CAMEROON HIGHER NATIONAL DIPLOMA TRAINING PROGRAM

Volume 4

TERTIARY SECTOR

September 2018
TERTIARY SECTOR

VOLUME 4
H.E. PAUL BIYA
President of the Republic of Cameroon,

“We need to radically transform the image of higher education in Cameroon”
(10th February 2008)
H.E. PHILEMON YANG
Prime Minister, Head of Government,

“In Higher Education, the Government is striving not only to increase and diversify training offers for the Cameroonian youth, but also to ensure quality, social relevance and professionalization of teachings. Furthermore, it is providing better working and living conditions to the members of the university community”

(26th November 2013)
Prof. JACQUES FAME NDONGO
Minister of Higher Education,
Chancellor of Academic Orders

“We must translate into reality the new vision of the University prescribed by the Head of State through far-reaching changes that seek, amongst other things, the improvement of the quality of university services in the areas of teaching and research, to make our universities more attractive and competitive at the national, sub-regional and international levels”

(Excerpt of the New Year Wishes Speech at the University of Yaounde I, January 2010)
FOREWORD

Since November 2015, the Ministry of Higher Education has undertaken a vast and ambitious operation to review training programmes in the Brevet de Technicien Supérieur (BTS) and Higher National Diploma (HND) cycles. This initiative was incumbent on us as a categorical imperative since it became obvious that the programmes that were so far implemented had become obsolete because of the exponential evolution of the labour market.

If we recall that the programmes in question dated, most of them, as far back as 2001 and that they were developed as institutions and fields of study were set up, one easily understands why their review had become a must. Moreover, the advent of the BMD introduced innovations in our training and certification process that needed to be taken into account, especially as many BTS and HND holders now aspire to register in professional Bachelor’s and Master’s Degrees.

In order to reconcile this professional requirement with the legitimate need of students to pursue their academic programmes, we requested the support of three main stakeholders: representatives of the business world, teachers-experts from our universities and professional schools, proprietors/proprietresses of Private Institutions of Higher Education.

These three major stakeholders had the opportunity to brainstorm during the two (02) seminars we organized, the first took place on 28th November 2015 and the second on 16th March 2018, at the National Advanced School of Engineering of Yaounde I. The programmes that we are now putting at the disposal of the national university community is the fruit of their deliberations.

We can thus note that, thanks to this brainstorming, new fields of study emerged, others have been redesigned, while others have disappeared altogether, either because the labour market was already saturated, or because they had become inoperative. Trainings identified have been organized according to sectors of activity known to date: primary, secondary, tertiary and quaternary. Within these sectors, they have been divided into training areas, fields of study and specialties. We therefore have 7 major training areas, 21 fields of study and 130 specialties. These training areas have been grouped in a programme-document in 7 volumes, distributed as follows:

Volume 1: Trainings of the Primary Sector (461 pages);
Volume 2: Trainings of the Secondary Sector (356 pages);
Volume 3: Trainings of the Secondary Sector (Continued) (514 pages);
Volume 4: Trainings of the Tertiary Sector (627 pages);
Volume 5: Trainings of the Tertiary Sector (Continued) (784 pages);
Volume 6: Trainings of the Tertiary Sector (Continued) (572 pages);
Volume 7: Trainings of the Quaternary Sector (246 pages).
The seven volumes put together make a total of three thousand five hundred and sixty (3560) pages, preceded by a statutory instrument to determine the system of studies and examinations of the Brevet de Technicien Supérieur.

All this arsenal is proof, if any were needed, that our educational and certification system is resolutely embarked on the quest for its effectiveness and social relevance. It is attentive to all innovations and adapts to the developments of our society.

Through this approach, we hope to meet the expectations of our partners and provide the nation with skills that it needs to achieve her emergence by 2035.

The Minister of Higher Education

Pr. Jacques FAME NDONGO
THE MINISTER OF HIGHER EDUCATION,

- Mindful of the Constitution.
- Mindful of law No. 2001/005 of April 16th, 2001 on the orientation of Higher Education.
- Mindful of decree No. 2011/408 of December 9th, 2011 to organize the government.
- Mindful of decree No. 93/026 of January 19th, 1993 to create Universities.
- Mindful of decree No. 2001/882/PM of September 10th, 2001 setting common rules applicable to the private institutions of Higher Education.
- Mindful of Order No.99/0005/ MINESUP/DDES OF November 16th, 1999 to give the general depositions applicable to the organization of studies and the evaluation of State Universities of Cameroon.
- Mindful of Order No. 01/0014/MINESUP/DDES of February 26th, 2001 organizing the study schemes and evaluations and setting the study programme fields of the HND in the Republic of Cameroon.

ORDERS:

SECTIONI: GENERAL PROVISIONS

Article 1: This Order deals with the organization of studies, assessments and syllabi of the Higher National Diploma, abbreviated "HND" in Cameroon.

Article 2: (1) The HND is a national certificate of higher education which certifies an academic and technical qualification in two years or four semesters of study after the acquisition of the Baccalaureate Certificate or General Certificate of Education, Advanced Level.

(2) It certifies that the graduate can hold a position of a senior technician and can use his / her knowledge and skills to improve upon himself / herself or pursue university studies in his/her field of study.

(3) The HND shall indicate the sector, the field and the professional specialty in accordance with the training pursued by its holder;

Article 3: (1) The HND is defined by a standard that is characteristic of the professional and cross-disciplinary skills required to obtain it.
(2) The standard referred to in paragraph (1) of this article is defined by domain and for each field by an order from the Minister of Higher Education. It lists the abilities that the diploma holders must have, specifies the knowledge and skills that must be acquired and indicates the requirements needed to obtain the certificate.

**Article 4:** Only public or private institutions of higher education duly authorized by the Minister of Higher Education can provide courses preparing candidates for the HND.

**SECTION II: THE ORGANIZATION OF STUDY**

**Article 5:** (1) Studies for the HND must last two (2) academic years or four (4) semesters after acquisition of the Baccalaureate certificate, the General Certificate of Education, Advanced Level or any diploma or certificate deemed equivalent pursuant to Article (2) above at the end of Secondary Education.

(2) However, some training programmes may require one year of preparation or upgrading, without any modification of the academic base set in Article (2) above.

(3) Where necessary, a specific text of the Minister of Higher Education shall specify the training programmes referred to in paragraph (2) of this article.

**Article 6:** (1) The academic year is subdivided into two (02) semesters. A semester consists of fourteen (14) to sixteen (16) weeks dedicated to teaching and assessment.

(2) Each semester ends with an examination session comprising a regular session and a resit session open to students who fail in the regular session under conditions set by regulatory texts.

**Article 7:** (1) Courses taught in Higher Education Institutions are organised following a structured programme.

(2) One semester has seven (7) Courses (C) with a total of 30 credits.

(3) A Course is an identifiable group of objectives and outcomes called Constituent Elements (CEs) that are scientifically coherent and specific. Each Course has a value defined in number of adjustable credits based on the pertinence of the Constituent Elements.

(4) The Constituent Elements of a CU (CECU) comprise several forms of teaching: Lectures (L), Practical work (P), Tutorials (T), Student’s Personal Work (SPW); activities applied in the form of internships in companies, projects, (remove) or end-of-study projects.

**Article 8:** (1) Credit is a value or unit that is used to quantify the total workload required for the student to achieve the training objective of a CU. The number of credits allocated to each semester is thirty (30) for all the CUs of the semester. The number of hours to be taught for a credit is fifteen (15) hours spread weekly in one semester.

(2) The credits are only obtained after work has been carried out, after an appropriate assessment either during a semester, or during a year, or at the end of the course.

**Article 9:** (1) The courses are structured into compulsory Courses and Elective courses.

(2) The compulsory CUs are the set of CUs that students enrolled in an HND cycle must offer. They constitute (90%) of credits of all the CUs of the training and (100%) of credits of the
official program published by the Minister of Higher Education and required for the National Examination. They are divided into three categories:

- The compulsory CUs linked to the discipline or disciplines corresponding to the field, representing (30%) of the overall hours taught and credits allocated to the compulsory CUs.

- Professional CUs organized around technical and professional contents representing (60%) of the overall hours taught and credits allocated to the compulsory CUs.

- Cross-discipline CUs linked to complementary training in different domains, representing (10%) of the hours taught and compulsory CU credits.

(3) Elective CUs organised by each institution per its specificity, allowing the student to deepen his specialization or explore to other fields of knowledge.

**Article 10:** The Higher National Diploma cycle is done in four (04) semesters. The hours taught for a lecture credit is 15 hours, a total of 30 credits per semester consist of 450 hours of courses per semester. There is a total of 120 credits making 1800 hours of lectures for all the training in 2 years, distributed as follows per semester:

a) Fundamental courses; 2 CU, 9 credits, 135 hours.
b) Professional courses; 4 CU, 18 credits, 270 hours.
c) Cross-discipline courses; 1 CU, 3 credits, 45 hours

**Article 11:** The teaching of French and English is compulsory throughout the training in accordance with the national decision on bilingualism. Likewise, the teaching of civics and ethical education is recommended throughout the training cycle.

**Article 12:** The student is enrolled in a specialisation that he/she keeps throughout his/her training. He/She takes the cross-disciplinary lessons in general including classical aspects of the training.

**Article 13:** Practical lessons constitutes a decisive phase and is an indispensable base of the training.

**SECTION III: INTERNSHIP IN A PROFESSIONAL MILIEU**

**Article 14:** Each specialisation includes practical internships in companies. All HND candidates must complete an internship in a professional setting in one or more companies in the sector corresponding to their training.

**Article 15:** The internship in a professional setting aims at complementing the training of the candidate through the experience of professional practices corresponding to the skills required. It also allows the student to acquire qualities of rationality, professional aptitude and behaviours, and to develop a sense of responsibility by gradually adapting to the requirements of the job.

**Article 16:** (1) Internship in a professional setting is organized throughout the training leading to the HND. It constitutes an important and essential part of the student's training.

(2) No special provision may exempt an HND candidate from the obligation of carrying out an internship in a professional setting, referred to in paragraph (1) of this Article.
Article 17: (1) The search for companies or establishments to receive trainee students and the negotiation of the contents of the internship are carried out jointly by the student and the persons in charge of his/her training institution.

(2) The student's training institution is responsible in its entirety for the organisation of internship periods, their monitoring and their educational content.

(3) At the end of the internship, the candidate must produce an internship report.

(4) The institution must take all steps to find an internship for the student when the latter reports with evidence that his/her attempts to find an internship were unsuccessful.

Article 18: Internship in a professional setting is a Professional Course whose objectives and outcomes are considered in the assessments.

SECTION IV: TRAINING PROGRAM

Article 19: - The training to obtain the HND is structured into Sectors, Domains, Fields, Specialities and Options:
- A Sector consists of Domains;
- A Domain consists of Fields;
- A Field consists of Specialities from the same work-related group.
- A Speciality is a grouping of subjects forming a job profile required by the labour market.
- A Speciality may consist of options.

Article 20: The different sectors are as follows:
- Primary sector;
- Secondary sector;
- Tertiary sector;
- Quaternary sector.

Article 21: These sectors consist of the following domains:

- The primary sector includes the agro-pastoral domain, and the Water and Environmental domain.
- The secondary sector includes Industry and Technology.
- The tertiary sector includes the domains of Commerce, Management, Law, Tourism, Hospitality, Social Sciences, and Health.
- The quaternary sector includes the domains of Information and Communication Technologies

Article 22: (1) The following specialities are open in the following domains:

PRIMARY SECTOR
DOMAIN: AGRICULTURAL AND ENVIRONMENTAL SCIENCES

Field: Agricultural And Food Sciences
Specialties

1- Agricultural Engineering
2- Food Technology
3- Animal Production Technology
4- Crop Production Technology
5- Fisheries Management
6- Agro-pastoral adviser
7- Agro pastoral Entrepreneurship
8- Agricultural Business Technics
9-Aquaculture
10-Agricultural Production Technology

Field: Environmental Sciences
Specialties

1- Agro-Forestry and Forest Management
2- Nature Management and Protection
3- Risk Management
4- Pollution Prevention and Remediation
5- Meteorology
6- Solid Waste Management
7- Wildlife Management
8- Environmental Impact Assessment
9- Forest Engineering

Field: Water Engineering And Management
Specialties

1- Hydrology and Water Resources Management
2- Hydrogeology and Groundwater Management
3- Waste Water Management
4- Hydraulic Engineering and Water Infrastructure
5- Integrated Water Resource Management

SECONDARY SECTOR

DOMAIN: ENGINEERING AND TECHNOLOGY

Field: Civil Engineering
Specialties

1-Civil Engineering Technology
2- Topography
3- Urban Planning
4- Geotechnics
5- Sanitary Installation and Plumbing
6- Building Science and Technology
7- Wood Works
   Options: 7-1-Carpentry
           7-2- Joinery And Cabinetmaking
8- Real Estate Maintenance
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<tr>
<td>9- Roads and Civil Engineering</td>
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<td>2- Mechanical Manufacturing</td>
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<td>3- Mechanical Construction</td>
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<td>4- Boiler making and Welding</td>
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<td>1- Chemical Manufacturing</td>
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<td>3- Chemical Laboratory Technology</td>
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<tbody>
<tr>
<td>1- Agricultural Biotechnology</td>
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<td>3- Electrical Power System</td>
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<td>4- Maintenance of Industrial system</td>
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<td>5- Maintenance of Biomedical Equipment</td>
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<td>1- Air conditioning and Refrigeration</td>
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<td>2- Sustenability and Renewable energy</td>
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<td>3- Maintenance and management of fluid system</td>
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<td>1- Applied Geology</td>
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<td>2- Drilling Technology</td>
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<td>3- Quarries Operations</td>
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<td>4- Petroleum Systems and Exploitation</td>
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<td>5- Petroleum Logistics</td>
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TERTIARY SECTOR

DOMAIN: MANAGEMENT, BUSINESS STUDIES AND LEGAL CAREERS

Field: Management

Specialties

1- Assistant Manager  
2- Operation of Air Transport  
3- Management of Non-Governmental Organizations (NGOs)  
4- Project Management  
5- Human Resource Management  
6- Quality Management  
7- Logistics and Transport Management  
8- Sport Management  
9- Information Systems Management  
10- Local Government Management  
   Options:  10-1 Accounting and Finance  
             10-2 Local Government Taxation  
             10-3 Local Government Administration  

11- Statistics  
12- Events Management  
13- Port Shipping Management

Field: Business and Finance

Specialties

1- Accountancy  
2- Marketing- Trade-Sale  
3- Banking and Finance  
4- International Trade  
5- Microfinance  
6- Insurance

Field: Legal Careers

Specialties

1- Legal Assistant  
2- Business Law  
3- Land Law  
4- Stock Market Career  
5- Customs and Transit  
6- Tax Management

DOMAIN: HOME ECONOMICS, TOURISM AND HOTEL MANAGEMENT,

Field: Home Economics and Social Work

Specialties

1- Bakery and Food Processing  
2- Fashion, Clothing and Textiles  
3- Beauty-Esthetics  
   Options:  3-1-Beauty care and Cosmetics  
             3-2 -Hairdressing Professions
4- Social Work

Field: Tourism and Hotel Management
Specialties
1- Tourism and Travel Agency Management
2- Hotel Management And Catering

DOMAIN: ARTS AND CULTURE, EDUCATION AND COMMUNICATION

Field: Education
Specialties
1- Didactics, Curriculum Development and Teaching
2- Education Management and Administration
3- Special Education
4- Distance and Continuing Education
5- Vocational Guidance and Counseling
6- Andragogy

Field: Communication
Specialties
1- Journalism
2- Advertising and Public Relations
3- Corporate Communication
4- Printing, Editing and Publishing
5- Media photography and Audio visual

Field: Arts And Culture
Specialties
1- Gastronomic Arts
2- Cinematography
3- Sculpture
4- Caricature, Illustration and Comic Arts
5- Cartoon
6- Art Design
   Options 6-1-Product Design
       6-2-Graphic Design
       6-3-Fashion Design
       6-4-Interior Design
7- Performing Arts
8- Musicology
9- Painting
DOMAIN: HEALTH
Field: Medical and Biomedical Sciences
Specialties
1- Nursing
2- Medical Laboratory Sciences
3- Medical Imaging Technology
4- Pharmacy Technology
5- Dental Therapy
6- Dental Prosthesis
7- Midwifery
8- Optician/Clinical Optometry
9- Physiotherapy
10- Nutrition and Dietetics
11- Health Care Management
12- Health Sanitary Inspector
13- Ophthalmic Technician
14- Ultrasonography
15- Prosthesis and Orthotics

QUATERNARY SECTOR

DOMAIN: INFORMATION AND COMMUNICATION TECHNOLOGY
Field: Networks and Telecommunication
Specialties
1- Telecommunication
2- Network and Security

Field: Computer Engineering
Specialties
1- Computer Engineering Options
   1-1- Software Engineering
   1-2- Computer Science and Networks
   1-3- Data Base Management
2- Computer Maintenance Option
   2-1- Hardware Maintenance
3- Industrial Computing and Automation
4- Computer Graphics and Web Design
5- E-commerce and Digital Marketing

(2) Other specialities and options may be created when the need arises, by Order of the Minister in charge of Higher Education.

SECTION V: ASSESSMENTS
Article 23: (1) Courses are evaluated from 0 to 100.
(2) No one may be admitted to take a Course unless he has obtained an average score of at least 50 out of 100 for all the Constituent elements of the CU.
(3) Assessment is carried out per Course. The test may consist of several sections corresponding to the constituent elements of the CU.
**Article 24:** (1) Except for the professional internship CU, each CU is assessed as follows per level:
   - Continuous assessment: 30% of the points
   - Written examination: 70% of the points

(2) The continuous assessment mark includes marks for the following:
   - Participation in tutorials and practical work;
   - Written Tests
   - Oral questions;
   - Presentations;
   - Projects.

(3) The professional internship Course includes at least two Constituent elements, one of which is dedicated to the company experience and the other to the end of training report and its defence.

**Article 25:** (1) Continuous Assessment marks are on the competence of each authorized teacher who teaches the corresponding course. At least one continuous assessment mark is required per course.

(2) The written examinations referred to in paragraph (1) of Article (24) above and all activities involved in evaluation per level are organized under the responsibility of the Management of each institution authorized to provide HND training and under the supervision of the Institution which ensures the academic supervision of the Institution concerned in accordance with the regulations in force.

(3) The transition from level 1 to level 2 is conditioned by a pass in all the CU's.

**Article 26:** (1) A National Examination taking place in a single annual session shall approve the completion of studies carried out in accordance with the provisions of this Order.

(2) The General Regulations of the National Examination for obtaining the Higher National Diploma are fixed when necessary by the Minister of Higher Education on the proposal of the National Commission for the Organization of National Examinations.

**SECTION VI: TEACHING SYLLABUS**

**Article 27:** The teaching syllabus of the training leading to the acquisition of the Higher National Diploma presented by sectors, domains, fields, specialities and possibly by options are annexed to this order.

**Article 28:** The effective opening of an HND training in an authorised public or private Institution for a field, a speciality or a given option, can occur only after a specific text of the Minister of Higher Education establishing teaching syllabuses of corresponding courses has been issued.

**SECTION VII: FINAL PROVISIONS**

**Article 29:** This order repeals all prior contrary provisions including Order No. 01/0014/MINESUP/DDES of 26 February 2001 organising the system of studies and assessments and setting the syllabus for HND courses in the Republic of Cameroon, as well as those of Order No. 05/0020/MINESUP of 12 January 2005 on the creation, system of studies, assessments and syllabi of the Higher Professional Diploma (HPD) of Higher Education Institutions of Cameroon.
**Article 30:** This order takes effect as of the 2018/2019 academic year.

**Article 31:** During the effective implementation of the new HND fields, the courses leading to HPD remain valid for a period of three (03) years.

**Article 32:** Heads of University Institutions, Heads of Authorized Institutions, the President of the National Commission for the Organization of National Examinations, the President of the National Commission for Private Higher Education and the Director of Development of Higher Education are responsible, in their respective spheres of competence for the implementation of this order which shall be registered and published in the official gazette in French and English.

THE MINISTER OF HIGHER EDUCATION,

[Signature]

Jacques Fame Ndongo
## SUMMARY

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**DOMAIN : MANAGEMENT, BUSINESS STUDIES AND LEGAL CAREERS**

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DOMAIN

MANAGEMENT, BUSINESS STUDIES AND LEGAL CAREERS
Field : MANAGEMENT

Specialty :

ASSISTANT MANAGER
1. The objective of the training

This specialty, which replaces the HND in "Secretarial studies" trains the collaborators of General, manager, Directors of units or heads of service. Organized, rigorous, dynamic, discreet, they assist, facilitate and follow the work of the responsible in order to make it more effective. The Assistant Manager provides mainly plays the role of interface and mediation between the company and its environment. He is in charge of occupies the administration, communication, organization of work, an aid to decision and can even support a specialized file or organize an event.

2. The powers sought

→ **General skills**
  - Control the economy of organizations;
  - Master several languages;
  - Have negotiation skills;
  - Understand the professional environment;
  - Be able to work under pressure;
  - Demonstrate adaptability and maturity.

→ **Specific skills**
  - Participate in the organization and management of the company;
  - Manage and deal with the flow of information to allow for decision-making;
  - Ensure the function of relational interface;
  - Ensure the accounting and financial management of the company;
  - Master the different legal procedures;
  - Be courteous, reactive and well organized;
  - Master drafting administrative.

3. Outlets

- Assistant of managers;
- Assistant of directors;
- Administrative Assistants;
- Sales assistant;
- Public relations assistant;
- Assistant of human resources;
- Office manager.
4. Organization of the Teachings

- **FIRST SEMESTER**

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**Fundamental courses 30% (2 UC) 9 credits 135 hours**

**Professional courses 60% (4 UC) 18 credits 270 hours**

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**Cross-Sectional Courses 10% (1 UC) 3 Credits 45 hours**

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<td>AMA117</td>
<td>Bilingual training I and economic environment I</td>
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**Total** 270 100 45 35 450 30

- **SECOND SEMESTER**

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**Fundamental UC 30% (2 UC) 9 credits 135 hours**

**Professional UC 60% (4 UC) 18 credits 270 hours**

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<td>AMA124</td>
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**Cross-Sectional Courses 10% (1 UC) 3 Credits 45 hours**

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### THIRD SEMESTER

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<td>Accounting and ICT I</td>
<td>30 20 5 5</td>
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<tr>
<td>AMA233</td>
<td>Professional techniques III</td>
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<td>AMA237</td>
<td>Legal environment and civic education I</td>
<td>25 10 5 5</td>
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### FOURTH SEMESTER

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<td>Professional internship</td>
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<td>95 145 150 60</td>
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</table>
5. Description of Units Teaching

❖ AMA111: Mathematics and Computer Training I

➢ General Mathematics I: 3 credits (45 hours); L, T, SPW

- Algebra vector spaces
  1. Polynomials
     ▪ Polynomials characteristics
  2. Vector space
     ▪ Linear applications
  3. Matrices
     ▪ Operations on the matrices;
     ▪ Matrices associated with a linear application; □ matrices and determinants.
  4. The Determinants
     ▪ Determinant of a square matrix;
     ▪ Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     ▪ Inversion of matrix of order less than or equal to 3 - method of Gauss;
     ▪ Resolution of systems of linear equations by the method of; Pivot
     ▪ Application of the matrix calculation on the resolution of systems of linear equations.
  6. Reduction of square matrices
     ▪ own values;
     ▪ ownvectors.
  7. Differential equations and linear récurrentielles of order 2 with constant coefficients
  8. Mathematical applications in Economics and Management

➢ General Computing I: 2 credits (30 hours); L, T,SPW

A- The hardware

  1. The peripheral components
     ▪ Imputdevices;
     ▪ ouPutdevices;
     ▪ storage devices; □ devices input and output.
  2. The central unit
     ▪ The central memory;
     ▪ The microprocessor;
     ▪ The ports;
     ▪ The motherboard;
     ▪ The chipset;
     ▪ The power;
     ▪ extensioncards;
     ▪ Otherinternalorgans;
  3. The unit of exchange (or bus)
     ▪ Role;
     ▪ Types of bus:
       - Data bus;
       - Control bus; - address bus.
B- The Software

1. The application software
   - Definition;
   - Role;
   - Types and examples of software.

2. The basic software (or software systems)
   - Definition
   - Types of basic software
     - The drivers;
     - The compilers;
     - The utilities;
     - The operating systems:
       ✓ Features;
       ✓ Roles;
       ✓ Types of operating systems;
       ✓ Structure of an operating system; architecture.
   - Concept of Free Software and proprietary software.

System of Numbering and coding

A- The numbering systems

1. A few basic concepts
   - The base of the system;
   - Weight;
   - Alphabet of the language;
   - Format of the word (length of the word); power of language.

2. A few numbering systems
   - The decimal system;
   - The binary system; the octal system; the hexadecimal system.

3. The basic changes
   - Of Decimal to another base b;
   - To a base b of any kind to the decimal basis;
   - of the binary in octal and vice versa;
   - from binary to hexadecimal and vice versa.

4. Arithmetic operations
   - Binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
   - addition of binary numbers:
   - Subtraction of binary numbers;
   - Use the add-in to 2 in the subtraction;
   - multiplication of binary numbers;
   - division of binary numbers.

5. Hexadecimal arithmetic
   - addition of numbers in Hexadecimal;
   - subtraction of numbers in hexadecimal.
B- The codes

1. General information on the concept of a code
   - Definitions;
   - Objectives of codification;
   - The functional codification;
   - Types of functional codes;
   - technological codification.

2. The alphanumeric codes
   - The ASCII code:
     - ASCII standard;
     - Extended ASCII;
     - use.

❖ AMA121: Mathematics and Computing II

➢ General Mathematics II: 2 credits (30hours); L, T, P, SPW

1. The real numbers;
2. Numerical Functions of a real variable, limit, continuity;
3. Differentiability, extrema, theorem of Rolle and finished increases;
4. Polynomials, fractions, rational;
5. Study and graphic representation, reciprocal functions;
6. Limited developments, integrals and applications to calculations of Aires;
7. Logarithmic functions and exponential;
8. Digital Suites: Direction of variation, convergence;
9. Arithmetic Suites, Suites geometrical, recurring suites of Order 1;
10. Mathematical applications in economics and management.

➢ Computing II: 2 credits (30hours); L, T, P, SPW

A. Computer Networks

1. General information
   - Definition of A computer network;
   - interest of computer networks;
   - basic vocabulary:
     - Workstation;
     - Mode;
     - Server;
     - packet .

2. Typology of networks according to the media:
   - Wired networks;
   - Networks not wired.

3. Typology of networks according to the "Geographic Extent:"
   - The local networks (LAN);
   - The metropolitan area networks (MAN); - the wide area networks (WAN).

4. Network Topologies
   - Physical topology
     - The bus topology;
- The star topology;
- The ring topology; - the topology in mesh; - the topology in shaft.
- Logical Topology
  - Networks to dissemination;
  - Point-to-point networks.

5. **Network Architectures**
   - Client/Server architecture; - architecture of equal to equal.

6. **The equipment of computer networks** Equipements of basis of a network:
   - The computer;
   - The network card;
   - The server;
   - The network cable;
   - The transceiver (or adapter); - the transmission mounts; - the socket.

7. **The equipment of interconnections**:
   - Hubs (hub);
   - Switch (Switch);
   - Routers;
   - Gateways
   - The gateway (gateway);
   - The router; - the bridge (Bridge); - the repeaters.

8. **Concept of IP addressing**
   - Structure of an IP address
     - Network identifier (Net ID);
     - Identifier of host (Host ID).
   - Specific addresses
     - Network addresses;
     - Machine address;
     - Broadcast Address (broadcaste);
     - Limited Broadcast address (multicast);
     - Address of rOATgging (loopback).
   - Class IP addressing
     - Class A;
     - Class B;
     - Class C.

B. **Internet network**

1. **Concept of protocol**
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
     - NNP protocol;
     - FP protocol;
     - Http protocol;
     - IMAP protocol;
     - Protocol TCP;
     - other.

2. **A few Internet Services**
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
The transfer of files;
The Download (Download A text, download An image, download a free software...);
The online Trade; □ The IRC (Internet Relay Chat);
Other.

3. The searchengines
   ▪ Definition;
   ▪ Role;
   ▪ Some searchengines.

4. Tools for Internet access
   ▪ The browsers (definition, examples);
   ▪ The plug-ins (definition, examples);
   ▪ The search engines (definition, examples, use).

5. The connection to the Internet
   ▪ Connection hardware;
   ▪ Suppliers of access (role, examples);
   ▪ Types of connections (specialized line, phone line, satellite).

❖ AMA112: Quantitative techniques I

➢ Financial Mathematics I: 2 credits (30 hours); L, T, SPW

1. The Basics
   ▪ Simple Interest;
   ▪ Calculation of the value gained;
   ▪ Current value commercial and current value rational one; □ précompté interest and effective interest.

2. Calculation of the average rate of a series of simultaneous investments
3. Equivalence and replacement of effect
4. Short-term financial transactions - Current Account and interest
5. Commercial Discount - real rate of discount
6. Compound interest
   ▪ Acquired value;
   ▪ Current value;
   ▪ Rate equivalent and proportional rate; □ rate of Interest apparent;
   ▪ Rate of real interest.

➢ The statistics I: 2 credits (30 hours); L, T, SPW

1. Statistical series to a variable □ Definition and vocabulary;
   ▪ Graphical representation;
   ▪ Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Standard deviation;
     - Quantiles;
     - Coefficient of variation.

2. Statistical series of two variables
   ▪ Definition and vocabulary;
Cloud of points;
Average point;
Covariance and covariance matrix of 2 variables;
The coefficient of correlation and regression;
Linear adjustment by the method of least squares.

**AMA122: Quantitative techniques of management II**

**Financial Mathematics II: 2 credits (30 hours); L, T, SPW**

1. **The annuities:**
   - Constant annual installments;
   - Annuities in arithmetic progression;
   - Annuities in geometric progression;
   - Perpetual annuities.
2. **The undivised debenture**
   - Reimbursement by constant annual installments;
   - Table d’amortization;
   - Laws followed by depreciation recovery of the debt still alive;
   - Laws followed by the annuities;
   - Applications on the borrowings undivided.
3. **The bond loans**
   - Reimbursements to the pair;
   - Constant annual installments;
   - Constant depreciation;
   - Rate of yield and rates of returns of a debenture loan;
   - Rate of returns of the borrowing to the Broadcast;
   - Choice of Investments.

**Statistics II: 2 credits (30 hours); L, T, SPW**

1. Estimation of an average, a proportion and a standard deviation
2. Confidence interval and confidence coefficient
3. Tests of hypothesis and the KHI-two

**AMA113: Communication Tools I**

**The tools of communication I: 2 credits (30 hours) L, T, P**

1. Switched networks
2. The Theory of Circuits
3. The tools of telephone communication
4. The tools of the electronic messaging

**Information I: 2 credits (30 hours); L, T, P, SPW**

1. Master the techniques of the Audiovisual sector in the framework of the policy of the Company
2. Study of Communication Networks
3. Study and practice of the Internet
4. The Multimedia Tools
5. Social Networks

△ AMA123: Communication Tools II

- The tools of communication II: 2 credits (30 hours); L, T, P
  1. videotex system
  2. packet data transmission system
  3. The tools used in the dissemination of information

- Information II: 3 credits (45 hours); L, T, P, SPW
  1. The information Research. information needs Assessment Mobilization of information research methods; the eve informational.
  2. Production of a structured information
    - Creation and modeling of a document;
    - Development of a documentary file, an a accounting file, a press review.
  3. Management of records entity
    - The digital acquisition of documents;
    - Sorting, filling and archiving of documents in the service.
  4. Contribution to the quality of the information system
    - Optimization of the circulation of the information; Participation in the evolution of the system of information.

△ AMA114: Professional techniques I

- Commerce I: 2 credits (30 hours); L, T, P, SPW
  1. Definition of basic concepts
  2. Study, design and use of commercial documents
  3. Calculation of reductions, of taxes

- Filing: 3 credits (45 hours); L, T, P
  1. General information on filing
  2. Filing methods
  3. Filing systems

△ AMA124: Methodology and Professional Techniques II

- Commerce II: 2 credits (30 hours); L, T, SPW
  1. The Stock Exchange Operations
  2. Operations related to orders, to delivery and invoicing

- Methodology for drafting internship reports: 1 credit (15 hours); L, P
  1. The collection of Information
  2. How to make a report
  3. The plan of internship report and the Executive Summary
  4. The Table of Contents
5. The introduction of report of internship
6. The conclusion of the Internship report
7. The Acknowledgments
8. How to build the appendices
9. When to start an Internship report
10. How to find a topic for of Internship report
11. The cover page
12. How to write effectively
13. Form and presentation (cover, MSDS identification seP, Abstract, glossary, bibliography, glossary, index of figures, tables and illustrations)
14. Instructions and typographical rules of presentation (police, spacing, titles, highlighting, punctuation, graphic charter)
15. How to prepare the defense

➢ Filing II: 2 credits (30 hours); L, T, P

   1. Filing methods
   2. Signalization

❖ AMA233: Professional techniques III

➢ Organization and administrative methods I: 2 credits (30 hours); L, T, P

   1. Circulation of Documents
      ▪ Image diagram;
      ▪ posts documents diagram;
      ▪ SCOM diagram.
   2. Graphics representation of information
      ▪ GANTT chart;
      ▪ Calendar - graphis;
      ▪ chronological evolution graph (graph rectangular coordinates, graphic polar coordinate).

➢ Filing and office equipment I: 2 credits (30 hours); L, T, P

   1. The Documentary research
   2. Manual and electronic archive

❖ AMA243: Professional techniques IV

➢ Organization and administrative methods II: 2 credits (30 hours); L, T, P, SPW

   1. Graphical representation of information
   2. Distribution Graph 3. ABC Graphs or 20/80)
      ▪ Time Management:
         - The traditional tools (agenda, timing);
         - PERT Network (PERT Time - PERT Cost - PERT potential method);
           (schedule cordonnets); plannings (card planning, band planning, curser planning and thread planning)

➢ Classification and office equipment II: 2 credits (30 hours); L, T, P
1. The filing equipment
2. Office equipment (for the seizure, the collection, processing and dissemination of the information)
3. Small Office equipment

❖ AMA115: Professional Relations I

➢ Internal Professional Relations I: 2 credits (30 hours); L, T, SPW

1. The Mail in the Company
2. mail processing
3. mail of contentious character
4. The characteristics of internal mail
5. The areas of internal mail
   ▪ Notes;
   ▪ Accountrendering;
   ▪ Minutes;
   ▪ Reports; □ memos.

➢ External Professional Relations I: 2 credits (30 hours); L, T, P, SPW

1. The drafting of external mail
2. mail of contentious character
3. characteristics of the internal mail
4. mail relating to the search job seeking

❖ AMA125: Professional Relations II

➢ Internal Professional Relations II: 2 credits (30 hours); L, T, P

1. General notions
   ▪ Identification of a mail ;
   ▪ Mail data in the company;
   ▪ access autothorization to e-mail.
2. Access to e-mail: composition, archiving, deletion, consultation
   ▪ Composition of a mail;
   ▪ Filing of a mail;
   ▪ Deleting a mail;
   ▪ opening of a mail;
   ▪ Search for a mail.
3. Composition of a mail
   ▪ Composition Screen;
   ▪ Constitution of the list of addresses:
     - Upper part of the screen: Search of adresses;
     - Lower part of the screen: list of adresses.

➢ External professional Relations II: 2 credits (30 hours); L, T, P

1. management Functions of incoming mail
   ▪ Information necessary for the management of incoming mail:
- Creation of the incoming mail register;
- Copies to one or more administrative units;
- Internal allocation;
- Follow-up of responses to incoming mail;
- Management of reassignment of e-mails;
- Management of invoice information;
- Consultation and editing of incoming mail file; Deleting incoming mail;
- Research in incoming mail.

2. Function of outgoing mail
   - Information processing of outstanding mail;
   - Creation of outgoing mail file;
   - Management of addresses outgoing mail;
   - Management of certified copies;
   - Management of internal copies to the organization;
   - Consultation and edition of an outgoing mail file;
   - Deleting of outgoing mail file; management of the follow-up of outgoing mail; search in the outgoing mail.

❖ AMA234: Professional Relations III

➢ Professional writing I: 2 credits (30 hours); L, T, SPW

1. The specificity of the Administrative Style
2. The administrative vocabulary
3. The punctuation and the use of uppercase punctuation:
   - Definition;
   - The punctuation signs; - the spacings.
   - The Employment of capital letters:
     - General information; notions
     - The proper noun and the capital letter;
     - The other categories of words and the uppercase letter.
4. Commercial Letter (qualities and structure)
5. Letter presentation and envelops
6. Preparation and placing of an order
7. Modification of an order + Reply
8. Correspondence relating to the delivery
9. Claims relating to delivery
10. Correspondence relating to the invoicing
11. Payments settlements
12. Relationships with carriers
13. Relations with the insurers
14. Letter to an after-sales service
15. Drafting of printed matters

➢ internal and external Professional relations I: 2 credits (30 hours); L, T, SPW

The variability of professional situations and their criticality

1. The reception and information
   - Role established;
   - Instructions respected;
Atmospheric relationship; Image; Social codes and cultural rights; professional effectiveness.

2. **conflicts**
   - conflict process, triggers, deep sources; attitudes and behavior of the actors in the conflict; result.

3. **Cultural differences**
   - Professional context (statutes, roles, relationships, Territories);
   - Issues of actors;
   - Cultural codes, verbal and non-verbal cues;
   - Interactions:
     - Adjustments, misunderstandings and potential misunderstandings due to the social or differences or cultural;
     - Difficulties from sources other than culture.

4. **Negotiation**
   - The role and status of the actors, relationship;
   - Interests and Issues;
   - Margins of maneuvers and instructions;
   - identified Cultural differences;
   - Arguments;
   - Processes of manipulation, processes process of manipulation refusal;
   - Modalities for search of an agreement.

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### AMA244: Professional Relations IV

1. **Professional writing II: 2 credits (30 hours); L, T, P, SPW**
   1. Features of administrative writing
   2. Structure of Administrative letter
   3. Drafting
   4. Consignment note, and cover note
   5. Acknowledgment of Receipt
   6. Internal mail (reports, debrief, minutes, circulars, Invitations convocations and others)
   7. Relations with Service Companies (Carriers, Insurances, Banks, telecommunications, NSIF...)
   8. Drafting of the external mail (order, delivery, invoicing, settlement, transport, insurance...)
   9. Personal Letters (application for internship, job application, motivation letter, curriculum vitae(CV))

2. **internal and external Professional relations II: 2 credits (30 hours); L, T, P, SPW**

Support to professional relations internal and external

1. **Collaborate with the(s) manager(s)**
   - Establish and maintain the relationship with the(s) manager(s);
   - Render an account, Inform, make the point.

2. **Contribute to group cohesion**
   - Put in place a favorable working climate conditions
• Install the conditions of a working climate favorable; coordinate team work;
• Manage a meeting.

3. **Ensure the interface between manager(s) and the working environment (internal, external, international)**
   • Create, maintain and activate a relational network (internal, external, to the International);
   • Welcome and inform in French and in foreign language; and in foreign
   • Communicate in Writing (internal, external, in French and in foreign language);
   • negotiate in French and other languages.

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MA116: Organization and Management I

- **Organization of the action I: 2 credits (30 hours): L, T, P**
  1. administrative work
  2. The subject matter of administrative work
  3. "observation of administrative work
  4. The means used in the execution of administrative work

- **Application and synthesis work I: 3 credits (45 hours): L, T, SPW**

  **A- Written part**
  Organize case studies of synthesis which simulate professional and administrative situations surrounding specific themes:
  1. workOrganization
  2. The diagrams, algorithms and graphs
  3. The design, critical analysis and the improvement of operating modes
  4. Assistance in decision-making

  **B- Practical part**
  - **Folder 1:** Activities of the administrative function, classification of these according to the main order, codification and control of information, elements, or barriers to communication, proposed enhancement, Accounting and Statistics
  - **File 2:** Organization of a workstation, filing of the information according to the derivative methods, steps of the administrative work, conception of printed matter of printed, Accounting and Statistics
  - **File 3:** Activities of the workstation, organization of premises, viewing information by tables, organization of a workstation, Accounting and Statistics
  - **File 4:** Creation of a fictitious company, research of information, filing, processing of "information, Accounting and Statistics
  - **File 5:** different modes and degrees of processing of the information, conception of simple printed matters, Accounting and Statistics
NB: The partis accounting and statistics will be planned and evaluated by teachers providing these disciplines.

**AMA126: Organization and Management II**

- **Organization of the Action II: 2 credits (30 hours); L, T, P, SPW**
  1. Method of regulation and control of organization of administrative tasks (optimisation of administrative work; technics control of queues; measurement and control of the quality of administrative work)
  2. Measurement and control of the quality of administrative work
  3. Monitoring devices (T.R.T. and check-list)

- **Application and Synthesis work II: 2 credits (30 hours); L, T, P**
  
  **A- Written part**

  Organize case studies of synthesis which simulate professional administrative surroundings situations:
  1. Study of models of scheduling of tasks and the choice of opportunities;
  2. The administrative costs and their minimization;
  3. The conduct of the Office projects.

  **B- Practical part**

  - **File 6:** aid to decision-making by decision tables, organization chart, accounting and statistics
  - **File 7:** Tools of aid to decision-making by the presentation of the algorithm, elaboration of miscellaneous printed material, Accounting and Statistics
  - **Case 8:** representation of information by the tables, filing of modern aids, accounting and statistics
  - **File 9:** Activities of the workstation, drawing of a post profile using Microsoft Word, comparison and choice of a workstation, Accounting and Statistics
  - **Case 10:** functional Codification, elaboration and representation of a planetary flowchart, calculation of costs, accounting and statistics

NB: The accounting and statistics parts will be planned and evaluated by teachers providing these courses.

**AMA235: Organization and Management III**

- **Organization of the Action III: 2 credits (30 hours); L, T, P, SPW**

  **Decision aid**
  1. Identification of a problem or a need
1. Problem solving
   ▪ Distinction of a need or a problem;
   ▪ Definition of objectives;
   ▪ Identification of constraints and opportunities.

2. Proposal of solutions
   ▪ Search for solutions; analysis of solutions;
   ▪ Presentation of the solutions.

3. The follow-up of the decision
   ▪ Definition of a plan of action;
   ▪ Development of a dashboard;
   ▪ Analysis of variances; and
   ▪ Alert and proposal of the corrective measures.

➢ Application and synthesis work III: 2 credits (30 hours); T, P

At least 10 practices cases will be studied and treated by the learners to be, corrected by the teacher.
Each case study will include 03 parts organized in 4 or in 5 files:

- First part (03 files): OTA+ Information Aid;
- Second part (01 Folder): accounting;
- Third part (01 Folder): Statistics.

• Case 01: elaboration of a questionnaire and counting table and the Table of recount, circulation of documents, Filing of documents of the company, codification and control of information, accounting, statistics.

• Case 02: visualization of information, elaboration of graph and its functioning, establishment of traditional aids, filing and coding of information, accounting, statistics.

• Case 03: Visualization information by the distribution graphs, organization of A Workstation, filing and coding of information, accounting, statistics.

• Case 04: Time Management by the conventional tools, calculation of administrative costs, filing and coding of information, accounting, statistics.

• Case 05: construction of the PERT time network elaboration of Bible standard paragraphs, establishment of the datasheet of paragraphs selected for the drafting, filing and coding of information, accounting, statistics.

• Case 06: Time Management by the PERT "cost", establishment of staff distribution table staff, equalization of staff for period, filing of printed matters and counting, filing and coding of information, accounting, statistics.

• Case 07: PERT method of the potential, programming table and corresponding graph, Organization of enterprise, calculation of the costs of this visit, filing and coding of information, accounting, statistics.

• Case 08: Circulation of Documents, SCOM diagram) + critical analysis, calculation of bands,
Elaboration of a position document, filing elaboration and coding of information, accounting, statistics.

- **Case 09**: time management by plannings and presentation of a function description and compare it to the Attribution, sheet, filing and coding of information, accounting, statistics.

- **Case 10**: Presentation of cursor planning, functioning principle of the planning, structural organization chart. Staff and Line, particularity of this tool, filing and coding of information, accounting, statistics.

**AMA245: Organization and Management IV**

- **Organization of the action IV**: 2 credits (30 hours); L, T, P

**The Delegated Activities**

1. **The administrative management of the human resources of the service**
   - Participation in the recruitment process;
   - Preparation and Monitoring of the trainings;
   - The follow-up of annual leaves;
   - Management of absences;
   - Participation in the social information of the members of the service. Update of the administrative data of the staff.

2. **Management of material resources of an administrative service**
   - Management of Purchases of small equipment and supplies;
   - organization of the work space;
   - Development and monitoring of the operating budget of the service.

3. **Handling of a specialized file**
   - Collection of information specific to the field of specialty;
   - Implementation of the methods of work specific to the field of specialty; □ evaluation of its performance.

**Application and synthesis work IV**: 2 credits (30 hours); T, P

At least 10 practices cases will be studied and treated by the learners to be, corrected by the teacher. Each case will include 03 parts organized in 4 or in 5 files:

- First part (03 files): OA+ information Aïdtheintraining;
- Second part (01 Folder): accounting;
- Third part (01 Folder): Statistics.

- **Case 11**: Determination of the number of instantaneous observations, elaboration of printed matter table of counting, to properly manage time, Forecast Graph and its commentary, filing of documents in the Company numerical and alphanumerical accounting, statistics.

- **Case 12**: ABC Graph or 20/80, (Representation and operation of the latter), Improvement of the perfection by Quality Circle, filing and coding of information, accounting, statistics.
• **Case 13:** visualization of information by chronological evolution graph, Ishikawa diagram (5 m provide the table the analysis table, filing of rubrics in ideological method and transformation in decimal method comparison of the two methods in the ideological, accounting, statistics).

• **Case 14:** Time Management by conventional tools, calculation of administrative costs, filing and coding of information, accounting, statistics.

• **Case 15:** construction of the PERT network by potential methods evaluation elaboration, filing of printed matters and Table accounting of problem of queue (arithmetic solution and graphic, filing and coding of information, accounting, statistics.

• **Case 16:** management of queues, elaboration of the causes effects diagram "causes-effects," filing of the documents terminal digit methods, particularity of this method of filing, accounting, statistics.

• **Case 17:** Visualization information by a dynamic planning, organization of a trip abroad, elaboration of a trip sheet, filing and coding of information, accounting, statistics.

• **Case 18:** Monitoring Devices: the T.R.T, calculation of bands, conception of a position document, characteristics of such a document, filing of information in alphabetical order and justify the choice of the word Director, Accounting, Statistics.

• **Case 19:** Monitoring Devices: the checklist, establishment of a post profile of position and to a curriculum vitae, research of personnel needs, filing of documents and active filing of the pending documents, accounting, statistics.

• **Case 20:** elaboration of a request for personnel form, a printed form for Evaluation of a training action, queue (do consider the two solutions, filing and coding of information, accounting, statistics.

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** AMA117: Bilingual training I and economic environment I**

- **French expression:** 1 credit (15 hours); L, T
  1. **Form of words in French**
     - Prefix, radical; Root, suffix.
  2. **Explanation of words and group of words**
  3. **Morphosyntax and rhetoric**
     - Components and structure of the sentence:
       - Simple sentence;
       - complex sentence;
       - sentence composed.
     - Figures of style:
       - Figures of analogy;
       - Figures of amplification;
       - Figures of opposition;
- Figures of mitigation.

4. **Administrative correspondence professional and**
   - The different parts of an administrative correspondence and the administrative style;
   - Professional correspondence:
     - Note of service;
     - Record (activity, mission);
     - the report (activity, mission).

5. **Professional correspondence to individual dominance**
   - Request for employment;
   - CV;
   - Letter of motivation.

6. **Methodological Considerations on the written exercises**
   - French composition;
   - Contraction of text:
     - French composition: methodological reminder and application;
     - Contraction of text: methodological reminder and application.

- **General Economics: 2 credits (30 hours); L, T, P**
  1. Business and production
  2. Households and the consumption
  3. Markets and Prices
  4. Training and distribution of income
  5. The currency and the financing of the Economy
  6. The elements of the National Accounts
  7. The macro-economic equilibrium
  8. The socialist system
  9. The capitalistic economy
  10. The State and its interventions
  11. The foundations of international trade
  12. International payments
  13. The balance of payments
  14. Economic development and its inequalities
  15. Growth and its inequalities
  16. Inflation, unemployment, industrial change
  17. The issues of development and the globalization of problems
  18. The development strategies
  19. The economic integration and the forms of cooperation in the world
  20. The strategies of the International Debt

- **AMA127: Bilingual training I and Economic Environment II**

- **English Expression: 1 credit (15 hours); L, T**

  Introduction - Course Content - Syllabus - Importance of English - Style in Business Writing - Punctuation; capitalization - Abbreviations

  Parts of speech - Verbs - Question Words - Methodology: - of asking and answering questions

  Economic activities - Sectors of activity - Commerce and Trade - Channels of Distribution - Essay writing - specialized shops - active voice and passive voice - direct and indirect speech

➢ Economy and organization of enterprises: 2 credits (30hours): L, T, P

1. The company, definition and mode of analysis
2. Filing of Enterprises
3. The structures of organization of enterprises
4. The insertion of the company in the economic fabric
5. The commercial activity of the company
6. The productive activity of the Company
7. Logistics in the Company
8. The financial activity of the company
9. The management of human resources
10. The systemic approach of the company
11. The system of Information
12. The decision-making system
13. The strategic analysis of the Company
14. Choice and implementation of a Strategy
15. The business, society and culture
16. The business, society and the Ethics

❖ AMA231: Quantitative techniques and computer skills I

➢ Probabilities and operational research I: 3 credits (45 hours); L, T, P, PE

1. Algebra of sets
   ▪ Applications;
   ▪ The Counts.
2. Basic Set linked to a random experiment
   ▪ Probabilisation;
   ▪ Conditional probability;
   ▪ Formula of Bayes;
   ▪ Tests in BERNOUILLI.
3. **Random variables discrete**
   - Law of probability;
   - Distribution function.

4. **Random variables continuous**
   - Density,
   - Hope;
   - Variance;
   - Standard deviation;
   - Moments.

5. **Conventional laws**
   - Binomial
   - Normal ;
   - Fish;
   - Exponential.

- **Applied computer I**: 2 credits (30 hours); L, T, P, SPW
  1. **The study of the Graphical Environment Windows**
     - Presentation;
     - Management of Windows;
     - Managing Files and Folders.
  2. **What is a file, a folder?**
     - Path of access to a file.
  3. **Practical Study of Microsoft Word** study of basic functions.
  4. **Practical Study of Microsoft Excel**
     - Presentation;
     - Arithmetic operations.
  5. **Construction of a formula**
     - Use of the integrated functions: - definition;
       - Syntax of the integrated functions;
       - A few integrated functions;
       - Relative reference, absolute reference and joint reference; - Case of synthesis.

- **AMA241: Quantitative techniques and Computer training II**

- **Probabilities and Operational Research II**: 3 credits (45 hours); L, T, P, SPW
  1. **Concepts of the combinatorial optimization**
     - Constraints/objectives;
     - Feasible solution/best;
     - Terminal;
     - Local optima, etc.
  2. **Graph Theory**
     - Modeling;
     - Coloring;
     - Roads;
     - The trees masking fluid;
3. **The linear programming**
   - Program to two variables;
   - program to more than two variables.

4. **The algorithm of the simplex - the table method**
   - Analysis of the final table of the simplex;
   - problem of duality;
   - the management of stocks.

5. **The problems of scheduling - General Information on the Graphs**
   - The PERT method:
     - Applications on the PERT;
   - The choice of investment in deterministic universe.

6. **Modeling**
7. **Decision in Uncertain Future**
8. **Transportation problems**
9. **The problems of assessment**

➢ **Applied computer II: 2 credits (30 hours); L, T, P**

**Specific work**
1. Creation of printed
2. Manufacture of various cards with Publisher
3. Fusion and direct mail
4. Printing of documents and protection
5. Update of the various files.

**AMA232: Accounting and ICT I**

➢ **System of information I: 2 credits (30 hours); L, T, P**

1. **Concept information systems**
   - Introduction
     - Systemic Analysis of the company the system of information;
     - Functions of the IF; - the roles of the IF; - qualities of A if.
   - Computerization of the IF:
     - The parties to A if;
     - Software;
     - Definitions;
     - The purpose of a system of information;
     - The functions of a system of information; - the organizational system;
     - The treatment of information.

2. **Concept of algorithmic and programming initiation**
   - Objects: circumstances, variables, operators …;
   - Basic treatments and sequential;
   - Choice and repetition ;
   - Function and procedures;
   - Structure of the data (vectors, table, registration, file); application with basic or Pascal.
Analytical accounting and budgetary management I: 2 credits (30 hours); L, T, SPW

1. Of the general ledger to the analytical accounting
   - Generality on the analytical accounting (objectives, role, concept of load)

2. Analysis of expenses
   - Loads liable and not liable;
   - Direct costs and indirect;
   - Suppletive loads;
   - Allocation of Indirect Costs.

3. Valuation of stocks (FIFO method, LUP)

4. The full costs (cost of purchase, cost of production, introduce the stocks)

   NB: do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products).

5. Partial costs
   - The variable costs;
   - The marginal costs.

6. The Rational Importance of loads of structure

AMA242: Accounting and ICTS II

System of Information II: 2 credits (30 hours); L, T, P

A- The conceptual model of data: mcd

1. Constitution of the data dictionary DD
   - Goal (objective);
   - Basic Concepts: Elementary data-heading- Document;
   - Techniques of collection of information;
   - Purge of the dictionary;
   - Highlighted objects;
   - Identification of entities;
   - Definition of the relations of dependency between the objects.

2. The development of the entity model- Association
   - Basic Concepts:
     - Entity and entity type;
     - Attribute (property);
     - Insociation;
     - Occurrence of a property;
     - the identifier (key);
     - cardinality.

B- The logic model for relational data: MLDI

1. Purpose

2. Basic concepts
   - Primary key;
   - Foreign key; relationship:
• Registration.

3. **The model entity/INSociation**
   - Relationship of the entities;
   - Definition of Other relations of dependencies between objects; cardinalities.

4. **Passage of the MCD at the MLD**
   - Transformation of entities;
   - Transformation of associations;
     - Binary relationship to the cardinalities \((x, 1) - (x, n)\) with \(X = 0\) or \(x = 1\);
     - Relationship n-area (regardless of the cardinalities);
     - Reflexive relationship to the cardinalities \((x, 1) - (x, n)\) with \(X = 0\) or \(X = 1\); a binary relationship to the cardinalities \((0,1) - (1,1)\).

C- **Physical Data Model: implementation of the database**

1. Creation of the database
2. Creation of tables
3. Entering the data in the tables
4. Relationship of the tables
5. Creating Forms
6. Relational model (relationship, degree, schema, PRIMARY KEY/secondary, cardinality, domain, ... P of base or access)
7. The languages of requests (SQL...)
8. Study of a few SQL commands

- **Analytical accounting and budgetary management II: 2 credits (30 hours); L, T, P, SPW**
  
  1. **The predetermined costs**
     - determination of variances on direct costs and indirect and algebraic analysis of these differences (exclude the graphic analysis)
  2. **The Budgets (brief study and practice)**
     - The budgets of the sales;
     - The production budgets;
     - The budgets of supply; budgets of investment; budgets of cash flow.

- **AMA236: Management of human resources and of events I and II**
  
  - **Introduction to the management of human resources I: 2 credits (30 hours); L, T, SPW**
   
   **History of the management of HR**
   1. The Secrets of the well-being in the Middle Ages
   2. The management of staff and the industrial revolution
   3. The first areas of HRM
   4. The HRM before the 2nd World War

  - **Organization an Event I: 1 credit (15 hours); L, T, P**
    
    1. Analysis of the environment and choice of a strategy
    2. The planning and project management
    3. The Logistics
Introduction to the management of human resources ii: 2 credits (30 hours) ; L, P

Administrative management and social relations

A- Environment of employment

- The CV, letter of motivation, request for employment, sheet of post, recruitment, performance assessment, wage negotiation

1. Locate the legal context of the function and know seek information make the link between the Labor Code and collective agreements.

2. Formalities for hiring and follow-up of the trial period
   - Complete the formalities of hiring (DPAE, registration to the social security ...);
   - Organize the medical visits (hiring, resuming...);
   - Accommodate the employee;
   - Know the minimum content of a mandatory CDI ;
   - Follow the test periods.

3. Control the management of CSD and acting appointments
   - The unemployment contribution on the CSD short;
   - what period of time? For what reason?
   - The possibilities of renewal and succession;
   - what salary? What premiums?

4. Manage the working time and absences
   - The duration of the work;
   - The overtime;
   - Paid leave (legal framework, planning, etc.);
   - The absences disease and accident at work (against-medical visit...);
     Leave related to parenting.

5. To best manage the end of the labor contract and accompany the employee in the event of departure
   - Distinguish between the different causes of rapture and their consequences;
   - Organize administratively to the departure of the employee;
   - Inform the employee on its rights to unemployment and the Foresight...

Organization of an event II: 1 credit (15 hours) ; L, T, P, SPW

1. Sponsorship
2. The relationship with the media
3. Forecasting and Management of Costs
4. Evaluation of Results

AMA237: The legal environment and civic education I

Law on Commercial Companies I: 1 credit (15 hours); L, T

1. The status of the trader
2. The acts of commerce
3. The fund of commerce
4. The different commercial contracts
Civil law: 2 credits (30 hours); L, T, P

1. Definition, characters, the branches and the sources of the law
2. The field of application of the Act
3. The dimensions of the law (objective, subjective right)
4. The Legal organization
5. The right to legal personality
6. The civil status, the name and the resident
7. The Disabilities
8. The legal acts
9. The legal facts

AMA 246: Professional internship

The professional internship: 6 credits (90 hours); P, SPW

1. Arrival and Business Integration
2. Working in a company
3. The holding of the Intern journal
4. The choice of the theme of work: in collaboration with mentors professional academic and
5. Elaboration of the canvas of research
6. The resources to operate
7. The organization of work
8. Drafting of the report
9. Presentation of the report before a jury

AMA 247: The legal environment and Civic education II

Law on Commercial Companies II: 1 credit (15 hours); L, T

1. Definition, Object and forms of commercial companies
2. The creation of commercial companies
3. The operation of the Commercial Companies
4. The dissolution of commercial companies

Labor law: 1 credit (15 hours); L, T, P

1. Definition of the right of labor, birth and evolution of labor law and sources
2. The contract of work (conclusion, implementation and rupture)
3. The conflicts of work (individual and collective)
4. The delegate of the staff, unions
5. Work accidents and occupational diseases
6. The hygiene and safety in the workplace

Civic Education and Ethics: 1 credit (15 hours); L, SPW

The Concepts

• The citizen;
• The Nation;
• The State;
• Public Property unto collective property;
• The freedoms;
• The public service;
• Problem of ethics;
• Ethics, Law and reason;
• Management and ethics of responsibility;
• Ethics and management.
• Ethics
• Civics
• Deontology
• Moral consciousness
• The universal declaration of Human Rights
• Good governance in public services
• Explain the importance of civics to the life of the nation
• Functions of the state and its citizens
• Deontology, Professional ethics and professionalism
• Relationship between morality, law and ethics
• Codes of ethics
Field: MANAGEMENT

Specialty:

OPERATION OF AIR TRANSPORT
1. **Objectives of the training**

The objective of this specialty is to provide holders of the certificate with theoretical and practical knowledge that will enable them participate in all activities relating to air transport operations performed by air transport companies, management of airport services and the administration of air transport.

2. **Skills Sought After**

   → **General skills**
   - Understand the professional and economic environment;
   - Be apt in oral and written communication;
   - Be apt in sales and commercial negotiations;
   - Master the legal framework of the activity and be able to analyze the applicable taxation rules;
   - Master the use of NIT applicable to air transport;
   - Be capable of having a second look at a problem and finding the solution that meets the expectations of the client and the marketing policy of the enterprise;
   - Be flexible.

   → **Specific Skills**
   - Technical preparation of the flight (aircraft loading plan);
   - Issuing of tickets;
   - Processing of passengers;
   - Processing of luggage and freight;
   - Management of security and security of the flight.

3. **Outlets**

   - Airport and customer service reception officer;
   - Commercial stop over and customer relation officer;
   - Import and export agent;
   - Technical operating officer;
   - Freight agent.
4. Organization of the Teachings

Semester 1

<table>
<thead>
<tr>
<th>Field: Management</th>
<th>Specialty: OPERATION of AIR TRANSPORT</th>
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<tbody>
<tr>
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<td><strong>Course Title</strong></td>
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<tr>
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<tr>
<td><strong>Fundamental Courses 30% (2 UC) 9 credits 135 hours</strong></td>
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<tr>
<td>OAT111</td>
<td>Mathematics and Computer Science I</td>
</tr>
<tr>
<td>OAT112</td>
<td>Quantitative Technicsl</td>
</tr>
<tr>
<td><strong>Professional course 60% (4 UC) 18 credits 270 hours</strong></td>
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<tr>
<td>OAT113</td>
<td>Economic Environment of Air Transport</td>
</tr>
<tr>
<td>OAT114</td>
<td>Airport platform</td>
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<tr>
<td>OAT115</td>
<td>Legal framework and safety</td>
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<td>OAT116</td>
<td>Quality and safety management</td>
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<tr>
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<td>OAT117</td>
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Semester 2

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<tr>
<td>OAT121</td>
<td>Mathematics and Computing II</td>
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<tr>
<td>OAT123</td>
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<td>OAT124</td>
<td>Goods and Freight</td>
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<tr>
<td>OAT125</td>
<td>Legal framework and balance of loads in the aircraft</td>
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<tr>
<td>OAT126</td>
<td>Weighing, pricing of roads and handling of air cargo</td>
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<tr>
<td><strong>Cross-sectional courses 10% (1 UC) 3 credits 45 hours</strong></td>
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<tr>
<td>OAT127</td>
<td>Bilingual Training II and Economic Environment II</td>
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#### Fundamental course 30% (2 UC) 9 credits 135 hours

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<tbody>
<tr>
<td>OAT231</td>
<td>Quantitative techniques and computer skills I</td>
<td>35</td>
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<tr>
<td>OAT232</td>
<td>Accounting and ICT I</td>
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#### Professional course 60% (4 UC) 18 credits 270 hours

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<td>OAT233</td>
<td>Security control system and multimodality of transport</td>
<td>30</td>
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<tr>
<td>OAT234</td>
<td>Units of packaging and services rendered to the aircraft</td>
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<td>20</td>
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<tr>
<td>OAT235</td>
<td>The work of synthesis and operational management of the navigation</td>
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<tr>
<td>OAT236</td>
<td>Administration and planning of air navigation</td>
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#### Cross-sectional course 10% (1 UC) 3 credits 45 hours

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**Total** 190 | 135 | 100 | 25 | 450 | 30

### Semester 4

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<th>Specialty: OPERATION OF AIR TRANSPORT</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td>Number Of Credits</td>
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</table>

#### Fundamental course 30% (2 UC) 9 credits 135 hours

<table>
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<tr>
<th>Code</th>
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<th>Hourly Volume</th>
<th>Number Of Credits</th>
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<tbody>
<tr>
<td>OAT241</td>
<td>Quantitative techniques and computer II</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>OAT242</td>
<td>Accounting and ICTS II</td>
<td>10</td>
<td>20</td>
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</table>

#### Professional course 60% (4 UC) 18 credits 270 hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Hourly Volume</th>
<th>Number Of Credits</th>
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<tbody>
<tr>
<td>OAT243</td>
<td>The work of synthesis, management and treatment of airport flows</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>OAT244</td>
<td>Claims management and processing of disputes in air transport</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>OAT245</td>
<td>Actuation of the skills and management of resources</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>OAT246</td>
<td>Professional internship</td>
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#### Cross-sectional course 10% (1 UC) 3 credits 45 hours

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<th>Hourly Volume</th>
<th>Number Of Credits</th>
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<tbody>
<tr>
<td>OAT247</td>
<td>Legal environment and civic education II</td>
<td>30</td>
<td>15</td>
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</tbody>
</table>

**Total** 100 | 135 | 160 | 55 | 450 | 30

Page 39 of 627
5. Courses content

❖ OAT 111: Mathematics and computing I

➢ General Mathematics I: 3 credits (45 hours); L, T, SPW

- Algebra vector spaces

1. Polynomials
   • polynomials characteristics
2. Vector space
   • Linear applications
3. Matrices
   • Operations on the matrices;
   • Matrices associated with a linear application; matrices and determinants.
4. The Determinants
   • Determinant of a square matrix;
   • Calculation of determinants of order less than or equal to 3.
5. Linear Systems
   • Inversion of matrix of order less than or equal to 3 - method of Gauss;
   • Resolution of systems of linear equations by the method of; Pivot
   • Application of the matrix calculation on the resolution of systems of linear equations.
6. Reduction of square matrices
   • real values;
   • realvectors.
7. Differential equations and linear recurrence of 2nd order with constant coefficients
8. Mathematical applications in Economics and Management

➢ General Computing I: 2 credits (30 hours); L, T, SPW

A- The hardware

1. The peripheral components
   • inputdevice;
   • ouPut devices;
   • The storage devices; the devices of input and output.
2. The central unit
   • The central memory;
   • The microprocessor;
   • The ports;
   • The motherboard;
   • The chipset;
   • The power;
   • The cards of extension;
   • Other internal organs;
3. The unit of exchange (or bus)
   • Role;
   • Types of bus:
     - Data bus;
     - Control bus; - Bus of address.

B- The Software

1. The application software
   • Definition;
   • Role;
   • Types and examples of software.

2. The basic software (or software systems)
   • Definition
   • Types of basic software
     - The drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation:
       ▪ Features;
       ▪ Roles;
       ▪ Types of operating system;
       ▪ Structure of a operating system;
       ▪ architecture.
   • Concept of Free Software and propriatry software.

System of Numbering and coding

A- The numberingsystems

1. A few basic concepts
   • The base of the system;
   • Weight;
   • Alphabet of the language;
   • Format of the word (length of the word);
   • power of language.

2. A few numberingsystems
   • The decimal system;
   • The binary system;
   • the octal system;
   • the hexadecimal system.

3. The basic changes
   • from Decimal to another base b;
   • To a base b of any kind to the decimal basis;  from the binary in octal and vice versa;  from binary to hexadecimal and vice versa.

4. Arithmetic operations
   • binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
     - addition of binary numbers;
• Subtraction of binary numbers;
• Use of the complement to 2 in the subtraction;
• Multiplication of binary numbers;
• Division of binary numbers.

5. Hexadecimal arithmetic
• Addition of numbers in Hexadecimal;
• Subtraction of numbers in hexadecimal.

B- The codes

1. General information on the concept of a code
   • Definitions;
   • Objectives of the codification;
   • The functional codification;
   • Types of functional codes;
   • The technological codification.

2. The alphanumeric codes
   • The ASCII code:
     • Standard ASCII; - Extended ASCII;
     • Use.

OAT 121: Mathematics and Computing II

General Mathematics II: 2 credits (30 hours); L, T, P, SPW

1. The real numbers;
2. Numerical Functions of a real variable, limit, continuity;
3. Differentiability, extrema, theorem of Rolle and finished increases;
4. Polynomials, fractions, rational;
5. Study and graphic representation, reciprocal functions;
6. Limited developments, integrals and applications to calculations of Aires;
7. Logarithmic functions and exponential;
8. Digital Suites: Direction of variation, convergence;
9. Arithmetic Suites, Suites geometrical, recurring suites of Order 1;
10. Mathematical applications in economics and management.

Computing II: 2 credits (30 hours); L, T, P, SPW

A- Computer Networks

1. General information
   • Definition of A computer network;
   • Interest of computer networks;
   • Basic vocabulary:
     - Workstation;
     - Mode;
     - Server;
     - Packet.

2. Typology of networks according to the media:
   • Wired networks;
3. **Typology of networks according to the "Geographic Extent:"**
   - The local networks (LAN);
   - The metropolitan area networks (MAN);
   - The wide area networks (WAN).

4. **Network Topologies**
   - **Physical topology**
     - The bus topology;
     - The star topology;
     - The ring topology;
     - The topology in mesh;
     - The topology in shaft.
   - **Logical topology**
     - Networks to dissemination;
     - Point-to-point networks.

5. **Network Architectures**
   - Client/Server architecture; architecture of equal to equal.

6. **The equipment of computer networks**
   - Equipements of basis of a network:
     - The computer;
     - The network card;
     - The server;
     - The network cable;
     - The transceiver (or adapter);
     - The transmission mounts;
     - The socket.

7. **The equipment of interconnections:**
   - Hubs (hub);
   - Switch (Switch);
   - Routers;
   - Gateways
   - The gateway (gateway);
   - The router;
   - The bridge (Bridge);
   - The repeaters.

8. **Concept of IP addressing**
   - Structure of an IP address
     - Network identifier (Net ID);
     - Identifier of host (Host ID).
   - Specific addresses
     - Network addresses;
     - Machine address;
     - Broadcast Address (broadcast);
     - Limited Broadcast address (multicast);
     - Address of rOATgging (loopback).
   - Class IP addressing
     - Class A;
     - Class B;
     - Class C.

C. **Internet network**

1. **Concept of protocol**
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
     - NNP protocol;
- FP protocol;
- HTTP protocol;
- IMAP protocol;
- Protocol TCP;
- other.

2. **A few Internet Services**
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
   - The Download (Download A text, download An image, download a free software...);
   - The online Trade; □ The IRC (Internet Relay Chat);
   - Other.

3. **The searchengines**
   - Definition;
   - Role;
   - Someseachengines.

4. **Tools for Internet access**
   - The browsers (definition, examples);
   - The plug-ins (definition, examples);
   - The search engines (definition, examples, use).

5. **The connection to the Internet**
   - Connection hardware;
   - Suppliers of access (role, examples);
   - Types of connections (specialized line, phone line, satellite).

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**OAT 112: Quantitative technics I**

- **Financial Mathematics I: 2 credits (30hours); L, T, SPW**

  1. **The Basics**
     - Simple Interest;
     - Calculation of the acquired value.
     - Commercial present value and current value rational
     - Pre-determined interest and effective interest
  2. **Calculation of the average rate of a series of simultaneous investments**
  3. **Equivalence and replacement of effect**
  4. **Short-term financial transactions - Current Account and interest**
  5. **Commercial Discount - real rate of discount**
  6. **Compound interest**
     - Acquired value;
     - present value;
     - Equivalent rate and proportional rate;
     - apparent rate of interest;
     - real interest rate.
Statistics: 2 credits (30 hours); L, T, SPW

1. **Statistical series to a variable**
   - Definition and vocabulary;
   - Graphical representation;
   - Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Standard deviation;
     - Quantiles;
     - Coefficient of variation.

2. **Statistical series of two variables**
   - Definition and vocabulary;
   - Scatter diagrams;
   - Average point;
   - Covariance and covariance matrix of 2 variables;
   - The coefficient of correlation and regression;
   - Linear adjustment by the method of least squares.

OAT 122: Quantitative techniques II

Financial Mathematics II: 2 credits (30 hours); T, P, SPW

1. **The Annuities**
   - Constant annuities;
   - Annuities in arithmetic progression;
   - Annuities in geometric progression;
   - Perpetual annuities.

2. **The joint loans**
   - Reimbursement by constant annual installments;
   - Amortization table;
   - Laws followed by depreciation recovery of the debt still alive;
   - Laws followed by the annuities;
   - Applications on the undivided loans (joint loans).

3. **The bond loans**
   - Reimbursements to the pair;
   - Constant annual installments;
   - Constant depreciation;
   - Yield rate and rates of returns of a debenture loan;
   - Rate of returns of debenture loan at issue;
   - Choice of Investments.

Statistics II: 2 credits (30 hours); T, P, SPW

1. Estimation of an average, a proportion and a standard deviation
2. Confidence interval and confidence coefficient
3. Tests of hypothesis and the KHI-square
International Economics: 2 credits (30 hours); L, T, P, SPW

A- Benefits and nature of international economic relations:

1. The Act, comparative advantages and the magnitude of the international economic relations

B- The balance of payments:

1. Definition and operation;
2. The content of the international economic relations
3. The balance of trade
   • The territorial services;
   • The external services;
   • The Unilateral transfers;
   • The balance of current transactions (balance of income); □ The balance of capital movements;
   • The balance of the compensatory movements.

C- The protectionism and trade policy

1. The tariff instruments of trade policy the rights of customs
2. The instruments Non-tariff barriers to trade policy

D- The cooperation and economic integration: international organizations of economic cooperation International:

1. The International Monatary Fund
   • Agreements of Brettons Woods (USA);
   • Collapse of the system of the standard"-currency-gold;
   • Two causes of the collapse;
   • Kingston conference. Amendment of the Statutes of the IMF (1976); □ SDR.
2. The International Bank for Reconstruction and Development (IBRD)
3. The General Agreement on Tariffs and Trade GATT
4. The Organization of Economic Cooperation and Development (OECD)
5. The United Nations Conference on Trade and Development (CNUCE)

E- The Europeaneconomic integration

1. The modalities and forms of the Economic Integration
2. The European Community (EC)
3. The The European Free Trade association (EFTA)
4. The European Economic Area (EEA)

F- The economic development and development Assistance

1. International economic disparities
2. The characteristics of the under-development
3. The theories of the Economic under-development
4. The development strategies

G- Economic integration in Africa

1. CEMAC
2. UMOA
3. CDEAO

Air Transport economics: 3 credits (45 hours); L, T, P, SPW

1. Introduction
2. The economy of the offer
   • Economy of the production of services of transport;
   • Economics of infrastructure;
   • Economics of services in passenger transport.
3. The demand in air transport
   • The demand for transport;
   • Analysis (static) of the balance of supply and demand; management of the request.
4. The management of the transport system and its development
   • The management of the medium-term offer;
   • Long-term development of a transportation system; supplements and openings.

OAT 114: Airportplatform

Airport environment: 3 credits (45 hours); L, T, P, SPW

1. The devicemodels
   • Gateway model;
   • Satellite model;
   • Gateway model-satellite; model semi-circular; Room of waiting for mobile.
2. Role and Responsibilities of the stakeholders
   • Airlines;
   • The air navigation services and meteorology;
   • Royal Canadian Mounted Police;
   • Police;
   • FireDepartment;
   • Oil tankers;
   • Customs;
   • Health;
   • Catering;
   • Shops.

Passengers and Baggage I: 2 credits (30 hours); L, T, P

1. General information
2. The commercial documents and Accounts
3. System of management of passengers
   • Booking module (PNR);
   • Inventory Module (yield management);
   • Control Module of departures (DCS);
   • the revenues management module (RMS).
4. Treatment of passengers
   • The different types of passengers;
   • Passengers not admitted expelled, persons to be convicted;
   • Procedures for registration;
   • Procedures for boarding;
   • Landing procedures;
   • Treatment of carry-on baggage.

5. Baggage processing
   • Standards of registration;
   • Bags out template;
   • Baggage disputes (System World Tracer);

6. The contract of assistance

❖ OAT 115: Legal framework and safety

➢ Law and regulation of air transport: 2 credits (30 hours); L, T, P, PE

1. Background and objectives of the instruction
2. Certification of Operators
   • The functions of the authorities of the State;
   • Methods by which the State exercises normally its authority;
   • Permit to exploitation.
3. The Convention on International Civil Aviation
   • The Convention on the international civil aviation;
   • Sovereignty over the airspace;
   • Right to overview by commercial aircraft of the territory of the Contracting States.
4. Question of International Air Transport
   • Treated in the Conventions;
   • The problems dealt with in an international arrangement.
5. The International Civil Aviation Organization (ICAO)
3. The organization of the international civil aviation;
4. Documents and publications of the ICAO.
6. Responsibility for the airworthiness of aircraft
   • Responsibilities of the State relating to the maintenance of the airworthiness of aircraft;
   • Responsibility of the operator in respect to the maintenance of the airworthiness of aircraft;
   • Responsibility of the operator relating to the loading (state of charge).
7. The regulatory provisions of the flight manual.
   • Field of application of the manual of the flight;
   • Content of a flight manual typical;
   • Systems of circuits of edge that present interest for the state, and effect of their state of operation.
8. Introduction to the minimum list of equipment (LME)
   • General description
9. Introduction In the Operations Manual
   • The force of the Manual of Operating;
• Layout and content of the Manual of Operating.

10. Aircrew
   • Patents, licenses and qualifications;
   • Composition of crews, designation of the CBD; responsibility of the CBD.

11. Embedded documentation

12. Equipment for navigation, communication and rescue

➢ Introduction to the safety: 2 credits (30 hours); L, T, P.
  1. Objective of the safety
  2. General Organization of the safety of the Aviation
  3. Presentation of the national program of safety (PNS) of the civil aviation
  4. Responsibility of the airline in terms of reliability of the civil aviation
  5. Safety Program of the company
  6. Role of the chief of security of the operator
  7. Responsibility of the captain and the crew of conduct relating to security
  8. Protection of the cockpit
  9. Precautions before flight

❖ OAT 116: Safety and quality Management

➢ Quality Management System: 2 credits (30 hours); L, T, P
  1. General requirements
  2. Requirements relating to the documentation
     • General information;
     • Quality Manual; control of documents;
     • Control of Records.
  3. Responsibility of the Directorate
     • Management commitment;
     • Listens to the customer;
     • Quality policy;
     • Planning;
     • Responsibility, Authority and Communication.
  4. Management of Resources
     • Provision of resources;
     • Human Resources;
     • Competence, Training and awareness raising and training;
     • Infrastructure;
     • Work Environment.

➢ Introduction to the Safety Management System I: 2 credits (30 hours); L, T, P, SPW
  1. Role of the responsible officer
  2. Guide to the preparation of a manual GSS
     • Introduction;
     • Security policy and organization;
     • Risk management;
     • Assurance of the maintenance of the Security;
     • Promotion of security.
3. **Elaboration of an impact assessment on the security in the event of change**
   - Introduction;
   - Principle of evaluations of impact on Security (EIS);
   - Evaluation of impact on the safety (risk management);
   - Form of impact evaluation.

### OAT 117: Bilingual training I and economic environment I

- **French expression: 1 credit (15hours): L, T**
  
  1. **Vocabulaire**
     - Vocabulaire technique usuel
  2. **Grammaire**
     - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
     - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
     - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
     - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
     - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
     - Des fonctions grammaticales.

3. **Expression et communication**
   - Compréhension et interaction au cours d’une discussion technique ;
   - Communication orale courante ;
   - Communication orale interactive
   - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
   - Lecture rapide et compréhension de texte ;
   - synthèse d’un long texte
   - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
   - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
   - Expressions figées

- **Principles of Economics: 2 credits (30hours): L, T, P**
  
  1. Business and production
  2. Households and the consumption
  3. Markets and Prices
  4. Training and distribution of income
  5. The currency and the financing of the Economy
6. The elements of the National Accounts
7. The macro-economic equilibrium
8. The socialist system
9. The capitalist economy
10. The State and its interventions
11. The foundations of international trade
12. International payments
13. The balance of payments
14. Economic development and its inequalities
15. Growth and its inequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of problems
18. The development strategies
19. The economic integration and the forms of cooperation in the world;
20. The strategies of the International Debt

OAT 127: Bilingual training II and Economic Environment II

- English Expression: 1 credit (15 hours); L, T, SPW

1. Vocabulary
   - Technical and usual vocabulary of the specialty
2. Grammar
3. Bilingual expression
   - Understanding in interaction in Technical Discussions
   - Continuous oral communication: Show, explain, develop, summarize, account, comment;
   - Interactions oral communication
4. Autonomous reading of "writings" of all levels
   - Lead by a quick reading to understand the general sense;
   - Browse a text long enough to locate desired information;
   - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
5. Write clear, detailed texts
   - Essay writing;
   - Application for employment;
   - C.V.;
   - Letter of motivation;
   - Letter/memo writing and minutes of a meeting

- Economy and organization of enterprises: 2 credits (30 hours); L, T, P
  - The Enterprise, definition and mode of analysis;
  - Classification of Enterprises;
  - The Organisational Structure of enterprises;
  - The insertion of the company in the economic fabric;
  - The commercial activity of the enterprise;
- The productive activity of the enterprise;
- Logistics in the enterprise;
- The financial activity of the enterprise;
- The management of human resources;
- The systemic approach of the enterprise;
- Information system;
- The decision-making process;
- The strategic analysis of the company;
- Choice and implementation of a strategy;
- The business, society and culture;
- The business, society and the Ethics.

**OAT 123: Methodology and Marketing**

- **Marketing applied to the air transport**: 2 credits (30 hours); L, T, P, SPW
  1. History of marketing
  2. The foundations of the marketing concept
  3. The role of marketing
  4. The approach of marketing
  5. The areas of application of marketing
  6. Relations between Business and the market
  7. The environment of the Company
  8. The characteristics and actors in the market
  9. The demand of the consumers
  10. The behavior of the Consumer face in the market
  11. The segmentation of the market
  12. The internal and external factors which influence the Purchaser
  13. The Analysis of the competition

- **Methodology for drafting a report of internship**: 1 credit (15 hours); L, P
  1. The collection of Information
  2. How to make a report
  3. The plan of the probationary report and the Executive Summary
  4. The Table of Contents
  5. The introduction of the report of internship
  6. The conclusion of the Internship report
  7. The Acknowledgments
  8. How to build the annexes
  9. When to start his internship report
  10. How to find a subject of Internship report
  11. The cover page
  12. How to write effectively
  13. Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations)
  14. Instructions and typographical rules of presentation (police, spacing, titles, highlighted, punctuation, graphic charter)
15. How to prepare the defense

- **Purchase negotiation sale**: 2 credits (30 hours); L, T, P, SPW
  
  1. **Systemic logic of the Negotiation**
     - Fit the situation of negotiations;
     - Explore and collect information on the specific objectives and issues;
     - take position and negotiate;
     - conclude.
  
  2. **Key steps of the process of purchase**
     - Identification of need;
     - Review and formalization of the need (specifications);
     - Analysis of the market;
     - The call for offer;
     - Counting of the call for offers and analysis of results;
     - Analysis of the strengths and weaknesses;
     - Selecting short list;
     - Negotiations (search of the agreement);
     - contractualisation.
  
  3. **Key steps sales process**
     - Preparation: objectives and strategic plan;
     - Preparation atmosphere of context;
     - Open questioning and methods of “active listening;
     - Reformulation of the need;
     - Involvement of the prospect in the act of Purchase;
     - discussion and research of agreements;
     - conclusion.

- **OAT 124: Goods and Freight**

  - **The dangerous goods**: 2 credits (30 hours); L, T, P, SPW

  1. **General Theory**
     - The basis of the Regulations;
     - Responsibility of shippers/carriers;
     - training.
  
  2. **Restriction**
     - Dangerous goods concealed;
     - Dangerous goods transported by the passengers and the crew”;
     - Differences of states and airlines.
  
  3. **Classification of Dangerous Goods**
     - General principles;
     - The classes of dangerous goods;
• Dangerous goods to multiple risks;
• Identification of Dangerous Goods
• General information;
• Choice of the exact designation of “expedition;
• List of dangerous goods; □ specific definitions.

4. Packaging
• General information;
• Instructions for packaging;
• Identification of the types of packaging.

5. Marking and labelling of dangerous goods
• Markings;
• Labelling;
• Specification of the labels.

6. Documentation
• Declaration of the Sender of dangerous goods;
• Letter of air transport.

7. Treatment of dangerous goods
• Acceptance;
• Warehousing;
• Loading;
• Inspection;
• Information to provide.

8. Radioactive materials
• Transport of radioactive goods;
• Restrictions;
• Classification;
• Identification;
• Packaging;
• Marking and labelling; □ Documentation.

➢ Treatment of air cargo I: 2 credits (30 hours); L, T, P

1. Generality
• IATA areas and code of cities/airport;
• Abbreviations of codes;
• Coding/decoding of the companies;
• Definitions;
• The conversion tables of weights and measures.

2. Acceptance of the transportation and logistics
• Generality;
• Documents to be provided by the sender;
• Acceptance of the goods;
• Delivery;
• Shipping during transport.

3. Transportation Costs
• Taxation;
• Rates not published;
• Calculation of the transport costs; Costs Appendix.
• The letter of air transport

❖ OAT 125 : Legal framework and balance of loads in the aircraft

➢ Ground control and the centering: 2 credits (30 hours); L, T, P

1. Introduction to the control of the weight and balance
2. Definitions and objectives (limits of structure, aerodynamic and operational)
3. Organization of responsibilities relating to the control of the weight and balance
4. Technical services, preparation of the load and communication
5. Methods of calculation of the mass and the centering (moments and% MAC)
6. Authorization of loading (state of charge); detailed description

➢ Certification of an airline company: 2 credits (30 hours); L, T, P

1. The Air Transport License
2. The certificate of air carrier
   • Organization of an airline;
   • The control of operation;
   • Crew and qualifications;
   • Limitation of working time and rest recuperator;
   • Qualification to the jurisdiction of the road and airfield;
   • The provisions of health;
   • Procedures for operating on the ground;
   • Use of Aircraft;
   • Roads and Road;
   • Training of crews.
4. Study of Airworthiness
   • Procedures and Documents
5. Detailed study of the MEL/CDL
   • Master MEL;
   • Procedure for adaptation of the Master MEL;
   • approval of the MEL.

❖ OAT 126: Weighing and pricing of the loads and handling of air cargo

➢ Planning of the load: 2 credits (30 hours); L, T, P

1. The three aspects of the planning of the load
   • The volume or space available;
• Carry the maximum load;
• Distribute the load and the separate depending on the nature, the destination, etc.

2. **Combined limitations of maximum pay**
• Difference between base weight and mass of Maxi without fuel;
• Volumetric limits;
• Passenger capacity.

3. **Tables of pre-allocation of the pay load load**
• Cargo ventilation, pax, position; lump-sum mass by pax (statistics);
• Case of excessive load (larger aircraft, landing in Road, hold favorable weather, disembark load);
• List of Priority pax, freight claims and position, live animals.

4. **Definition of masses of maximum calculation**
• When driving;
• Take-off;
• Landing;
• Without fuel.

5. **The operational factors that can limit the earth**
• Limitation of track on takeoff and the landing;
• Limitation of performance at takeoff and landing”;
• Limitation to the take-off related to the limitation landing and to the conso;
• Limitations related to anomalies of loading or fuel; limitations related to the”state machine.

6. **The various operational masses**
• BOW, Dow, ZFW, OW, TOW and all the relationships combined

7. **MINS of the passengers**
• Convention according to regulations, statistics, season or destination

8. **Reminders of the mass of the fuel minimum**
• Concept of fuel mini on assumption of ZFW;
• Notions of density, temperature, and mass;
• Converting Units of Volume (liters, USG, gal) in kg.

9. **Determination of the pay load available**
• Determine operational mass eligible to take-off;
• Determine the fuel mini and the fuel for the take-off to the ground;
• Determine the ZFW (compare to the ZFW maxi);
• Closer to the DOW.

10. **Centering and longitudinal stability**
• The center of gravity and the center of aerodynamic thrust;
• The mean aerodynamic chord (MAC) and % MAC;
• Functions of stabilizer and the control surfaces of depth;
• Variations of the CG depending on the load.

11. **Moments and centering**
• The time, definition and units: negative time and conditions of balancing”
The structural aspects of the loading of a plane: 2 credits (30 hours); L, T, P

1. Resistance of the fuselage
   - need to distribute the load to decrease the local overload;
   - Stowage of the load for the security and stability of the Balance.

2. Structure of the fuselage
   - Floor joists laid down in the backbone of the fuselage;
   - Loads transmitted to the structure of the fuselage and wings and the train;
   - loads of remote structure of the wings can withstand more of mass;
   - The bunkers closest to the wings can withstand more mass.

3. Illustrations of eligible loading
   - Schema of fuselage with senior compartments and lower;
   - Resistance of each section of the floor
   - Maximum load per unit of floor surface
   - Load per unit length
   - Use of standardized spacers to spread the load.

4. Tables of maximum combinations
   - Tables builders by plane and/or by cargo door;
   - combination of length, height, width, maximum.

5. Immobilization of loads
   - Protection of persons, cargo and the plane;
   - Prevent movement of the brutal CG in acceleration, turbulence;
   - Methods of immobilization in the hold bulk or in CAB;
   - Pallets description, limitations, cargo stowage on pallet and pallet on A/C; certification Containers, description, limits stowage of containers.

6. Imitation: airplane mass, bunkers, compartments, floor, centering

7. Dangerous goods, accounting, location, priorities

8. Loading Instructions
   - Responsibility of the authorising officer, AE or loader chief;
   - Detailed form with visa of conformity of the charger.

9. Loads of last minute (LA)
   - Conditions of acceptance

10. Authorization of loading (state of load)
    - Description, details of loading, LA, limitations, CG

11. Dangerous goods and other special cargo
    - Awareness: types, packaging, separation, inspection, information, CBD;
    - Live animals: handling, processing temperature, ventilation, protection of the aircraft, the pax, of the crew.

12. IATA system of technical numbering of the flight
OAT 231: Quantitative techniques and computer skills I

Probabilities and Operational Research i: 3 credits (45 hours); L, T, P, 4SPW

1. Algebra of sets
   - Applications;
   - The Counts.
2. Basic Set linked to a random experiment
   - Probability;
   - Conditional probability;
   - Formula of Bayes;
   - Tests in BERNOULLI.
3. Random variables discrete
   - Law of probability;
   - Distribution function.
4. Random variables continuous
   - Density,
   - Hope;
   - Variance;
   - Standard deviation;
   - moments.
5. Conventionallaws
   - Binomial
   - Normal
   - fisher
   - exponential.

Applied computer i: 2 credits (30 hours); L, T, P, SPW

1. The study of the Graphical Environment Windows
   - Presentation;
   - Management of Windows;
   - Managing Files and Folders.
2. What is a file, a folder?
   - Path of access to a file
3. Practical Study of Microsoft Word
   - Study of Basic Functions
4. Practical Study of Microsoft Excel
   - Presentation;
   - Arithmetic operations.
5. Construction of a formula
   - Use of the integrated functions: - definition;
     - Syntax of the integrated functions;
     - A few integrated functions;
     - Relative reference, absolute reference and joint reference;
     - Case of synthesis.
OAT 241: Quantitative Technical and informatics II

- Probabilities and Operational Research II: 3 credits (45 hours); L, T, P, SPW

1. Concepts of the combinatorial optimization:
   - Constraints/objectives;
   - Feasible solution/best;
   - Terminal;
   - Local optima, etc.

2. Graph Theory:
   - Modeling;
   - Coloring;
   - Roads;
   - The treesmaskingfluid;
   - The Waves...

3. The linear programming
   - Program to two variables;
   - Program to more than two variables.

4. The algorithm of the simplex - the table method
   - Analysis of the final table of the simplex; problem of duality; the management of stocks.

5. The problems of scheduling - General Information on the Graphs
   - The PERT method:
     - Applications on the PERT;
   - The choice of investment in deterministic universe.

6. Modeling
7. Decision in Uncertain Future
8. Transportation problems
9. The problems of assignment

- Applied informatics II: 2 credits (30 hours); L, T, P

Specific work
- Software of exploitation of air transport

OAT 232: Accounting and ICT I

- Logistics Information System i: 2 credits (30 hours); L, T, P, SPW

1. Concept information systems
   - Introduction
     - Systemic Analysis of the company the system of information system;
     - Functions of the information system; - the roles of the IF;
- Qualities of an IF.
- Computerization of the IF:
  ✓ The parts of an IF;
  ✓ Software;
  ✓ Definitions;
  ✓ The purpose of a system of information;
  ✓ The functions of a system of information; - the organizational system; - the processing of information.

2. Concept of algorithmic and programming initiation
   • Objects: circumstances, variables, operators …;
   • Basic treatments and sequential;
   • Choice and repetition;
   • Function and procedures;
   • Structure of the data (vectors, table, registration, file); □ application with basic or Pascal.

Cost accounting and budgetary management i: 2 credits (30hours); L, T, SPW

1. Of the general ledger to the analytical accounting
   • Generality on the analytical accounting (objectives, role, concept of load)

2. Analysis of expenses
   • liable and non- liable expense;
   • Direct and indirect cost;
   • Suppletive expenses;
   • Allocation of Indirect Costs.

3. Valuation of stocks (FIFO method, Average Method)

4. The full costs (cost of purchase, cost of production, introduce the stocks)
   NB: do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products)

5. Partial costs
   • The variable costs; □ marginal costs.

6. The Rational Importance of expenses

OAT 242: Accounting and ICTS II

System of Information II: 2 credits (30 hours); L, T, P

A- The conceptual model of data: mcd

1. Constitution of the data dictionary DD
   • Goal (objective);
   • Basic Concepts: Elementary data-heading- Document;
   • Techniques of collection of information;
   • Purge the dictionary;
   • Highlighting of objects;
   • Identification of entities;
   • Definition of the relations of dependency between the objects.
2. The development of the entity association model
   • Basic Concepts:
     - Entity and entity type;
     - Attribute(property);
     - association;
     - Occurrence of a property; - the identifier (key); - cardinality.

B- The logic model for relational data: MLDR

1. Purpose
2. Basic concepts
   • Primary key;
   • Foreign key;
   • relationship;
   • Registration.
3. The model entity/Association
   • Relationship of the entities;
   • Definition of Other relations of dependencies between objects; ☐ cardinalities.
4. Passage of the MCD at the MLD
   • Transformation of entities;
   • Transformation of associations;
     - Binary relationship to the cardinalities \((x, 1)- (x, n)\) with \(X = 0\) or \(x =1\);
     - Relationship n-area (regardless of the cardinality);
     - Reflexive relationship to the cardinalities \((x, 1)-(x, n)\) with \(X= 0\) or \(X = 1\);
     - a binary relationship to the cardinalities \((0.1) - (1.1)\).

C- Physical Data Model: implementation of the database

1. Creation of the database
2. Creation of tables
3. Entering the data in the tables
4. Relationship of the tables
5. Creating Forms
6. Relational model (relationship, degree, schema, PRIMARY KEY/secondary, cardinality, domain, ... P of base or access)
7. The languages of requests (SQL...)
8. Study of a few SQL commands

Cost accounting and budgetary management II: 2 credits (30 hours); L, T, P, SPW

1. The predetermined costs
   • Identification of standard deviation on direct costs and indirect and algebraic analysis of these differences (exclude the graphic analysis)
2. The Budgets (brief study and practice)
   • The budgets of the sales;
   • The production budgets;
   • The budgets of supply;
• The budgets of the investment;
• budgets of cash flow.

❖ OAT 233: Security and control system and multimodality of transport

➢ Introduction to the Safety Management System II: 1 credit (15 hours); L, T, P, SPW
  1. Method of analysis of incidents/accidents
     • Introduction;
     • Form of accident/incident analysis.
  2. Supplement relating to the characteristics of the risk fatigue
     • Particular case of risk management fatigue; assurance of the maintenance of security.

➢ Introduction to the safety II: 1 credit (15 hours); L, T, P, SPW
  1. Responsibilities of the Chief of the cab in the area of safety
  2. Measures of safety related to activities traffic and passage of an Airline
  3. Measures of safety related to activities track, office, armaments, cleaning and victualling
  4. Work to the Airport
  5. Protection of Aircraft parked
  6. Filtering and physical search of hold baggage and cab
  7. Manual inspection of luggage
  8. Escort of passengers and shipments by air. Search and protection of a sterile area.

➢ The road transport (terrestrial): 1 credit (15 hours); L, T, P
  1. Specific characteristics to road transport
  2. Characteristics of roads
  3. Control of the load to the axle and preservation of roads
  4. Transport of people and goods
  5. Choice and cost of operation of motor vehicles
  6. Technical control and inspections and the maintenance of the vehicles
  7. Organization of the profession

➢ The maritime and inland waterway transport: 1 credit (1 hours); L, T, P
  1. Specific characteristics of mode of Transport
  2. The port infrastructure
  3. Transport of people and goods
  4. Characteristics and Types of vessels or boats
  5. The costs of exploitation
  6. Terminal Charges
  7. The organization of the profession
OAT 234: Units of command and services rendered to the aircraft

- Assistance from the aircraft to the stopover: 2 credits (30 hours); L, T, P

Technical affected

1. The stakeholders
2. Aircraft Park and safety zone
3. Refuelling
4. The Constraints
5. Load Test
6. The contract of assistance
7. The equipment of Airport assistance
8. FireSafety
9. Anti-cooling and cooling of the Air
10. Nomenclature of causes of delays
11. Regulation of flights

- The packagings in air transport: 2 credits (30 hours); L, T, P.

1. General Packing Instructions
   - Restrictions on size and weight of the mailings;
   - General instructions for packaging;
   - General methods of packaging;
   - Closure of your package;
   - Addressing and labelling of your package;
   - Instructions for the packaging of particular goods.

2. The packing instructions for perishable foodstuffs
   - Preparation of perishable foodstuffs for the shipping;
   - Maintenance of the temperature of the refrigerated products during transport;
   - Maintenance of the temperature of the frozen products during transport;
   - Shipment of fish and seafood with the ice;
   - Protection of products in order to avoid freezing their;
   - Instructions of sealing and of labelling.

3. The packing instructions for flowers and plants
   - Requirements relating to the packaging;
   - Preparation of flowers and plants for the shipping;
   - The recommendations of the Service Express;
   - Instructions for sealing and labelling.

4. The packing instructions for the computer hardware
   - Options for Recommended packaging;
   - Shipping in the packing of Origin of the manufacturer;
   - Shipping without the packing of Origin of the manufacturer;
   - Instructions for sealing and labelling;
   - Shipping in a fund of transport;
   - Packaging for shipments of freight;
5. The packing instructions for clinical samples
   • Requirements of packaging of clinical samples;
   • General requirements of packaging;
   Requirements of complementary packaging of clinical samples Non-infectious.

6. The packing instructions for the automotive parts
   • General instructions;
   • Good practices for automotive parts;
   • Methods of shipping and minimum requirements of packaging;
   • Shipping safely with a packaging and an adequate padding;
   • Shipment with a basis for forklift truck;
   • Instructions relating to dangerous goods;
   • packaging for shipments of freight;
   • Instructions of sealing and of labelling.

7. The packing instructions for the batteries / Battery
   • Preparation of Batteries loaded for the shipping;
   • Shipment of batteries to liquid;
   • Shipment of dry cell batteries;
   • Shipment of batteries/ lithium batteries;
   • Instructions of sealing and of labelling;
   • Restrictions on shipment of batteries/batteries.

8. The packing instructions for the packaging of United Nations shipments 3373
   • The requirements of shipments listed as biological substances of Category B;
   • General requirements of packaging;
   • Marking requirements of shipments listed as biological substances of category B.

❖ OAT 235: Work of synthesis and operational management of the navigation

➢ Weather: 2 credits (30 hours); L, T, P

1. Atmosphere
   • Temperature, humidity of the atmosphere and units;
   • Atmospheric pressure and units;
   • wind;
   • turbulence.

2. Clouds
   • Formation of clouds to the precipitation; □ thunderstorms.

3. Aircraft cooling

4. Visibility and runway visual range

5. Climatology
   • General Climatology;
   • Climatology along a road.
6. Time under the tropics
7. Messages of meteorological observation aeronautics
8. Analysis of the cards is surface and in altitude
9. Aviation Forecasts
10. Meteorological support to the international navigation
11. Organization of the weather assistance aeronautics in the states

➢ The work of Synthesis I: 2 credits (30 hours); T, P

A dozen of practical cases mounted and animated by a group of teachers of the specialty

➢ The Navigation: 2 credits (30 hours); L, T, P, SPW

1. Position and distance
2. Time
3. True direction, magnetic and compass
4. Map protection
5. Cards used by a representative operator
6. General determination of the position of a plane
7. Measurement of aerodynamic speeds
8. Measurement of the altitude of the aircraft
9. Introduction to the radionavigation system
10. Point of non-return (NRP) and critical point (équitemps)
11. System of landing with instruments (they)
12. Navigation Procedures

❖ OAT 236: Administration and planning of air navigation

➢ Flight Plan: 2 credits (30 hours); L, T, P, SPW

1. The flight plan ATC
2. Operational Flight Plan

➢ Record of flight: 2 credits (30 hours); L, T, P

1. Constitution of flight record
2. Acceptance by the "crew"

❖ OAT 237: The legal environment and civic education I

➢ Law on Commercial Companies I: 1 credit (15 hours); L, T

1. The status of trader
2. The acts of commerce
3. The fund of commerce
4. The different commercial contracts
Civil law: 2 credits (30 hours); L, T, P

1. Definition, characters, the branches and the sources of the law
2. The field of application of the Act
3. The dimensions of the law (objective, subjective right)
4. The Legal organization
5. The right to legal personality
6. The civil status, the name and the Domicile
7. The Disabilities
8. The legal acts
9. The legal facts

OAT243: Work of synthesis, management and treatment of airport flows

Passengers and Baggage II: 1 credit (15 hours); L, T, P

1. Baggage processing
   - Standards of registration;
   - Bags out template;
   - Baggage disputes (System World Tracer).
2. The contract of assistance

Treatment of air cargo II: 1 credit (15 hours); L, T, P, SPW

1. Transportation Costs
   - Taxation;
   - Rates not published;
   - Calculation of the transport costs;
   - Charges;
   - The letter of air transport.

The work of Synthesis II: 2 credits (30 hours); T, P

A dozen of practical cases mounted and animated by a group of teachers of the specialty.

OAT 244: Claims management and processing of disputes in air transport

Treatment of incidents - accidents: 2 credits (30 hours); L, T, P

1. Definitions
2. Record
3. Serious Incidents
4. Accidents

Investigations on the incidents and accidents to aircraft: 2 credits (30 hours); L, T, P, SPW

1. Objective of the Investigation
2. Responsibility of the state of occurrence
3. Conservation of the indices, custody and removal of the aircraft
4. Responsibility of the state of registration, the state of the design or the “state” of construction
5. Responsibility of the opening and of the conduct of the Investigation
6. Organization and Conduct of the Investigation
7. Participation in the Investigation
8. Preliminary account
9. Reporting of Data of accident/incident
10. System of account of Incidents
11. The Database System
12. Data analysis, measurement, preventive measures
13. Exchange of security information

**OAT245: Coordination and resource management**

- **Human Factors and dispatch resources management:** 2 credits (30 hours); L, T, P, SPW
  1. Meaning of the expression “human factors”
  2. Dispatch Resources Management (DRM)
  3. Awareness, drive, return of information and strengthening
  4. DRM Concept of base: environment of the operation; vigilance
  5. Communications, use of the Info, interpersonal relations
  6. Management of the workload, effective decision-making
  7. The parts of the statement DRM and the evolution of concepts
  8. Management of stress and fatigue
  9. Errors induced by the Technology
  10. Command and Leadership
  11. Management of Conflicts
  12. Corporate resource management

- **Command and Leadership:** 2 credits (30 hours); L, T, P, SPW
  1. **The Leadership**
     - Introduction on the notions of power and leadership;
     - The origins of leadership;
     - The Study of Behavior styles:
       - The two-dimensional model of leadership;
       - The Managerial grid of Blake and Mouton; - the situational approaches to leadership.
     - Recent research:
       - The implicit theories of leadership; - the Study of Shweder.
  2. **The dynamics of the group**
     - The different types of groups;
     - The communication of influence in the groups;
     - The animation of group.
OAT 246: Professional internship

The professional internship: 6 credits (90 hours); P, SPW

1. Arrival and Business Integration
2. Working in a company
3. The holding of the Intern journal
4. The choice of the theme of work: in collaboration with mentors professional and academic supervisor structure
5. Elaboration of the canvas of research
6. The resources to operate
7. The organization of work
8. Drafting of the report
9. Presentation of the report before a jury

OAT 247: The legal environment and civic education II

Law on Commercial Companies II: 1 credit (15 hours); L, T

1. Definition, Object and forms of commercial companies
2. The creation of commercial companies
3. The operation of the Commercial Companies
4. The dissolution of commercial companies

Labor law: 2 credits (30 hours); L, T, P

1. Definition of the labour law, creation and evolution of labor law and sources
2. The contract of work (conclusion, implementation and rupture)
3. The conflicts of work (individual and collective)
4. The staff delegate, unions
5. Work accidents and occupational diseases
6. The hygiene and safety in the workplace

Civic Education and Ethics: 1 credit (15 hours); L, SPW

The Concepts

- The citizen;
- The Nation;
- The State;
- Public Property unto collective property;
- The freedoms;
- The public service;
- Problem of ethics;
- Ethics, Law and reason;
- Management and ethics of responsibility;
- Ethics and management.
• Ethics
• Civics
• Deontology
• Moral consciousness
• The universal declaration of Human Rights
• Good governance in public services
• Explain the importance of civics to the life of the nation
• Functions of the state and its citizens
• Deontology, Professional ethics and professionalism
• Relationship between morality, law and ethics
• Codes of ethics
Field: MANAGEMENT

Specialty:
MANAGEMENT OF NON-GOVERNMENTAL ORGANIZATION (NGO’S)
1. The objective of the training

The objective of this specialty is to produce technicians having good knowledge of analyses of the stakes of NGOs, the understanding and use of management techniques, the conception and follow-up of projects, and negotiation with partners.

2. Skills Sought After

   → **General skills**
   - Understand the professional and economic environment and enterprises;
   - Master the use of the computer;
   - Be apt in oral and written communication;
   - Be capable of team leadership.

   → **Specific Skills**
   - Lead a project for the creation of an NGO;
   - Master the analyzing and evaluation tools of projects;
   - Mount and manage NGO development projects;
   - Participate in the preparation of NGO action plans (preparation of the rules, and orientation and harmonization of their orientation);
   - Put in place the means necessary for the accomplishment of the administrative action (defining the mission, programmers and scheduling; management of subventions and financial assistance);
   - Give an account of the conduct of the work to hierarchy;
   - Update his knowledge and follow up the evolution of regulatory and legislative instruments in the domain.

The holder of the HND should be able to:
- Identify the principal components of a project in the domain and the roles involved;
- Evaluate the charges and arrange the scheduling of an NGO;
- Construct and follow up the budgetary plan of an NGO;
- Follow up and master NGOs.

3. OUTLETS

   - Administrative officer of NGOs;
   - Collaborator to the head of a project;
   - Assistant to the head of a cooperation and development mission;
4. Organization of Courses

Semester 1

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**Fundamental courses 30% (2 UC) 9 credits 135 hours**

**Professional courses 60% (4 UC) 18 credits 270 hours**

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**Cross-sectional courses 10% (1 UC) 3 credits 45 hours**

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**Total**

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| | 245 | 100 |  70 |  35 |  450 |  30 |

Semester 2

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**Fundamental courses 30% (2 UC) 9 credits 135 hours**

**Professional courses 60% (4 UC) 18 credits 270 hours**

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**Total**

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|---|---|---|---|---|
| | 250 | 90 |  75 |  35 |  450 |  30 |</p>
<table>
<thead>
<tr>
<th>Semester 3</th>
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<th>Specialty: MANAGEMENT OF NGO’S</th>
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<td><strong>code</strong></td>
<td><strong>Course title</strong></td>
<td><strong>Hourly Volume</strong></td>
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<tr>
<td><strong>Fundamental courses 30% (2 UC) 9 credits 135 hours</strong></td>
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<tr>
<td>MNG231</td>
<td>Quantitative techniques and computer skills I</td>
<td>35</td>
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<tr>
<td>MNG232</td>
<td>Information Systems and Financial Analysis I</td>
<td>30</td>
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<tr>
<td><strong>Professional courses 60% (4 UC) 18 credits 270 hours</strong></td>
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<td>MNG233</td>
<td>General Policy and Accounting Management I</td>
<td>30</td>
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<td>MNG234</td>
<td>Management of Risks and initiation to the Logistics I</td>
<td>25</td>
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<tr>
<td>MNG235</td>
<td>Management Techniques of camp I</td>
<td>30</td>
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<tr>
<td>MNG236</td>
<td>Management techniques and management of projects III and IV</td>
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<td><strong>Cross-sectional courses 10% (1 UC) 3 credits 45 hours</strong></td>
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<td>MNG237</td>
<td>The legal environment and the creation of business</td>
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<td><strong>Fundamental courses 30% (2 UC) 9 credits 135 hours</strong></td>
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<td>MNG241</td>
<td>Quantitative techniques and Computing I</td>
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<td>MNG242</td>
<td>Information Systems and Financial Analysis II</td>
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<td><strong>Professional courses 60% (4 UC) 18 credits 270 hours</strong></td>
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<td>MNG243</td>
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<td>Management of Risks and initiation to the Logistics II</td>
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<td>MNG245</td>
<td>Initiation to logistics and management of camps II</td>
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<tr>
<td>MNG246</td>
<td>Professional Internship</td>
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<td><strong>Cross-sectional courses 10% (1 UC) 3 credits 45 hours</strong></td>
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<tr>
<td>MNG247</td>
<td>Legal environment and civic education II</td>
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<td><strong>Total</strong></td>
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5. Courses contents

❖ MNG 111: Mathematics and Computing 1

➢ General Mathematics I: 3 credits (45 hours); L, T, SPW

- Algebra vector spaces
  1. Polynomials
     • Polynomials characterics.
  2. Vectorspace
     • Linear applications.
  3. Matrices
     • Operations on the matrices;
     • Matrices associated with a linear application;
     • Matrices and determinants.
  4. The Determinants
     • Determinant of a square matrix;
     • Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     • Inversion of matrix of order less than or equal to 3 - method of Gauss;
     • Resolution of systems of linear equations by the method of Pivot;
     • Application of matrix calculation on the resolution of systems of linear equations.
  6. Reduction of square matrices
     • Own values;
     • Own vectors.
  7. Differential equations and linear récurrentielles of order 2 with constant coefficients
  8. Mathematical applications in Economics and Management

➢ Generalities I: 2 credits (30 hours); L, T, SPW

The hardware and software on a computer system has- the Hardware

1. The peripheral components
   • The devices of input;
   • The output devices;
   • The storage devices;
   • The devices of input and output.

2. The central unit
   • The central memory;
   • The microprocessor;
   • The ports;
   • The motherboard;
   • The chipset;
   • The power supply;
   • The cards of extension;
   • Other internal organs.
3. The unit of exchange (or bus)
   • Role;
   • Types of bus:
     - Data bus;
     - Control bus;
     - Bus of address.

B- The Software

1. The application software
   • Definition;
   • Role;
   • Types and examples of software.

2. The basic software (or software systems)
   • Definition;
   • Types of basic software:
     - Drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation:
       ▪ Features;
       ▪ Roles;
       ▪ Types of operating system;
       ▪ Structure of a operating system;
       ▪ architecture.
   • Concept of Free Software and proprietary software.

System of numeration and Codification

A- The numbering systems

1. A few basic concepts
   • The base of the system;
   • Weight;
   • Alphabet of the language;
   • Format of the word (length of the word)
   • power of language.

2. A few numbering systems
   • The decimal system;
   • The binary system;
   • the octal system;
   • the hexadecimal system.

3. The basic changes
   • Of Decimal to another base b;
   • Toa base b of any kind to the decimal basis;
   • of the binary in octal and vice versa;
   • from binary to hexadecimal and vice versa.

4. Arithmetic operations
   • binary binary numbers signed:
     • Exact representation;
     • Representation in complement to 2.
• Addition of binary numbers;
• Subtraction of binary numbers;
• Use the add-in to 2 in the subtraction;
• multiplication of binary numbers;
• division of binary numbers.

5. Hexadecimal arithmetic
• addition of numbers in Hexadecimal;
• subtraction of numbers in hexadecimal.

B- The codes

1. General information on the concept of a code
   • Definitions;
   • Objectives of the codification;
   • The functional codification;
   • Types of functional codes;
   • the codification of technology.

2. The alphanumeric codes
   • The ASCII code:
     • Standard ASCII;
     • Extended ASCII;
     • Use.

❖ MNG 121: Mathematics and Computing II

➢ General Mathematics II: 3 credits (45 hours); T, P, SPW

Analysis
1. The Real Numbers
2. Numerical Functions of a real variable, limit, Continuity
3. Differentiability, extrema, theorem of Rolle and finished increases
4. Polynomials, fractions, rational
5. Study and graphic representation, reciprocal Functions
6. Limited developments, integrals and applications to calculations of Aires
7. Logarithmic functions and exponential
8. Digital Suites: Direction of variation, convergence
9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
10. Mathematical applications in Economics and Management

➢ General Computing II: 2 credits (30 hours); T, P, SPW

A- Computer Networks

1. Generalities
   • Definition of a computer network;
   • interest of computer networks;
   • basic vocabulary:
     - Workstation;
     - Node;
     - Server;
     - - packet.
2. **Typology of Networks**
   - networks according to the media:
     - Wired networks;
     - Networks not wired.
   - according the Geographic Extent:
     - The local networks (LAN);
     - The metropolitan area networks (MAN); - the wide area networks (WAN).

3. **Network Topologies**
   - Physical Topology
     - The bus topology;
     - The star topology;
     - The ring topology;
     - The topology in mesh; - the topology in shaft.
   - Logical Topology
     - Networks to dissemination;
     - Point-to-point networks.

4. **Network architectures**
   - client/server architecture;
   - architecture of equal to equal.

5. **The equipment of computer networks**
   - Equipments of basis of a network:
     - The computer;
     - The network card;
     - The server;
     - The network cable;
     - The transceiver (or adapter);
     - the transmission mounts;
     - the socket.
   - The equipment of interconnections:
     - Hubs (hub);
     - Switch (Switch);
     - Routers;
     - Gateways
     - The gateway (gateway);
     - The router;
     - The bridge (Bridge);
     - the repeaters.

6. **Concept of IP addressing**
   - Structure of an IP address
   - network identifier (Net ID)
   - Identifier of host (Host ID).
   - Specific addresses
     - Network address;
     - Machine address;
     - Broadcast Address (broadcast);
     - Limited Broadcast address (multicast);
     - Address of rebroadcasting (loopback).
   - Classes of IP addressing
- CLASS A;
- CLASS B; - CLASS C.

B- Internet network

1. Concept of protocol
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
     - NNP protocol;
     - The FP protocol;
     - HTP protocol;
     - IMAP protocol; - Protocol TCP; - other.

2. A few Internet Services
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
   - The Download (Download a text, downloadAn image, downloada free software...);
   - The online Trade;
   - TheIRRC (Internet Relay Chat);
   - Other.

3. The searchengines
   - Definition;
   - Role;
   - Some searchengines.

4. Tools for Internet access
   - The browsers (definition, examples);
   - The plug-ins (definition, examples);
   - The search engines (definition, examples, use).

5. The connection to the Internet
   - Connection hardware;
   - Suppliers of access (role, examples);
   - Types of connections (specialized line, phone line, satellite).

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MNG112: Quantitative Techniques I

- Financial Mathematics I: 2 credits (30hours); L, T, SPW

1. The Basics
   - Simple Interest;
   - Calculation of the value gained;
   - Current value commercial and current value rational one; précompté interest and effective interest.

2. Calculation of the average rate of a series of simultaneous investments
3. Equivalence and replacement of effect
4. Short-term financial transactions - Current Account and interest
5. Commercial Discount - real rate of discount
6. Compound interest
- Acquired value;
- Current value;
- Rate equivalent and proportional rate;
- Rate of interest apparent;
- Rate of real interest.

➢ **Statistics: 2 credits (30 hours); L, T, SPW**

1. **Statistical series to a variable**
2. Definition and vocabulary;
   - Graphical representation;
   - Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Gap-type; quantiles; coefficient of variation.
3. **Statistical series of two variables**
   - Definition and vocabulary;
   - Cloud of points;
   - Average point;
   - Covariance and covariance matrix of 2 variables;
   - The coefficient of correlation and regression;
   - Linear adjustment by the method of least squares.

❖ **MNG122: Quantitative Techniques II**

➢ **Financial Mathematics II: 2 credits (30 hours); T, P, SPW**

1. **The Annuities**
   - Constant annual instalments;
   - Annuities in arithmetic progression; © annuities in geometric progression; © perpetual annuities.
2. **The undivisit debenture**
   - Reimbursement by constant Annuities ;
   - Table demortization;
   - Laws followed by depreciation recovery of the debt still alive;
   - Laws followed by the annuities;
   - Applications on the borrowings undivided.
3. **The bond loans (Obligatory Loans )**
   - Reimbursements to the pair;
   - Constant annuities;
   - Constant depreciation;
   - Rate of yield and rates of returns of a debenture loan;
   - Rate of returns of the borrowing to the Broadcast;
   - Choice of Investments.

➢ **Statistics II: 2 credits (30 hours); T, P, SPW.**

1. Estimation of an average, a proportion and a standard deviation
2. Confidence interval and confidence coefficient
3. Tests of assumption and the KHI-two
MNG 113: The legal environment and Accounting I

Principles of Accounting I: 2 credits (30 hours); L, T, P, SPW

1. General information
   - Definition evolution and the role of the accounting;

2. The balance sheet
   - Notion of Employment and Resource

3. The account and the principle of the double part

4. The accounting transfer

5. The accounting systems (conventional and computerized)

6. Purchase and sale of the goods
   - the elements which diminish the invoice (reductions);
   - The elements that increases the invoice (transportation costs, VAT, packaging (see only logging and deconsignation).

Legal and tax management I: 2 credits (30 hours); L, T, P, SPW.

1. Legal Classifications of Economic Activities
   - Study of different sectors of activities from the distinction act of commercial civil status;
   - Study of the statutes related to the nature of the professional activity; - economic activity public.

2. The company
   - Legal concept of the company;
   - The merits of trade;
   - The building of the company (registered or not in the balance sheet).

3. Organisational Structures
   - Sole Proprietorship;
   - Private Limited Companies, Commercial companies and civil, Cooperatives… - public limited company.

4. Instruments of payment and credit
   - Checks, bill of exchange, promissory notes, Dailli slip, cards; - leasing; - the inheritance.

5. Forecasting and regulation of business difficulties

MNG 123: The legal environment and accounting II

Principles of Accounting II: 2 credits (30 hours); L, T, P

1. The Regulations
   - In cash (broken, bank);
   - A term (effect of trade: creation, cashing).

NB: do not see the movement of the effects of trade.

2. The significant balances of Management (industrial and commercial company)
NB: from management accounts present the significant balances of management.

3. **Concept of amortization (constant and degressive)**
   - Terminology;
   - Calculation (Table DDepreciation of INSets placed in service at the beginning and the course of exercise).

4. **Concept of Provision**
   - For depreciation;
   - For loads and losses.

NB: for the Chapters IX and X and present the Extract from the balance sheet (brief study and practice).

- **Legal and Tax Management**: 2 credits (30 hours); L, T, P
  1. The sources of the tax law
     - national sources; - international sources.
  2. Definition of the various tax levies - taxes, taxes and para-fiscal charges; - Taxation of state and local taxation.
  3. Presentation of different taxes
     - Vat; Taxes on income; - Tax on corporations.
  4. Relations between taxpayer and tax administration (fiscal control, tax litigation)

**MNG 114: Business ethics and analysis of markets I**

- **Business Ethics I**: 2 credits (30 hours); L, T, P, SPW
  - The loyalty in contractual matters;
  - The loyalty of the competition;
  - The duties and responsibility of the leaders and auditors.

- **Analysis of the markets I**: 3 credits (45 hours); L, T, P, SPW
  - How to analyze a market?
  - The study of the competition, characteristics.

**The product policy**
- The classification and the identity of the product;
- The cycle of life, packing and packaging;
- The quality, standards and labels;
- The range, the design;
- The launch of new products;
- The policy communication: communication media, the communication non-media.

**MNG 124: Business ethics and analysis of markets II**

- **Business Ethics II**: 2 credits (30 hours); L, T, P, SPW
  - The duties and responsibility of the leaders and auditors; - the control of the management by the Cooperation; - the prohibitions and disqualifications.
Analysis of the Markets II: 3 credits (45 hours); L, T, P, SPW

The private policy
- The price constraints;
- The strategies of price by the launch of a new product;
- The strategies of prices compared to the request, the fixing of prices by the costs;

The distribution policy
- Definitions;
- The functions;
- The different forms of distribution.

MNG 115: Marketing I

Principles /Bases of Marketing: 2 credits (30 hours); L, T, P

1. The basis of marketing
   - History of marketing;
   - Definition and objective of the Marketing;
   - Evolution of Marketing;
   - Field of application of marketing; - customer satisfaction.

2. The Market
   - The environment;
   - The concept of the market;
   - The segmentation;
   - Indicators of the market;
   - Analysis of competition (competitive positions, competitive strategies.).

3. Marketing Information
   - The Analysis of consumer market
   - Consumer’s behavior relating to purchasing (models of ‘analysis, the consumer, the determinants of the ‘purchase, the Process of purchase ).
   - Market Research Techniques (Phase of the conduct, techniques of descriptive studies, processing of information).

4. political and social marketing credit (30 hours) ; L,T,P, SPW
   - The ‘strategic analysis in marketing (environmental analysis and determination of the opportunities /threats, Diagnosis of the ‘company and determination of the strength/weaknesses.
   - The ‘Strategic Development (formulation of objectives, targeting and positioning, choice of strategic vectors);
   - The marketing mix (the contours of the concept of marketing mix, the product, the price, the distribution the marketing communication /EOL).
   - The product life cycle (from the idea generation to phases of the product life cycle)
   - Management of brands
   - Operation of the product (product functions).
Management of communication in projects I: 2 credits (30 hours); L, T, P, SPW
- Planning the communication: needs analysis, use of technology, methods and models of communication.
- Disseminating of communication in NGO’s I: 2 credits (30 hours)L,T,P, PE.

MNG 125: Marketing II

Fundamental Marketing II: 2 credits (30 hours); L, T, P, SPW
1. Marketing Information
   - The Analysis of consumer markets;
   - Consumer behavior relating to purchasing (models of analysis, the consumer, the determinants of the purchase, the process of purchase);
   - Market Research Techniques (Phase of the conduct, techniques of descriptive studies, processing of information).
2. Introduction to Marketing Planning
   - The strategic analysis in marketing (environmental analysis and determination of the opportunities/threats, Diagnosis of the company and determination of the strengths/weaknesses);
   - The Strategic Development (formulation of objectives, targeting and positioning, choice of strategic vectors);
   - The marketing mix (the contours of the concept of marketing mix, the product, the price, the distribution, the marketing communication/EOL);
   - The life cycle of the product (from idea generation to phases of product life cycle);
   - Management of brands;
   - Identification of the product; - Product functions.

Management of communication in NGO’s projects II: 2 credits (30 hours); L, T, P, SPW
- Events communication and its different techniques: sponsoring, patronage, sponsorship,
- The ‘interest of the choice of the ‘Event as the support of communication;
- Effectiveness and impact of an action of event communication; - The place of the event communication in a global communication plan
- Disseminate information and make account: Frequency necessary, technology available, duration of the project...

MNG 116: Creation and management of Projects I

Creation of Projects I: 2 credits (30 hours); L, T, P, SPW
1. Technical studies
   - Objective of the Technical Study;
   - Definition of the activity;
   - Enumeration and qualification of needs;
   - analysis of the constraints of the project.
2. Marketing Research of the expectations of the Beneficiaries
   - Marketing Research
   - Objectives Marketing Research
   - know and understanding your market

- Introduction to the Management of Projects I: 3 credits (45 hours); L, T, P, SPW
  - General information on the projects, problematic of the management of projects;
  - The Typology of projects;
  - The History of the Management of Projects, project framework.
  - Techniques of project management.
  - Administrative management of the project, the management of datelines.
  - Human resources management of projects, the management of quality.

- MNG 126: Methodology, Creation and management of projects II

- Research Methodology for internship Reports: 1 credit (15 hours); L, P
  - Data Collection
  - How to write a report;
  - The plan of the Probationary report and the summary;
  - The Table of material;
  - The introduction of the report of internship;
  - The conclusion of the internship report;
  - The acknowledgments;
  - How to build the annexes;
  - When to start his internship report;
  - How to find a subject of internship report;
  - The cover page;
  - How to write effectively;
  - Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations);
  - Instructions and typographical rules of presentation (police, sprint, titles, highlighted, punctuation, graphic charter); - How to prepare the defense.

- Project, Creation /Entrepreneurship II: 1 credit (15 hours); L, T, P

- Economic and financial studies

  Study of the market or of the expectations of the Beneficiaries
  - Objective of the Market Survey
  - Know and understand its market
  - The initial financial plan
  - Treasuring planning, the cash plan, the threshold of profitability.

- Introduction to the management of projects II: 3 credits (45 hours); L, T, P, PE
  - The techniques of management of projects;
  - Administrative management of the project, the management of time;
- Human resources management of the project, the management of the quality.

**MNG 236: Management Techniques III and IV**

- **Mounting of Projects I:** 1 credit (15 hours); L, T, P, SPW
  1. **Marketing Research or of the expectations of the beneficiaries** -
     Define a strategy to develop the activity.
  2. **Economic and financial studies**
     - Course Objective ;
     - The initial financial plan.
     - Treasuring Planning-The cash plan, the threshold of profitability.

- **Management of Projects I:** 2 credits (30 hours); L, T, P.

The five (05) stages of a project:

- **Project emergency**
  - Definition;
  - Tools: The Beast To horns, thetreeofobjectives.
- **The feasibility**
  - Definition;
  - Tools: quantitative tools, qualitative tools of Analysis of risks, tools of functional analysis.
- **The design** - definition;
  - Tools: Organizational chart of tasks (WBS), the plug of the tasks, the planning, budget, the schedule of expenditures.
- **The achievement** - definition;
  - Tools: Book of operational load, the Gantt, sheet of reporting, dashboards.
- **Conclusion**
  - Definition;
  - Tools: the transfer and the closure, the sheets of capitalization of the experience.

- **Mounting of projects II:** 1 credit (15 hours); L, T, P, SPW.

**StudyEconomic and Financial**

- The account of forecast result;
- The cash plan;
- The threshold of profitability.

- **Management of Projects II:** 2 credits (30 hours); T, P, SPW.

  1. **The Project Leader**
     - The profile of the project leader;
     - The specialties;
     - The strengths of the Project Leader;
     - The behaviors;
     - The activities;
     - The dilemmas.
  2. **The Small Projects**
     - Contextual Elements;
- Elements of Implementation.

3. The data of a general nature
- The project, the stakeholders;
- The project of enterprise;
- The Phases of preliminary studies;
- The offers, the risks;
- The launch of the project;
- The Human Resources;
- The cycle of project management.

❖ MNG 117: Bilingual training I and Economic environment I

➢ French expression: 1 credit (15 hours); L, T

1. Vocabulaire
   - Vocabulaire technique usuel

2. Grammaire
   - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
   - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
   - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
   - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
   - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
   - Des fonctions grammaticales.

3. Expression et communication
   - Compréhension et interaction au cours d’une discussion technique ;
   - Communication orale courante ;
   - Communication orale interactive
   - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
   - Lecture rapide et compréhension de texte ;
   - synthèse d’un long texte
   - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
   - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
   - Expressions figées

➢ Principles of Economics: 2 credits (30 hours); L, T, P

• The enterprises and the production;
• The Households and consumption;
• Markets and prices;
• Training and distribution of income;
• The currency and the financial transactions of the economy;
• The elements of the national accounts;
• The macro-economic equilibrium;
• The socialist system;
• The capitalist economy;
• The State and its interventions;
• The foundations of international trade;
• International payments;
• The balance of payments;
• Economic development and its inequalities;
• Growth and its inequalities;
• Inflation, unemployment, industrial change;
• The issues of development and the globalization of problems;
• The development strategies;
• The economic integration and the forms of cooperation in the world;
• The strategies of the international debt.

MNG 127: Bilingual training II and Economic Environment II

- English Expression: 1 credit (15 hours); L, T, SPW
  1. Vocabulary
     - Technical and usual vocabulary of the specialty
  2. Grammar
  3. Bilingual expression
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. Autonomous reading of "writings" of all levels
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. Write clear, detailed texts
     - Essay writing;
     - Application for employment;
     - C.V.;
     - Letter of motivation;
     - Letter/memo writing and minutes of a meeting

- Economy and organization of enterprises: 2 credits (30 hours); L, T, P
  - The Enterprise, definition and mode of analysis;
  - Classification of Enterprises;
  - The Organisational Structure of enterprises;
  - The insertion of the company in the economic fabric;
  - The commercial activity of the enterprise;
• The productive activity of the enterprise;
• Logistics in the enterprise;
• The financial activity of the enterprise;
• The management of human resources;
• The systemic approach of the enterprise;
• Information system;
• The decisionmaking process;
• The strategic analysis of the company;
• Choice and implementation of a strategy;
• The business, society and culture;
• The business, society and the Ethics.

❖ MNG231: Quantitative techniques and computer skills I

➢ Probabilities and operational research I: 3 credits (45 hours); L, T, P, SPW
1. Algebra of sets
   • Applications;
   • The Counts.
2. Basic Set linked to a random experiment
   • Probabilisation;
   • Conditional probability;
   • Formula of Bayes;
   • Tests in BERNOUILLI.
3. Random variables discrete
   • Law of probability;
   • Distribution function.
4. Random variables continuous
   • Density,
   • Hope;
   • Variance;
   • Standard deviation; moments.
5. Conventional laws
   • Binomial
   • Normal; fish; exponential.

➢ Applied Computing I: 2 credits (30 hours); L, T, P, SPW
1. The study of the Graphical Environment Windows
   • Presentation;
   • Management of Windows;
   • Managing Files and Folders.
2. What is a file, a folder?
   • Path of access to a file.
3. Practical Study of Microsoft Word study of basic functions.
4. Practical Study of Microsoft Excel
   • Presentation;
• Arithmetic operations.

5. Construction of a formula
   • Use of the integrated functions: - definition;
     - Syntax of the integrated functions;
     - A few integrated functions;
     - Relative reference, absolute reference and joint reference; - Case of synthesis.

❖ MNG 241: Quantitative Techniques and Computing II

➢ Probabilities and Operational Research II: 3 credits (45 hours); L, T, P, SPW
  1. Concepts of the combinatorial optimization
     • Constraints/objectives;
     • Feasible solution/best;
     • Terminal;
     • Local optima, etc.
  2. Graph Theory
     • Modeling;
     • Coloring;
     • Roads;
     • The treesmaskingfluid;
     • The Waves…
  3. The linear programming
     • Program to two variables;
     • Program to more than two variables.
  4. The algorithm of the simplex - the table method
     • Analysis of the final table of the simplex; □ problem of duality □; the management of stocks.
  5. The problems of scheduling - General Information on the Graphs
     • The PERT method:
       - Applications on the PERT;
     • The choice of investment in deterministic universe.
  6. Modeling
  7. Decision in Uncertain Future
  8. Transportation problems
  9. The problems of INSignment

➢ Applied Computing II: 2 credits (30 hours); L, T, P

Specific work
□ software for the management of projects.
MNG 232: Information Systems and Financial Analysis I

Information Systems: 2 credits (30 hours); L, T, P, SPW.

1. Concepts information systems
   - Introduction
     - Systemic Analysis of the Company
   - The system of information:
     - Functions of the IF; - the roles of the IF; - qualities of a IF.
   - Computerization of the IF:
     - The parties to an IF;
     - Software;
     - Definitions;
     - The purpose of a system of information;
     - The functions of a system of information;
     - the organizational system;
     - the processing of information.

2. Concept of algorithmic and initiation to programming
   - Objects: circumstances, variables, operators;
   - Basic treatments and sequencies;
   - Choice and repetition;
   - Function and procedures;
   - Structure of data (vectors, table, registration, file); application with basic or Pascal.

Financial Analysis I: 2 credits (30 hours); L, T, SPW.

   - Accounting balance sheet;
   - Financial Balance sheet;
   - Functional balance sheet;
   - Significant balances of management;
   - The ratios;
   - Functional analysis and differential δ; the threshold of profitability.

MNG 242: Information System and Financial Analysis II

Information System II: 2 credits (30 hours); L, T, P

Elaboration of the database

A - The conceptual model of data: mcd

1. Constitution of the data dictionary DD
   - Goal (objective);
   - Basic Concepts: Elementary data-Rubrique-Document;
   - Techniques of collection of information;
   - Purge of the dictionary;
   - Highlighted objects;
   - Identification of entities;
• Definition of the relations of dependency between the objects.

2. **Elaboration of the model Entity-association**
   • Basic Concepts:
     - Entity and entity type;
     - Attribute (property);
     - association;
     - Occurrence of a property;
     - Identifier (key);
     - Cardinality.

**B- The logic model for relational data: MLDR**

1. **Purpose**
2. **Basic concepts**
   • Primary key;
   • Foreign key; relationship;
   • Registration.
3. **The model entity/Information**
   • Relationship of the entities;
   • Definition of other relations of dependencies between objects; cardinalities.
4. **Pinsage of the MCD at the MLD**
   • Transformation of entities;
   • Transformation of Information;
     - Binary relationship to the cardinalities \((x, 1) - (x, n)\) with \(X = 0\) or \(x = 1\);
     - Relationship n-area (regardless of the cardinality);
     - Reflexive relationship to the cardinalities \((x, 1) - (x, n)\) with \(X = 0\) or \(x = 1\).
     - a binary relationship to the cardinalities \((0.1) - (1.1)\).

**C- Physical Data Model: implementation of the database**

1. Creation of the database;
2. Creation of tables;
3. Entering data in the tables;
4. Relationship of the tables;
5. Creating forms;
6. Relational model (relationship, degree, schema, PRIMARY KEY/secondary, cardinality, domain, ... P of base or access);
7. The languages of requests (SQL...);
8. Study of a few SQL commands.

- **Financial Analysis II: 2 credits (30 hours); L, T, P, SPW**
  • The magnitudes of the financial balance;
  • Presentation of the account of result;
  • Ability to self-financing; rations of farms and profitability.
MNG 233: General Policy and Managerial Accounting I

- Cost accounting and budget management I: 2 credits (30 hours); L, T, P, SPW
  1. From principles of accounting to cost accounting
     - Generality on the analytical accounting (objectives, role, concept of load)
  2. Analysis of expenses
     - Loads liable and not liable;
     - Direct costs and indirect;
     - Suppletive loads;
     - Allocation of Indirect Costs.
  3. Valuation of stocks (FIFO method, LUP)
  4. The full costs (cost of purchase, cost of production, introduce the stocks)
     NB: do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products).
  5. Partial costs
     - The variable costs;
     - The marginal costs.
  6. The Rational Importance of loads of structure

MNG 243: General Policy and Managerial Accounting II

- Cost accounting and budget management II: 2 credits (30 hours); L, T, P, SPW
  1. The predetermined costs
     • Identification of gaps on direct costs and indirect and algebraic analysis of these differences (exclude the graphic analysis).
  2. The budgets (brief study and practice)
     • The budgets of the sales;
     • The production budgets;
     • The budgets of supply; □ budgets of investment; □ budgets of cash flow.
General Policy and Strategy II: 2 credits (30 hours); L, T, P, SPW.

1. The organizational structures
   - Bases and forms of organizations.

2. The dynamic strategy structure
   - Taking into account the constraints of organization and environment in the development of strategic decisions (dimension of the company or of the markets, international context ...).

MNG 234: Management of Risks and initiation to Logistics I

Risk management I: 2 credits (30 hours); L, T, P, SPW.
- Analysis of the risks in the management of enterprise;
- Risk analysis in the management of projects;
- Risk management planning;
- Identification of risks.

Initiation to the Logistics and team management I: 2 credits (30 hours); L, T, P, SPW.
- Physical flows and informational, loops of pilotage, mapping of flows, flow learned/Pushed;
- Production system, charging station, work, data time association;
- Types of needs.

MNG 244: Management of Risks and initiation to the Logistics II

Team Management I: 1 credits (45 hours); L, T, P.
- Analysis of the risk;
- Answers to the risk
- Follow-up to the risk of project;
- Communications in management of risks;
- Case study: analysis of risks in a project well specified.

Initiation to Logistics and team management: 2 credits (30 hours); L, T, P, SPW.
- Notions of load and capacity, deadlines for obtaining;
- Impact of the flows and the management of the stocks in the company, performance indicators.

MNG 235: Analysis and planning of projects I

Technical analysis of the projects I: 2 credits (30 hours); L, T, P.
- The production process;
- The criteria to remember;
- The characteristics of the means of production;
- The equipment of the project.
- Planning of the projects I: 2 credits (30 hours); L, T, P, SPW.
  - Identification of tasks and operations of the project;
  - Scheduling of these tasks.

- MNG 245: Initiation to the logistics and Group/Team management

- Technical analysis of projects II: 2 credits (30 hours); L, T, P, SPW.
  - Location of the unit of production;
  - Risk Analysis of the project;
  - Prevention of risks of the project.

- Planning of the group II: 2 credits (30 hours); L, T, P, SPW
  - Scheduling of these tasks;
  - Planning tools of the projects (Gantt of the project).

- MNG 237: The legal environment I.

- Law on Commercial enterprises I: 1 credit (15 hours); L, T
  1. The status of trader;
  2. The acts of trade;
  3. The fund of commerce;
  4. The different commercial contracts.

- Civil law: 1 credit (15 hours); L, T, P
  1. Definition, characters, the branches and the sources of the law;
  2. The field of application of the Act;
  3. The dimensions of the law (objective, subjective right);
  4. The legal organization;
  5. The law of the legal personality;
  6. The civil status, the name and the domicile;
  7. The disability;
  8. The legal acts;
  8. The legal facts.

- Creation of enterprise: 1 credit (15 hours); L, T, P, SPW
  1. Concept of contractor;
  2. Motivations to the creation of company;
  3. Search for ideas and evaluation;
  4. Research funding;
  5. Choice of legal status;
  6. Ethical aspects of the business;
  7. Preparation of the business plan.
MNG 246: Professional internship

- The professional internship: 6 credits (90 hours); P, SPW
  1. Arrival and Business Integration
  2. Working in a company
  3. The holding of the Intern journal
  4. The choice of the theme of work: in collaboration with mentors professional academic and
  5. Elaboration of the canvas of research
  6. The resources to operate
  7. The organization of work
  8. Drafting of the report
  9. Presentation of the report before a jury

MNG 247: The legal environment and civic education II

- Law on Commercial Companies II: 1 credit (15 hours); L, T
  1. Definition, Object and forms of commercial companies
  2. The creation of commercial companies
  3. The operation of the Commercial Companies
  4. The dissolution of commercial companies

- Labor law: 1 credit (15 hours); L, T, P
  1. Definition of the right of labor, birth and evolution of labor law and sources
  2. The contract of work (conclusion, implementation and rupture)
  3. The conflicts of work (individual and collective)
  4. The delegate of the staff, unions
  5. Work accidents and occupational diseases
  6. The hygiene and safety in the workplace

- Civic Education and Ethics: 1 credit (15 hours); L, SPW

The Concepts
- The citizen;
- The Nation;
- The State;
- Public Property unto collective property;
- The freedoms;
- The public service;
- Problem of ethics;
- Ethics, Law and reason;
- Management and ethics of responsibility;
- Ethics and management.
- Ethics
- Civics
- Deontology
• Moral consciousness
• The universal declaration of Human Rights
• Good governance in public services
• Explain the importance of civics to the life of the nation
• Functions of the state and its citizens
• Deontology, Professional ethics and professionalism
• Relationship between morality, law and ethics
• Codes of ethics
Field: MANAGEMENT

Specialty: PROJECT MANAGEMENT
Field: MANAGEMENT

Specialty: Project Management

1. The objective of the training

The objective of this specialty is to train technicians capable of leading projects of enterprises in all sectors (industrial, service, commercial, technological and cultural), through the development of the enterprise and the acquisition of theoretical and practical knowledge in project management.

2. Skills Sought After

   ➔ General skills
   - Understand the professional and economic environment and enterprises;
   - Master the use of the computer;
   - Be apt in oral and written communication;
   - Be capable of team leadership.

   ➔ Specific Skills

   Innovate, create, and ameliorate a project, product or process:
   - Identify local, national and international partners;
   - Monitoring technological and competitive development;

   Coordinate a project:
   - Carry out feasibility studies;
   - Define the operational objectives of the project;
   - Identify the working tools;
   - Prepare the technical file.

   Search and treatment of information:
   - Identify the sources to exploit
   - Analyze and summarize information found.

3. Outlets

   - Assistant project manager;
   - Assistant marketer;
   - Officer responsible for public relations;
   - Planner of the project.
4. Organization of the Teachings

Semester 1

<table>
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Fundamental Courses 30% (2 UC) 9 credits 135 hours

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Professional Courses 60% (4 UC) 18 credits 270 hours

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Cross-sectional Courses 10% (1 UC) 3 credits 45 hours

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Total 270 100 50 30 450 30

Semester 2

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Fundamental Courses 30% (2 UC) 9 credits 135 hours

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Professional Courses 60% (4 UC) 18 credits 270 hours

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Cross-sectional Courses 10% (1 UC) 3 credits 45 hours

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Total 250 90 75 35 450 30
### Semester 3

**FIELD: MANAGEMENT**  
**Specialty : PROJECT MANAGEMENT**

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**Fundamental courses 30% (2 UC) 9 credits 135 hours**

**Professional Courses 60% (4 UC) 18 credits 270 hours**

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**Cross-sectional Courses 10% (1 UC) 3 credits 45 hours**

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**Total**

|        |                                                  | L  | T   | P    | SPW | Total |                  |
|--------|                                                  | 205| 140 | 70   | 35  | 450   | 30               |

### Semester 4

**FIELD: MANAGEMENT**  
**Specialty : PROJECT MANAGEMENT**

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**Fundamental Courses 30% (2 UC) 9 credits 135 hours**

**Professional courses 60% (4 UC) 18 credits 270 hours**

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**Cross-sectional Courses 10% (1 UC) 3 credits 45 hours**

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**Total**

|        |                                                  | L  | T   | P    | SPW | Total |                  |
|--------|                                                  | 133| 165 | 120  | 32  | 450   | 30               |
5. Courses content

❖ PRM 111: Mathematics and Computer training I

- General Mathematics I: 3 credits (45 hours); L, T, SPW

- Algebra vector spaces
  1. Polynomials
     • Polynomials characteristics.
  2. Vector space
     • Linear applications.
  3. Matrices
     • Operations on the matrices;
     • Matrices associated with a linear application;
     • Matrices and determinants.
  4. The Determinants
     • Determinant of a square matrix;
     • Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     • Inversion of matrix of order less than or equal to 3
     • Method of Gauss;
     • Resolution of systems of linear equations by the method of Pivot;
     • Application of matrix calculation on the resolution of systems of linear equations.
  6. Reduction of square matrices
     • Own values; vectors.
  7. Differential equations and linear récurrentielles of order 2 with constant coefficients
  8. Mathematical applications in Economics and Management

❖ General Computing I: 2 credits (30 hours); L, T, SPW

The hardware and software on a computer system - the Hardware

1. The peripheral components
   • The devices of input;
   • The ouPut devices; the storage devices;
   • The devices of input and ouPut.

2. The central unit
   • The central memory;
   • The microprocessor;
   • The ports;
   • The motherboard;
   • The chipset;
   • The powersupply;
   • The cards of extension;
   • Other internal organs.

3. The unit of exchange (or bus)
   • Role;
• Types of bus:
  - Data bus;
  - Control bus;
  - Bus of address.

B- The Software

3. The application software
   • Definition;
   • Role;
   • Types and examples of software.

4. The basic software (or software systems)
   • Definition;
   • Types of basic software:
     - Drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation*:
       ▪ Features;
       ▪ Roles;
       ▪ Types of operating system;
       ▪ Structure of an operating system;
       ▪ architecture.
   • Concept of Free Software and proprietary software.

System of numeration and Codification

C- The numbering systems

1. A few basic concepts
   • The base of the system;
   • Weight;
   • Alphabet of the language;
   • Format of the word (length of the word);
   • power of language.

2. A few numberingsystems
   • The decimal system;
   • The binary system;
   • The octal system;
   • The hexadecimal system.

3. The basic changes
   • Of Decimal to another base b;
   • To a base b of any kind to the decimal basis;
   • Of the binary in octal and vice versa;
   • From binary to hexadecimal and vice versa.

4. Arithmetic operations
   • binary binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
   • Addition of binary numbers;
   • Subtraction of binary numbers;
   • Use the add-in to 2 in the subtraction;
5. **Hexadecimal arithmetic**
   - addition of numbers in Hexadecimal;
   - subtraction of numbers in hexadecimal.

D- **The codes**

1. **General information on the concept of a code**
   - Definitions;
   - Objectives of the codification;
   - The functional codification;
   - Types of functional codes;
   - the codification of technology.

2. **The alphanumeric codes**
   - The ASCII code:
     - Standard ASCII;
     - Extended ASCII;
     - Use.

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**PRM 121: Mathematics and Computing II**

- General Mathematics II: 3 credits (45 hours); T, P, SPW

**Analysis**

1. The Real Numbers
2. Numerical Functions of a real variable, limit, Continuity
3. Differentiability, extrema, theorem of Rolle and finished increases
4. Polynomials, fractions, rational
5. Study and graphic representation, reciprocal Functions
6. Limited developments, integrals and applications to calculations of Aires
7. Logarithmic functions and exponential
8. Digital Suites: Direction of variation, convergence
9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
10. Mathematical applications in Economics and Management

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- General Computing II: 2 credits (30 hours); T, P, SPW

**A- Computer Networks**

1. **General information**
   - Definition of A computer network;
   - interest of computer networks;
   - basic vocabulary:
     - Workstation;
     - Node;
     - Server;
     - packet.

2. **Typology of networks according to the media**:
   - Wired networks;
   - Networks not wired.
   - according the GeographicExtents:
     - The local networks (LAN);
     - The metropolitan area networks (MAN);
- The wide area networks (WAN).

3. **Network Topologies**:
   - Physical Topology;
   - The bus topology;
   - The star topology;
   - The ring topology;
   - The topology in mesh;
   - The topology in shaft;
   - Logical Topology;
   - Networks to dissemination;
   - Point-to-point networks.

4. **Network architectures**:
   - client/server architecture;
   - architecture of equal to equal.

5. **The equipment of computer networks**:
   - Equipments of basis of a network; The computer; The network card; The server; The network cable; The transceiver (or adapter); the transmission mounts; the socket.
   - The equipment of interconnections; Hubs (hub); Switch (Switch); Routers; Gateways the gateway (gateway); The router; The bridge (Bridge); the repeaters.

6. **Concept of IP addressing**
   - Structure of an IP address - network identifier (Net ID); - Identifier of host (Host ID).
   - Specific addresses;
   - Network address;
   - Machine address;
   - Broadcast Address (broadcast);
   - Limited Broadcast address (multicast);
   - Address of rebroadcasting (loopback);
   - Classification IP addressing; CLASS A; CLASS B; CLASS C.

B- **Internet network**

1. **Concept of protocol**
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
     - NNProtocope;
     - The FP protocol;
     - HTTP protocol;
     - IMAP protocol; - Protocol TCP; - other.

2. **A few Internet Services**
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
   - The Download (Download A text, download An image, download a free software…);
   - The online Trade;
3. **The search engines**
   - Definition;
   - Role;
   - Some search engines.

4. **Tools for Internet access**
   - The browsers (definition, examples);
   - The plug-ins (definition, examples);
   - The search engines (definition, examples, use).

5. **The connection to the Internet**
   - Connection hardware;
   - Suppliers of access (role, examples);
   - Types of connections (specialized line, phone line, satellite).

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**PRM 112: Quantitative techniques I**

- **Financial Mathematics I**: 2 credits (30 hours); L, T, SPW
  1. The Basics
     - Simple Interest;
     - Calculation of the acquired values;
     - Commercial present value and rational present value;
     - Forecasted interest and effective interest.
  2. Calculation of the average rate of a series of simultaneous investments
  3. Equivalence and replacement of effect
  4. Short-term financial transactions - Current Account and interest
  5. Cash Discount - real rate of discount
  6. Compound interest
     - Acquired value;
     - Present Value;
     - Rate equivalent and proportional rate;
     - Apparent interest rate;
     - Real rate of interest.

- **Statistics**: 2 credits (30 hours); L, T, SPW
  1. Statistical series to a variable
     - Definition and vocabulary;
     - Graphical representation;
     - Characteristics of central tendency and dispersal characteristics:
       - Average;
       - Mode;
       - Median;
       - Standard deviation; quantiles; coefficient of variation.
  2. Statistical series of two variables
     - Definition and vocabulary;
     - Cloud of points;
     - Average point;
• Covariance and covariance matrix of 2 variables;
• The coefficient of correlation and regression;
• Linear adjustment by the method of least squares.

PRM 122: Quantitative techniques II

Financial Mathematics II: 2 credits (30 hours); T, P, SPW

1. The Annuities
   • Constant annuities;
   • Annuities in arithmetic progression;
   • annuities in geometric progression;
   • perpetual annuities.
2. Joint loan
   • Reimbursement by constant annuities;
   • Amortisation Table
   • Laws followed by depreciation recovery of the debt still annuities;
   • Laws followed by the annuities;
   • Applications on the joint loan.
3. The bond loans
   • Reimbursements as pearannuities;
   • Constant annuities;
   • ConstantAmortissation;
   • Yield rate and rates of returns of a debenture loan;
   • Rate of returns of the debenture loan at issue;
   • Choice of Investments.

Statistics II: 2 credits (30 hours); T, P, SPW.

1. Estimation of an average, a proportion and a standard deviation
2. Confidence interval and confidence coefficient
3. Hypothesis testing and the KHI-square

PRM 113: The legal environment and accounting I

General Ledger I: 2 credits (30 hours); L, T, P, SPW

1. General information
   • Definition evolution and the role of the accounting;
   • Study of the accounting law: sources and Principles (briefly).
2. The balance sheet
   • notion of source and Application
3. The account and the principle of the double entry
4. The accounting transfer
5. The accounting systems (conventional and computerized)
6. Purchase and sale of the goods
   • the elements which diminish the invoice (reductions);
   • The elements that increases the invoice (transportation costs, VAT, packaging (see only logging and deconsignation).
Legal management and tax I: 2 credits (30 hours); L, T, P, SPW
1. Legal classification of economic activities
   - Study of different sectors of activities from the distinction of the commercial act and Civics act;
   - Study of the statutes related to the nature of the professional activity;
   - Public economic activities
2. The company
   - Legal aspect of the company;
   - Business;
   - The building of the company (registered or not in the balance sheet).
3. The structures of the company
   - Sole Proprietorship;
   - Commercial companies and civil, Association
   - public company.
4. Instruments of payment and credit
   - Cheque, bill of exchange, promissory note, Dailli slip, cards; leasing; the inheritance.
5. Forecasting and settlement of business difficulties

PRM 123: The legal environment and accountant II

General Accounting II: 2 credits (30 hours); L, T, P
1. The settlement
   - In cash (cash, bank);
   - A term (effect of trade: creation, cashing).
   **NB:** do not see the movement of the effects of trade.
2. Trading profit and loss account (industrial and commercial company)
   **NB:** from management accounts present the significant balances of management.
3. Concept of amortization (constant and degressive)
   - Terminology;
   - Calculation (Table of Depreciation of assets placed in service at the beginning and the course of the financial year).
4. Concept of Provision
   - For depreciation;
   - For expenses and losses.
   **NB:** for the Chapters IX and X and present the Extract from the balance sheet (brief study and practice).

Legal management and taxation II: 2 credits (30 hours); L, T, P
1. The sources of the tax law - national sources; - international sources.
2. Definition of the various tax levies - taxes, taxes and parafiscal charges; - Taxation of state and local taxation.
3. Presentation of different taxes
   - VAT;
   - Personal Income tax on corporations.
4. Relations between taxpayer and tax administration (fiscal control, tax litigation)

PRM 114: Business ethics and Market Research I

- **Business Ethics I: 2 credits (30 hours): L, T, P, SPW**
  - The loyalty in contractual matters;
  - The loyalty of the competition;
  - The duties and responsibility of the leaders and auditors.

- **Market Research I: 3 credits (45 hours): L, T, P, SPW**
  - How to analyze a market?
  - The study of the competition, characteristics.

The product policy
- The classification and the identity of the product;
- Life cycle, packaging and packaging;
- The quality, standards and labels;
- The range, the design;
- The launch of new products;
- The communication policy: communication media, the communication non-media.

PRM 124: Business ethics and market research II

- **Business Ethics II: 2 credits (30 hours): L, T, P, SPW**
  - The duties and responsibility of the leaders and auditors;
  - the control of the management by the associated;
  - the prohibitions and disqualifications.

- **Market research II: 3 credits (45 hours): L, T, P, SPW**

The pricing policy
- The price constraints;
- The strategies of price by the launch of a new product;
- The strategies of prices compared to the demand, the fixing of prices from the costs;

The distribution policy
- Definitions;
- The functions;
- The different forms of distribution.

PRM 115: Marketing I

- **Fundamental Marketing: 2 credits (30 hours): L, T, P**
  1. The basis of the marketing - History of marketing;
  - Definition and objective of the Marketing;
- Balance Sheet of marketing;
- Field of application of marketing;
- Customer satisfaction.

2. The Market
- The environment;
- The concept of the market;
- The segmentation;
- Indicators of the market;
- Analysis of the competition (competitive positions, competitive strategies).

➢ Communication in Project Management I: 2 credits (30 hours); L, T, P, PE
- Planning the communication: needs analysis, use of technology, methods and models of communication.

PRM 125: Marketing II

➢ Fundamental Marketing II: 2 credits (30 hours); L, T, P, SPW
  1. The Marketing Information
     - The Analysis of consumer markets;
     - Consumer buying behavior (models of analysis, the consumer, the determinants of the purchase, the process of purchase);
     - The techniques of market studies (Phase of the conduct, techniques of descriptive studies, processing of information).
  2. Introduction to Marketing Planning
     - The strategic analysis in marketing (environmental analysis and determination of the opportunities/threats, Diagnosis of the company and determination of the strengths/weaknesses);
     - The Strategic Development (formulation of objectives, targeting and positioning, choice of strategic vectors);
     - The marketing mix (the concept of marketing mix, the product, the price, the distribution, the commercial communication/EOL);
     - The life cycle of the product (the idea to product, phases of the cycle of life);
     - Brand Management;
     - Identification of the product;
     - Operation of the products.

➢ Communication management in the projects II: 2 credits (30 hours); L, T, P, PE
- Disseminate information and make reports: Frequency necessary, technology available, duration of the project...

PRM 116: Conception and management of the projects I

➢ Introduction to the fitting of the projects I: 2 credits (30 hours); L, T, P, SPW
  1. Technical Study
     - Objective of the Technical Study;
- Definition of the activity;
- Enumeration and qualification of needs;
- Analysis od project constraints.

2. Study of the market or of the expectations of the Beneficiaries
   - Objective of the Market Study;
   - know and understand its market.

➢ Introduction of the project Management I: 3 credits (45 hours); L, T, P, SPW
   - Generalities on projects, problems in the management of projects;
   - The Typology of projects;
   - The History of the Management of Projects, part of the project, specifications.

❖ PRM 126: Methodology, Conception and management of projects II

➢ Methodology of the drafting of the report of internship: 1 credit (15 hours); L, P
   - The collection of information;
   - How to make a report;
   - The plan of the Probationary report and the summary;
   - The Tables of content;
   - The introduction of the report of internship;
   - The conclusion of the internship report;
   - The acknowledgments;
   - How to build the annexes;
   - When to start his internship report;
   - How to find a topic of internship report;
   - The cover page;
   - How to write effectively;
   - Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations);
   - Instructions and typographical rules of presentation (font size, line spacing, titles, highlighted, punctuation, graphic charter);
   - How to prepare the defense.

➢ Introduction to the conception of projects II: 1 credit (15 hours); L, T, P

Study of the market or of the expectations of the Beneficiaries
   - Objectives of the Market Survey
   - Know and understand your market

➢ Introduction to the management of projects II: 3 credits (45 hours); L, T, P, SPW
   - The techniques of managing Projects;
   - Administrative management of the project, the management of time;
   - Human resources management of the project, the management of the quality.
PRM 236: Conception and management of projects III and IV

- Conception of Projects I: 1 credit (15 hours); L, T, P, SPW
  1. Study of the market or of the expectations of the beneficiaries
     - Define a strategy to develop the activity.
  2. Economic and Financial study
     - Objectives of the Study;
     - The initial financial plan.

- Project management I: 2 credits (30 hours); L, T, P.

The five (05) stages of a project:
- The emergence of the project
  - Definition;
  - Tools: The Beast To horns, the tree of objectives.
- The feasibility
  - Definition;
  - Tools: quantitative tools, qualitative tools of Analysis of risks, tools of functional analysis.
- The design - definition;
  - Tools: Work Break Down Structure (WBS), activity list, the planning, budget, the schedule of expenditures.
- Implementation - definition;
  - Tools: Specification the Gannt, sheet of reporting, dashboards.
- Conclusion
  - Definition;
  - Tools: the transfer and the closure, the sheets of capitalization of the experience.

- Conception of Projects II: 1 credit (15 hours); L, T, P, SPW.

Study Economic and Financial
- The forecast account result;
- The cash plan;
- The threshold of profitability.

- Project management II: 2 credits (30 hours); T, P, SPW

1. The Project Manager
   - The profile of the project manager;
   - The specialties;
   - The strengths of the Project manager;
   - The behaviors;
   - The activities;
   - The dilemmas.

2. The Small Projects
   - Elements of context;
Elements of Implementation.

3. Generalities of project
- The project, the stakeholders;
- The project of enterprise;
- The Phases of preliminary studies;
- The offers, the risks;
- The launch of the project;
- The HumanResources;
- The cycle of project management.

PRM 117: Bilingual training I and economic environment I

> French expression: 1 credit (15hours): L, T

1. Vocabulaire
   - Vocabulaire technique usuel

2. Grammaire
   - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
   - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
   - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
   - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
   - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
   - Des fonctions grammaticales.

3. Expression et communication
   - Compréhension et interaction au cours d’une discussion technique ;
   - Communication orale courante ;
   - Communication orale interactive
   - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
   - Lecture rapide et compréhension de texte ;
   - synthèse d’un long texte
   - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
   - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
   - Expressions figées

> General Economics: 2 credits (30hours): L, T, P

1. Business and production
2. Households and the consumption
3. Markets and Prices
4. Training and distribution of income
5. The currency and the financing of the Economy
6. The elements of the National Accounting
7. The macro-economic equilibrium
8. The socialist system
9. The capitalist economy
10. The state and its interventions
11. The foundations of international trade;
12. International payments
13. The balance of payments
14. Economic development and its inequalities
15. Growth and its inequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of problems
18. The development strategies
19. The economic integration and the forms of cooperation in the world
20. The strategies of the International Debt

PRM 127: Bilingual training II and Economic Environment II

- English Expression: 1 credit (15 hours); L, T, SPW

1. Vocabulary
   - Technical and usual vocabulary of the specialty
2. Grammar
3. Bilingual expression
   - Understanding in interaction in Technical Discussions
   - Continuous oral communication: Show, explain, develop, summarize, account, comment;
   - Interactions oral communication
4. Autonomous reading of "writings" of all levels
   - Lead by a quick reading to understand the general sense;
   - Browse a text long enough to locate desired information;
   - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
5. Write clear, detailed texts
   - Essay writing;
   - Application for employment;
   - C.V.;
   - Letter of motivation;
   - Letter/memo writing and minutes of a meeting
Economy and organization of enterprises: 2 credits (30 hours); L, T, P

- The Enterprise, definition and mode of analysis;
- Classification of Entreprises;
- The Organisational Structure of enterprises;
- The insertion of the company in the economic fabric;
- The commercial activity of the enterprise;
- The productive activity of the enterprise;
- Logistics in the enterprise;
- The financial activity of the enterprise;
- The management of human resources;
- The systemic approach of the enterprise;
- Information system;
- The decision making process;
- The strategic analysis of the company;
- Choice and implementation of a strategy;
- The business, society and culture;
- The business, society and the Ethics.

PRM 231: Quantitative techniques and computer skills I

Probabilities and operational research i: 3 credits (45 hours); L, T, P, SPW

1. Algebra of sets
   - Applications;
   - The Counts.
2. Basic Set linked to a random experiment
   - Probabilisation;
   - Conditional probability;
   - Formula of Bayes;
   - Tests of BERNOUILLI.
3. Random variables discrete
   - Law of probability;
   - Distribution function.
4. Random variables continuous
   - Density;
   - Hope;
   - Variance;
   - Standard deviation; moments.
5. Conventional laws
   - Binomial
   - Normal; fisher; exponential.

Applied computer i: 2 credits (30 hours); L, T, P, SPW

1. The study of the Graphical Environment Windows
   - Presentation;
• Management of Windows;
• Managing Files and Folders.

2. **What is a file, a folder?**
   • Path of access to a file.

3. **Practical Study of Microsoft Word**
   • study of basic functions.

4. **Practical Study of Microsoft Excel**
   • Presentation;
   • Arithmetic operations.

5. **Construction of a formula**
   • Use of the integrated functions: - definition;
     - Syntax of the integrated functions;
     - Some integrated functions;
     - Relative reference, absolute reference and joint reference; - summary case.

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**PRM 241: Quantitative Techniques and computer II**

- **Probabilities and Operational Research II**: 3 credits (45 hours); L, T, P, SPW

1. **Concepts of the combinatorial optimization**
   • Constraints/objectives;
   • Feasible solution/best;
   • Terminal;
   • Local optima, etc.

2. **Graph Theory**
   • Modeling;
   • Coloring;
   • Roads;
   • The trees masking fluid;
   • The Waves...

3. **The linear programming**
   • Program to two variables; program to more than two variables.

4. **The algorithm of the simplex - the table method**
   • Analysis of the final table of the simplex; problem of duality; the management of stocks.

5. **The problems of scheduling - General Information on the Graphs**
   • The PERT method:
     - Applications on the PERT;
   • The choice of investment in deterministic universe.

6. **Modeling**
7. **Decision in Uncertain Future**
8. **Transportation problems**
9. **The problems of consignment**

- **Applied computer training II**: 2 credits (30 hours); L, T, P

Specific work
c software for the management of projects.
PRM 232: System of Information and Financial Analysis I

System of Information I: 2 credits (30 hours); L, T, P, SPW

1. Concept information systems
   - Introduction
     - Systemic Analysis of the Company
   - Information System:
     - Functions of the information system;
     - The roles of the information system;
     - Qualities of an information system.
   - Computerization of the Information system:
     - The parties to an information system;
     - Software;
     - Definitions;
     - The purpose of a system of information;
     - The functions of a system of information;
     - The organizational system;
     - The processing of information.

2. Concept of algorithmic and initiation to the programming
   - Objects: circumstances, variables, operators ...;
   - Basic treatments and sequential;
   - Choice and repetition;
   - Function and procedures;
   - Structure of the data (vectors, table, registration, file);
   - Application with basic or Pascal.

Financial Analysis I: 2 credits (30 hours); L, T, SPW

- Accounting balance sheet;
- Financial Balance sheet;
- Functional balance sheet;
- Trading profit and loss account;
- The ratios;
- Functional analysis and differential □;
- The index profitability.

PRM 242: Information System and Financial Analysis II

System of Information II: 2 credits (30 hours); L, T, P
Elaboration of the database

A- The conceptual model of data: MCD

1. Constitution of the data dictionary DD
   - Goal (objective);
   - Basic Concepts: Elementary data-Rubrique-Document;
   - Techniques of collection of information;
   - Purge of the dictionary;
   - Highlighted objects;
   - Identification of entities;
• Definition of the relations of dependency between the objects.

2. Elaboration of the model Entity-association
   • Basic Concepts:
     - Entity and entity type;
     - Attribute (property);
     - Association;
     - Occurrence of a property;
     - Identifier (key);
     - Cardinality.

B- The logic model for relational data: MLD
   1. Purpose
   2. Basic concepts
      • Primary key;
      • Foreign key;
      • Relationship;
      • Registration.
   3. The model entity/association
      • Relationship of the entities;
      • Definition of Other relations of dependencies between objects;
      • Cardinalities.
   4. Passage of the MCD at the MLD
      • Transformation of entities;
      • Transformation of associations:
        - Binary relationship to the cardinalities \((x, 1)\) - \((x, n)\) with \(X = 0\) or \(x = 1\);
        - Relationship n-area (regardless of the cardinality);
        - Reflexive relationship to the cardinalities \((x, 1)\) - \((x, n)\) with \(X = 0\) or \(X = 1\);
        - A binary relationship to the cardinalities \((0.1)\) - \((1.1)\).

C- Physical Data Model: implementation of the database
   1. Creation of the database;
   2. Creation of tables;
   3. Entering data in the tables;
   4. Relationship of the tables;
   5. Creating forms;
   6. Relational model (relationship, degree, schema, PRIMARY KEY/secondary, cardinality, domain, ... P of base or access);
   7. The languages of requests (SQL...);
   8. Study of a few SQL commands.

Financial Analysis II: 2 credits (30 hours); L, T, P, SPW
   • The magnitudes of the financial balance;
   • Presentation of the account of result;
   • Ability to self-financing;
   • Ratios of "exploitation and profitability."
PRM 233: General Policy and Accounting Management I

➤ Cost accounting and budgetry management i: 2 credits (30 hours); L, T, P, SPW

1. Of the general ledger to the cost accounting
   - Generality on the cost accounting (objectives, role, concept of load)
2. Analysis of expenses
   - Loads liable and not liable;
   - Corporable and non-corporable expense
   - Direct costs and indirect;
   - Suppletive loads;
   - Allocation of Indirect Costs.
3. Valuation of stocks (FIFO method, LUP)
4. The full costs (cost of purchase, cost of production, introduce the stocks)
   NB: do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products).
5. Partial costs
   - The variable costs;
   - the marginal costs.
6. The Rational Importance of loads of structure

PRM 243: General Policy and Accounting Management II

➤ Analytical accounting and budgetary management II: 2 credits (30 hours); L, T, P, SPW

1. The predetermined costs
   • Identification of gaps on direct costs and indirect and algebraic analysis of these differences (exclude the graphic analysis).
2. The budgets (brief study and practice)
   • Sales budget;
   • The production budgets;
   • The supply budget;
   • investment budget;
• cash budget.

- General Policy and Strategy II: 2 credits (30 hours); L, T, P, SPW
  1. The organizational structures
     • Bases and forms of organizations.
  2. The dynamic strategy-structure
     • Taking into account the constraints of organization and Environment in the development of strategic decisions (dimension of the company or of the markets, international context...).

* PRM 234: Management of Risks and initiation to the Logistics I

- Risk management i: 2 credits (30 hours); L, T, P, SPW
  - Analysis of the risks in the management of enterprise;
  - Risk analysis in the management of projects;
  - Risk management planning;
  - Identification of risks.

- Initiation to the Logistics I: 2 credits (30 hours); L, T, P, SPW
  - Physical and informational, flows loops of coordination, mapping of flows, flow pulled /Pushed;
  - Production system, expenses station, work, data time negotiation;
  - Types of needs.

* PRM 244: Management of Risks and initiation to the Logistics II

- Management of Risk II: 2 credits (30 hours); L, T, P.
  - Analysis of the risk;
  - Answers to the risk;
  - Follow-up to the risk of project;
  - Communications in management of risks;
  - Case study: analysis of risks in a project well specified.

- Initiation to the Logistics II: 2 credits (30 hours); L, T, P, SPW
  - Notions of load and capacity, deadlines for obtaining;
  - Impact of the flows and the management of the stocks in the company, performance indicators.

* PRM 235: analysis and planning of projects I

- Technical analysis of the projects I: 2 credits (30 hours); L, T, P.
  - The production process;
  - The criteria to remember;
  - The characteristics of the means of production;
  - The equipment of the project.
- Planning of the projects I: 2 credits (30 hours); L, T, P, SPW
  - Identification of tasks and operations of the project;
  - Scheduling of these tasks.

- PRM 245: analysis and planning of projects II

- Technical analysis of projects II: 2 credits (30 hours); L, T, P, SPW
  - Location of the unit of production;
  - Risk Analysis of the project;
  - Prevention of risks of the project.

- Planning of projects II: 2 credits (30 hours); L, T, P, SPW
  - Scheduling of these tasks;
  - Planning tools of the projects (Gantt chart of the project).

- PRM 237: The legal environment, civic education and the creation of business

- Law on Commercial Companies I: 1 credit (15 hours); L, T
  1. The status of trader;
  2. The acts of trade;
  3. The fund of commerce;
  4. The different commercial contracts.

- Civil law: 1 credit (15 hours); L, T, P
  1. Definition, characters, the branches and the sources of the law;
  2. The field of application of the Act;
  3. The dimensions of the law (objective, subjective right);
  4. The legal organization;
  5. The law of the legal personality;
  6. The civil status, the name and the domicile;
  7. The disability;
  8. The legal acts;

- Creation of business: 1 credit (15 hours); L, T, P, SPW
  - Concept of contractor;
  - Motivations to the creation of company;
  - Search for ideas and evaluation;
  - Research funding;
  - Choice of legal status;
  - Ethical aspects of the business;
  - Preparation of the business plan.
PRM 246: Professional internship

- The professional internship: 6 credits (90 hours); P, SPW
  1. Arrival and Business Integration
  2. Working in a company
  3. The holding of the Intern journal
  4. The choice of the theme of work: in collaboration with mentors professional academic and
  5. Elaboration of the research structure
  6. The resources to operate
  7. The organization of work
  8. Drafting of the report
  9. Presentation of the report before a jury

PRM 247: Legal environment and civic education II

- Law on Commercial Companies II: 1 credit (15 hours); L, T
  1. Definition, Object and forms of commercial companies
  2. The creation of commercial companies
  3. The operation of the Commercial Companies
  4. The dissolution of commercial companies

- Labor law: 1 credit (15 hours); L, T, P
  1. Definition of the right of labor, birth and evolution of labor law and sources
  2. The contract of work (conclusion, implementation and rupture)
  3. The conflicts of work (individual and collective)
  4. The delegate of the staff, unions
  5. Work accidents and occupational diseases
  6. The hygiene and safety in the workplace

- Civic Education and Ethics: 1 credit (15 hours); L, SPW
  The Concepts
  - The citizen;
  - The Nation;
  - The State;
  - Public Property unto collective property;
  - The freedoms;
  - The public service;
  - Problem of ethics;
  - Ethics, Law and reason;
  - Management and ethics of responsibility;
  - Ethics and management.
  - Ethics
  - Civics
• Deontology
• Moral consciousness
• The universal declaration of Human Rights
• Good governance in public services
• Explain the importance of civics to the life of the nation
• Functions of the state and its citizens
• Deontology, Professional ethics and professionalism
• Relationship between morality, law and ethics
• Codes of ethics
Field: MANAGEMENT

Specialty:

HUMAN RESOURCE MANAGEMENT
1. The objective of the training

The objective of this specialty is to train specialists in the administrative follow-up of the personnel (contracts, absences, leaves, medical visits, declarations to labour organizations) and offering refreshment courses in line with the labour code; the regulation of work and the human resource policy of the enterprise.

2. Skills Sought After

→ General skills
  - Understand the professional and economic environment and enterprises;
  - Master the use of the computer;
  - Administer individual salary files;
  - Effect declarations dictated by law;
  - Identify the needs for training of the personnel;
  - Define the needs for training;
  - Inform the personnel on the labour code and the peculiarities of the enterprise;
  - Lead a work team.

→ Specific Skills
  - Control the pay vouchers of the personnel;
  - Establish pay slips;
  - Carry out the administrative follow-up of human resources operations;
  - Carry out interview in view of employment;
  - Follow up outsources service contracts;

3. OUTLETS

  - Assistant human resource manager;
  - Assistant to the person in charge of human resources;
  - Assistant to the directorate;
  - Officer in charge of recruitment;
  - Manager of salaries.
4. Organization of the Teachings

Semester 1

<table>
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<td>HRM 114</td>
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5. COURSE CONTENTS

➤ HRM 111: Mathematics and Computing I

➢ General Mathematics I: 3 credits (45 hours); L, T, SPW

- Algebra and vectorspaces
  1. Polynomials
     • Polynomials characteristics.
  2. Vectorspace
     • Linear applications.
  3. Matrices
     • Operations on the matrices;
     • Matrices relating to a linear application;
     • Matrices and determinants.
  4. The Determinants
     • Determinant of a square matrix;
     • Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     • Inversion of matrix of order less than or equal to 3 - method of Gauss;
     • Resolution of systems of linear equations by the method of; Pivot
     • Application of the matrix calculation on the resolution of systems of linear equations.
  6. Reduction of square matrices
     • Own values;
     • Own vectors.
  7. Differential equations and linear récurrentielles of order 2 with constant coefficients
  8. Mathematical applications in Economics and Management

➢ General Computing I: 2 credits (30 hours); L, T, SPW

The hardware and software on a computer system

has- the Hardware

  1. The peripheral components
     • The devices of input;
     • The output devices;
     • the storage devices;
     • The devices of input and output.
  2. The central unit
     • The central memory;
     • The microprocessor;
     • The ports;
     • The motherboard;
     • The chipset;
     • The powersupply;
     • The cards of extension;
• other internal organs.

3. **The unit of exchange (or bus)**
   - Role;
   - Types of bus:
     - Data bus;
     - Control bus; - Bus of address.

**B- The Software**

1. **The application software**
   - Definition;
   - Role;
   - Types and examples of software.

2. **The basic software (or software systems)**
   - Definition;
   - Types of basic software;
     - The drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation:
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of an operating system;
       - architecture.
   - Concept of Free Software and proprietary software.

**System of numeration and codification**

**A- The numberingsystems**

1. **A few basic concepts**
   - The base of the system;
   - Weight;
   - Alphabet of the language;
   - Format of the word (length of the word);
   - power of language.

2. **A few numberingsystems**
   - The decimal system;
   - The binary system; the octal system;
   - the hexadecimal system.

3. **The basic changes**
   - Of Decimal to another base b;
   - To a base b of any kind to the decimal basis;
   - of the binary in octal and vice versa;
   - from binary to hexadecimal and vice versa.

4. **Arithmetic operations**
   - binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
     - addition of binary numbers;
• Subtraction of binary numbers;
• Use of the complement to 2 in the subtraction; multiplication of binary numbers; division of binary numbers.

5. Hexadecimal arithmetic
• Addition of numbers in Hexadecimal;
• Subtraction of numbers in hexadecimal.

B- The codes

1. General information on the concept of a code
   • Definitions;
   • Objectives of the codification;
   • The functional codification;
   • Types of functional codes;
   • The codification of technology.

2. The alphanumeric codes
   • The ASCII code:
     - Standard ASCII;
     - Extended ASCII;
   • Use.

HRM 121: Mathematics and Computing II

- General Mathematics II: 3 credits (45 hours); T, P, SPW

Analysis

1. The Real Numbers
2. Numerical Functions of a real variable, limit, Continuity
3. Differentiability, extrema, theorem of Rolle and finished increases
4. Polynomials, fractions, rational
5. Study and graphic representation, reciprocal Functions
6. Limited developments, integrals and applications to calculations of Aires
7. Logarithmic functions and exponential
8. Digital Suites: Direction of variation, convergence
9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
10. Mathematical applications in Economics and Management

- General Computing II: 2 credits (30 hours); T, P, SPW

A- Computer Networks

1. General information
   • Definition of a computer network;
   • Interest of computer networks; basic vocabulary:
     - Workstation;
     - Node;
     - Server; - Packet.

2. Typology of networks according to the media:
   • Wired Networks;
   • Networks Not Wired.
   • According The Geographic Extent:
3. Network Topologies
   • Physical Topology
     - The bus topology;
     - The star topology;
     - The ring topology;
     - The topology In Mesh;
     - The topology in shaft.
   • Logical Topology
     - Point-to-point networks.

4. Network architectures
   • client/server architecture;
   • architecture of equal to equal.

5. The equipment of computer networks
   • Equipements of basis of a network:
     - The computer;
     - The network card;
     - The server;
     - The network cable;
     - The transceiver (or adapter);
     - The transmission Mounts;
     - The socket.
   • The equipment of interconnections:
     - Hubs (hub);
     - Switch (Switch);
     - Routers;
     - Gateways
     - The gateway (gateway);
     - The router;
     - The bridge (Bridge);
     - the repeaters.

6. Concept of IP addressing
   • structure of an IP address:
     - Network identifier (Net ID);
     - Identifier of host (Host ID).
   • Specific addresses:
     - Network addresses;
     - Machine address;
     - Broadcast Address (broadcast);
     - Limited Broadcast address (multicast);
     - Address of rebroadcasting (loopback).
   • IP addressing by Classes:
     - CLASS A;
     - CLASS B; - CLASS C.
B- Internet network

1. **Concept of protocol**
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
     - NNP protocol;
     - The FP protocol;
     - HTP protocol;
     - IMAP protocol; - Protocol TCP; - other.

2. **A few Internet Services**
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
   - The Download (Download A text, download An image, download a free software...);
   - The online Trade;
   - The IRC (Internet Relay Chat); ☐ Other.

3. **The search engines**
   - Definition;
   - Role;
   - Some search engines.

4. **Tools for Internet access**
   - The browsers (definition, examples);
   - The plug-ins (definition, examples);
   - The search engines (definition, examples, use).

5. **The connection to the Internet**
   - Connection hardware;
   - Suppliers of access (role, examples);
   - Types of connections (specialized line, phone line, satellite).

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**HRM 112: Quantitative techniques I**

- **Financial Mathematics I**: 2 credits (30 hours); L, T, SPW

1. **The Basics**
   - Simple Interest;
   - Calculation of the value gained;
   - Current value commercial and current value rational one;
   - précompté interest and effective interest.

2. **Calculation of the average rate of a series of simultaneous investments**
3. **Equivalence and replacement of effect**
4. **Short-term financial transactions - Current Account and interest**
5. **Commercial Discount - real rate of discount**
6. **Compound interest**
   - Acquired value;
   - Current value;
• Rate equivalent and proportional rate;
• rate of Interest apparent;
• rate of real interest.

➢ Statistics: 2 credits (30 hours); L, T, SPW

1. Statistical series to a variable
   • Definition and vocabulary;
   • Graphical representation;
   • Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Gap-type;
     - Quantiles;
     - Coefficient of variation.

2. Statistical series of two variables
   • Definition and vocabulary;
   • Cloud of points;
   • Average point;
   • Covariance and covariance matrix of 2 variables;
   • The coefficient of correlation and regression;
   • Linear adjustment by the method of least squares.

➢ HRM 122: Quantitative techniques II

➢ Financial Mathematics II: 2 credits (30 hours); T, P, SPW

1. The Annuities
   • Constant annualinstallments;
   • Annuities in arithmetic progression; □ annuities in geometric progression;
   • Perpetual annuities.

2. The undivischdebentures
   • Reimbursement by constant annual installments;
   • Table of amortization;
   • Laws followed by depreciation recovery of the debt still alive;
   • Laws followed by the annuities;
   • Applications on the borrowings undivided.

3. The bond loans
   • Reimbursements to the pair;
   • Constant annualinstallments;
   • Constant depreciation;
   • Rate of yield and rates of returns of a debenture loan;
   • rate of returns of the borrowing to the Broadcast;
   • Choice of Investments.
➢ Statistics II: 2 credits (30 hours); T, P, SPW

1. Estimation of an average, a proportion and a gap type;
2. Confidence interval and confidence coefficient;
3. Tests of assumptions and the KHI-two.

❖ HRM 113: Legal environment and accountant I

➢ General Ledger: 2 credits (30 hours); L, T, P, SPW

1. The heritage
2. The flow in the company and their registration
3. Relationship balance, balance sheet, Result
4. Accounting Law and the accounting plan
5. Purchases and sales
6. The loads and the products
7. Incidental expenses on purchases and on sales
8. The packaging
9. The transport
10. The conventional financial system
11. The regulations in cash
12. The regulations in the long term
13. Depreciation

➢ Legal management and tax I: 2 credits (30 hours); L, T, P, SPW

1. **Legalsignification of economic activities**
   - Study of different sectors of activities from the distinction act of commerce act civil;
   - Study of the statutes related to the nature of the professional activity; - economic activity public.
2. **The company**
   - Legal concept of the company;
   - The merits of trade;
   - The building of the company (registered or not in the balance sheet).
3. **The structures of the company**
   - Individual company;
   - Commercial companies and civil, associations... - public company.
4. **Instruments of payment and credit**
   - Check, bill of exchange, promissory note, Dailli slip, cards; - leasing; - the inheritance.
5. **Forecasting and regulation of business difficulties**

❖ MHR 123: Legal environment and accounting II

➢ Cost accounting and management of budget : 2 credits (30 hours); L, T, P, SPW

1. Of the general ledger to the cost accounting
   - Generality on the analytical accounting (objectives, role, concept of load)
2. Analysis of expenses
   - Loads liable and not liable
   - Direct costs and indirect
   - Suppletiveloads
   - Distribution of Indirect loads
3. Valuation of stocks (FIFO method, LUP)
4. The full costs (cost of purchase, cost of production, introduce the outstanding) NB: do not address the special notes related to the costs (waste and scrap, semi-finished, under Products)
5. Partial costs
   - The variable costs
   - The marginal costs
6. The Rational Importance of loads of structure
7. The predeterminedcosts
   - Identification of gaps on direct costs and indirect and algebraic analysis of these differences (exclude the graphic analysis)
8. The Budgets (brief study and practice)
   - The budgets of sales
   - The production budgets
   - The budgets of supply
   - Budgets of investments
   - Budgets of cash flow.

➢ Tax Management II: 3 credits (45hours); L, T, P.

1. The sources of the tax law
   - National sources;
   - International sources.
2. Definition of the various tax levies – taxes rates and taxes fiscal, and parafiscal charges; - State taxes and local taxes.
3. Presentation of differenttaxes
   - Vat;
   - Personal income tax;
   - Corporate tax.
4. Relationship between tax payer and fiscal administration (fiscal control, tax litigation)

❖ MHR 114: Human Relations I

➢ Psychology and social relations dynamics I: 2 credits (30hours); L, T, SPW
   1. Psychosocial organizations;
   2. Theory of motivation;
   3. Social communication.

➢ Human Resource Information SystemsI: 3 credits (45hours); L, T, P, SPW
   1. Concept of Information Systems
• Introduction:
  - Systemic Analysis of the business.
• the system of information:
  - Functions of the IF;
  - The roles of the IF;
  - Qualities of an IF.
  - Computerization of if:
    - The parties of A if;
    - Software;
    - Definitions;
  - The purpose of a system of information;
  - The functions of a system of information;
  - The organizational system;
  - The processing of information.

2. Concept of algorithmic and Programming Initiation
• Objects: cumststances, variables, operators ...
• Basic treatments and sequential;
• Choice and repetition;
• Function and procedures;
• Structure of the data (vectors, table, registration, file).

3. Application with Basic or Pascal

❖ MHR 124: Human Relations II
➢ Psychology and social relations dynamics II: 2 credits (30hours); L, T, SPW
  1. The personality;
  2. The leadership;
  3. Decision-making;
  4. The management of stress.

➢ HR Information Systems II: 2 credits (30hours); L, T, P.

Elaboration of the Database
  1. The conceptual model of data: MCD
     - Constitution of data dictionary SD:
       - Goal (objective);
       - Basic Concepts: Elementary data-heading- Document;
       - Techniques of collection of information;
       - Purge of the dictionary;
       - Highlighted objects;
       - Identification of entities;
       - Definition of the relations of dependency between the objects.
     - The development of the entity model- association:
       - Basic Concepts:
1. **Entity and entity type;**
   - **Attribute(property);**
   - **INsociation;**
   - **Occurrence of a property;**
   - **identifier (key);**
   - **cardinality.**

2. **The logic model of relational data: MLD**
   - **Purpose;**
   - **Basic Concepts:**
     - Primary key;
     - Foreign key;
     - Relationship;
     - Registration.
   - The model entity/association
     - Relationship of the entities;
     - Definition of Other relations of dependencies between objects;
     - Cardinalities;
     - Passage of the MCD at the MLD;
     - Transformation of entities;
     - Transformation of associations;
     - Binary relationship to the cardinalities \((x, \infty)\) with \(X = 0\) or \(X = 1\);
     - Relationship n-area (regardless of the cardinality);
     - Reflexive relationship to the cardinalities \((x, \infty)\) with \(X = 0\) or \(X = 1\); binary relationship to the cardinalities \((0,1)\) - \((1,1)\).

3. **Physical Data Model: Implementation of the database**
   - Creation of the database;
   - Creation of tables;
   - Entering data in the tables;
   - Relationship of the tables;
   - Creating forms;
   - Relational model (relationship, degree, schema, PRIMARY KEY/secondary, cardinality, domain, ... P of base or access);
   - The languages of requests (SQL...); 
   - Study of a few SQL commands.

<MHR 115: Professional Relations I>

- **Professional relations both internal and external I: 2 credits (30hours); L, T, P, SPW.**
  - The mail in the Enterprise;
  - The processing of mail;
  - The mail to contentious character.
Computing I: 2 credits (30 hours); L, T, P.
- Master the techniques of the Audiovisual sector in the framework of the policy of the business.
- Study of communication networks;
- Study and practice of the Internet.

MHR 125: Professional Relations II

Professional relations both internal and external II: 2 credits (30 hours); L, T, P, SPW.
- The characteristics of internal mail;
- The areas of internal mail: notes, reporting, minutes, reports, memos.

Information II: 2 credits (30 hours); L, T, P, SPW.
- Multimedia tools; - social networks.

MHR 116: Organization I

Initiation to the HRM I: 2 credits (30 hours); L, T, P.
- Evolution of HRM;
- The Secretary of employee well-being during the Middle Ages;
- The management of staff and the industrial revolution;
- The first areas of HRM; - HRM before the 2nd World War.

The Motivation I: 3 credits (45 hours); L, T, P.
- The process of motivation;
- The theories on motivation:
  - The Maslow’s hierarchy of needs;
  - The Theory X and Theory Y (McGregor);
  - The Hygiene Theory of motivation by Hertzberg.

MHR 126: Methodology and organization II

Methodology on writing an internship report: 1 credit (15 hours); L, P

1. The collection of Information
2. How to write a report
3. The methodology and abstract
4. The Table of Contents
5. The introduction of the report of internship
6. The conclusion of the Internship report
7. The Acknowledgments
8. How to build the annexes
9. When to start his Internship report
10. How to construct a report Topic
11. The cover page
12. How to write effectively
13. Form to and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations)
14. Instructions and typographical rules of presentation (police, titles, highlighted, punctuation, graphic charter)
15. How to prepare the internship defense

- **Initiation to the HRM II: 2 credits (30 hours); L, T, P**

- **Administrative management and social relations**

  **The Employment Environment**

  The CV, letter of motivation, request for employment, sheet of post, recruitment, performance appraisal, wage bargaining.

  1. **Locate the legal context of the function and know how on information**
     - To make the link between the Labor Code and collective agreements.
  2. **Formalities for hiring and follow-up of the trial period**
     - Complete the formalities of hiring (DPAE, registration to the social security ...);
     - Organize the medical visits (hiring, rinduction...);
     - Accommodate the employee;
     - Mastering the content of and obligatory contract of definite duration;
     - Follow up of the test periods.
  3. **Control the management of CDD and Part time**
     - The unemployment benefits on the CDD;
     - what period of time? For what reason?
     - The possibilities of renewal and succession;
     - What is the salary? What benefits?
  4. **Manage the working time and absences**
     - The work duration;
     - The overtime;
     - Paid leave (legal executies, planning, etc.);
     - Sick absences and accident at work (against-medical visit...);
     - leave related to maternity.
  5. **To best manage the end of the labor contract and accompanying the employee in the event of departure**
     - Distinguish between the different causes of rupture and their consequences;
     - Organize administratively to the departure of an employee;
     - Inform the employee on his unemployment rights and Insurance...

- **The Motivation II: 2 credits (30 hours); L, T, P**

  1. contemporary approaches of the Motivation;
  2. Theory of the three needs (McClelland);
3. Theory of equity (Adams):
   - Relations of comparison in the Equity theory
   - Theory of the Equity: personal judgments;
   - Motivate the various employees;
   - Work/life balance;
   - Profiles of collaborators and system of motivation.

MHR 117: Bilingual training I and economic environment I

- French expression: 1 credit (15 hours): L, T

1. Vocabulaire
   - Vocabulaire technique usuel

2. Grammaire
   - Du verbe: Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
   - De l’adjectif: Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
   - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
   - Du pronom: personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
   - De l’adverbe et de la locution adverbiale: pour dire comment, où, quand et pourquoi ;
   - Des fonctions grammaticales.

3. Expression et communication
   - Compréhension et interaction au cours d’une discussion technique ;
   - Communication orale courante ;
   - Communication orale interactive
   - De la phrase: simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
   - Lecture rapide et compréhension de texte ;
   - synthèse d’un long texte
   - De la communication: rédaction de texte, d’instructions, de rapport, d’une correspondance – d’une lettre recommandation ou de motivation, d’une demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
   - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
   - Expressions figées

- General Economics: 2 credits (30 hours): L, T, P

  1. Business and production
  2. Households and the consumption
  3. Markets and Prices
  4. Training and distribution of income
5. The currency and the financing of the "Economy"
6. The elements of the National Accounting
7. The macro-economicequilibrium
8. The socialist system
9. The capitalist economy
10. The State and its interventions
11. The foundations of international trade;
12. International payments
13. The balance of payments
14. Economic development and itsinequalities
15. Growth and itsinequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of problems
18. The development strategies
19. The economic integration and the forms of cooperation in the world
20. The strategies of the International Debt

❖ MHR 127: Bilingual training II and Economic Environment II

❖ English Expression: 1 credit (15hours); L, T, SPW

1. Vocabulary
   - Technical and usual vocabulary of the specialty
2. Grammar
3. Bilingual expression
   - Understanding in interaction in Technical Discussions
   - Continuous oral communication: Show, explain, develop, summarize, account, comment;
   - Interactions oral communication
4. Autonomous reading of "writings" of all levels
   - Lead by a quick reading to understand the general sense;
   - Browse a text long enough to locate desired information;
   - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
5. Write clear, detailed texts
   - Essay writing;
   - Application for employment;
   - C.V.;
   - Letter of motivation;
   - Letter/memo writing and minutes of a meeting

❖ Economy and organization of enterprises: 2 credits (30 hours); L, T, P

• The Enterprise, definition and mode of analysis;
• Classification of Enterprises;
• The Organisational Structure of enterprises;
• The insertion of the company in the economic fabric;
• The commercial activity of the enterprise;
• The productive activity of the enterprise;
• Logistics in the enterprise;
• The financial activity of the enterprise;
• The management of human resources;
• The systemic approach of the enterprise;
• Information system;
• The decision-making process;
• The strategic analysis of the company;
• Choice and implementation of a strategy;
• The business, society and culture;
• The business, society and ethics.

❖ MHR 231: Quantitative techniques and computer skills I

➢ Probabilities and operational research I: 3 credits (45 hours); L, T, P, SPW

1. sets Algebra
   • Applications;
   • The Counts.

2. Basic Set linked to a random experiment
   • Probabilities;
   • Conditional probability;
   • Formula of Bayes;
   • Tests in BERNOUILLI.

3. Random variables discrete
   • Law of probability;
   • Distribution function.

4. Random variables continuous
   • Density;
   • Hope;
   • Variance;
   • Standard deviation; moments.

5. Conventional laws
   • Binomial
   • Normal; fish; exponential.

➢ Applied computing I: 2 credits (30 hours); L, T, P, SPW

1. The study of the Graphical Environment Windows
   • Presentation;
   • Management of Windows;
   • Managing Files and Folders.

2. What is a file, a folder?
   • Path of access to a file

3. Practical Study of Microsoft Word
   • Study of Basic Functions
4. **Practical Study of Microsoft Excel**
   - Presentation;
   - Arithmetic operations.

5. **Construction of a formula**
   - Use of the integrated functions:
     - Definition;
     - Syntax of the integrated functions;
     - A few integrated functions;
     - Relative reference, absolute reference and joint reference;
     - Case of synthesis.

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**MHR 241: Quantitative techniques and computer training II**

- **Probabilities and Operational Research II:** 3 credits (45 hours); L, T, P, SPW
  1. **Concepts of the combinatorial optimization**
     - Constraints/objectives;
     - Feasible solution/best;
     - Terminal;
     - Local optima, etc.
  2. **Graph Theory**
     - Modeling;
     - Coloring;
     - Roads;
     - The trees masking fluid;
     - The Waves...
  3. **The linear programming**
     - Program to two variables;
     - Program to more than two variables.
  4. **The algorithm of the simplex - the table method**
     - Analysis of the final table of the simplex; problem of duality; the management of stocks.
  5. **The problems of scheduling - General Information on the Graphs**
     - The PERT method:
       - Applications on the PERT;
     - The choice of investment in deterministic universe.
  6. **Modeling**
  7. **Decision in Uncertain Future**
  8. **Transportation problems**
  9. **The problems of assignment**

- **Applied computing II:** 2 credits (30 hours); L, T, P

**Specific work**
- software for the management of human resources.
MHR 232: Finance and ICT I

- The Human Resources Information System I: 2 credits (30 hours); L, T, P, SPW

1. Concept information systems
   - Introduction:
     - Systemic Analysis of the business.
   - The system of information:
     - Functions of the IF;
     - The roles of the IF;
     - Qualities of an IF.
   - Computerization of the IF:
     - The parties to A if;
     - Software;
     - Definitions;
     - The purpose of a system of information;
     - The functions of a system of information;
     - The organizational system;
     - The processing of information.

2. Concept of algorithmic and initiation to the programming
   - Objects: circumstances, variables, operators ...;
   - Basic treatments and sequential;
   - Choice and repetition;
   - Function and procedures;
   - Structure of the data (vectors, table, registration, file); application with basic or Pascal.

- Financial Analysis I: 2 credits (30 hours); L, T, SPW.
  - Accounting balance sheet;
  - Financial Balance sheet;
  - Functional balance sheet;
  - Significant balances of management;
  - The ratios;
  - Functional analysis and differential □; the threshold of profitability.

MHR 242: Finance and ICTS II

- The Human Resources Information System II: 2 credits (30 hours); L, T, P.

Elaboration of the Database

A- The conceptual model of data: mcd

1. Constitution of the data dictionary DD
   - Goal (objective);
   - Basic Concepts: Elementary data-Rubrique-Document;
   - Techniques of collection of information;
   - Purge of the dictionary;
• Highlighted objects;
• Identification of entities;
• Definition of the relations of dependency between the objects.

2. Elaboration of the model Entity-Association
• Basic Concepts:
  - Entity and entity type;
  - Attribute (property);
  - Association;
  - Occurrence of a property;
  - The identifier (key);
  - Cardinality.

B- The logic model for relational data: MLDR
1. Purpose
2. Basic concepts
  • Primary key;
  • Foreign key;
  • relationship;
  • registration.
3. The model entity/association
  • Relationship of the entities;
  • Definition of Other relations of dependencies between objects; cardinalities.
4. PINsage of the MCD at the MLD
  • Transformation of entities; Transformation of associations:
    - Binary relationship to the cardinalities (x, 1) - (x, n) with X = 0 or x = 1;
    - Relationship n-area (regardless of the cardinality);
    - Reflexive relationship to the cardinalities (x, 1) - (x, n) with X = 0 or X = 1; a binary relationship to the cardinalities (0.1) - (1.1).

C- Physical Data Model: implementation of the database
1. Creation of the database
2. Creation of tables
3. Entering the data in the tables
4. Relationship of the tables
5. Creating Forms
6. Relational model (relationship, degree, schema, PRIMARY KEY/secondary, cardinality, domain, ... P of base or access)
7. The languages of requests (SQL...)
8. Study of a few SQL commands

Financial Analysis II: 2 credits (30 hours); L, T, P, SPW
• The magnitudes of the financial balance;
• Presentation of the account of result;
• Ability to self-financing;
• The rations of farms and profitability.
MHR 233: Development of Human Resources I

- General Policy and Strategy I: 2 credits (30 hours); L, T, P.
  1. The approach to undertake
     - Creation of the company;
     - Analysis of Evolution of activity in long period.
  2. The strategic approaches
     - Analysis and diagnosis: identification of opportunities and modalities of decision-making, identification of strengths and weaknesses of the company;
     - Strategic Choice: approach by the segmentation of the activities and/or by the Trades...
     - Implementation and pilotage: articulation of strategic decisions and the operational functioning.

- The areas of the Social Management I: 2 credits (30 hours); L, T, P, SPW.
  - The management of staffing and skills;
  - The management of the remuneration and payroll;
  - The organization and working conditions; - the structure and dynamics of the human resources function.

MHR 243: Development of Human Resources II

- General Policy and Strategy II: 2 credits (30 hours); L, T, P, PE
  1. The organizational structures
     - the bases and forms of organizations.
  2. The dynamic strategy-structure
     - Taking into account the constraints of organization and environment in the development of strategic decisions (dimension of the company or of the markets, international context...).

- The areas of the Social Management II: 2 credits (30 hours); L, T, P, SPW.
  - The dialog and the social audit;
  - The control of social management;
  - The instrument panel.

MHR 234: Human resources Management technics I

- Social pilotage I: 2 credits (30 hours); L, T, P
  - Instrument panel;
  - Social balance sheet.

- The GPEC I: 2 credits (30 hours); L, T, P
  - Recruitment;
  - Training.
- **MHR 244: Human Resources Management technics II**
  - **Social pilotage II: 2 credits (30 hours); L, T, P, SPW**
    - Performance appraisal
    - Compensation.
  - **The GPEC II: 2 credits (30 hours); L, T, P, SPW**
    - Assessment of performance;
    - Remuneration.

- **MHR 235: Social Environment I**
  - **Professional Relations I Internal: 2 credits (30 hours); L, T, P, SPW.**
    - The mail in the "Enterprise;
    - The processing of the mail;
    - The mail to contentious.
  - **External Professional Relations I: 2 credits (30 hours); L, T, P, SPW.**
    - The drafting of the external mail;
    - The mail to litigation.

- **MHR 245: Social Environment II**
  - **Professional Relations II Internal: 3 credits (45 hours); L, T, P, SPW**
    - The characteristics of the internal mail;
    - The areas of internal mail: notes, reports, minutes, reports, memos.
  - **Professional Relations II External: 2 credits (30 hours); L, T, P.**
    - The characteristics of the internal mail;
    - The mail relating to the search for employment.

- **MHR 236: Organization and management I and II**
  - **Organization of the action I: 2 credits (30 hours); L, T, P**
    1. The administrative work
    2. The matter of work of administrative work
    3. The observation of the administrative work
    4. The means used in the execution of the administrative work
  - **The case of synthesis I: 2 credits (30 hours); T.**
    - 15 cases on the 1st part of the fundamental courses of the Semester 3;
The 15 cases studied, treaties and corrected with the learners on the teachings of the fourth semester.

**NB**: Each case is a presentation of work situations calling for a thorough reflection.

- **Organization of the Action II: 1 credit (15 hours); L, T, P, SPW**
  1. Method of regulation and control of the organization of administrative tasks (optimisation of the administrative work; technical control of queues of hold; measurement and control of the quality of administrative work)
  2. Measurement and control of the quality of administrative work
  3. Monitoring devices (T.R.T. and check-list)

- **The case of summary II: 1 credit (15 hours); T**
  - 15 cases on the 1st part of the fundamental courses of the Semester 3;
  - The 15 cases studied, treaties and corrected with the learners on the teachings of the fourth semester.

**NB**: Each case is a presentation of work situations calling for a thorough reflection.

- **MHR 237: The legal environment and enterprise creation**

- **Law on Commercial Companies I: 1 credit (15 hours); L, T**
  1. The status of trader
  2. The acts of commerce
  3. The fund of commerce
  4. The different commercial contracts.

- **Civil law: 1 credit (15 hours); L, T, P**
  1. Definition, characters, the branches and the sources of the law
  2. The field of application of the Act
  3. The dimensions of the law (objective, subjective right)
  4. The Legalorganization
  5. The right to legalpersonality
  6. The civil status, the name and the residence
  7. The Disabilities
  8. The legalacts
  9. The legalfacts

- **Creation of enterprise: 1 credit (15 hours); L, T, P, SPW**
  - Concept of Entrepreneur;
  - Reasons for Business Creation;
  - Search for ideas and evaluation;
  - Sources of finance;
  - Choice of legal status;
  - Ethical aspects of the business;
  - Preparation of the business plan.
MHR 246: Professional internship

- Professional Internship: 6 credits (90 hours); P, SPW
  1. Arrival and Reception
  2. Working in a company
  3. The holding of the Intern journal
  4. The choice of the theme of work: in collaboration with mentors professional academic and
  5. Elaboration of the canvas of research
  6. The resources to operate
  7. The organization of work
  8. Drafting of the report
  9. Presentation of the report before a jury

MHR 247: Legal environment and Civic education II

- Law on Commercial Companies II: 1 credit (15 hours); L, T
  1. Definition, Object and forms of commercial companies
  2. The creation of commercial companies
  3. The operation of the Commercial Companies
  4. The dissolution of commercial companies

- Labor law: 1 credit (15 hours); L, T, P
  1. Definition of the right of labor, birth and evolution of labor law and sources
  2. The contract of work (conclusion, implementation and rupture)
  3. The conflicts of work (individual and collective)
  4. The delegate of the staff, unions
  5. Work accidents and occupational diseases
  6. The hygiene and safety in the workplace

- Civic Education and Ethics: 1 credit (15 hours); L, SPW

  The Concepts
  - The citizen;
  - The Nation;
  - The State;
  - Public Property unto collective property;
  - The freedoms;
  - The public service;
  - Problem of ethics;
  - Ethics, Law and reason;
  - Management and ethics of responsibility;
  - Ethics and management.
  - Ethics
  - Civics
• Deontology
• Moral consciousness
• The universal declaration of Human Rights
• Good governance in public services
• Explain the importance of civics to the life of the nation
• Functions of the state and its citizens
• Deontology, Professional ethics and professionalism
• Relationship between morality, law and ethics
• Codes of ethics
Field: MANAGEMENT

Specialty:

QUALITY MANAGEMENT
1. **The objective of the training**

The objective of this specialty is to train specialists who can ensure the control of flows and quality; and who shall have good knowledge to pilot the production of goods and services within the framework of improved performance in terms of costs, quality, and delay, to satisfy the demands of internal and external customers.

2. **Skills Sought After**

   - **General skills**
     - Pilot a unit of production;
     - Manage the flow of material and information;
     - Manage work in shifts/team work;
     - Supervise production and control products;
     - Animate a quality system.

   - **Specific Skills**
     - Put in place appropriate methods and tools;
     - Exploit resources implemented and the associated information systems;
     - Check the compliance of results of associated processes;
     - Measure the activity and its performance;
     - Contribute to the continuous improvement of the activity and its performance;
     - Evolve towards positions with greater responsibility;
     - Implant and organize production resources and logistics;
     - Put in place and cause to evolve information systems;
     - Plan operations and induced resources;
     - Schedule, launch and monitor operations;
     - Use information systems dedicated to the production of goods and services;
     - Participate in the putting in place of an approach to improve on flows;
     - Use, within the framework of quality approach, statistical and methodology tools that will enable a mastery of processes and quality;
     - Participate to put in place an approach to improve on quality capable of being attested by the issue of a certificate;
     - Participate in the characterization and optimization of the parameters of an industrial process;
- Measure the magnitude of industrial processes when they are put in place or improved;
- Measure and control the conformity of manufactured products and processes with the specifications and norms;
- Follow up the updating of measuring and control techniques and norms which are responsible for development of metrology and control services.

3. **Outlets**
   - Scheduling expert;
   - Inventory manager;
   - Supplier;
   - Planning technician;
   - Manager of technical data;
   - GPAO/ERP technician;
   - Logistics technician;
   - Method/industrialization/organization technician, etc;
   - Quality assessment technician;
   - Metrology technician;
   - Internal auditor;
   - Quality controller;
   - Quality animator.
4. Organization of the Teachings

Semester 1

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<td>Quality Health, Safety and Environmental Control</td>
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<td>QMA 116</td>
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### Semester 4

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<th>code</th>
<th>Course title</th>
<th>Hourly Volume</th>
<th>Number Of Credits</th>
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<tbody>
<tr>
<td></td>
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<td>L</td>
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<tr>
<td></td>
<td><strong>Fundamental courses 30% (2 UC) 9 credits 135 hours</strong></td>
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<tr>
<td>QMA 241</td>
<td>Quantitative techniques and Computer Skills II</td>
<td>20</td>
<td>25</td>
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<td>QMA 242</td>
<td>Accounting and ICTS II</td>
<td>10</td>
<td>20</td>
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<td><strong>Professional courses 60% (4 UC) 18 credits 270 hours</strong></td>
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<td>QMA 243</td>
<td>Documentary Management of a system, organization and animation of a production unit</td>
<td>30</td>
<td>30</td>
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<td>QMA 244</td>
<td>Planning and Control</td>
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<td>23</td>
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<tr>
<td>QMA 245</td>
<td>Simulation and parameterization of an ERP</td>
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<td>15</td>
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<td>QMA 246</td>
<td>Professional intership</td>
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<td><strong>Cross-sectional courses 10% (1 UC) 3 credits 45 hours</strong></td>
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<tr>
<td>QMA 247</td>
<td>Legal environment and civic education</td>
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<td>13</td>
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<td><strong>Total</strong></td>
<td>125</td>
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</table>
5. Courses content

❖ QMA 111: Mathematics and Computing I

➢ General Mathematics I: 3 credits (45 hours); L, SPW

- Algebra and vector spaces
  1. Polynomials
     • Polynomials characteristics.
  2. Vectorspace
     • Linear applications.
  3. Matrices
     • Operations on the matrices;
     • Matrices associated with a linear application;
     • Matrices and determinants.
  4. The Determinants
     • Determinant of a square matrix;
     • Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     • Inversion of matrix of order less than or equal to 3 - method of Gauss;
     • Resolution of systems of linear equations by the method of Pivot;
     • Application of matrix calculation on the resolution of systems of linear equations.
  6. Reduction of square matrices
     • Real value; Real vectors.
  7. Differential equations and linear recurrence of the 2nd order with constant coefficients
  8. Mathematical applications in Economics and Management

➢ General Computing I: 2 credits (30 hours); L, T, SPW

The hardware and software on a computer system
has - the Hardware

1. The peripheral components
   • Input devices;
   • Output devices;
   • The storage devices;
   • Input and output devices.

2. The central unit
   • The central memory;
   • The microprocessor;
   • The ports;
   • The motherboard;
   • The chipset;
   • The power supply;
   • The cards of extension; other internal organs.
3. The unit of exchange (or bus)
   • Role;
   • Types of bus:
     - Data bus;
     - Control bus; - Bus of address.

B- The Software

1. The application software
   • Definition;
   • Role;
   • Types and examples of software.

2. The basic software (or software systems)
   • Definition;
   • Types of basic software;
     - The drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation:
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of an operating system; architecture.
   • Concept of Free Software and proprietary software.

System of numeration and Codification

A- The numbering systems

1. A few basic concepts
   • The base of the system;
   • Weight;
   • Alphabet of the language;
   • Format of the word (length of the word); power of language.

2. A few numberingsystems
   • The decimal system;
   • The binary system; the octal system; the hexadecimal system.

3. The basic changes
   • From Decimal to another base b;
   • From a base b of any kind to the decimal basis; from the binary in octal and vice versa; from binary to hexadecimal and vice versa.

4. Arithmetic operations binary numbers signed:
   - Exact representation;
   - Representation in complement to 2. addition of binary numbers;
   • Subtraction of binary numbers;
   • Use of the complement to 2 in the subtraction; multiplication of binary numbers; division of binary numbers.

5. Hexadecimal arithmetics
   • Addition of numbers in Hexadecimal; subtraction of numbers in hexadecimal.
B- The codes

1. General information on the concept of a code
   • definitions;
   • Objectives of the codification;
   • The functional codification;
   • Types of functional codes;
   • technological codification.

2. The alphanumeric codes
   • The ASCII code:
     • Standard ASCII; - Extended ASCII;
     • Use.

△ QMA121 : Mathematics and Computing II

➢ General Mathematics II: 3 credits (45hours); T, P, SPW

Analysis
1. The Real Numbers
2. Numerical Functions of a real variable, limit, Continuity
3. Differentiability, extrema, theorem of Rolle and finished increases
4. Polynomials, fractions, rational
5. Study and graphic representation, reciprocal functions
6. Limited developments, integrals and applications to calculations of Aires
7. Logarithmic functions and exponential
8. Digital Suites: Direction of variation, convergence
9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
10. Mathematical applications in Economics and Management

➢ General Computing II: 2 credits (30hours); T, P, SPW

A- Computer Networks

1. Generalities
   • Definition of a computer network;
   • interest of computer networks;
   • basic vocabulary:
     - Workstation;
     - Node;
     - Server;
     - - packet.

2. Typology of Networks
   • networks according to the media:
     - Wired networks;
     - Networks not wired.
   • according the Geographic Extent:
     - The local networks (LAN);
     - The metropolitan area networks (MAN); - the wide area networks (WAN).
3. **Network Topologies**
   - Physical Topology
     - The bus topology;
     - The star topology;
     - The ring topology;
     - The topology in mesh; - the topology in shaft.
   - Logical Topology
     - Networks to dissemination;
     - Point-to-point networks.

4. **Network architectures**
   - client/server architecture;
   - architecture of equal to equal.

5. **The equipment of computer networks**
   - Equipments of basis of a network:
     - The computer;
     - The network card;
     - The server;
     - The network cable;
     - The transceiver (or adapter);
     - the transmission mounts;
     - the socket.
   - The equipment of interconnections:
     - Hubs (hub);
     - Switch (Switch);
     - Routers;
     - Gateways
     - The gateway (gateway);
     - The router;
     - The bridge (Bridge);
     - the repeaters.

6. **Concept of IP addressing**
   - Structure of an IP address
     - network identifier (Net ID)
     - Identifier of host (Host ID).
   - Specific addresses
     - Network address;
     - Machine address;
     - Broadcast Address (broadcaste);
     - Limited Broadcast address (multicast);
     - Address of rebroadcasting (loopback).
   - Classes of IP addressing
     - CLASS A;
     - CLASS B; - CLASS C.

7. **Internet network**

8. **Concept of protocol**
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
8. A few Internet Services
   • The e-mail;
   • Research on the Internet;
   • The Newsgroup (discussion forum);
   • The transfer of files;
   • The Download (Download a text, download an image, download free software…);
   • The online Trade;
   • The IRC (Internet Relay Chat);
   • Other.

9. The search engines
   • Definition;
   • Role;
   • Somesearchengines.

10. Tools for Internet access
    • The browsers (definition, examples);
    • The plug-ins (definition, examples);
    • The search engines (definition, examples, use).

11. The connection to the Internet
    • Connection hardware;
    • Suppliers of access (role, examples);
    • Types of connections (specialized line, phone line, satellite).

QMA112: Quantitative technics I

- Financial Mathematics I: 2 credits (30hours); L, T, SPW

  1. The Basics
     • Simple Interest;
     • Calculation of the acquired value;
     • commercial present value and current value rational one; pre-determined interest and effective interest.

  2. Calculation of the average rate of a series of simultaneous investments

  3. Equivalence and replacement of effect

  4. Short-term financial transactions - Current Account and interest

  5. Commercial Discount - real rate of discount

  6. Compound interest
     • Acquired value;
     • present value;
     • equivalent rate and proportional rate; apparent rate of interest; real interest rate.

- Statistics: 2 credits (30hours); L, T, SPW

  1. Statistical series to a variable
     • Definition and vocabulary;
• Graphical representation;
• Characteristics of central tendency and dispersal characteristics:
  - Average;
  - Mode;
  - Median;
  - Gap-type;
  - Standard deviation
  - Quartiles;
  - Coefficient of variation.

2. **Statistical series of two variables**
   • Definition and vocabulary;
   • Scatter diagram;
   • Average point;
   • Covariance and covariance matrix of 2 variables;
   • The coefficient of correlation and regression;
   • Linear adjustment by the method of least squares.

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### QMA 122: Quantitative technics II

#### Financial Mathematics II: 2 credits (30 hours); T, P, SPW

1. **The Annuities**
   • Constant annuities;
   • Annuities in arithmetic progression; □ annuities in geometric progression; □ perpetual annuities.

2. **The joint-loans**
   • Reimbursement by constant;
   • amortization Table;
   • Laws followed by depreciation recovery of the debt still in process;
   • Laws followed by the annuities;
   • Applications on the borrowings undivided.

3. **The bond loans**
   • Reimbursements to the pair;
   • Constant annualinstallments;
   • Constant depreciation;
   • yield Rate and rates of returns of a debenture loan;
   • rate of returns of Debenture loan at issue;
   • Choice of Investments.

#### Statistics II: 2 credits (30 hours); T, P, SPW

1. Estimation of an average, a proportion and a standard deviation
2. Confidence interval and confidence coefficient
3. Tests of assumptions and the KHI-two
QMA 113: Logistics and Quality

- **Introduction to logistics: 2 credits (30 hours): L, T, P**
  - Physical and informational flows, loops of coordination, mapping of flows, flow learned/Pushed;
  - Production system, charging station, work, associated data time;
  - Types of needs;
  - Notions of load and capacity, deadlines for obtaining;
  - Impact of the flows and the management of the stocks in the company, performance indicators.

- **Introduction to the quality: 2 credits (30 hours): L, T, P**
  - Methods and Tools for the resolution of problems;
  - The principle of continuous improvement;
  - The repositories of quality management for the industrial sectors and service;
  - Process approach;
  - Structure of quality management system.

QMA 114: Inventory management and production system

- **Management of stocks: 2 credits (30 hours): L, T, P**
  - The different types of stocks and their functions;
  - Classification of stocks: ABC method;
  - Inventories (turning; to fixed period);
  - Economic Quantity: The formula of Wilson;
  - Safety stock;
  - Indicators of a stock (coverage; average stock; rate of rotation);
  - Costs related to stocks (acquisitions and possession), capital; - Valuation of stocks;
  - Different types of replenishments:
    - Restocking at fixed quantity/fixed periodicity;
    - Restocking at fixed quantity/variable frequency. Point of command;
    - replenishment to quantity variable/fixed periodicity. Refill;
    - replenishment by dates and quantities variables. - Impact of the rules of management of stock on the production process; - limitation of stock management

- **Characterization of a production system: 4 credits (60 hours): L, T, P, SPW**
  - Typology of production;
  - Means of production, handling, storage, control;
  - Implantation of the means of production, handling, storage and control;
  - Representation of flows (graph of flows, process analysis);
  - Knowledge of the static and the dynamic aspects of the stream;
  - Influence of the modification of technical data on the process; - analysis of a implantation.
QMA115: QH S E, R S E and typology of products and processes

- **H S E, Sustainable Development and R S E: 2 credits (30hours); L, T, P, SPW**
  - Repositories, certification and self-assessment;
  - Standards relating to hygiene, security, the environment, sustainable development and social responsibility;
  - Methods of Analysis: HACCP;
  - Integrated Management System;
  - Organization and QSE services; - QSE Management/DD/CSR.

- **Typology of products and processes: 2 credits (30hours); L, T, P, SPW**
  - Typology of products, productions and companies, sectors of activity;
  - Constraints induced by the products and processes on production activities (quality, logistics, organization, hygiene and safety, environment); - Processes for the preparation and processing of materials.

QMA116: Industrialization and eco-design

- **Industrialization: 2 credits (30hours); L, T, P, SPW**
  - The industrialization process;
  - Means of production, position of load, workstation, handling means storage and control;
  - Modes of description of a production process (ranges, contract phase, operating diagrams, ...);
  - Manufacturing cycle, cycle time, simmogramme; identify the cycle of a production machine;
  - Deadlines, operating time, unproductive time, causes of waiting;
  - Learning of the measure and the estimation of time; - Study and organization of a workstation (ergonomy);
  - Flow rate or rate of a process and a workstation (evaluation); - safety of operation.

- **Eco-design: 2 credits (30hours); L, T, P, SPW.**
  - Conduct and Analysis of technical drawings;
  - Determination of needs in materials;
  - Analysis of the falls and replacement items;
  - Realization of the nomenclature of the Bureau of Studies;
  - Functional analysis of the need (AFB) and Functional Analysis Technique (AFT);
  - Analysis of the life cycle of the product;
  - The impact of design on the process of recycling;
  - Principle of recycling to infinity (C2C: Cradle to Cradle);
  - Positioning of the product in the company and its environment.
QMA 117: Bilingual training I and economic environment I

- **French expression: 1 credit (15 hours): L, T**
  1. **Vocabulaire**
     - Vocabulaire technique usuel
  2. **Grammaire**
     - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
     - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
     - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
     - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
     - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
     - Des fonctions grammaticales.
  3. **Expression et communication**
     - Compréhension et interaction au cours d’une discussion technique ;
     - Communication orale courante ;
     - Communication orale interactive
     - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
     - Lecture rapide et compréhension de texte ;
     - synthèse d’un long texte
     - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
     - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
     - Expressions figées

- **Principles of Economics: 2 credits (30hours): L, T, P**
  1. Business and production
  2. Households and the consumption
  3. Markets and Prices
  4. Training and distribution of income
  5. The currency and the financing of the Economy
  6. The elements of the National Accounts
  7. The macro-economic equilibrium
  8. The socialist system
  9. The capitalist economy
  10. The State and its interventions
  11. The foundations of international trade
  12. International payments
13. The balance of payments
14. Economic development and its inequalities
15. Growth and its inequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of problems
18. The development strategies
19. The economic integration and the forms of cooperation in the world
20. The strategies of the International Debt

QMA127: Bilingual training I and Economic Environment II

- English Expression: 1 credit (15 hours); L, T, SPW

1. Vocabulary
   - Technical and usual vocabulary of the specialty
2. Grammar
3. Bilingual expression
   - Understanding in interaction in Technical Discussions
   - Continuous oral communication: Show, explain, develop, summarize, account, comment;
   - Interactions oral communication
4. Autonomous reading of "writings" of all levels
   - Lead by a quick reading to understand the general sense;
   - Browse a text long enough to locate desired information;
   - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
5. Write clear, detailed texts
   - Essay writing;
   - Application for employment;
   - C.V.;
   - Letter of motivation;
   - Letter/memo writing and minutes of a meeting

- Economy and organization of enterprises: 2 credits (30 hours); L, T, P

   - The Enterprise, definition and mode of analysis;
   - Classification of Enterprises;
   - The Organisational Structure of enterprises;
   - The insertion of the company in the economic fabric;
   - The commercial activity of the enterprise;
   - The productive activity of the enterprise;
   - Logistics in the enterprise;
   - The financial activity of the enterprise;
   - The management of human resources;
   - The systemic approach of the enterprise;
   - Information system;
   - The decision-making process;
   - The strategic analysis of the company;
   - Choice and implementation of a strategy;
   - The business, society and culture;
   - The business, society and the Ethics.
QMA123: Management of the application and technical data

- **Management of request**: 2 credits (30 hours); L, T, P, SPW

  1. **The different types of markets and request**
     - B to B, B to C, public markets...
     - Firm orders, open orders ....
     - Type of trend, seasonalities, vagaries.
  2. **Customer Relationship Management**
     - Principles and issues;
     - The different commercial documents;
  3. **Forecasts of the request**: issues and links with the planning
  4. **Qualitative Methods**
  5. **Quantitative methods**
  6. **Critical analysis of a method of forecasting**
     - Criteria for the choice of a method of forecasting;
     - Horizon and mesh of forecasting;
     - Errors and Uncertainties on the forecasts.
  7. **Calculation of the needs for distribution**

- **Technical data**: 2 credits (30 hours); L, T, P, SPW.
  - Codification and categories of articles;
  - The different types of nomenclatures;
  - Center of load, position of load and Workstation;
  - The ranges and their data;
  - Organization of the production process with the ranges and the nomenclatures, in an objective of client satisfaction;
  - Flow, cadence, performance of a production process (evaluation), and the concept of productivity and flexibility;
  - Optimize flows, management of the bottlenecks and critical positions; - Operating Time (simmogramme), cycle time of production.

QMA124: Quality management and auditing

- **Quality Management and improvement**: 3 credits (45 hours); L, T, P, SPW.
  - Indicators and dashboards
  - Continuous improvement;
  - Mapping;
  - Evaluations;
  - Documentary structure and management of data;
  - Creativity and approach;
  - Repositories and quality management system.
- **Audit, Evaluation and Certification**: 2 credits (30 hours); L, T, P, SPW.
  - Typology of the repositories;
  - Evaluations;
  - Internal Audits;
  - External Audits;
  - Certification process;
  - Introduction to the management of a park measurement equipment.

- **QMA 125: Organization and planning**

- **Organization of a workstation**: 3 credits (45 hours); L, T, P, SPW.
  - Organization of a workstation, 5s;
  - Ergonomic approach; security to the workstation
  - SMED, Kaizen;
  - Integration of the self-regulation in the position;
  - Performance rate synthetic (TRS);
  - Integration of the first level of maintenance, safety of operation;
  - Formalization of the workstation (drafting of operating modes, fact sheets of instructions).

- **Production Planning**: 3 credits (45 hours); L, T.
  - Exploitation of technical data (Articles, nomenclatures, posts of load, ranges and calendars);
  - Distinguish the different needs (gross, net, dependent, independent);
  - Plan the needs in horizons of decisions (periodicity and mesh of time);
  - Plan the production of finished products: Program Director of production;
  - Planning the production and supply of components and materials: Calculation of the needs of gross and net;
  - Staking out the shop orders (OF) and check the adequacy between load and production capacity.

- **QMA126: Methodology and project**

- **Methodology for drafting the report of internship**: 1 credit (15 hours); L, P.
  - The collection of information;
  - How to make a report;
  - The plan of the probationary report and the summary;
  - The table of contents;
  - The introduction of the report of internship;
  - The conclusion of the internship report;
  - The acknowledgments;
  - How to build the annexes;
  - When to start his internship report;
  - How to find a subject of internship report;
  - The cover page;
  - How to write effectively;
- Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations);
- Instructions and typographical rules of presentation (police, spacing, titles, highlighted, punctuation, graphic charter); - How to prepare the defense.

➢ The bases of the project planning: 2 credits (30 hours); L, T, P.

- Expression of the need and desirability study (management of a case, decomposition of the elements constituting);
- Costing of the time and costs in a case;
- Task and division of the project, links of chronology between the tasks;
- Tasks and critical path, free margin, total margin;
- Analysis of the workload, the dimensioning of resources, costs; - uncertainties of planning;
- Schedule of Project, Project Schedule;
- Follow up of the project or of the case and update of a schedule.

❖ QMA 231 : Quantitative techniques and computer skills I

➢ Probabilities and operational research I: 3 credits (45 hours); L, T, P, SPW

1. Algebra of sets
   • Applications;
   • The Counts.

2. Basic Set linked to a random experiment
   • Probability;
   • Conditional probability;
   • Formula of Bayes;
   • Tests in BERNOUILLI.

3. Random variables discrete
   • Law of probability;
   • Distribution function.

4. Random variables continuous
   • Density,
   • Hope;
   • Variance;
   • Standard deviation; □ moments.

5. Conventionallaws
   • Binomial
   • Normal ;
   • fisher;
   • exponential.

➢ Applied computer I: 2 credits (30 hours); L, T, P, SPW

1. The study of the Graphical Environment Windows
   • Presentation;
   • Management of Windows;
   • Managing Files and Folders.
2. **What is a file, a folder?**
   - Path of access to a file.

3. **Practical Study of Microsoft Word**
   - Study of basic functions.

4. **Practical Study of Microsoft Excel**
   - Presentation;
   - Arithmetic operations.

5. **Construction of a formula**
   - Use of the integrated functions:
     - Definition;
     - Syntax of the integrated functions;
     - A few integrated functions;
     - Relative reference, absolute reference and joint reference;
     - Case of synthesis.

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**QMA 241: Quantitative techniques and computing II**

- **Probabilities and Operational Research II: 3 credits (45hours); L, T, P, SPW**

1. **Concepts of the optimization combination**
   - Constraints/objectives;
   - Feasible solution/best;
   - Terminal;
   - Local optima, etc.

2. **Graph Theory**
   - Modeling;
   - Coloring;
   - Roads;
   - The treesmaskingfluid;
   - The Waves...

3. **The linear programming**
   - Program to two variables;
   - Program to more than two variables.

4. **The algorithm of the simplex - the table method**
   - Analysis of the final table of the simplex;
   - Problem of duality;
   - The management of stocks.

5. **The problems of scheduling - General Information on the Graphs**
   - The PERT method:
     - Applications on the PERT.
   - The choice of investment in deterministic universe.

6. **Modeling**

7. **Decision on uncertainly**

8. **Transportation problems**

9. **The problems of transfert**
Specific work
software quality management.

QMA232: Accounting and ICT I

The information system: 2 credits (30 hours); L, T, P, SPW

1. Concept information systems
   - Introduction:
     - Systemic Analysis of the business.
   - The system of information:
     - Functions of the Information System; - the roles of the Information System;
     - Qualities of an Information System;
   - Computerization of Information System;
     - The parts to an Information System;
     - Software;
     - Definitions;
     - The purpose of an Information System;
     - The functions of an Information System; - the organizational system; - the processing of information.

2. Concept of algorithmic and initiation to the programming
   - Objects: circumstances, variables, operators …;
   - Basic treatments and sequential;
   - Choice and repetition;
   - Function and procedures;
   - Structure of the data (vectors, table, registration, file);
   - application with basic or Pascal.

Cost accounting and budgetary management: 2 credits (30 hours); L, T, P, SPW

1. the general ledger to the cost accounting
   - Generality on the analytical accounting (objectives, role, and the concept of the load).

2. Analysis of expenses
   - liable and not liable expenses;
   - Direct and indirect costs;
   - Suppletive expenses;
   - Allocation of Indirect Costs.

3. Valuation of stocks (FIFO method, LUP)

4. The full costs (cost of purchase, cost of production, introduce the outstanding)
   NB: do not address the special notes related to the costs (waste and scrap, semi-finished, under Products).

5. Partial costs
   - The variable costs;
- The marginal costs;
6. The Rational Importance of expenses of structure

QMA 242: Accounting and ICTS II

- System of Information II: 2 credits (30 hours); L, T, P.

Elaboration of Database

A- The conceptual model of data: mcd

1. Constitution of the data dictionary DD
   - Goal (objective);
   - Basic Concepts: Elementary data-Rubrique-Document;
   - Techniques of collection of information;
   - Purge of the dictionary;
   - Highlighted objects;
   - Identification of entities;
   - Definition of the relations of dependency between the objects.

2. Elaboration of the Entity association model
   - Basic Concepts:
     - Entity and entity type;
     - Attribute (property);
     - association;
     - Occurrence of a property; - the identifier (key);
     - Cardinality.

B- The logic model for relational data: MLDR

1. Purpose
2. Basic concepts
   - Primary key;
   - Foreign key;
   - relationship;
   - Registration.
3. The model entity/associations
   - Relationship of the entities;
   - Definition of Other relations of dependencies between objects;
   - cardinalities.
4. Passage of the MCD at the MLD
   - Transformation of entities;
   - Transformation of associations;
     - Binary relationship to the cardinalities (x. 1)- (x, n) with X = 0 or x =1;
     - Relationship n-area (regardless of the cardinality);
     - Reflexive relationship to the cardinalities (x, 1)-(x, n) with X= 0 or X = 1; - a binary relationship to the cardinalities (0.1) - (1.1).

C- Physical Data Model: implementation of the database

1. Creation of the database
2. Creation of tables
3. Entering the data in the tables
4. Relationship of the tables
5. Creating Forms
6. Relational model (relationship, degree, schema, PRIMARY KEY/secondary, cardinality, domain, ... P of base or access)
7. The languages of requests (SQL...)
8. Study of a few SQL commands

- Analytical accounting and budgetary management II: 2 credits (30 hours); L, T, P
  1. The predetermined costs
     - Identification of standard deviation on direct and indirect costs and algebraic analysis of these differences (exclude the graphic analysis).
  2. The Budgets (brief study and practice)
     - The budgets of the sales;
     - The production budgets;
     - The budgets of supply;
     - budgets of investment;
     - budgets of cash flow.

- QMA 233: Implementation of an approach and scheduling I and II

- Scheduling/Launch I: 1 credit (15 hours); L, T, P, SPW
  - Definition of types of workshops and yields, Capacities of workstations, posts of expenses;
  - Determination of the sequences of scheduling with methods of Simple Scheduling (Johnson, rules of priority, algorithm, ..);
  - Staking activity in earlier and the later, overlap, fractionation;
  - Reimplementation schedules of Gantt.

- Implementation of an improving process I: 1.5 credits (22.5 hours); L, T, P
  - Continuous improvement;
  - Project Process Improvement (6 sigma; DMAICS; Lean ...);
  - The Kaizen Process;
  - Project Definition (context; issues; actors; perimeter of action; difficulties and constraints...);
  - Performance measurement: diagnosis of the existing and indicators to measure the existing;
  - Conduct of the change;
  - Analysis and statistical treatment of data;
  - Implementation and monitoring of actions;
  - Drafting of a specification.

- Scheduling/Launch II: 1 credit (15 hours); L, T, P, SPW
  - Authorisation by the bottlenecks and optimization;
- Assessment of the performance of a schedule (performance criteria, measures ...) and decision-making;
- Evolution of the schedule as a function of the vagaries (breakdowns, absenteeism ...).

IMPLEMENTATION OF AN IMPROVING PROCESS II: 1.5 CREDITS (22.5 HOURS); L, T, P, SPW

- Continuous improvement;
- Project Process Improvement (6 sigma; DMAICS; Lean ...);
- Approach of the small Not (Kaizen...);
- Project Definition (context; issues; actors; perimeter of action);
- Difficulties and constraints...);
- Performance measurement: diagnosis of the existing and indicators to measure the existing;
- Conduct of the change;
- Analysis and statistical treatment of data;
- Implementation and monitoring of actions;
- Drafting of a specimen.

QMA 234: MASTERY OF PROCESSES AND PILOTAGE OF WORKSHOP

MASTERY OF PROCESSES: 2 CREDITS (30 HOURS); L, T, P

- Aptitude of control systems measurement;
- Implementation and use of the control cards;
- Effectiveness of models of the control cards in a given context;
- Control of receipt;
- Self-control, foolproofing devices;
- Sources of variability;
- Capability study.

PILOTING OF WORKSHOP: 2 CREDITS (30 HOURS); L, T, P, SPW

- Management of planning process of, management of production and purchases;
- Operating and updating of technical data (Articles, ranges, Nomenclatures, Inventories, workstation, workshop, calendars,...);
- Planning of manufacture orders (OF) and of purchase (OA) and scheduling;
- Staking of of infinite capacity and calculation of forecast loads;
- Scheduling and generation of production schedule;
- Launch in production, pilotage, monitoring and closure of of;
- Management of OA, procurement and receipt of purchase orders.

QMA 235: OPTIMIZATION

OPTIMIZATION PROCESSES / EXPERIMENTAL APPROACHES: 2 CREDITS (30 HOURS); L, T, P, SPW

- Introduction and Reminder of basic statistics;
- Statistical Quality Control: The control cards by variables, maps of control by attributes, the control cards for small series;
- Performance Indices and of capability of processes;
- Theory and plans of the sampling;
- Systematic experimentation and passive: plans of experiences fractional factorial, Taguchi method and response surfaces;
- Modeling and Optimization of processes;
- Use of software packages for the development of the control cards and the treatment and the statistical analysis of the data.

➢ **Actuation of the flows in just in time: 2 credits (30 hours); L, T, P, SPW**

- Philosophy of the Just In Time (JIT) - Base of Lean Production management;
- The tools for improvement and reduction of time (SMED, PM, 5S, ...);
- Continuous improvement - KAIzen;
- Different ways to control the flow (pushed, drawn); - Principle of the kanban sizing (and implementation).

➢ **Optimization of a workstation: 2 credits (30 hours); L, T, P**

- Regulations and standards of work;
- Ergonomic approach, security to the workstation;
- Calculation of time and optimization of the Cadence;
- Efficiency of a workstation;
- Specification of evolution and creation of posts;
- Application to the workstation of the concepts of improvement and just in time (P on the position);
- The establishment of standards for time; - analysis of the economic impact of the solutions to be recommended.

➢ **Optimization of an Implementation: 2 credits (30 hours); L, T, P**

- Influence of the modification of technical data on the process;
- Consistency between the technical data and process (trio nomenclature range process);
- Analysis of a Location:
  - Needs of circulation space in function of the technological means of handling and production;
  - The needs of spaces linked to human activity; functional analysis of surfaces.
- Analysis of stream:
  - Quantification of trafficking; debits and cadences.
- Simple techniques of implantation (-membered, online, homogeneous sections, implementation islets ...);
- Physical implementation and implementation plan: location of stocks and in-course; Calculation of surfaces.
QMA 236: Simulation and ethics

- Simulation of a system of production of goods and services I: 1 credit (15 hours); T, P
  - Definition of key performance indicators of production;
  - Definition of the criteria and objectives of the simulation;
  - Collection, analysis and preparation of data.

- The Ethics: 1 credit (15 hours); L, SPW
  - The loyalty in contractual matters;
  - The loyalty of the competition;
  - The duties and responsibility of the leaders and auditors;
  - The control of the management by the associated;
  - Interdictions and disqualifications.

QMA 237: Legal environment and Creation of an enterprise

- Law on Commercial Companies I: 1 credit (15 hours); L, T
  1. The status of trader
  2. The acts of commerce
  3. Goodwill
  4. The different commercial contracts

- Civil law: 1 credit (15 hours); L, T, P
  1. Definition, characters, the branches and the sources of the law
  2. The field of application of the Act
  3. The dimensions of the law (objective, subjective right)
  4. The "Legal organization
  5. The right to legal personality
  6. The "civil status, the name and the Domicile
  7. The Disabilities
  8. The legal acts
  9. The legal facts

QMA 244: Planning and Control

- Short and long-term planning: 1 credit (15 hours); L, T.
  - Industrial and Business Plan (ICP): Notions of families of products, macro nomenclatures, finished products by family; OF SUPPLY; configuration;
  - Calculation of capacity needs on the critical resources (ratio, macro-ranges, articles-ressources...);
  - Program Director of Production (PDP);
  - Typologies of PDP (on forecasting, to the command; mixed);
- Horizons and management area (farm ...), available to sell, consumption of forecasts;
- Consistency PIC/PDP;
- Measurement of the performance of the PDP (indicator of stability of the PDP; ...).

- Control and Management of Equipments: 2 credits (30 hours); L, T, P.
  - Declaration of Conformity Product;
  - Documentation management and monitoring of equipment;
  - Instruction cards;
  - Facilities management of monitoring and measuring.

- QMA 245: Simulation and parameterization of an ERP

- Parameterization of an ERP: 3 credits (45 hours); L, T, P, SPW.
  1. General presentation of the les
     - Definition;
     - The LES: for who, why?
       - For that;
       - For what;
       - Technical architecture.
  2. Modular architecture of the ERP The main publishers of the ERP; the modular architecture:
     - The finance module.
     - The logistics module: The profiles menus;
       - The basic data;
       - The sales process, the command of sale;
       - The process stock;
       - The process of purchase, the purchase order; The module e-commerce.
  3. Parameterization, commissioning, testing and evaluation of the software package setting:
     - Analysis;
     - Development;
     - Qualification;
     - Migration of data;
     - Development, Test and Evaluation; assistance to change; maintenance and support of the product.

- Simulation of a system of production of goods and services II: 2 credits (30 hours); T, P, SPW.
  - Setting of the model;
  - Strategy for the conduct of the trials of simulation;
  - Analysis, formatting and exploitation of results.
QMA 243: Documentary Management of a system, organization and animation of a production unit

- Documentary Management of a quality system: 3 credits (45 hours); L, T, P, SPW
  - What is documentary management?
  - The objectives of the Documentary Management;
  - The components of the documentary system;
  - The documents quality;
  - The creation of a document quality;
  - The application of a document quality;
  - The monitoring of a document quality;
  - The principlediagram;
  - The qualitymanual;
  - The procedures;
  - The operating mode;
  - The guides;
  - The design and presentation;
  - The approval and dissemination;
  - The conservation and the archiving;
  - The Computer Management of the documentary system;
  - The usefulness of a documentary system effectiveness.

- Organization and animation of a unit of production of goods and services: 3 credits (45 hours); L, T, P, SPW
  - Modeling of the production unit, balancing and implantation, coordination by the constraints, by the bottlenecks;
  - Organization of production units:
    ✓ Passage of a traditional unit to an autonomous unit;
    ✓ Opportunity to an organization in a team and their capacity for action;
    ✓ The key factors of success; - key success factors
    ✓ Management of the versatility/polycompétence; Definition, distribution and planning of tasks.
  - Animation of the production units:
    ✓ Visual management;
    ✓ Implementation of an approach to progress; Choice, establishment, operation of the indicators.

QMA 246: Professional internship

- The professional internship: 6 credits (90 hours); P, SPW
  1. Arrival and Business Integration
  2. Working in a company
  3. The holding of the Intern journal
4. The choice of the theme of work: in collaboration with mentors professional and academic
5. Elaboration of the structure of research
6. The resources to operate
7. The organization of work
8. Drafting of the report
9. Presentation of the report before a jury

QMA247: Legal environment and Civic education II

- Business Law II: 1 credit (15 hours); L, T
  1. Definition, Object and forms of commercial companies
  2. The creation of commercial companies
  3. The operation of the Commercial Companies
  4. The dissolution of commercial companies

- Labor law: 2 credits (30 hours); L, T, P
  1. Definition of labour law creation and evolution of labor law and sources
  2. The contract of work (conclusion, implementation and rupture)
  3. The conflicts of work (individual and collective)
  4. The staff delegate, unions
  5. Work accidents and occupational diseases
  6. The hygiene and safety in the workplace

- Civic Education and Ethics: 1 credit (15 hours); L, SPW

The Concepts

- The citizen;
- The Nation;
- The State;
- Public Property unto collective property;
- The freedoms;
- The public service;
- Problem of ethics;
- Ethics, Law and reason;
- Management and ethics of responsibility;
- Ethics and management.
- Ethics
- Civics
- Deontology
- Moral consciousness
- The universal declaration of Human Rights
- Good governance in public services
- Explain the importance of civics to the life of the nation
- Functions of the state and its citizens
- Deontology, Professional ethics and professionalism
- Relationship between morality, law and ethics
- Codes of ethics
Field : MANAGEMENT

Specialty :
LOGISTICS AND TRANSPORT MANAGEMENT
1. **Objectives of the training**

The objective of this specialty is to train experts in the organization and management of logistics and transport in the local, regional and international markets, taking into account the complementary modes of transport and sustainable development. They will in this exercise have to master foreign languages, communication and negotiation techniques, management techniques, and optimizing flow of goods, management of warehouses, and the exploitation of urban transport network.

2. **Skills Sought After**

   → **General skills**
   - Have knowledge of the social and national, regional and international economic environment;
   - Be rigorous in the organization of work, be proactive and creative;
   - Have knowledge of foreign languages (English and French);
   - Can negotiate sales and after sales agreements.

   → **Specific Skills**
   - Ensure the piloting of a logistics chain;
   - Know a wide range of techniques linked to the use of the logistics chain (storage, handling, workflow, transport, etc);
   - Facilitate and coordinate exchange between the internal stakeholders of the enterprise;
   - Contribute to the rapid resolution of problems between suppliers and customers;
   - Manage change and promote solutions necessary for the adhesion of partners;
   - Have knowledge of marketing so as to identify the expectations of customers and strike a compromise between efficiency and quality in a context of competition;
   - Conceive adaptable structures, permanently interacting with the multiple environmental components;
   - Practice methods which are flexible and rational, to materialize the action and permit the regulation of flows through the development of a logistics system and good information networks;
- Have knowledge in accounting and finance management as well as management control (more centered on tools for rapid control of the accounting methods);
- Know the tools necessary for optimizing quality and security of physical and information flows;
- Provide for performing alternatives in case of disruption of the current flows;
- Be capable of using specific software, contribute in making a choice for the enterprise and facilitate their use;

3. **Outlets**
- Manager of transport units;
- Inventory Manager;
- Warehouse Manager;
- Stock Control and Store Keeper;
- Purchasing Manager;
- Logistics Engineer;
- Supply Chain Manager;
- International Logistics Manager;
- Analyst;
- Logistics Consultant;
- Transport and logistics service provider;
- Authorized customs agent;
- Controller of SGS;
- Import and Export Agent
- Intermediate staff members of the Maritime Administration
- Port Officials/Administrators
- Shipping Line Personnel
- Shipping Agency Personnel
- Maritime Controllers
- Ship Brokers
- Customs Brokers
- Consolidators
- Maritime/Shipping Teachers
- Marine Insurance Officials/Personnel
- Customs Officials
- Logistics Officers
- Transport Officers
- Supply chain Officers
- Commercial Managers
- Freight Managers
- Delivery Officers
- Terminal Operators
4. Organization of the Teachings

Semester 1

<table>
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<tr>
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<th>Hourly Volume</th>
<th>Number of Credits</th>
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<td>Principles of Management/ Principles of business Law</td>
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<td>LTM112</td>
<td>Mathematics and Quantitative technics</td>
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<td>LTM113</td>
<td>Introduction to Logistics Management / ICT for Logistics</td>
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<td>LTM114</td>
<td>Ancillary Professions</td>
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<td>LTM115</td>
<td>Shipping and International Trade/ Maritime Transport</td>
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<td>LTM116</td>
<td>Transport Law/ Carriage Law</td>
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<td>LTM117</td>
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Semester 2

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<td>LTM122</td>
<td>Research Methodology</td>
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<td>LTM123</td>
<td>International Transport Management/ Safe Transport of Dangerous Goods</td>
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<td>LTM124</td>
<td>Warehouse Management/ Procurement and Inventory Management</td>
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<td>LTM 125</td>
<td>Total Quality Management/ Maritime Administration I and II</td>
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<td>LTM126</td>
<td>Marine Insurance /Fundamentals of Cargo Insurance</td>
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<td>LTM233</td>
<td>Land and Inland Waterway Transport/ Air Transport</td>
<td>60</td>
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<td>LTM234</td>
<td>Carriage of goods by sea / Port Management operation</td>
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<td>LTM235</td>
<td>Environmental Management</td>
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<td>LTM236</td>
<td>Ship Finance/ Ship Chartering</td>
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<td>Computer for Business II</td>
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<td>LTM242</td>
<td>International Commercial Law/ Strategic Management</td>
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<td>Multi-modal Transport</td>
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<td>LTM245</td>
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<td>LTM246</td>
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<td>LTM247</td>
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5. Courses content
LTM111: Principles of Management/Principles of business Law

- **Principles of Management:** 1 credits (15 hours); L, T, SPW

Description - This is a beginning course designed to study management theory and practice. The topics to be treated in this course will include inter alia:

- Functions of management
- History of management thought
- Executive functions of a manager
- Functional areas (Marketing, Production, Personnel, Financial, Operations)
- Business organizations.

- **Principles of business Law:** 1 credits (15 hours); L, T, SPW

LTM 112: Mathematics and Quantitative technics

- **General Mathematics:** 3.5 (52.5 hours)

- **General Mathematics I:** 1.75 credits (26.25 hours)

- **Algebra vector spaces:** 1.75 credits (26.25 hours); L, T, P, SPW

1. **Polynomials**
   - Polynomials characteristics.

2. **Vectorspace**
   - Linear applications.

3. **Matrices**
   - Operations on the matrices;
   - Matrices associated with a linear application; matrices and determinants.

4. **The Determinants**
   - Determinant of a square matrix;
   - Calculation of determinants of order less than or equal to 3.

5. **Linear Systems**
   - Inversion of matrix of order less than or equal to 3 - method of Gauss;
   - Resolution of systems of linear equations by the method of; Pivot
   - Application of the matrix calculation on the resolution of systems of linear equations.

6. **Reduction of square matrices**
   - Real values;
   - Real vectors.

7. **Differential equations and linear recurrence of the 2nd order with constant coefficients (cc)**

8. **Mathematical applications in Economics and Management.**
General Mathematics II 1.75 credits (26.25 hours)

Analysis: 1.75 credits (26.25 hours); L, T, P, SPW
1. The Real Numbers
2. Numerical Functions of a real variable, limit, Continuity
3. Differentiability, extrema, theorem of Role and finished increases
4. Polynomials, fractions, rational
5. Study and graphic representation, reciprocal functions
6. Limited developments, integrals and applications to calculations of Aires
7. Logarithmic functions and exponential
8. Digital Suites: Direction of variation, convergence
9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
10. Mathematical applications in Economics and Management

Quantitative technics: 3.5 credits (52.5 hours)

Financial Mathematics I: 0.875 credits (13.125 hours); L, T, P, SPW
1. The Basics
   • Simple Interest;
   • Calculation of the value gained;
   • Current value commercial and current value rational one; précompté interest and effective interest.
2. Calculation of the average rate of a series of simultaneous investments
3. Equivalence and replacement of effect
4. Short-term financial transactions - Current Account and interest
5. Commercial Discount - real rate of discount
6. Compound interest
   • Acquired value;
   • Current value;
   • Rate equivalent and proportional rate;
   • Rate of Interest apparent;
   • Rate of” real interest.

Statistics: 0.875 credits (13.125 hours); L, T, P, SPW
1. Statistical series to a variable
   • Definition and vocabulary;
   • Graphical representation;
   • Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Gap-type;
     - Quantiles;
     - Coefficient of variation.
2. Statistical series of two variables
   • Definition and vocabulary;
   • Cloud of points;
   • Average point;
• Covariance and covariance matrix of 2 variables;
• The coefficient of correlation and regression;
• Linear adjustment by the method of least squares.

❖ Financial Mathematics II: 0.875 credits (13.125 hours); L, T, P, SPW

1. The Annuities
   • Constant annual installments;
   • Annuities in arithmetic progression; annuities in geometric progression; perpetual annuities.
2. The undivided borrowings
   • Reimbursement by constant annual installments;
   • Table d'amortization;
   • Laws followed by depreciation recovery of the debt still alive;
   • Laws followed by the annuities;
   • Applications on the borrowings undivided.
3. The bond loans
   • Reimbursements to the pair;
   • Constant annual installments;
   • Constant depreciation;
   • Rate of yield and rates of returns of a debenture loan; rate of returns of the borrowing to the Broadcast; Choice of Investments.

❖ Statistics II: 0.875 credits (13.125 hours); L, T, P, SPW

1. Estimation of an average," a proportion and" a standard deviation
2. Confidence interval and confidence coefficient
3. Tests of assumptions and the KHI-two

❖ LTM113: Introduction to Logistics Management / ICT for Logistics

❖ Introduction to Logistics Management : 2.5 credits (37.5 hours); L, T, SPW

Course description: This module provides students with the skills and knowledge in coordinating the movement of goods, both imports and exports. Some of the topics to be covered are as follows:
• Important Concepts in Logistics management: Logistics, Forwarding, Outsourcing, Tendering, Quality management etc.
• Information handling and control issues
• Introduction to Warehousing
• Construction, Layout and Safety
• Customer Service

❖ ICT for Logistics: 1.5 credits (22.5 hours); L, T, SPW

Course Description: The focus of this course will be to provide students with a thorough understanding of how to adopt Information and Communications Technology (ICT) to improve the efficiency of information flow and control in the logistics/supply chain efficiency
environment. The course further exposes students to the role of the internet in modern logistics management, as well as the various logistics software's which can be employed to increase efficiency in supply chain. Some of the topics to be treated are as follows:

- The role of Information Communication Technology in the Supply Chain
- Electronic Data Interchange
- Point of Sale Information
- Value Added Logistics
- Commodity Related Systems.

❖ LTM114: Ancillary Professions

Course Description:
This course will introduce on the one hand shore-based personnel who offer supporting services to maritime transport, and on the other hand, port-based firms specialized in cargo handling activities. These shall include the:

- **Ship representation: 2 credits (30hours); l, t, p, spw.**
  - Legal status and functions (municipal and international legal instruments)
  - Activities carried out
  - Warehousing of cargo and relationship with both the freight forwarder and the cargo handling firm
  - Different appearances or ‘caskets’ worn (port agent, protecting agent, husbandry agent).
  - Relationship with the Maritime Administration, ships chandlers, customs’ services and the port’s authorities.

- **Freight Forwarding (cargo representation): 2 credits (30 hours); l, t, p, spw**
  With the following topics to be treated:
  - International Freight Forwarder and Freight Business
  - Interaction between International Trade and Forwarding Activities
  - Forwarding services and the Legal position of the Forwarder
  - International Commercial terms
  - Customs brokerage
  - Documentation in Forwarding.

- **Cargo Handling: 2 credits (30 hours); L, T, P, SPW**
  The topics to be examined shall include:
  - Legal status
  - Cargo handling equipment
  - Types of cargo and cargo gear
  - Cargo stowage and legal responsibilities
  - Cargo warehousing and relationship with freight forwarders and shipping agent
  - Contractual partners
LTM115: Shipping and International Trade/ Maritime Transport

Shipping and International Trade: 2 credits (30 hours); L, T, P, SPW

**DESCRIPTION** - This Course examines the nature of world trade and its relationship to Logistics. It explores the interfaces between Logistics services and world trade as well as an overview of the International Logistics Industry. The core of the topics to be covered is as follows:

- World trade development
- Demand for Logistics services
- Economics of sea transport
- International trade, trade balance and trade routes
- The impact of Transport cost
- Shipping markets
- Shipping companies
- International institutions and their role in maritime trade and transport

Maritime Transport: 2 credits (30 hours); L, T, P, SPW

**Objective:**

This course introduces students to the concept of sea transport and its service nature to International trade in the global. It explores the nature and philosophy behind sea transport, its relationship to the trading community and examines the basics local/international institutions and methods used in the industry.

**Course outline:**

- Introduction to maritime transport;
- International Organizations and regulation in maritime Transport;
- Documents in shipping;
- Pricing of Ocean Freight;
- Registration and Licensed of Ships.

LTM116: Transport Law/ Carriage Law

Transport Law: 2 credits (30 hours); L, T, P, SPW

**Objective:** this course has an international focus, providing insight into international rules governing the carriage of goods. The following topics will be treated:

**Course outline:**

- General Common Law rules for carriage of goods (Duties and Liabilities of the common carrier);
- International law rules for carriage of goods by Roads (CMR rules);
- International Rules for carriage of goods by air (Warsaw Convention);

Carriage Law: 2 credits (30 hours); L, T, P, SPW

**Course description:** This is an introductory course that announces the various international instruments that regulate the different types of transport modes whether maritime, surface, air,
or inland waterways. This course has an International focus, providing insight into the International rules governing the carriage of goods. The following topics will be treated:

- General Common Law rules for carriage of goods (Duties and Liabilities of the common carrier)
- International Law rules for carriage of goods by Road (CMR rules)
- International Rules for Carriage of goods by Air (Warsaw Convention)
- International Rules for Carriage of goods by Sea (Hague, Hague Visby, Hamburg and Rotterdam Rules).

**LTM117: Bilingual training I and economic environment I**

- **French expression: 1 credit (15 hours); L, T**
  1. **Vocabulaire**
     - Vocabulaire technique usuel
  2. **Grammaire**
     - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
     - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
     - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
     - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
     - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
     - Des fonctions grammaticales.
  3. **Expression et communication**
     - Compréhension et interaction au cours d’une discussion technique ;
     - Communication orale courante ;
     - Communication orale interactive
     - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
     - Lecture rapide et compréhension de texte ;
     - synthèse d’un long texte
     - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
     - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
     - Expressions figées

- **General Economics: 2 credits (30hours); L, T, P**
  1. Business and production
  2. Households and the consumption
  3. Markets and Prices
  4. Training and distribution of income
  5. The currency and the financial of the"Economy
6. The elements of the National Accounts
7. The macro-economic equilibrium
8. The socialist system
9. The capitalistic economy
10. The State and its interventions
11. The foundations of international trade
12. International payments
13. The balance of payments
14. Economic development and its inequalities
15. Growth and its inequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of problems
18. The development strategies
19. The economic integration and the forms of cooperation

**LTM121: Government Politics**

- Government Politics: 4 credits (60 hours); L, T, P, SPW

Content:
- The concept of governance;
- The concept of politics;
- Types of Governments;
- Distinction among governments;
- Democracy and origin;
- The Attributes of the Philosophy of Democracy;
- Types of Democracies;
- Survey of Cameroon Political History;
- The Establishment of the Federal Government / Unitary Government;
- Constitutional Change in Cameroon.

**LTM122: Research Methodology**

- Methodology for drafting the report of internship: 5 credits (75 hours); L, T, P, SPW

  - The collection of information;
  - How to make a report;
  - The plan of the Probationary report and the summary;
  - The table of contents;
  - The introduction of the internship report;
  - The conclusion of the internship report;
  - The acknowledgments;
  - How to build the annexes;
  - When to start his internship topic;
  - How to find a theme of internship report;
  - The cover page;
  - How to write effectively;
- Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations);
- Instructions and typographical rules of presentation (police, spacing, titles, highlighted, punctuation, graphic charter);
- How to prepare for the defense.

**LTM123: International Transport Management/ Safe Transport of Dangerous Goods**

**International Transport Management: 2 credits (30 hours); L, T, P, SPW**

**Objective:**
The purpose of this course is to train students in the global logistics and supply chain concept evolution up to date, the environmental developments and different methods and strategies used for international multimodal transportation to facilitate cost and efficiency objectives.

**Course outline:**
- Evolution of Logistics Concept;
- Effect on International Transport;
- Development in Logistics and Supply Chain;
- Most used Aircraft and Pallets;
- Futures issues in International shipping and Transport Management.

**Safe Transport of Dangerous Goods: 2 credits (30 hours); L, T, P, SPW**

**Course description**
This module attempts to outline and discuss the distinct features of dangerous goods transportation and the regulatory requirements for handling dangerous goods. It further elucidates on the classification of dangerous goods as outlined in International Conventions and guidelines. Some of the topics to be covered are as follows:

1. Dangerous Goods;
2. Dangerous Goods Regulations (focus on the IMDG code);
3. Classification of Dangerous goods;
4. Identification of Dangerous Goods;
5. Description of Dangerous Goods;
6. Marking and labeling of hazardous cargo;

**LTM124: Warehouse Management/ Procurement and Inventory Management**

**Warehouse Management: 2 credits (30 hours); L, T, P, SPW.**

1. Objectives of Warehousing
2. Warehousing Resources
3. Rationale of Warehousing
4. Types of Warehouses
5. Functions of Warehouses
6. Basic Warehousing Decisions
7. Basic Warehousing Operations

➢ Procurement and Inventory Management: 3 credits (45hours); L, T, P, SPW.

Course Description: This course is a beginning course that teaches students the basic principles of procurement and inventory. Some of the topics to be considered are as follows:

1. Procurement
   ▪ principles of purchasing
   ▪ identification of needs
   ▪ specification of requirement
   ▪ identifying sources
   ▪ choosing potential suppliers
   ▪ selecting the supplier
   ▪ placing the order

2. More advanced concepts
   ▪ Total cost of ownership (TCO)
   ▪ Procurement targeting
   ▪ category management

3. In-house classification of goods
   ▪ purchasing of immediate use
   ▪ Inventory and stock
   ▪ project materials

4. Inventory principles
   ▪ To stock or not
   ▪ consequences of non-availability
   ▪ decisions about how much to buy and when
   ▪ opportunities to avoid holding stock

➢ LTM125: Total Quality Management/ Maritime Administration I and II

➢ Total Quality Management: 2 credits (30hours); L, T, P, SPW

Objective: this course gives a good background to the concept of quality management and its evolution as well as the various approaches to ascertaining and measuring quality performance and its limitations.

Course outline:
- Quality management system;
- Quality assurance system;
- Total Quality Concept;
- Transformation process;
- Continuous improvement of process;
- Demings 14 points;
- Product and Service process;
- Standardization.

➢ Maritime Administration I and II: 3 credits (15hours)
Maritime Administration I: 1.5 credits (22.5 hours); L, T, P, SPW

This course is designed to introduce that organ of the administration of a coastal state that provides advisory services to the government with regard to transport in general and maritime transport in particular. With regard to statutory functions and activities, the following topics should be examined in two semesters:

- Basic maritime problems of developing countries
- Participation of developing countries in the evolution of global maritime standards
- Development of Maritime legislation
- Structures and sub structures of the Maritime Administration
- Maritime Safety (ship registration, inspections, etc)
- Carriage Law framing, implementation and enforcement
- Accidents and casualty investigations
- Conflicts and conflict resolutions
- Development of carriage law with related administrations
- Liaising with regional and international organs and organizations (UN Agencies and Specialized Agencies) in the preparation of carriage related laws and regulations, together with safety-oriented ones.
- National maritime training facilities
- Port development
- Statutory inspections and controls (flag, port, and coastal state controls)
- Flag state activities (registration, inspections, etc)

Maritime Administration II: 1.5 credits (22.5 hours); L, T, P, SPW

Course description: The focus here will be on:

- STATUTORY CONTROLS (PORT STATE CONTROL)

This Course explores the various obligations and requirements imposed on flag, port, and coastal states to ensure the good condition, state and conduct of vessels and crew, as well as the powers imposed on them. Some of the topics to be discussed are as follows:

- Background
- Flag State Controls and Inspections
- Coastal State Controls
- IMO Port State Control Inspection guidelines
- PSC MOU (Memorandum of Understanding)
- Legislation
- PSC Inspections and detentions
- PSC forms and their completion
- PSC: ISM code - ISPS code interaction

- CASUALTY INVESTIGATION; that shall include inquiries into marine/maritime disasters.
LTM126: Marine Insurance /Fundamentals of Cargo Insurance

Marine Insurance: 2.5 credit (37.5 hours); L, T, P.

Objective: this is an awareness course that exposes students to the insurance policies utilized within the logistics industry with special reference to the unique nature of marine insurance. It addresses the issue of maritime risk, and how this risk is managed through available insurance policies. The topics to be examined are as follows:

Course outline:
- General principles of cargo insurance;
- The need to spread risk;
- General average;
- Legal background – Cargo vs. Hull, Utmost good faith, Disclosure and warranties;
- Hull and machinery insurance - Premium and Claim, insured perils, Exclusions, Port risks;
- Protection and indemnity insurance;
- Cargo Insurance;

Fundamentals of Cargo Insurance: 1.5 credit (22.5 hours); L, T, P.

Course description
This is an awareness course that exposes students to the insurance policies utilized within the Logistics Industry with special reference to the unique nature of marine insurance. It addresses the issue of maritime risk, and how this risk is managed through available insurance policies. The topics to be examined are as follows:

- General principles of cargo insurance
- The need to spread risk
- General average
- Legal background – Cargo vs. Hull, Utmost good faith, Disclosure and warranties
- Hull and machinery insurance - Premium and claims, Insured perils, Exclusions, Port risks
- Protection and Indemnity Insurance
- Cargo Insurance

LTM 127: Bilingual training II and Economic Environment II

English Expression: 1 credit (15 hours); L, T, SPW

1. Vocabulary
   - Technical and usual vocabulary of the specialty

2. Grammar

3. Bilingual expression
   - Understanding in interaction in Technical Discussions
   - Continuous oral communication: Show, explain, develop, summarize, account, comment;
- Interactions oral communication

4. **Autonomous reading of "writings" of all levels**
   - Lead by a quick reading to understand the general sense;
   - Browse a text long enough to locate desired information;
   - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.

5. **Write clear, detailed texts**
   - Essay writing;
   - Application for employment;
   - C.V.;
   - Letter of motivation;
   - Letter/memo writing and minutes of a meeting

➤ **Economy and organization of enterprises: 2 credits (30 hours); L, T, P**
   - The Enterprise, definition and mode of analysis;
   - Classification of Enterprises;
   - The Organisational Structure of enterprises;
   - The insertion of the company in the economic fabric;
   - The commercial activity of the enterprise;
   - The productive activity of the enterprise;
   - Logistics in the enterprise;
   - The financial activity of the enterprise;
   - The management of human resources;
   - The systemic approach of the enterprise;
   - Information system;
   - The decision making process;
   - The strategic analysis of the company;
   - Choice and implementation of a strategy;
   - The business, society and culture;
   - The business, society and the Ethics.

❖ **LTM231: Project Management**

 ➤ **Project Management: 5 credits (75 hours); L, T, P, SPW**

This is an introductory course. That exposes students to the elements and principles of project management (quality and strategic) and its application. Some of the courses of interest include:

- Terminal planning
- Project business case
- Project lifecycle
- Project planning and scheduling
- Managing a project budget
- Monitoring and control
- Managing change orders
- Managing risk
- Effective communication
- Managing a team
A- the Hardware

1. The peripheral components
   - The input devices;
   - The device output;
   - The storage devices;
   - The devices of input and output.

2. The central unit
   - The central memory;
   - The microprocessor;
   - The ports;
   - The motherboard;
   - The chipset;
   - The power supply;
   - The cards of extension;
   - Other internal organs.

3. The unit of exchange (or bus)
   - Role;
   - Types of bus:
     - Data bus;
     - Control bus; - Bus of address.

B- The Software

1. The application software
   - Definition;
   - Role;
   - Types and examples of software.

2. The basic software (or software systems)
   - Definition;
   - Types of basic software;
     - The drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation":
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of a operating system;
       - Architecture.
   - Concept of Free Software and proprietary software.

System of numbering and coding

A- The numberingsystems
1. **A few basic concepts**
   - The base of the system;
   - Weight;
   - Alphabet of the language;
   - Format of the word (length of the word);
   - Power of language.

2. **A few numbering systems**
   - The decimal system;
   - The binary system;
   - The octal system;
   - The hexadecimal system.

3. **The basic changes**
   - From Decimal to another base b;
   - From base b of any kind to the decimal basis;
   - From binary in octal and vice versa;
   - From binary to hexadecimal and vice versa.

4. **Arithmetic operations**
   - Binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
     - Addition of binary numbers;
     - Subtraction of binary numbers;
     - Use the add-in to 2 in the subtraction;
     - Multiplication of binary numbers;
     - Division of binary numbers.

5. **Hexadecimal arithmetic**
   - Addition of numbers in Hexadecimal;
   - Subtraction of numbers in hexadecimal.

**B- The codes**

1. **General information on the concept of a code**
   - Definitions;
   - Objectives of the codification;

2. **The functional codification**;
   - Types of functional codes;
   - The of technological codification.

3. **The alphanumeric codes**
   - The ASCII code:
     - Standard ASCII;
     - Extended ASCII;
     - Use.

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**LTM233: Land and Inland Waterway Transport/ Air Transport**

- Land and Inland Waterway Transport: 2.5 credits (37.5 hours); L, T, P, SPW

Course Description
This module trains students in the operations of Road Transport, Rail Transport and Inland waterway Transport as well as the regulatory regime governing these modes of transport. Some of the topics to be considered are as follows:

- Introduction to Road Transport, Rail Transport and Inland Waterway Transport
- Legal Requirements for Land Transport and Inland Waterway Transport
- Documentation requirements
- Budapest Convention for Inland waterway Transport
- Dangerous goods and Land Transport

➢ Air Transport: 3.5 credits (52.5 hours); L, T, P, SPW

Course Description
This module highlights the various International regulations that govern the conduct of International Air Transport. It also examines the accepted International practices in Air Transport as well as the contemporary trends. Some of the topics to be treated are as follows:

- International Organizations in Air Transport
- Applicable International Rules (Warsaw Convention, Montreal Convention etc.)
- IATA conditions of carriage
- Liability to Airlines
- Dangerous goods by Air
- Packaging of Air freight
- Documentation in Air Transport

➢ LTM234: Carriage of goods by sea / Port Management operation

➢ Carriage of goods by sea: 2 credits (30 hours); L, T, P, SPW.

Course Description
This course introduces students to the concept of sea transport and its service nature to International trade. It explores the nature and philosophy behind sea transport, its relationship to the trading community and examines the basic local/international institutions and methods used in the industry. Some of the topics to be covered are as follows:

- Introduction to Maritime Transport
- Tramp shipping (Chartering practices)
- Liner Shipping
- International organizations and regulations in maritime transport
- Shipping services and sea ports
- Documents in shipping
- Pricing of Ocean Freight
- Registration and Licensing of Ships

➢ Port Management operation: 2 credits (30 hours); L, T, P, SPW

Course Description:
This Course in the first place, is designed to provide a good Introduction to the nature and functions of terminals in International trade examining as it were, the relationship between the port authority and the terminal operator, related legal obligations, ownership and operating structures and the pricing of port services. The topics to be considered here shall include:

- Introduction to port and Terminal Operations
- Duties and Responsibilities - Port Authority, terminal operator
- Legal obligations and powers of Ports and Terminals
- Role of the Port authority
- Port ownership
- Deregulation of Port and Terminal activities
- Port/Terminal responsibility
- Improving Port and Terminals performance
- Value added services in ports

In the second place, the course shall look at key issues in the operations of the various terminal types, along with an investigation of the various terminal operators and the benchmarking of terminals. The topics to be examined here will be as follows:

- Ship and cargo characteristics
- Types of Terminals - Liquid bulk, Dry bulk, General cargo, container, Ro-Ro, Cruise and passenger
- Terminal Infrastructure and equipment
- Terminal operating systems
- Major terminal operators
- Process of cargo movement
- Safe working in terminals
- Measuring and benchmarking terminal performance

**LTM235: Environmental Management**

- Environmental Management: 3 credits (45 hours); L, T, P, SPW

**Course Description**

This course provides a comprehensive introduction to the principles underpinning maritime environmental management before examining the numerous environmental impacts associated with maritime operations. The topics to be discussed include the following:

- Introduction to the Marine and Coastal Environment
- Sustainable development
- Key issues facing marine and coastal environment
- Environmental impacts associated with maritime operations
- Maritime environmental Governance and enforcement

**LTM236: Ship Finance / Ship chartering**

- Ship Finance: 2.5 credits (37.5 hours); L, T, P, SPW
Objective: This course addresses the key issues in the financing of vessels as well as the overall financial system for international Shipping.

Course outline:
- Costs and revenues in Shipping business;
- Impact of decisionson profitability;
- Interpreting financials performance;
- Corporate and social responsibility;
- Governance;
- Investment, operating regulatory risk.

Ship chartering: 2.5 credits (37.5 hours); L, T, P, SPW

Objective: This course is designed to exposed students to the contractual terms in Charter parties and how to obtain the best terms. The topics to be examined are as follows:

Course outline:
- What is a Charter Party ? ;
- Types of Charter parties;
- Commercial context of Charter parties;
- Examples of charter parties used in different trades;
- Key issues of contract law as applicable to charter parties;
- Brokers role in negotiating and fixing charter parties.

LTM237: Civics and Ethics/The legal environment and the creation of business

Civics and Ethics: 1 credits (30 hours); L, T, P

The Concepts
- The citizen;
- The Nation;
- The State;
- Public Property unto collective property;
- The freedoms;
- The public service;
- Problem of ethics;
- Ethics, Law and reason;
- Management and ethics of responsibility;
- Ethics and management.
- Ethics
- Civics
- Deontology
- Moral consciousness
- The universal declaration of Human Rights
- Good governance in public services
- Explain the importance of civics to the life of the nation
- Functions of the state and its citizens
- Deontology, Professional ethics and professionalism
- Relationship between morality, law and ethics
- Codes of ethics

- Law on Commercial Companies I: 0.5 credit (7.5 hours); L, T
  1. The status of trader
  2. The acts of commerce
  3. The fund of commerce
  4. The different commercial contracts

- Common law: 1 credit (15 hours); L, T, P
  1. Definition, characters, the branches and the sources of the law
  2. The field of application of the Act
  3. The dimensions of the law (objective, subjective right)
  4. The Legal organization
  5. The right to legal personality
  6. The civil status, the name and the Domicile
  7. The Disabilities
  8. The legal acts
  9. The legal facts

- Creation of business: 0.5 credit (7.5 hours); L, T, P, SPW
  - Concept of contractor;
  - Motivations to the creation of company;
  - Search for ideas and evaluation;
  - Search for funds a sources of funding;
  - Choice of legal status;
  - Ethical aspects of the business;
  - Preparation of the business plan.

- LTM241: Computer for Business II

- Computer for Business II: 4 credits (60 hours); L, T, P, SPW

  A- Computer Networks
  1. General information
     - Definition of a computer network;
     - Interest of computer networks;
     - Basic vocabulary:
       - Workstation;
       - Node;
       - Server;
2. **Typology of networks according to the media:**
   - Wired networks;
   - Networks not wired.
   - According to the Geographic Extent:
     - The local networks (LAN);
     - The metropolitan area networks (MAN);
     - The wide area networks (WAN).

3. **Network Topologies**
   - Physical Topology:
     - The bus topology;
     - The star topology;
     - The ring topology;
     - The topology in mesh;
     - The topology in shaft.
   - Logical Topology:
     - Networks to broadcast;
     - Point-to-point networks.

4. **Network architectures**
   - Client/server architecture;
   - Architecture of equal to equal.

5. **The equipments of computer networks**
   - Equipments of basis of a network:
     - The computer;
     - The network card;
     - The server;
     - The network cable;
     - The transceiver (or adapter);
     - The transmission mounts;
     - The socket.
   - The equipment of interconnections:
     - Hubs (hub);
     - Switch (Switch);
     - Routers;
     - Gateways
     - The gateway (gateway);
     - The router;
     - The bridge (Bridge); - the repeaters.

6. **Concept of IP addressing**
   - Structure of an IP address:
     - Network identifier (Net ID);
     - Identifier of host (Host ID).
     - Specific Addresses:
       - Network addresses;
       - Machine address;
       - Broadcast Address (broadcaste);
- Limited Broadcast address (multicast);
- Address of rebroadcasting (loopback).

• IP addressing by classes:
  - Class A;
  - Class B;
  - Class C.

B- Internet network

1. Concept of protocol
   • Definitions and a few types of protocols:
     - SMP protocol;
     - POP protocol;
     - NNP protocol;
     - The FP protocol;
     - HTP protocol;
     - IMAP protocol;
     - Protocol TCP;
     - Other.

2. A few Internet Services
   • The e-mail;
   • Research on the Internet;
   • The Newsgroup (discussion forum);
   • The transfer of files;
   The Download (Download A text, download An image, download a free software…);
     • The online Trade;
     • The IRC (Internet Relay Chat);
     • Other.

3. The search engines
   • Definition;
   • Role;
   • Somesearchengines.

4. Tools for Internet access
   • The browsers (definition, examples);
   • The plug-ins (definition, examples);
   • The search engines (definition, examples, use).

5. The connection to the Internet
   • Connection hardware;
   • Suppliers of access (role, examples);
   • Types of connections (specialized line, phone line, satellite).

❖ LTM247: Business Communication

➢ Business Communication : 3 credits (45hours); L, T, P, SPW

❖ LTM243: Introduction to Custom Operations and Procedures/ Maritime Law
Introduction to Custom Operations and Procedures: 3 credits (45 hours); T, P.

Course Description
This Course explains the role of Customs with its economic and fiscal mission in a Trade facilitation driven World economy development. It also touches on Customs Tariff, and valuation methods. Some of the topics to be discussed are as follows:

- Functions of Customs Administration worldwide
- Customs Tariff
- The entry making process, clearance and Shipping of goods
- Customs examination techniques
- Customs Valuation and WTO concept
- Customs Valuation

Maritime Law: 2 credit (30 hours); L, T, P, SPW

Course Description
The Course will basically expose students to the public International law aspects of maritime law. It is interested in examining the legal order of the oceans particularly the United Nations Convention on the Law of the Sea. Some of the topics to be examined are as follows:

- Coastal State, Flag State and Port State Jurisdictions
- Maritime Zones
- Environmental requirements for shipping under UNCLOS
- MARPOL convention
- SOLAS convention
- Navigational rights of States

Multi-modal Transport: 3 credits (45 hours); L, T, P, SPW

This module aims to provide a fundamental knowledge in multi-modal transport and containerization operations. It explains the concept of multimodal transport and the physical Infrastructure required for multimodal transport. It also discusses the commercial aspects such as multi-modal transport pricing.

The topics to be studied include:
- Concept of Multi-modalism
- Components of Intermodal Transport chain
- Multimodal Transport operations
- Project Transport
- Documents used in Multimodal Transport
- Applicable Law in Multimodal transport.

LTM245: Introduction to Oil and Gas/ Safety and Security in Shipping
Introduction to Oil and Gas: 2.5 credit (37.5 hours); L, T, P, SPW

- Introducing Oil and Gas
- Finding Oil and Gas
- Extracting and Processing Oil and Gas
- Oil Refining and gas Treatment
- Selling Oil and Gas
- Managing Oil and Gas

Safety and Security in Shipping: 2.5 credit (37.5 hours); L, T, P, SPW

Course Description
This module covers the regulatory skills required to document, classify, prepare, offer and accept shipments of dangerous goods intended for transportation by air, land and sea. It also covers the related ground transportation requirements as well as specific International requirements on safety.

Some of the topics to be covered are as follows:

- Safety and Security requirement for Shipments
- ISPS code in sea borne traffic
- Safety and Security Inspections at Interfaces and preventive actions
- Safety of life at sea
- Maritime security

LTM242: International Commercial Law/ Strategic Management

International Commercial Law: 2.5 credits (37.5 hours); L, T, P, SPW

This course provides a comprehensive overview of the legal framework for International commerce with particular emphasis on the law relating to International commercial terms. Some of the topics of interest include

- Elements of The Contract for the Sale of goods
- Passing of title
- Passing of Risk
- Delivery
- International Commercial terms
- INCOTERMS and International Conventions

Strategic management: 2.5 credits (37.5 hours); L, T, P, SPW

Objective: a course that integrates the functional areas of production, accounting, marketing, finance and human resource. This course only introduces students to the concept of strategic management and its use.

Course outline:

- Concept of Strategic Management;
- Theories and approaches;
- Decision making;
- Strategic Analysis;
- Case studies.

**LTM246: Internship 5 credits (75 hours)**

- **Professional Internship: 5 credits (75 hours): P, SPW**
  1. Arrival and Business Integration
  2. Working in a company
  3. The holding of the Intern journal
  4. The choice of the theme of work: in collaboration with mentors professional academic and
  5. Elaboration of the canvas of research
  6. The resources to operate
  7. The organization of work
  8. Drafting of the report
  9. Presentation of the report before a jury
Field: MANAGEMENT

Specialty: SPORT MANAGEMENT
1. **Objectives of the training**

The objective of this specialty is to train technicians who will be able to understand the leisure market associated with sports and events, the regulations of the practice, the functioning of institutions and associations, collective or public, marketing and sports projects.

2. **Skills Sought After**

   - **General skills**
     - Manage the circulation of information;
     - Manage work equipment;
     - Have the professional capacity of sports managers – autonomy, sense of initiative, rigorous and responsible);
     - Have theoretical, practical and cultural knowledge of different physical and sport activities.

   - **Specific Skills**
     - Know the economic, legal and institutional environment in which the sports organizations evolve;
     - Conceive and provide sports equipment for the different sporting disciplines;
     - Mobilize appropriate instruments for the development and management of a sports organization;
     - Manage and animate a sports structure adaptable to the local, regional or national environment and with the authorities of the area;
     - Know the management tools applicable to the practice of public and private sports;
     - Analyze constraints to sporting activities and indulge in sports projects by using appropriate management methods and techniques;
     - Manage infrastructure assets;

3. **Outlets**

   - Manage a sports association;
   - Can be the administrative officer of a sports association;
   - Organize a sports event;
   - Manage a sports infrastructure; etc,
4. Organization of the Teachings

**Semester 1**

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#### Fundamental courses 30% (2 UC) 9 credits 135 hours

#### Professional courses 60% (4 UC) 18 credits 270 hours

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#### Fundamental courses 30% (2 UC) 9 credits 135 hours

#### Professional courses 60% (4 UC) 18 credits 270 hours

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#### Cross-sectional courses 10% (1 UC 3 credits 45 hours

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5. Courses content

- SMA111: Mathematics and Computer Science I BKF

- General Mathematics I: 3 credits (45 hours); L, T, SPW

- Algebra vector spaces
  1. Polynomials
     - Polynomials characteristics.
  2. Vector space
     - Linear applications.
  3. Matrices
     - Operations on the matrices;
     - Matrices associated with a linear application;
     - Matrices and determinants.
  4. The Determinants
     - Determinant of a square matrix;
     - Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     - Inversion of matrix of order less than or equal to 3 - method of Gauss;
     - Resolution of systems of linear equations by the method of Pivot;
     - Application of matrix calculation on the resolution of systems of linear equations.
  6. Reduction of square matrices
     - Own values;
     - Own vectors.
  7. Differential equations and linear récurrentielles of order 2 with constant coefficients
  8. Mathematical applications in Economics and Management

- Generalities I: 2 credits (30 hours); L, T, SPW

The hardware and software on a computer system has - the Hardware

1. The peripheral components
   - The devices of input;
   - The output devices;
   - The storage devices;
   - The devices of input and output.

2. The central unit
   - The central memory;
   - The microprocessor;
   - The ports;
   - The motherboard;
   - The chipset;
   - The power supply;
   - The cards of extension;
   - Other internal organs.
3. **The unit of exchange (or bus)**
   - Role;
   - Types of bus:
     - Data bus;
     - Control bus;
     - Bus of address.

B- The Software

5. **The application software**
   - Definition;
   - Role;
   - Types and examples of software.

6. **The basic software (or software systems)**
   - Definition;
   - Types of basic software:
     - Drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation:
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of a operating system;
       - architecture.
   - Concept of Free Software and proprietary software.

System of numeration and Codification

E- The numberingsystems

1. **A few basic concepts**
   - The base of the system;
   - Weight;
   - Alphabet of the language;
   - Format of the word (length of the word)
   - power of language.

2. **A few numberingsystems**
   - The decimal system;
   - The binary system;
   - the octal system;
   - the hexadecimal system.

3. **The basic changes**
   - Of Decimal to another base b;
   - To a base b of any kind to the decimal basis;
   - of the binary in octal and vice versa;
   - from binary to hexadecimal and vice versa.

4. **Arithmetic operations**
   - binary binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
• Addition of binary numbers;
• Subtraction of binary numbers;
• Use the add-in to 2 in the subtraction;
• Multiplication of binary numbers;
• Division of binary numbers.

5. Hexadecimal Arithmetic
   • Addition of numbers in Hexadecimal;
   • Subtraction of numbers in hexadecimal.

F- The codes

1. General information on the concept of a code
   • Definitions;
   • Objectives of the codification;
   • The functional codification;
   • Types of functional codes;
   • The codification of technology.

2. The alphanumeric codes
   • The ASCII code:
     • Standard ASCII;
     • Extended ASCII;
   • Use.

SMA121: Mathematics and Computer Science II

Analysis
1. The Real Numbers
2. Numerical Functions of a real variable, limit, Continuity
3. Differentiability, extrema, theorem of Rolle and finished increases
4. Polynomials, fractions, rational
5. Study and graphic representation, reciprocal functions
6. Limited developments, integrals and applications to calculations of areas
7. Logarithmic functions and exponential
8. Numerical series: Direction of variation, convergence
9. Arithmetic Suites, geometric series, recurring series of order 1
10. Mathematical applications in Economics and Management

A- Computer Networks

1. Generalities
   • Definition of a computer network;
   • Interest of computer networks;
   • Basic vocabulary:
     - Workstation;
     - Node;
     - Server;
2. **Typology of Networks**
   - networks according to the media:
     - Wired networks;
     - Networks not wired.
   - according the GeographicExtent:
     - The local networks (LAN);
     - The metropolitan area networks (MAN); - the wide area networks (WAN).

3. **Network Topologies**
   - Physical Topology
     - The bus topology;
     - The star topology;
     - The ring topology;
     - The topology in mesh; - the topology in shaft.
   - Logical Topology
     - Networks to dissemination;
     - Point-to-point networks.

4. **Network architectures**
   - client/server architecture;
   - architecture of equal to equal.

5. **The equipment of computer networks**
   - Equipments of basis of a network:
     - The computer;
     - The network card;
     - The server;
     - The network cable;
     - The transceiver (or adapter);
     - the transmission mounts;
     - the socket.
   - The equipment of interconnections:
     - Hubs (hub);
     - Switch (Switch);
     - Routers;
     - Gateways
     - The gateway (gateway);
     - The router;
     - The bridge (Bridge);
     - the repeaters.

6. **Concept of IP addressing**
   - Structure of an IP address
   - network identifier (Net ID)
   - Identifier of host (Host ID).
   - Specific addresses
     - Network address;
     - Machine address;
     - Broadcast Address (broadcaste);
     - Limited Broadcast address (multicast);
- Address of rebroadcasting (loopback).
- Classes of IP addressing
  - CLASS A;
  - CLASS B; - CLASS C.

B- Internet network

1. Concept of protocol
   - definitions and a few types of protocols
   - SMP protocol;
   - POP protocol;
   - NNP protocol;
   - The FP protocol;
   - HTP protocol;
   - IMAP protocol; - Protocol TCP; - other.

2. A few Internet Services
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
   - The Download (Download a text, downloadAn image, downloada free software...);
   - The online Trade;
   - TheIRC (Internet Relay Chat);
   - Other.

3. The searchengines
   - Definition;
   - Role;
   - Somesearchengines.

4. Tools for Internet access
   - The browsers (definition, examples);
   - The plug-ins (definition, examples);
   - The search engines (definition, examples, use).

5. The connection to the Internet
   - Connection hardware;
   - Suppliers ofaccess (role, examples);
   - Types of connections (specialized line, phone line, satellite).

SMA112: Quantitative techniques of management I

Financial Mathematics I: 2 credits (30 hours): L, T, SPW

1. The Basics
   - Simple Interest;
   - Calculation of the acquired value;
   - Commercial present value and rational present value current, value commercial and current value rational one;
   - fore casted interest and effective interest.
2. Calculation of the average rate of a series of simultaneous investments
3. Equivalence and replacement of effect
4. Short-term financial transactions - Current Account and interest
5. Cash Discount - real rate of discount
6. Compound interest
   - Acquired value;
   - present value;
   - Equivalent rate and proportional rate;
   - apparent Interest rate;
   - rate of real interest.
7. The Annuities
   - Constant annuities;
   - Annuities in arithmetic progression;
   - annuities in geometric progression;
   - perpetual annuities.
8. Joint loan
   - Reimbursement by constant annual installments;
   - Amortization table;
   - Laws followed by depreciation recovery of the debt still in process;
   - Laws followed by the annuities;
   - Applications on the borrowings undivided.
9. The bond loans /Debentureloans
   - Reimbursements at part;
   - Constant annuities;
   - Constant amortisation;
   - yieldRate and rates of returns of a debenture loan;
   - Rate of returns of the debenture loan at issue;

➤ The statistics I: 2 credits (30 hours); L, T, SPW

1. Statistical series to a variable
   - Definition and vocabulary;
   - Graphical representation;
   - Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Standard deviation;
     - Quantiles;
     - Coefficient of variation.
2. Statistical series of two variables
   - Definition and vocabulary;
   - Scattered deviation;
   - Average point;
   - Covariance and covariance matrix of 2 variables;
   - The coefficient of correlation and regression;
   - Linear adjustment by the method of least squares.
SMA122: Quantitative techniques of management II

- **Statistics II**: 2 credits (30 hours); T, P, SPW
  1. Estimation of an average, a proportion and a standard deviation
  2. Confidence interval and confidence coefficient
  3. Tests of hypothesis and the KHI- square

- **General Accounting II**: 3 credits (45 hours); L, T, SPW
  1. **The settlement**
     - In cash (credit settlement, bank);
     - A term (bill of exchange: creation, cashing). **NB**: do not see the circulations of the commercial bills.
  2. **The significant balances of Management (industrial and commercial company)**
     **NB**: from management accounts present the significant balances of management.
  3. **Concept of depreciation (constant and degressive)**
     - Terminology;
     - Calculation (Table of Depreciation of assets placed in service at the beginning and the course of financial year).
  4. **Concept of Provision**
     - For depreciation;
     - For loads and losses.
     **NB**: for the chap IX and X and present the Extract of balance sheet (brief study and practice).

SMA113: Legal environment and accounting I

- **General Ledger I**: 2 credits (30 hours); L, T, P, SPW
  1. **General information**
     - Definition evolution and the role of the accounting;
  2. **The balance sheet**
     notion of sources and application
  3. **The account and the principle of the double entry**
  4. **The accounting transfer**
  5. **The accounting systems** (conventional and computerized)
  6. **Purchase and sale of the goods**
     - The elements that decrease the invoice (reductions);
     - The elements that increases the invoice (transportation costs, VAT, packaging (do not see That logging and déconsignation)).
Legal and taxation management I: 2 credits (30 hours); L, T, P, SPW.

1. Legal classification of economic activities
   - Study of different sectors of activities from the distinction act of commercial and civil act;
   - Study of the statutes related to the nature of the professional activity; public-economic activity.

2. The company
   - Legal concept of the company;
   - The business;
   - The building of the company (registered or not in the balance sheet).

3. The structures of the company
   - Sale proprietorship;
   - Commercial companies and civil, associations…; - public company.

4. Instruments of payment and credit
   - Check, bill of exchange, promissory note, Daiili slip, cards; - leasing; - the inheritance.

5. Forecasting and regulation of business difficulties

SMA123: Legal environment and accounting II

Accounting: 2 credits (30 hours); L, T, P

1. from general accounting to cash accounting
   - Generality on the cash accounting (objectives, role, concept of charges)

2. Analysis of expenses
   - Corparable and non-corparable expenses;
   - Direct expenses and expenses;
   - Apportissement charges;
   - Allocation of Indirect Costs.

3. Valuation of stocks (FIFO method, WAC)

4. The full costs (cost of Purchase, cost of production, introduce the stocks)
   NB: do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products).

5. Partial costs
   - The variable costs;
   - The marginal costs.

6. The Rational Importance of loads of structure

Legal and taxation Management II: 2 credits (30 hours); L, T, P

1. The sources of the tax law - national sources; - international sources.

2. Definition of the various tax levies - taxes, taxes and parafiscal charges; - Taxation of state and local taxation.

3. Presentation of different taxes
   - VAT;
   - Personal income Tax; - corporate tax.

4. Relations between taxpayer and tax administration (fiscal control, tax litigation)
SMA114: Marketing

- **Fundamental Marketing**: 2 credits (30 hours); L, T, P
  - The basis of the marketing; - the market;
  - The Analysis of the competition;
  - The information marketing;
  - The techniques of Market research;
  - Introduction to Marketing Planning; - strategic development; - the marketing mix.

- **Negotiation of contracts athletes**: 3 credits (45 hours); L, T, P, SPW.
  1. **Applicable standards**
     - Legal framework of the sporting activity employed;
     - Athletelabormarket;
     - Law applicable to the contract of work in sport.
  2. **Negotiation and formation of the contract**
     - Genesis of the labor contract of athlete; - negotiation and the before-and-contracts; - draining of the contract.
  3. **Contract components**
     - Content of the contract work;
     - Duration of the contract;
     - Obligations of the contract; - Obligations of the club; - working time.
  4. **Alteration and termination of the contract**
     - The vagaries and the end of the labor contract of athletes;
     - The case of alteration of the contractual link;
     - Termination of the contract;
     - Conversion of the professional sportsman.
  5. **Guide to negotiate its contract**
     - The collective agreements (principles);
     - The labour contract;
     - The working time;
     - The Grids of classifications; - Sheet of position or employment.
  6. **Various**
     - Count and compensation for traveling time professionals (professional travel, Terms of compensation);
     - Modalities of compensation and Decision of compensatory rest.

SMA115: Management tools of sport I

- **Sponsoring I**: 2 credits (30 hours); L, T, P, SPW
  - Definition;
  - Typology of events;
  - The classification levels of the sport; - the forms of sponsorship of sport:
    - The sponsorship of team or of champions;
    - The sponsorship of tests or sports events.
- Tools for the management of sports projects i: 2 credits (30 hours); L, T, P
  - General information on the projects, problems of the management of projects; - The Typology of projects;
  - The History of the Management of Projects, part of the project, SOW;
  - The techniques of management of projects;
  - Administrative management of the project, the management of time limits; - management of human resources of the project, the management of the quality.

- SMA125: Management tools of Sport II
  - Sponsoring II: 2 credits (30 hours); L, T, P, SPW
    - Approach of the Sponsor:
      - The arguments to users;
      - The advice before the meeting with the sponsor;
      - The document of sponsoring (the form and the substance).

- Tools for the management of sports projects II: 2 credits (30 hours); L, T, P
  The five (05) stages of a project:
  1. The emergence of the project
     - Definition;
     - Tools: The Beast To horns, the tree of objectives.
  2. The feasibility
     - definition;
     - Tools: quantitative tools, qualitative tools of Analysis of risks; tools for functional analysis.
  3. The design
     - Definition
     - Tools: work breakdown structure (WBS), activity list, the planning, budget, the schedule of expenditures.
  4. The implementation
     - definition;
     - Tools: work desemption load, the Gantt, sheet of reporting, dashboards.
  5. The Terminator
     - Definition;
     - Tools: the transfer and the closure, the sheets of capitalization of the experience.

- SMA116: Management of structures and sports organizations I
  - Conception of sports projects i: 2 credits (30 hours); L, T, P, SPW.
    - Theoretical reminders on mounting of projects
Management of sports infrastructures I: 3 credits (45 hours) L, T, P, SPW.

1. Institutional and administrative framework
   - The legal nature of the sports center;
   - The Public administration;
   - The different modes of administration and management.

2. Design and development of equipment
   - The programming of the construction of a Sports center;
   - The land of outdoor sports;
   - The Omnisports halfs;
   - The heating;
   - The choice of the energy;
   - The ventilation and the dissemination of air;
   - The natural and artificial lighting;
   - The sports floor; - the acoustic ; - the timing.

3. Methods and planning of activities
   - The analysis and the knowledge of the area and of the Environment;
   - The study and knowledge of the terms of the practice of sport and its evolution; - The design strategies and planning at an activity.

4. Management of Financial Resources
   - The policy of the financing of the activities of the Sport Center;
   - The function and the Development of a budget estimate;
   - The principles of double-entry accounting and the operation of the accounts (public and private);
   - The function and the Analysis of an account of operation;
   - The function and the Analysis of an accounting sheet ;
   - The function of A program of investment;
   - The search for co-financing and the management of the appropriations; - A Few terminologies used in accounting.

SMA126: Management of structures and sports organizations II

Conception of sports projects II: 2 credits (30hours); L, T, P.

- The different steps for conception of a sports project:
  - The project itself (conceptualization);
  - The search for the information;
  - The partners (together);
  - Conception the file;
  - The search for funding.

Management of sports infrastructures II: 2 credits (30 hours); L, T, P.

1. Management of natural resources and equipment: control tools
   - the technical management.

2. Management of the security of persons and the protection of property - the security of persons;
   - the protection of property.

3. Concept of Management in the framework of a sustainable development
   - Concept of sustainable development;
- The High Environmental Quality (programming, construction of the sports center).

4. **Partnerships**
   - Why partnerships?
   - With that build partnerships;
   - The sponsorship, patronage or sponsorship; - The sponsorship contract or sponsorship.

5. **Information communication technologies**
   - The principles and the basic mechanisms of the communication;
   - The basic process;
   - The various forms of communication;
   - The techniques of communication;
   - The supports of the communication;
   - The styles of interpersonal communication;
   - The advantages of the communication;
   - The barriers of the communication; - the attitudes facilitating the communication; - the technologies of the information.

6. **Management tools**
   - **Human Resources**
     - Divisionnel organization chart;
     - Functional Organizational Chart;
     - Matrix Organization Chart;
     - Example of the job specification (Director of Sports);
     - Example of the job specification (responsible for stages);
     - Plug of evaluation;
     - Criteria for assessment;
     - Example of Partnership Convention.
   - **Financial Resources**
     - Accounting balance sheet;
     - Account of forecast exploitation;
     - Account of operation;
     - Plan of amortization of equipment and of capital assets;
     - Cash Plan;
     - Plan for reimbursement of loan$^*$; 
     - Program of investment.
   - **Hardware resources and equipment**
     - Example of regulation order procedure;
     - Example of schedule of A Sports center; - instrument panel to A equipment.
   - **Safety of persons and protection of property**

* SMA117: Bilingual training I and economic environment I

- French expression: 1 credit (15 hours); L, T

1. **Vocabulaire**
   - Vocabulaire technique usuel

2. **Grammaire**
- Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
- De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
- Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
- Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
- De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
- Des fonctions grammaticales.

3. Expression et communication
- Compréhension et interaction au cours d’une discussion technique ;
- Communication orale courante ;
- Communication orale interactive
- De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
- Lecture rapide et compréhension de texte ;
- synthèse d’un long texte
- De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
- Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
- Expressions figées

Principles of Economics: 2 credits (30hours): L, T, P

- Business and production
- Households and the consumption
- Markets and Prices
- Training and distribution of income
- The currency and the financing of the Economy
- The elements of the National Accounting
- The macro-economic equilibrium
- The socialist system
- The capitalistic economy
- The State and its interventions
- The foundations of international trade
- International payments
- The balance of payments
- Economic development and its inequalities
- Growth and its inequalities
- Inflation, unemployment, industrial change
- The issues of development and the globalization of problems
- The development strategies
- The economic integration and the forms of cooperation in the world 20.
- The strategies of the International Debt
SMA127: Bilingual training I and Economic Environment II

- English Expression: 1 credit (15 hours); L, T, SPW

  1. Vocabulary
    - Technical and usual vocabulary of the specialty
  2. Grammar
  3. Bilingual expression
    - Understanding in interaction in Technical Discussions
    - Continuous oral communication: Show, explain, develop, summarize, account, comment;
    - Interactions oral communication
  4. Autonomous reading of "writings" of all levels
    - Lead by a quick reading to understand the general sense;
    - Browse a text long enough to locate desired information;
    - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. Write clear, detailed texts
    - Essay writing;
    - Application for employment;
    - C.V.;
    - Letter of motivation;
    - Letter/memo writing and minutes of a meeting

- Business organization of enterprises: 2 credits (30 hours); L, T, P

  1. The company, definition and mode of analysis
  2. Classifications of Enterprises
  3. The structures of organization of enterprises
  4. The insertion of the company in the economic fabric
  5. The commercial activity of the company
  6. The productive activity of the Company
  7. Logistics in the Company
  8. The financial activity of the company
  9. The management of human resources
  10. The systemic approach of the company
  11. The system of Information
  12. The decision-making system
  13. The strategic analysis of the Company
  14. Choice and implementation of a Strategy
  15. The business, society and culture
  16. The business, society and the Ethics

SMA124: Management of Human Resources and Methodology

- Methodology for drafting the report of internship: 1 credit (15 hours); L, P.
  - The collection of information;
  - How to make a report;
- The plan of the Probationary report and the summary;
- The Table of material;
- The introduction of the report of internship;
- The conclusion of the internship report;
- The acknowledgments;
- How to build the annexes;
- When to start his internship report;
- How to find a subject of internship report;
- The cover page;
- How to write effectively;
- Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations);
- Instructions and typographical rules of presentation (font type, spacing, titles, highlighted, punctuation, graphic charter);
- How to prepare the defense.

➢ Initiation to the HRM: 2 credits (30 hours); L, T, P.
- The HRM - Definition and History;
- The HR function;
- Locate the HRM in the Managerial modes;
- Contribution and HR choice;
- International Strategy.

➢ Motivation: 3 credits (45 hours); L, T, P, SPW.

1. The process of motivation
2. The theories on motivation
   - The Maslow’s hierarchy of needs;
   - The Theory X and Theory Y (McGregor);
   - Theory of the motivation and the Hygiene of Herzberg.
3. Contemporary approaches to the motivation
   - Theory of the three needs (McClelland); - Theory of equity (Adams):
     □ relations of comparison in the theory of the equity;
     □ theory of the Equity: personal judgments.
   - Motivate the various employees;
   - Work/life balance;
   - Profiles of collaborators and system of motivation.

➢ SMA231: Quantitative techniques and computer skills I

➢ Probabilities and operational research I: 3 credits (45 hours); L, T, P, SPW

1. Algebra of sets
   • Applications;
   • The Counts.
2. Basic Set linked to a random experiment
   • Probabilisation;
   • Conditional probability;
   • Formula of Bayes;
   • Tests in BERNOULLI.

3. Random variables discrete
   • probability;
   • Distribution function.

4. Random variables continuous
   • Density,
   • Hope;
   • Variance;
   • Standard deviation;
   • moments.

5. Conventionallaws
   • Binomial
   • Normal ;
   • fisher;
   • exponential.

➢ Applied informatics I: 2 credits (30 hours); L, T, P, SPW

1. The study of the Graphical Environment Windows
   • Presentation;
   • Management of Windows;
   • Managing Files and Folders.

2. What is a file, a folder?
   • Path of access to a file.

3. Practical Study of Microsoft Word
   study of basic functions.

4. Practical Study of Microsoft Excel
   • Presentation;
   • Arithmetic operations.

5. Construction of a formula
   • Use of the integrated functions:
     - definition;
     - Syntax of the integrated functions;
     - A few integrated functions;
     - Relative reference, absolute reference and joint reference;
     - Case of synthesis.

❖ SMA241: Quantitative techniques and informatics II

➢ Probabilities and Operational Research II: 3 credits (45 hours); L, T, P, SPW

1. Concepts of the combinatorial optimization
   • Constraints/objectives;
2. **Graph Theory**
   - Modeling;
   - Coloring;
   - Roads;
   - The treesmaskingfluid;
   - The Waves...

3. **The linearprogramming**
   - Program to two variables;
   - program to more than two variables.

4. **The algorithm of the simplex - the table method**
   - Analysis of the final table of the simplex;
   - problem of duality
   - the management of stocks.

5. **The problems of scheduling - General Information on the Graphs**
   - The PERT method:
     - Applications on the PERT;
   - The choice of investment in deterministic universe.

6. **Modeling**

7. **Decision in Uncertain Future**

8. **Transportation problems**

9. **The problems of posting**

- **Applied computing II: 2 credits (30hours); L, T, P**

   Specific work
   - The software of management of sport.

- **SMA232: InformationsystemI and Financial Analysis I**

- **System of Information Human Resources I: 2 credits (30hours); L, T, P, SPW**

1. **Concept of Information Systems**
   - Introduction:
     - Systemic Analysis of the business.
   - The system of information:
     - Functions of the Information system; - the roles of the Information system;
     - Qualities of an information system.
   - Computerization of the information system:
     - The parties to aninformation system;
     - Software;
     - Definitions;
     - The purpose of a system of information;
2. **Concept of algorithmic and programming initiation**

- Objects: constances, variables, operators ...;
- Basic treatments and sequences;
- Choice and repetition;
- Function and procedures;
- Structure of the data (vectors, table, registration, file);
- Application with basic or Pascal.

- The functions of a system of information; - the organizational system; - the processing of information.

- **Financial Analysis I: 2 credits (30 hours); L, T, SPW**
  - Accounting balance sheet;
  - Financial Balance sheet;
  - Functional balance sheet;
  - Significant balances of management;
  - The ratios;
  - Functional analysis and differential; - the threshold of profitability.

- **SMA242: Information System and Financial Analysis II**

- **System of Information II: 2 credits (30 hours); L, T, P**

  Elaboration of the database

  A- The conceptual model of data: MCD

  1. Constitution of the data dictionary DD
     - Goal (objective);
     - Basic Concepts: Elementary data-Rubrique-Document;
     - Techniques of collection of information;
     - Purge of the dictionary;
     - Highlighted objects;
     - Identification of entities;
     - Definition of the relations of dependency between the objects.

  2. Elaboration of the model Entité- Association

    - Basic Concepts:
      - Entity and entity type;
      - Attribute (property);
      - association;
      - Occurrence of a property; - the identifier (key); - cardinality.

  B- The logic model for relational data: MLDR

  1. Purpose
  2. Basic concepts

    - Primary key;
    - Foreign key; relationship; Association;
    - Registration.
3. The model entity/association
   • Relationship of the entities;
   • Definition of Other relations of dependencies between objects; cardinalities.

4. Passage from the MCD to the MLD
   • Transformation of entities; Transformation of associations:
     - Binary relationship to the cardinalities \((x, 1)\)-\((x, n)\) with \(X = 0\) or \(x = 1\);
     - Relationship n-area (regardless of the cardinality);
     - Reflexive relationship to the cardinalities \((x, 1)\)-\((x, n)\) with \(X = 0\) or \(X = 1\); - a binary relationship to the cardinalities \((0,1)\) - \((1,1)\).

C- Physical Data Model: implementation of the database
   • Creation of the database;
   • Creation of tables;
   • Entering data in the tables;
   • Relationship of the tables;
   • Creating forms;
   • Relational model (relationship, degree, schema, PRIMARY KEY/secondary, cardinality, domain ...P of base or access);
   • the languages of requests (SQL...);
   • study of a few SQL commands.

- Financial Analysis II: 2 credits (30 hours); L, T, P, SPW
  • The magnitudes of the financial balance;
  • Presentation of the profit and loss account;
  • Ability to self-financing
  • rations of farms and profitability.

- SMA233 : Strategies and Tools I

- General Policy and Strategy I: 2 credits (30 hours); L, T, SPW
  1. The approach to undertake
     - Creation of the company;
     - Analysis of Evolution of activity in long period.
  2. The strategic approaches
     - Analysis and fault finding: identification of opportunities and modalities of decision-making; identification of the strengths and weaknesses of the company;
     - Strategic Choice: approach by the segmentation of the activities and/or by the Trades...
     - Implementation and pilotage: articulation of strategic decisions and the operational functioning.

- Tools for the management of sports projects III: 2 credits (30 hours); L, T, P
  1. The Project manager
     - The profile of the project manager;
- The specialties;
- The strengths of the Project manager;
- The behaviors;
- The activities;
- The dilemmas.

2. **The Small Projects**
- Elements of context;
- Elements of Implementation.

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**SMA243: Strategies and Tools II**

- **General Policy and Strategy II**: 2 credits (30 hours); L, T, P, SPW
  1. The organizational structures
     - the bases and forms of organizations.
  2. The dynamic strategy-structure
     - Taking into account the constraints of organization and Environment in the development of strategic decisions (dimension of the company or of the markets, international context...).

- **Tools for the management of sports projects IV**: 2 credits (30 hours); L, T, P, SPW

  The data of a general nature
  - The project, the stakeholders;
  - The project of enterprise;
  - The Phases of preliminary studies;
  - The offers, the risks;
  - The launch of the project;
  - The Human Resources; the cycle of project management.

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**SMA234: Microenvironment and sports organizations I**

- **The actors of the market of sport I**: 2 credits (30 hours); L, T, P, SPW
  - **The analysis of the offer**
    - In general the sports market is facing major issues;
    - Segmentation of the market as a function of the seasons;
    - The main suppliers on the market of the sport;
    - Analysis of the distribution.

- **Sports organizations I**: 2 credits (30 hours); L, T, P, SPW
  - **Environment, Law and Administration I**
    - The evolution of sports demand and the adaptation of clubs;
    - The regulatory aspects of the sports club;
    - Environment.
SMA244: Microenvironment and sports organizations II

- The actors of the market of Sport II: 2 credits (30 hours); L, T, P, SPW.
  - The analysis of the request
    - The reasons of such a passion;
    - Different needs according to buyers;
    - A request little money;
    - And for women... The freedom;
    - The mixed: a miracle;
    - industrial - Pricing policy;
    - The charm of the feedback.

- Sports organizations II: 2 credits (30 hours); L, T, P, SPW.
  - Environment, Law and Administration II
    - Structure and internal functioning of the club;
    - Responsibilities and insurance;
    - The club and its relations with the sports movement and the local communities.

SMA235: Marketing and Strategy I and II

- Marketing of a sports organization I: 2 credits (30 hours); L, T, P
  - The different facets of sports marketing
    - The sponsorship;
    - The Naming;
    - The patronage;
    - Public relations; - the right of the sport.
  - The new practices
    - The specialized agencies;
    - The new actors;
    - The importance of the segmentation.

- Strategy and planning of a sports club I: 1 credit (15 hours); L, T, P
  - Segmentation and strategic positioning;
  - The variables of the marketing mix;
  - Communication and advertising.

- Marketing of a sports organization II: 2 credits (30 hours); L, T, P, SPW
  - The actors of the sport;
  - The marketing teams and sports events;
  - The marketing of the products through the sport;
  - The sponsorship of events;
  - Sponsorship of league;
  - Advertising during sports events;
  - Television advertising;
✓ during sporting events of dissemination;
✓ using the image of athletes known worldwide.

- **Strategy and planning of a sports club II: 1 credit (15 hours); L, T, P**
  - Planning and adapting;
  - Construction and Implementation of a club project

- **SMA236: Work of synthesis and sport organization I**

  - **Organization of a sports event I: 2 credits (30 hours); L, T, P, SPW**
    - Analysis of the environment and choice of a strategy;
    - The planning and management of the project;
    - The sponsorship;
    - The relationship with the media.

  - **Sport Sponsorship I: 1 credit (15 hours); L, T, P, SPW**
    - Different types of sponsorship;
    - The issues of sponsorship for the enterprises;
    - The needs assessment;
    - The formulation of the offers:
      ✓ The folder;
      ✓ the counterparties.

  - **The work of Synthesis I: 1 credit (15 hours); T, P**
    - A dozen of practical cases mounted and animated by a group of teachers of the specialty.

- **SMA245: Work of synthesis and sport organization II**

  - **The work of Synthesis II: 2 credits (30 hours); T, P**
    - A dozen of practical cases mounted and animated by a group of teachers of the Specialty.

  - **Organization of a sports event II: 2 credits (30 hours); L, T, P**
    - The legal aspects;
    - The insurance of risks events;
    - Evaluation of results.

  - **Sport Sponsorship II: 2 credits (30 hours); L, T, P**
    - The plan of Action:
    - The targeting;
    - The startup:
      ✓ how to establish the first contact.
      ✓ The agreement (convention of partnership);
      ✓ The implementation of the partnership.
SMA237: Legal environment and creation of business

- Business law I: 1 credit (15 hours); L, T
  1. The status of trader
  2. The acts of commerce
  3. business
  4. The different commercial contracts

- Civil law: 1 credit (15 hours); L, T, P
  1. Definition, characters, the branches and the sources of the law
  2. The field of application of the Act
  3. The dimensions of the law (objective, subjective right)
  4. The Legalorganization
  5. The right to legalpersonality
  6. The civil status, the name and the Domicile
  7. The Disabilities
  8. The legalacts
  9. The legalfacts

- Creation of business: 1 credit (15 hours); L, T, P, SPW
  - Concept of contractor;
  - Motivations to the creation of company;
  - Search for ideas and evaluation;
  - Researchfunding;
  - Choice of legal status; - Ethical aspects of the business; - Preparation of the business plan.

SMA246: Professional internship

- Professional Internship: 6 credits (90 hours); P, SPW
  1. Arrival and Business Integration
  2. Working in a company
  3. The holding of the Intern journal
  4. The choice of the theme of work: in collaboration with mentors professional academic and
  5. Elaboration of the canvas of research
  6. The resources to operate
  7. The organization of work
  8. Drafting of the report
  9. Presentation of the report before a jury
SMA247: Legal environment and civic education

- Business law II: 1 credit (15 hours); L, T
  1. Definition, Object and forms of commercial companies
  2. The creation of commercial companies
  3. The operation of the Commercial Companies
  4. The dissolution of commercial companies

- Labor law: 2 credits (30 hours); L, T, P
  1. Definition of the labour law, birth and evolution of labor law and sources
  2. The contract of work (conclusion, implementation and rupture)
  3. The conflicts of work (individual and collective)
  4. The staff delegate, unions
  5. Work accidents and occupational diseases
  6. The hygiene and safety in the workplace

- Civic Education and Ethics: 1 credit (15 hours); L, SPW
  The Concepts
  - The citizen;
  - The Nation;
  - The State;
  - Public Property unto collective property;
  - The freedoms;
  - The public service;
  - Problem of ethics;
  - Ethics, Law and reason;
  - Management and ethics of responsibility;
  - Ethics and management.
  - Ethics
  - Civics
  - Deontology
  - Moral consciousness
  - The universal declaration of Human Rights
  - Good governance in public services
  - Explain the importance of civics to the life of the nation
  - Functions of the state and its citizens
  - Deontology, Professional ethics and professionalism
  - Relationship between morality, law and ethics
  - Codes of ethics
Field : MANAGEMENT

Specialty :

INFORMATION SYSTEMS MANAGEMENT
1. The objective of the training

The objective of this specialty is to train experts in the use of the computer by participating in the production and supply of services, through the realization or adoption of infrastructural solutions and ensuring the optimal functioning of equipment.

2. Skills Sought After

   → General skills
   - Update technical documentation;
   - Coordinate the different stages of a project;
   - Manage the circulation of information;
   - Manage the working equipment.

   → Specific Skills
   - Carry out study on the state of the art of the infrastructure;
   - Take charge of the relationship with suppliers and information technology service providers;
   - Measure and regulate the performance of infrastructure, equipment or computer services;
   - Install, integrate, administer, and secure the equipment and computer services;
   - Ensure the exploitation, supervision and maintenance of an infrastructure;
   - Define and configure machines, servers and interconnection equipment, and ensure their deployment and maintenance for customers;
   - Manage infrastructure assets;
   - Search for responses adapted to the evolving infrastructural needs or to problems related to the provision of computer services;
   - Resolve problems and assist users;
   - Maintain the quality of computer services;

3. Outlets

   - Systems and network administrator;
   - Support and deployment computer expert;
   - Operating pilot;
   - Infrastructure technician;
   - Production technician;
   - Network and micro technician;
   - Systems and network technician;
   - Telecommunication network technician
4. Organization of the Teachings

Semester 1

<table>
<thead>
<tr>
<th>Field: MANAGEMENT</th>
<th>Specialty: INFORMATION SYSTEMS MANAGEMENT</th>
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<tbody>
<tr>
<td><strong>CODE</strong></td>
<td><strong>Course title</strong></td>
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<tr>
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<tr>
<td><strong>Fundamental courses 30% (2 UC) 9 credits 135 hours</strong></td>
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<tr>
<td>MIS111</td>
<td>Quantitative techniques of management I</td>
</tr>
<tr>
<td>MIS112</td>
<td>Management Tools I</td>
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<tr>
<td><strong>Professional courses 60% (4 UC) 18 credits 270 hours</strong></td>
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<tr>
<td>MIS113</td>
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<tr>
<td>MIS114</td>
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<tr>
<td>MIS115</td>
<td>Networks I</td>
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<td>MIS116</td>
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Semester 2

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<td><strong>Fundamental courses 30% (2 UC) 9 credits 135 hours</strong></td>
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<tr>
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<td><strong>Professional courses 60% (4 UC) 18 credits 270 hours</strong></td>
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<td>Methodology and users access II</td>
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<tr>
<td>MIS233</td>
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<td>Network synthesis and Administration I</td>
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<td>System Administration I and II</td>
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### Semester 4

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<td>MIS245</td>
<td>Network synthesis and Administration II</td>
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<td>Legal environment and Civic education</td>
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5. Courses content

❖ MIS 111: Quantitative techniques I

➢ General Mathematics I: 3 credits (45 hours); L, T, SPW
  - Algebra vector spaces
    1. Polynomials
       - Polynomials characteristics.
    2. Vectorspace
       - Linear applications.
    3. Matrices
       - Operations on the matrices;
       - Matrices associated with a linear application;
       - Matrices and determinants.
    4. The Determinants
       - Determinant of a square matrix;
       - Calculation of determinants of order less than or equal to 3.
    5. Linear Systems
       - Inversion of matrix of order less than or equal to 3 - method of Gauss;
       - Resolution of systems of linear equations by the method of Pivot;
       - Application of matrix calculation on the resolution of systems of linear equations.
    6. Reduction of square matrices
       - Own values;
       - Own vectors.
    7. Differential equations and linear récurrentielles of order 2 with constant coefficients
    8. Mathematical applications in Economics and Management

➢ Statistics and probabilities: 2 credits (30 hours); L, T, SPW
  1. Statistical series to a variable
     - Definition and vocabulary;
     - Graphical representation;
     - Characteristics of central tendency and dispersal characteristics:
       - Average;
       - Mode;
       - Median;
       - Gap-type;
       - Quantiles;
       - Coefficient of variation.
  2. Statistical series of two variables
     - Definition and vocabulary;
     - Cloud of points;
     - Average point;
     - Covariance and covariance matrix of 2 variables;
     - The coefficient of correlation and regression;
     - Linear adjustment by the method of least squares; adjustment not linear - seasonal coefficients and forecasts.
MIS 121: Quantitative techniques II

- General Mathematics II: 3 credits (45 hours); T, P, SPW
  Analysis
  1. The Real Numbers
  2. Numerical Functions of a real variable, limit, Continuity
  3. Differentiability, extrema, theorem of Roll and finished increases
  4. Polynomials, fractions, rational
  5. Study and graphic representation, reciprocal Functions
  6. Limited developments, integrals and applications to calculations of Aires
  7. Logarithmic functions and exponential
  8. Digital Suites: Direction of variation, convergence
  9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
  10. Mathematical applications in Economics and Management

- Statistics and Probability II: 2 credits (30 hours); L, T, P, SPW
  1. Estimation of an average, a proportion and a standard deviation
  2. Confidence interval and confidence coefficient
  3. Tests of assumptions and the KHI-two
  4. Algebra of the sets. Applications. Counts

MIS 231: Quantitative techniques III

- Probabilities I: 3 credits (45 hours); L, T, P, SPW
  - Basic Set linked to a random experiment, probabilisation, conditional probability, formula of Bayes, tests of Bernoulli;
  - Random variables discrete, law of probability, distribution function.

- Operational research I: 2 credits (30 hours); L, T, P, SPW
  - Concepts of the Combinatorial Optimization: Constraints/objectives, achievable solution/optimal, terminals, local optima, etc.;
  - Graph Theory: modeling, staining, paths, trees masking fluid, waves...
  - The programmation linear:
    • Program to two variables;
    □ program to more than two variables.
  - The algorithm of the simplex - the method of the table:
    • Analysis of the final table of the simplex; □ problem of duality □; the management of stocks.

MIS 241: Quantitative techniques IV

- Probabilities II: 2 credits (30 hours); L, T, P, SPW
  - Random variables (continuous density, hope, variance, standard deviation, moments);
  - Conventional laws: binomial, normal, fish, exponential.

- Operational Research II: 3 credits (45 hours); L, T, P, SPW
  - The problems of Sequencing - General Information on the graphs: The PERT method:
Applications on the PERT.
- The choice of investments in deterministic universe:
  - Modeling;
  - Decision in Uncertain future;
- Problems of Transport;
- Problems of assignment.

**MIS 112: Tools of Management I**

- **General Ledger I:** 2 credits (30 hours); L, T, P, SPW
  1. **General information**
     - Definition, evolution and the role of the accounting;
  2. **The balance sheet**
     - Concept of Employment and Resource
  3. **The account and the principle of the double part**
  4. **The accounting transfer**
  5. **The accounting systems (conventional and computerized)**
  6. **Purchase and sale of the goods**
     - The elements that decrease the invoice (reductions);
     - The elements that increases the invoice (transportation costs, VAT, packaging: see only logging and deconsignation).

- **Basics of programming and applied Algorithm I:** 2 credits (30 hours); L, T, P.
  - Structured programming, control structures, sub Programs, structured types-classes without method, on to multiple dimensions, functions, files, XML, introduction to the OOP;
  - Application in Visual Studio (Visual Basic or C) or Java and in other hand integration of PHP in Web pages and association of the couplePHP/MySQL. Practical on Eclipse for example.

**MIS 122 : Management tools II**

- **General Accounting II:** 2 credits (30hours); L, T, SPW
  1. **The Regulations**
     - In cash (broken, bank);
     - A term (effect of trade: creation, cashing).
  2. **The significant balances of Management (industrial and commercial company)**

    **NB :** do not see the movement of the effects of trade.
  3. **Concept of amortization (constant and degressive)**
     - Terminology;
     - Calculation (Table of Depreciation of assets placed in service at the beginning and the course of exercise).
  4. **Concept of**
     - Provision for depreciation; for charges and losses.

    **NB :** for the chap IX and X and present the Extract from the balance sheet (brief study and practice).
Basic instructions and algorithms applied II: 3 credits

1. General information
   - Fundamental Concepts: Algorithm, finitude, modularity, Identifier, constant, variable, function, procedure, numeric expression, Conditional Expressions Boolean and ...

2. Manipulated data
   - Simple types: natural Integer, Integer, real, boolean, String;
   - One or two dimensional tables of a homogeneous type;
   - two dimensional tables consisting of one dimensional tables which most at times are not homogenous;
   - Entry Parameters, values returned by a function, global variables or local.

3. Basic instructions and operators used
   - Read, writing;
   - Assignment, recursive assignment (the assigned variable participating to the evaluated expression);
   - Numeric operators: addition, subtraction, multiplication, division, exponentiation, quotient and modulo signs;
   - usual Mathematical functions;
   - Comparison operators: =, <> or !=, <, <=, >, >= ;
   - Boolean operators: NOT, AND, OR, XOR;
   - Boolean operators NOT, AND,XOR;
   - Bitwise Boolean logic;
   - String operators: concatenation;
   - Functions allowing for the extraction in the beginning, middle or end;
   - Other instructions

MIS 232: Management tools III

Legal analysis of computer services I: 2 credits (30 hours); L, T, P, SPW
   - The fundamental principles of the law applied to the sector of the informatics and of the digital;
   - The computer scientist employee and the right of the work;
   - The legal environment for the production and provision of services.

Analytical accounting and budgetary management I: 2 credits (30 hours); L, T, P

1. Of the general ledger to the analytical accounting
   - Generality on the analytical accounting (objectives, role, concept of load)

2. Analysis of expenses
   - Loads liable and not liable;
   - Direct costs and indirect;
   - Suppletiveloads;
   - Allocation of Indirect Costs.

3. Valuation of stocks (FIFO method, LUP)

4. The full costs (cost of purchase, cost of production, introduce the stocks)
   - do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products).

5. Partial costs
6. The Rational Importance of loads of structure

- The variable costs;
- The marginal costs.

MIS 242: Management Tools IV

- **Legal analysis of computer services II**: 2 credits (30 hours); L, T, P, SPW
  - The legal protection of the tools and digital productions;
  - The security of the systems of information;
  - The liability of service providers’ external and internal system of information.

- **Analytical accounting and budgetary management II**: 2 credits (30 hours); L, T, P
  1. **The predetermined costs**
     - Identification of gaps on direct costs and indirect and algebraic analysis of these differences (exclude the graphic analysis).
  2. **The Budgets (brief study and practice)**
     - The budgets of the sales;
     - The production budgets;
     - The budgets of supply; □ budgets of investment; □ budgets of cash flow.

MIS 113: User Access I

- **User Access System Support I**: 2 credits (30 hours); L, T, P, SPW.
  - The hardware;
  - Operating systems (Windows, Linux and MacOS);
  - Types of application and data format;
  - Real practical work or simulation with Cisco Virtual Desktop for the hardware part.

- **User Access Network support of I**: 2 credits (30 hours); L, T, SPW.
  - Number system (Bases 2, 8, 10 and 16);
  - Data coding (analog data, digital data, integers coding, floating point coding, character coding);
  - Networks technologies (generalities, communication, protocols, communication media, nodes, detailed study of a NIC);
  - Local networks (networks typologies, the topologies of the networks, Ethernet standards and bandwidths, the frames switching of, the CSMA/CD, the Wi-Fi, the CPL).

MIS 123: Methodology and users access II

- **Methodology of the drafting of the report of internship**: 1 credit (15 hours); L, P
  - The collection of information;
  - How to make a report;
  - The plan of the Probationary report and the summary;
  - The Table of material;
  - The introduction of the report of internship;
- The conclusion of the internship report;
- The acknowledgments;
- How to build the annexes;
- When to start his internship report;
- How to find a subject of internship report;
- The cover page;
- How to write effectively;
- Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations);
- Instructions and typographical rules of presentation (police, spacing, titles, highlighted, punctuation, graphic charter);
- How to prepare the defense.

➢ System Support Of User Access II: 2 credits (30 hours); L, T, P
- Practice with Windows Seven;
- Linux and MacOS for the party and fast initiation to the tools of an office suite;
- Virtualization of physical environments and logic aid VMWare and/or HyperV And/or VirtualBox, etc.

➢ Network support of User Access II: 3 credits (45 hours); L, T, P, SPW
- The numbering systems (Bases 2, 8, 10 and 16);
- The coding of information (the analog data, the digital data, the coding of integers, the coding of real numbers to floating point, the character encoding);
- The technologies of networks (general information on the networks, the communication media, the point of connection to the network, the communication protocols, detailed study of a network card);
- The local networks (the typologies of networks, the network topologies, standards
- Ethernet and bandwidths, the switching of the frames, the CSMA/CD, the wifi, Cpl);  
- The OSI and TCP/IP models (the reasons of the standardization and the main actors, the OSI model and the communication between the layers, introduction and configuration of static VLANS, the TCP/IP model, composition data in the different layers);
- The IP addressing (the IP protocol, the different classes of the IPv4 addressing, network masks, addresses of networks and addresses of broadcast, public addresses and reserved addresses, differences between Internet and Ethernet, IPv6 or IPng, the DHCP server);
- The sub-IP networks (reason to be sub-networks, work on the sub-networks, exploration). Configuration of equipment networks (switches and routers); - T and P in real environments and virtual.

❖ MIS 114: Service media Management I

➢ Service Support and servers I: 2 credits (30 hours); L, T, SPW
- interconnection technologies (repeaters, hubs, bridges, switches, routers, gateway application, manageable equipment);
- The routing (general principle, Routing TCP/IP packets, the static routing, the routing tables, Internet Routing, the Dynamic Routing with RIP and OSPF);
- The client/server architecture (Presentation, operation, the clients, architecture n third party, the 5 models of client/server).
- Exploiting Data Scheme I: 3 credits (45 hours); L, T, P, SPW
  - Information system Definition If;
  - Information system Objectives;
  - Information system conception;
  - Use of MERISE in conception;
  - Computerization or automation (Master plan, prior study by area, detailed study by project, production, implementation, maintenance).

- MIS 124: Service support Management II

- Service Support and servers II: 2 credits (30 hours); L, T, P
  - System Administration (Windows Server 2000 and Linux);
  - communications encryption (definitions, mechanisms, achievements of the encryption, the SSL/TLS protocols, a few context of use);
  - Practical with a tool in the domain.

- Exploiting Data scheme II: 2 credits (30 hours); L, T, P
  - Practical work of generating a database with a tool for software engineering workshop and reverse engineering with a tool like DB-MAIN

- MIS 115: Network I

- Introduction to maintenance of users Access I: 2 credits (30 hours); L, T, P, SPW

  General information on data backup
  - Definitions;
  - Restoring;
  - Storage, DRA (Disaster Recovery Activities);
  - Choice of a backup technical;
  - Backup Strategies, client workstation;
  - Remote machine or servers;
  - Internet;
  - types of backup;
  - Mechanism;
  - Full backup;
  - Differential backup;
  - Incremental backup.

- Development of applications I: 2 credits (30 hours); L, T, SPW
  - Reading file structured;
  - Access to a RDBMS;
  - Support for HMI;
  - Support for HMI;
  - Documentation generation.
### MIS 125: Networks II

- **Introduction to maintenance of users Access II**: 2 credits (30 hours); L, T, P, SPW
  
  Windows security system model
  
  - security on an O/S;
  - basic mechanisms;
  - Security standards;
  - Class C2 security requirements;
  - Level B of Windows Features;
  - Windows Security component;
  - Windows logon types;
  - LSASS (Local Security Authority Subsystem Service);
  - SRM (Storage Resource Management);
  - Example of DACL (Discretionary Access Lists).

- **Application Development II**: 2 credits (30 hours); L, T, P, SPW
  
  - Units tests;
  - Versionning;
  - Use of a RAD such as VB.NET or any other software allowing to make the Event Programming or layer programming.

### MIS 116: Programming I

- **Design of infrastructure networks I**: 2 credits (30 hours); L, T, SPW
  
  - Reminders on TCP/IP (local networks, introduction to IP, Anatomy of an IP address, protocols, IP, TCP, UDP);
  - Switching and VLANS;
  - The 802.1Q (SP);
    - The 802.1p (VP static and dynamic).

- **Object oriented Programming I**: 3 credits (45 hours); L, T, P, SPW
  
  - Dependencies;
  - Reflexive associations;
  - Interfaces;
  - Abstract classes;
  - The multithreading;
  - The Object classes;
  - The polymorphism;
  - Cloning container classes;
  - The delegates;
  - Generics;
  - Advanced collections (arrays).

### MIS 126: Programming II

- **Design of networks infrastructure II**: 2 credits (30 hours); L, T, P, SPW
- The techniques and the routing protocols static and dynamic, routing protocols, IP tunnel, proxy, firewall, IP filtering, the NAT and PAT, the FP active and passive, access lists;
- The application protocols;
- P in real virtual environments.

- Object oriented Programming II: 2 credits (30 hours); L, T, P, SPW
  - The class diagram, sequence, the use case, State-transition activity;
  - Generation of classes from a diagram of class;
  - Integration of Object Constraint Language;
  - Development of GUI with Visual Studio or Java swing

- MIS 117: Bilingual training I and Economic environment I

- French expression: 1 credit (15 hours); L, T
  1. Vocabulaire
     - Vocabulaire technique usuel
  2. Grammaire
     - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
     - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
     - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
     - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
     - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
     - Des fonctions grammaticales.
  3. Expression et communication
     - Compréhension et interaction au cours d’une discussion technique ;
     - Communication orale courante ;
     - Communication orale interactive
     - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
     - Lecture rapide et compréhension de texte ;
     - synthèse d’un long texte
     - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance – d’une lettre recommandation ou de motivation, d’une demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
     - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
     - Expressions figées

- General Economics: 2 credits (30 hours); L, T, P
  1. Business and production
2. Households and the consumption
3. Markets and Prices
4. Training and distribution of income
5. The currency and the financial of the Economy
6. The elements of the National Accounts
7. The "macro-econmic equilibrium"
8. The socialist system
9. The "capitalist" economy
10. The "State and its interventions"
11. The foundations of international trade
12. International payments
13. The balance of payments
14. Economic development and its inequalities
15. Growth and its inequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of problems
18. The development strategies
19. The "economic integration and the forms of cooperation in the world;"
20. The strategies of the "International Debt"

**MIS127: Bilingual training II and Economic Environment II**

- **English Expression:** 1 credit (15 hours); L, T, SPW
  1. Vocabulary
     - Technical and usual vocabulary of the specialty
  2. Grammar
  3. Bilingual expression
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. Autonomous reading of "writings" of all levels
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. Write clear, detailed texts
     - Essay writing;
     - Application for employment;
     - C.V. ;
     - Letter of motivation;
     - Letter/memo writing and minutes of a meeting

- **Economy and organization of enterprises:** 2 credits (30 hours); L, T, P
  - The Enterprise, definition and mode of analysis;
  - Classification of Entreprises ;
  - The Organisational Structure of enterprises ;
• The insertion of the company in the economic fabric;
• The commercial activity of the enterprise;
• The productive activity of the enterprise;
• Logistics in the enterprise;
• The financial activity of the enterprise;
• The management of human resources;
• The systemic approach of the enterprise;
• Information system;
• The decisionmaking process
• The strategic analysis of the company;
• Choice and implementation of a strategy;
• The business, society and culture;
• The business, society and the Ethics.

**MIS 233: Software components Transition management I**

- **Design and adaptation of applicative solutions I:** 2 credits (30 hours); L, T, P, SPW
  - The problems and principles of software engineering;
  - The quality of the Software;
  - The conduct of IT project;
  - The phases of development or the 7 stages of the software are's life of a software.

- **Achievement and maintenance of software components I:** 2 credits (30 hours); L, T, P, PE
  - Why model;
  - The Software Engineering (actors and method);
  - object approach, classes, the encapsulation, the inheritance, polymorphism, the aggregation, etc.;
  - The Object Modeling with UML;
  - UML - Structure/Static, Classes diagram (classes diagram), objects diagram (Object diagram), Diagram Of Components (component diagram), deployment diagram (deployment diagram), diagram of packages (Package diagram).

**MIS 243: Software components Transition Managements II**

- **Design and adaptation of application solutions II:** 2 credits (30 hours); L, T, P, SPW
  - The life cycle of A software;
  - The models of the life cycle, the cascade model, the model in V, the model in spiral, the iterative model;
  - Many practical work on the Java platforms, Visual Studio, without forgetting Android and SQLite.

- **Achievement and maintenance of software components II:** 2 credits (30 hours); L, T, P, SPW
  - Diagram of composite structures (Composite structure diagram);
  - UML - Behavior/dynamic, diagram of case of use (use case diagram), diagram of activities (activity diagram), diagram of member-transitions (state machine diagram).
diagram), Sequence diagram (Sequence Diagram), diagram of the communication (communication diagram), Global diagram of interaction (global interaction diagram), Diagram of time (Timing Diagram).

**MIS 234: Services operations management of I**

- Operating the services I: 1 credit (15 hours); L, T, P, SPW
  - BSD sockets and architecture of servers (general information on sockets of Berkeley, supplements on the sockets in Berkeley, elements of servers, Anatomy of a Web server);
  - Configuration of the different services (DHCP, DNS, mail.).

- Design and adaptation of a database I: 2 credits (30 hours); L, T, P
  - Programming with mysql such stored procedures and triggers (triggers).

**MIS 244: Management of operations of Services II**

- Operation of services II: 2 credits (30 hours); L, T, P
  - Practice of a backup of data users and data equipment networks;
  - QoS management;
  - Establishment of a PRA;
  - P in real environments and virtual installation and configuration of a Web server (lamp, WAMP XAMP, and other).

- Design and adaptation of a database II: 2 credits (30 hours); L, T, P, SPW
  - Programming with mysql such stored procedures and triggers (triggers).

**MIS 235: Work of synthesis and Network Administration I**

- The work of Synthesis I: 2 credits (30 hours); T, P
  - A dozen of practical cases mounted and animated by a group of teachers of the specialty.

- Integration and adaptation of a service I: 1 credit (15 hours); L, T, P
  - Automation of tasks; - Drafting of A user manual;
  - Clustering of database.

- Maintenance of users Access I: 1 credit (15 hours); L, T, P, SPW
  - The securitydescriptors;
  - Objectsprotection;
  - ACL;
  - The token ;
  - The SID;
  - Example of Control access;
  - audit Strategy ;
  - The certificates;
  - SSH and TLS (purpose, the uses of X509, the hash, the secret key, private and public, the certificates, SSH, SSH tunneling, HSL, and TLS).

**MIS 245: Network synthesis and Administration II**
Synthesis work II: 2 credits (30 hours); T, P
- A dozen of practical cases mounted and animated by a group of teachers of the specialty.

Integration and adaptation of a service II: 1 credit (15 hours); L, T, P, SPW
- Full and incremental backup and then restore a database;
- Various advanced concepts in the management of databases; - P with MYSQl.

Maintenance of users Access II: 1 credit (15 hours); L, T, P
- The data backup of NAS and SAN.

**MIS 236: Systems Administration I and II**

Systems Administration I: 2 credits (30 hours); L, T, P, SPW
- Installation;
- Configuration and Administration of a Windows server environment and a Linux environment;
- Automation of management tasks with Powershell and the bash.

Networks Supervision I: 1 credit (15 hours); L, T, P, SPW
- The SNMP protocol;
- The monitoring with the tools such as Nagios.

Systems Administration II: 2 credits (30 hours); L, T, P, SPW
- Encryption and security of systems; encryption and system security
- Remote administration;
- The SSH, etc.;
- Practice at least on two systems environments.

Networks Supervision II: 2 credits (30 hours); L, T, P, SPW
- The monitoring with tools such as Nagios;
- CACTI and other;
- Practice.

**MIS 237: Legal Environment and Creation of enterprises**

Law on Commercial Companies I: 1 credit (15 hours); L, T
1. The status of trader
2. The acts of commerce
3. The fund of commerce
4. The different commercial contracts

Common law: 1 credit (15 hours); L, T, P
1. Definition, characters, the branches and the sources of the law
2. The field of application of the Act
3. The dimensions of the law (objective, subjective right)
4. The Legal organization
5. The right to legal personality
6. The civil status, the name and the Domicile
7. The Disabilities
8. The legalacts
9. The legalfacts
Creation of enterprise: 1 credit (15 hours); L, T, P, SPW
- Concept of contractor;
- Motivations to the creation of company;
- Search for ideas and evaluation;
- Research funding;
- Choice of legal status;
- Ethical aspects of affaires;
- Preparation of the business plan.

MIS 246: Professional internship

Professional Internship: 6 credits (90 hours); P, SPW
10. Arrival and Business Integration
11. Working in a company
12. The holding of the Intern journal
13. The choice of the theme of work: in collaboration with mentors professional academic and
14. Elaboration of the canvas of research
15. The resources to operate
16. The organization of work
17. Drafting of the report
18. Presentation of the report before a jury

MIS 247: Legal Environment and Civic Education

Law on Commercial Companies II: 1 credit (15 hours); L, T
1. Definition, Object and forms of commercial companies
2. The creation of commercial companies
3. The operation of the Commercial Companies
4. The dissolution of commercial companies

Labor law: 2 credits (30 hours); L, T, P
1. Definition of the right of labor, birth and evolution of labor law and sources
2. The contract of work (conclusion, implementation and rupture)
3. The conflicts of work (individual and collective)
4. The delegate of the staff, unions
5. Work accidents and occupational diseases
6. The hygiene and safety in the workplace

Civic Education and Ethics: 1 credit (15 hours); L, SPW
The Concepts
- The citizen;
- The Nation;
- The State;
- Public Property unto collective property;
- The freedoms;
• The public service;
• Problem of ethics;
• Ethics, Law and reason;
• Management and ethics of responsibility;
• Ethics and management.
• Ethics
• Civics
• Deontology
• Moral consciousness
• The universal declaration of Human Rights
• Good governance in public services
• Explain the importance of civics to the life of the nation
• Functions of the state and its citizens
• Deontology, Professional ethics and professionalism
• Relationship between morality, law and ethics
• Codes of ethics
Field: MANAGEMENT

Specialty: LOCAL GOVERNMENT MANAGEMENT

Option: ACCOUNTING AND FINANCE
1. The objective of the training

This specialty aims to train senior technicians responsible for the management of municipalities, divisions, regions and groupings using the innovative methods of management and finance such as: retrospective and prospective financial and fiscal analysis; intercommunal strategy and pooling of means; decentralized cooperation; choice of investments; financial communication; the consolidation of accounts and risks; the management of debts and treasuries with juridico-financial stakes borrowings; the automation of programs of engagement and financial regulation.

2. Expected skills

→ General Skills
  - To be able to manage a team group;
  - To master managerial and technical tools;
  - To have an editorial understanding;
  - To know how to communicate orally both in French and in English;
  - To be able to work in a team and with autonomy.

→ Specific Skills
  - Collect, process, save all information of financial accounting nature of public administrations in general and of decentralized territorial collectivities in particular;
  - Gather all the information required in the making of budgets of DTC as well as their periodic monitoring;
  - Participate in the development of budgets of Territorial Communities and their controls;
- Mastering the financial consequences of investment and financing politics of territorial collectivities;
- Accompany a project in its legal aspects, human resources, evaluation, and ICT.

3. Career opportunities

- Public accountants;
- Paying Treasurers;
- Cashiers;
- Finance officiers;
- etc.
4. Organization of the Teachings

- **First semester**

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- **Second semester**

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**Total** 175 130 110 35 450 30
### Third semester

**Field: Management of Local Government**  
**Specialty: Management of Local Government**  
**Option: Accounting and finances**

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### Fourth semester

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**Specialty: Management of Local Government**  
**Option: Accounting and finances**

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SPW: Students’ Personal Work
5. Courses Content

❖ AFI111: Accounting and Computer sciences I

➢ General accounting I: 2 credits (30 hours); L, T, P

1. General information
   ▪ Definition, evolution and the role of the accounting;

2. The balance sheet
   ▪ Notion of application and source

3. The account and the principle of the double entry

4. The accounting transfer

5. The accounting systems (classical and computerized)

6. Purchase and sale of the goods
   ▪ The elements that decrease the invoice (reductions);
   ▪ The elements that increases the invoice (transportation costs, VAT, packaging expenses; excluding consignments.

➢ General Computing I: 1 credit (15 hours); L, T, SPW

A- The Hardware

1. The peripheral components
   ▪ The devices of input
   ▪ The output devices (storage devices)
   ▪ The devices of input and output

2. The central unit
   ▪ The central memory
   ▪ The microprocessor
   ▪ The windows
   ▪ The motherboard
   ▪ The chipset
   ▪ The power supply
   ▪ The cards of extension
   ▪ Other internal organs

3. The unit of exchange (or bus)
   ▪ Role
• Types of bus:
  - Data bus;
  - Control bus;
  - Address bus.

B- The software

1. The application software
   • Definition
   • Role
   • Types and examples of software

2. The basic software (or software systems)
   • Definition
   • Types of basic software:
     - The drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation.
   • Features
   • Roles
   • Types of operating system
   • Structure of an operating system
   • Architecture
   • Concept of free software and proprietary software

System of numeration and Codification

A- The numbering systems

1. A few basic concepts
   • The base of the system;
   • Weight
   • Alphabet of the language
   • Format of the word (length of the word)
   • Power of language

2. A few numbering systems
   • The decimal system
   • The binary system
   • the octal system
3. **The basic changes**
   - Of Decimal to another base $b$
   - To a base $b$ of any kind to the decimal basis
   - Of the binary in octal and vice versa
   - From binary to hexadecimal and vice versa

4. **Arithmetic operations**
   - Binary numbers signed
   - Exact representation
   - Representation in 2 complement
   - Addition of binary numbers
   - Subtraction of binary numbers
   - Using 2 complements in subtraction
   - Multiplication of binary numbers
   - Division of binary numbers

5. **Hexadecimal arithmetic**
   - The addition of the numbers in hexadecimal
   - Subtraction of numbers in hexadecimal

**B- The codes**

1. **General information on the concept of a code**
   - Definitions
   - Objectives of codification
   - Functional codification
   - Types of functional codes
   - Technialogical codification

2. **The alphanumeric codes**

3. **The ASCII code**
   - ASCII standard
   - ASCII limit
   - ASCII utilisation

- **Public Accounting I: 2 credits (30 hours): L, P, spw**
  - An analysis of the mechanisms of the public accounting
  - The implementation of the budget documents
General Accounting II: 2 credits (30 hours); L, T, P

1. The settlements
   - In cash (cash, bank)
   - Term (commercial bills, creation, encashment)
   **NB:** do not see the movement of the bills of exchange.

2. Trading, profit and loss account (industrial and commercial company)
   **NB:** from management accounts present the significant margins of management.

3. Concept of depreciation (constant and degressive)
   - Terminology
   - Calculation (Table of Depreciation of assets placed in service at the start and in course of the financial year)

4. Concept of Provision
   - For depreciation
   - For charges and losses
   **NB:** For the Chap. IX and X and present the “Extract of the balance sheet” (Brief study and practice).

General Computing II: 1 credit (15 hours); L, P, spw

A- Computer Networks

1. Basics
   - Definition of a computer network
   - Interest of computer networks
   - Basic vocabulary:
     - Workstation;
     - Node;
     - Server;
     - Packet.

2. Typology of networks
   - According to the media:
     - Wired networks;
     - Unwired network.
• According the Geographic Limits:
  - The local networks (LAN);
  - The metropolitan area networks (MAN);
  - The wide area networks (WAN).

3. Network Classification
• Physical classification:
  - The bus type;
  - The star type;
  - The ring type;
  - The meb type;
  - The tree type.
• Logical classification:
  - Broadcasting networks;
  - Point-to-point networks.

4. Network architectures
• Client/server architecture
• Architecture of equal to equal

5. The equipment of computer networks
• Basic network Equipements:
  - A computer;
  - A network card;
  - A server;
  - A network cable;
  - The transceiver (or adapter);
  - The transmission tools;
  - The socket.
• The equipment of interconnections:
  - Hubs (hub);
  - Switch (Switch);
  - Routers;
  - Gateways
  - The gateway (gateway);
  - The bridge (Bridge);
  - The repeaters.
6. Concept of IP addressing

- Structure of an IP address:
  - Network identifier (Net ID);
  - Identifier of host (Host ID).

- Specific Addresses:
  - Network address;
  - Machine address;
  - Broadcast Address (broadcaste);
  - Limited Broadcast address (multicast);
  - Address of rebroadcast (loopback).

- IP addressing by classes:
  - Class A;
  - Class B;
  - Class C.

B- Internet network

1. Concept of protocol

- Definitions and a some types of protocols:
  - SMP protocol;
  - POP protocol;
  - NNP protocol;
  - The FP protocol;
  - http protocol;
  - IMAP protocol;
  - Protocol TCP;
  - etc.

2. A few Internet Services

- The electronic mail
- Research on the Internet
- The Newsgroup (discussion forum)
- The transfer of files
- The Download (Download a text, download a image, download a free software...)
- The online Trade
3. The search engines
   - Definition
   - Role
   - Some search engines

4. Tools for Internet access
   - The browsers (definition, examples)
   - The plug-ins (definition, examples)
   - The search engines (definition, examples, use)

5. The connection to the Internet
   - Connection hardware
   - Suppliers of access (role, examples)
   - Types of connections (specialized line, phone line, satellite)

- Public Sector Accounting II: 2 credits (30 hours) : L,P ,spw
  - The principles of public sector accounting
  - Private accounting and public sector accounting

- AFI112: Accounting and Management I
  - Cost accounting and budgetary management i: 2 credits (30 hours); L, T, P
    1. From financial accounting to cost accounting
       - Generalities on cost accounting (objectives, role, and the concept of the charges).
    2. Analysis of expenses
       - Incorporable and non-incorporable charges;
       - Direct and indirect charges;
       - Suppletive charges;
       - Allocation of Indirect Charges.
    3. Valuation of stocks (FIFO method, LUP)
    4. The full costs (cost of purchase, cost of production, stock in progress)
NB: do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products).

5. Partial costs
   - The variable costs; - the marginal costs.

6. Rational Imputation of cost incurred by business
   - Management of control I: 2 credits (30 hours); LP, spw
     - The control of actions;
     - The control of legality.

**AFI122: Accounting and Management II**

- Cost accounting and budgetary management II: 2 credits (30 hours); L, P, spw
  1. The predetermined costs
     - Identification of gaps on direct costs and indirect cost and algebraic analysis of these differences (exclude the graphic analysis).
  2. The Budgets (brief study and practice)
     - The budgets for sales;
     - The production budgets;
     - The budgets for supply;
     - Budgets for investment;
     - The cash budget.

**AFI 113: Environment of DTC I**

- History and Evolution of the DTC: 2 credits (30 hours); L, P, spw
  - Analysis of the History of DTC in Cameroon;
  - Saying of the different types of DTC in the time.

- Organization and operation of the DTC: 2 credits (30 hours); L, P, spw
  - Organization of DTC;
  - Skills and management structures of the DTC.
AFI123: Environment of DTC II

- **History and Evolution of DTC II:** 2 credits (30 hours); L, P, SPW
  - Accuracy of different denominations of the territorial community in the political history of Cameroon;
  - Guidelines and skills in these DTC.

- **Organization and operation of the DTC II:** 2 credits (30 hours); L, P, SPW
  - Scheduling of reports between the different structures of the DTC.

AFI114: Resources and Responsibilities in the DTC I

- **The resources of the DTC and strategies for mobilizing I:** 2 credits (30 hours); L, P, SPW
  - Typology of resources of DTC;
  - Modalities of management of the said resources.

- **Responsibility of local elected representatives and collaborators I:** 2 credits (30 hours); L, P, SPW
  - Communal competence, departmental and regional authorities;
  - The local development plan;
  - Communication and Marketing of communal activities.

- **Practical aspect of decentralization I:** 2 credits (30 hours); L, T, P
  - The actual skills of the actors of the local governance;
  - Variability of skills based on the geographical determinants.

AFI124: Resources and Responsibilities in the DTC II

- **The resources of the DTC and strategies for mobilizing II:** 2 credits (30 hours); L, T, P, SPW
  - Strategies of the optimization of resources;
  - Tools/approaches geared toward the improvement of financial resources.
- Responsibility of local elected representatives and collaborators II: 2 credits (30 hours); L, T, P, SPW
  - Subsequent improvement the experience of voters on a social and educational plan amongst others; - development of the Tops points guiding the action of DTC.

- Practical aspect of decentralization II: 2 credits (30 hours); L, T, P, SPW
  - Structuring difficulties the daily reports within the CTL; - Issues and Challenges of the process of decentralization.

- **AFI115: Right to the environment and urban development I**
  - The right to the environment: 2 credits (30 hours); L, T, SPW
    - The sources of the law of the environment;
    - The principles of the law of the"Environment.
  
  - Right of the Urbanism: 2 credits (30 hours); L, T, P, SPW
    - The rules of the urbanisation;
    - The Operations development.

- **AFI125: Right to the environment and Urban development II**
  - The right to the environment II: 2 credits (30 hours); L, T, SPW
    - The institutions;
    - The protection of ecosystems.
  
  - Right of the Urbanism II: 2 credits (30 hours); L, T, P
    - The modalities of pre-emption in matters of urban planning ; - Operations of development.

- **AFI116: Tax Law and Public Finance I**
  - Introduction to the Law of Public Finance I: 2 credits (30 hours); L, T
    - History and Foundations of the right of public finance; - the control of legality; - The Budgetary Control.
- General Tax Law I: 2 credits (30 hours); L, T, P, SPW
  - Definition of the tax law and its foundations;
  - Definition of its components that are the income tax, VAT, tax on the activities, royalties and other.

📍 AFI126: Methodology, tax law and public finance II

- Methodology for drafting an internship report: 1 credit (15 hours); L, P
  - The collection of information;
  - How to make a report;
  - The plan of a probationary report and the summary;
  - The table of contents;
  - The introduction of an internship report;
  - The conclusion of an internship report;
  - The acknowledgments;
  - How to build an annexes;
  - When to start his internship report;
  - How to title an internship report;
  - The cover page;
  - How to write effectively;
  - Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations);
  - Instructions and typographical rules of presentation (police, interline, titles, highlighted, punctuation, graphic charter); - How to prepare the defense.

- Introduction to the law of public finance II: 2 credits (30 hours); L, T, P, PE
  - The analysis of accounts;
  - The management control.

- General Tax Law II: 1 credit (15 hours); L, SPW
  - Analysis of the modalities of recovery;
  - Time and Modes of payment.
AFI 117: Bilingual training I and Economic environment I

- **French**: 1 credit (15 hours); L, T
  1. **Vocabulaire**
     - Vocabulaire technique usuel
  2. **Grammaire**
     - Du verbe : conjugaison aux temps communément utilisés : présent, passé composé, imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
     - De l’adjectif : qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
     - Du nom et son article : masculin/féminin, singulier/pluriel, dénombrable, et non-dénombrable ;
     - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
     - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
     - Des fonctions grammaticales.
  3. **Expression et communication**
     - Compréhension et interaction au cours d’une discussion technique ;
     - Communication orale courante ;
     - Communication orale interactive
     - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
     - Lecture rapide et compréhension de texte ;
     - Synthèse d’un long texte ;
     - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance, d’une lettre de recommandation ou de motivation, d’une demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
     - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
     - Expressions figées

- **General Economics**: 2 credits (30 hours); L, T, P
  1. Business and production
  2. Households and the consumption
3. Markets and Prices
4. Training and distribution of income
5. The currency and financing of Economy
6. The elements of National income
7. The macro-economic equilibrium
8. The socialist system
9. The capitalist economy
10. The State and its interventions
11. The foundations of international trade
12. International payments
13. balance of payments
14. Economic development and its inequalities
15. Growth and its inequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of problems
18. Development strategies
19. economic integration and the forms of cooperation in the world
20. The strategies of International Debt

❖ AFI127: Bilingual training II and Economic Environment II

➢ English : 1 credit (15hours); L, T

1. Vocabulary
   ▪ Technical and usual vocabulary of the specialty

2. Grammar

3. Bilingual expression
   ▪ Understanding in interaction in Technical Discussions
   ▪ Continuous oral communication: Show, explain, develop, summarize, account, comment;
   ▪ Interactions oral communication

4. Autonomous reading of "writings" of all levels
   ▪ Lead by a quick reading to understand the general sense;
   ▪ Browse a text long enough to locate desired information;
   ▪ Gather information from different parts of the document or of the different documents in order to accomplish a specific task.

5. Write clear, detailed texts
- Essay writing;
- Application for employment;
- C.V.;
- Letter of motivation;
- Letter/memo writing and minutes of a meeting

➢ Economy and organization of enterprises: 2 credits (30 hours); L, T, P
   1. The company, definition and mode of analysis
   2. Classification of Enterprises
   3. The structures of organization of enterprises
   4. The insertion of an enterprise in the economy circuit
   5. The commercial activity of an enterprise
   6. The productive activity of an enterprise
   7. Logistics in an enterprise
   8. The financial activity of an enterprise
   9. management of human resources
   10. The systemic approach of an enterprise
   11. The system of Information
   12. The decision-making system
   13. The strategic analysis of an enterprise
   14. Choice and implementation of a Strategy
   15. The enterprise, society and culture
   16. The enterprise, society and the Ethics

❖ AFI231: Urban Planning and Public domain

➢ Urban planning and taxation: 3 credits (45 hours); L, T, P
   - The resources of a locality;
   - Geography of a collectivity;
   - Creating of local taxes generating activities.

➢ Public domain and Taxation: 2 credits (30 hours); L, T, P, SPW
   - The determination of the different public domains of the state; the district of contents taxable in the public domain.
AFI232: Management of DTC

- **Cash Management:** 2 credits (30 hours); L, T, P
  - Treasury operation;
  - Cashier;
  - Bank reconciliations.

- **Sectoral accounting of CTL:** 2 credits (30 hours); L, T, P
  - Administrative accounts;
  - Operating account;
  - Analytical accounting.

AFI233: Public finance and taxation

- **Public finances:** 2 credits (30 hours); L, T, P, SPW
  - The Actors of public finances;
  - The budgetary principles of public finance; - the budgetary procedures; - the control of public finances.

- **Financial management:** 2 credits (30 hours); L, T, P, SPW
  - Introduction To Financial Management;
  - Financial diagnosis;
  - Financial analysis;
  - Investment policy;
  - Measure and forecast of cash flow.

AFI234: Taxation of CTL

- **Local taxation:** 2 credits (30 hours); L, T, P, SPW
  - General provisions;
  - The local taxes;
  - The Additional council tax;
  - Municipal taxes;
  - Special provisions applicable to urban communities;
  - The tax and rate of regions;
  - The tax procedures specific to local taxes.
➢ Taxation of salaries and social contributions: 1 credit (15 hours); L, T, P, SPW

- Notion on wages;
- Calculation of social security contributions;
- Calculations of salaries;
- Determination and accounting for taxes on wages; - the graceful recourse mechanism.

➢ Public Markets and Taxation: 2 credits (30 hours); L, T, P, SPW

- Public Procurement and VAT;
- Public procurement and taxes on income; - public procurement and withheld at the source; - public procurement and other taxes.

❖ AFI235: Litigation and Administration of CTL

➢ Litigation of local taxation: 1 credit (15 hours); L, T, P, SPW

- The means of seiror;
- Competence and delay of seiror;
- Contentious remedies.

➢ Litigation of public finances: 1 credit (15 hours); L, T, P, SPW

- The types of litigation;
- The means of seiror;
- Competence and delay of seiror;
- The contentious remedies.

➢ Deliberations, decisions and orders of the DTC: 1 credit (15 hours); L, T, P, SPW

- Elaboration of these decisions;
- The nomenclatures;
- Time limits;
- Scope of these categories of acts; - skills; - Applications.

➢ The elaboration and the implementation of the budget of the CTL: 2 credits (30 hours); L, T, P

- The basics of a budget;
- Accounting principles;
- The budgetary principles;
- Revenues and expenditures of the DTC;
- Budgetary nomenclature;
- Steps for Elaboration of a Budget: adoption and approval of the budget;
- The roles and functions of a authorising officer, the accounting officer and imprest administrators;
- Operations of execution of revenue and expenditure of a DTC;
- Establishment of the documents of end of management;
- Communication around the execution of a budget and the restitution of the results to the population;
- Control of the execution of a budget.

**AFI236: Administrative management and work of Secretariat duties**

- **Administrative Management:** 2 credits (30 hours); L, T, P, SPW
  - Concept of archives;
  - Definition and Characteristics of an archives;
  - Actors of the classification and of archiving;
  - Categories of records to classify and the different ages for archiving;
  - Conservation of archives;
  - Ranking;
  - Classification Plan;
  - The coding and storage;
  - Communication of the archives;
  - Definition of the communication of archives;
  - The research instruments.

- **The Secretariat duties:** 2 credits (30 hours); T, P
  - The computerized management of desktop, applications and folders;
  - The treatment of text and the mail;
  - Table and documents editing;
  - The concepts of professional communication;
  - Reception and telephone management;
  - The Internet and electronic mail.
**AFI237: Legal environment I and Business creation**

- **Business Law I: 1 credit (15 hours); L, T**
  - The status of a trader;
  - The acts of trade;
  - Goodwill;
  - Commercial contracts and its type.

- **Civil law: 1 credit (15 hours); L, T, P**
  - Definition of law
  - Characteristics
  - Classification
  - Sources
  - Degree of application
  - The dimensions of law (objective and subjective law)
  - The judicial organisation
  - The concept of legal personnality
  - The civil status act, the name and the domicile
  - Incapacity
  - Judicial acts
  - Legal acts

- **Creation of a business: 1 credit (15 hours); L, T, P, SPW**
  - Concept of entrepreneur
  - Motivations to the creation of a business
  - Search for ideas and evaluation
  - Souring of funding
  - Choice of legal status
  - Ethical aspects of a business
  - Elaboration of the business plan

**AFI241: Human Resources and Quality**

- **Human resources management: 3 credits (45 hours); L, T, P, SPW**
  - The Evolution of HRM (definition, basic concepts, issues);
  - Predictive management of a job (content, methods, issues);
• Practice of HRM (management of individual relationships: recruitment, training, animation, motivation, conditions of work; social dialog; techniques at the service of social dialog and crisis of social dialog);
  • Elements of payroll management;
  • Evaluation of the performance of HRM.
  • Place of HRM in the overall strategy of the business.

➢ Quality, Hygiene, Safety and the Environment: 2 credits (30 hours); L, T, P, SPW
  • Safety at Work;
  • Prevention of risks;
  • Hygiene and sanitation;
  • System of Management QSE;
  • Environment;
  • Safety; - quality.

❖ AFI242: Financial regime and Audit of DTC

➢ Audit of Municipal Account: 2 credits (30 hours); L, T, P, SPW
  • Regular accounting
  • Probable accounting;
  • Sincere accounting.

➢ Financial regime of DTC : 2 credits (30 hours); L, T, P, PE
  • The resources of a State;
  • Responsibilities of the state;
  • The programs of economic development;
  • Social development programs;
  • Cultural development programs; -
  • The different forms of laws finance.

❖ AFI244: Local public services and collection of Local taxes

➢ Local public services: 1 credit (15 hours); L, T, P
  • Nomenclature of local public services;
  • Levels of competence in these services;
  • Management of these type of services.
Procedures of control for the recovery of local taxes: 2 credits (30 hours); L, T, P
- The structures of control and recovery;
- The mechanisms of control and recovery;
- The guarantees of a control and recovery;
- Competences and remedies.

**AFI245: Professional Practice**

The case of synthesis of taxation: 2 credits (30 hours); L, T, P
- Case study of taxation;
- Study of cases of local taxation.

The case of synthesis of accounting: 3 credits (45 hours); L, T, P
- Case Study for the budgetary accounts; - study of cases of public accounting;
- Case study of analytical accounting.

**AFI243: Work of end of mandate and ASP**

The work of the end of the fiscal year and mandate: 2 credits (30 hours); L, T, P
- Elaboration of a balance sheet and end of year reports ;
- Elaboration of predictive reports ;
- Elaboration of a balance sheet /report at the end of a mandate.

Synthesis works: 2 credits (30 hours); T, P, SPW
- Synthesis of administration cost; - Synthesis of accounting costs;
- Synthesis of management cost;
- Synthesis of fiscal cost.

**AFI246: Professional internship**

Professional Internship: 6 credits (90 hours); P,SPW
1. Arrival and Business Integration ;
2. Working in a business environment ;
3. The keeping of Intern journal;
4. The choice of a theme of work: in collaboration with professional and academic supervisors;
5. Elaboration of a research plan
6. Resources be exploited
7. The organization of study
8. Report writing
9. Presentation of the report before a jury

❖ AFI247: Legal Environment II and Civic education

➢ Company law II: 1 credit (15 hours); L, T
  - Definition, Objectives and forms of commercial companies;
  - The creation of commercial companies;
  - The operation of commercial companies; - the dissolution of commercial companies.

➢ Labor law: 1 credit (15 hours); L, T, P
  - Definition of labour law,
  - Historical background of labour law;
  - The labour contracts for a job. (Conclusion, execution, and rupture);
  - Labour conflicts (individual and collective);
  - The staff delegate, trade unions etc.;
  - Industrial accident and professional illness: hygienic and safety at work place.

➢ Civic Education and Ethics: 1 credit (15 hours); L, SPW
  1. Concepts
     - The citizen;
     - The Nation;
     - The State;
     - Public Property unto collective property;
     - The freedoms;
     - The public service;
     - Problem of ethics;
     - Ethics, Law and reason;
     - Management and ethics of responsibility;
- Ethics and management.
- Ethics
- Civics
- Deontology
- Moral consciousness
- The universal declaration of Human Rights
- Good governance in public services
- Explain the importance of civics to the life of the nation
- Functions of the state and its citizens
- Deontology, Professional ethics and professionalism
- Relationship between morality, law and ethics
- Codes of ethics
Field: MANAGEMENT

Specialty:
LOCAL GOVERNMENT MANAGEMENT

Option:
LOCAL GOVERNMENT TAXATION
1. **The objective of the training**

The objective of this specialty is to train the student to understand and master taxation techniques applicable to local governments, so as to optimize the tax load and analyze the impact of decisions relating to tax management.

2. **Expected skills**

   -> **General skills**

   - Lead a team;
   - Master managerial techniques;
   - Have writing skills;
   - Can speak English and French;
   - Be capable of working in a team or independently.

   -> **Specific Skills**

   - Participate in the preparation of the budget of a local government;
   - Master the financial impact of investment policies and financing of local governments;
   - Accompany a project in its legal, financial, “human resources”, “evaluation”, and “NIT” aspects;
   - Take care of the public procurement policy of the local government within the framework of public procurement;
   - Collect, treat and record all financial and accounting information of public administrations in general and local governments in particular;
   - Gather all necessary aggregates in the preparation of budgets of local governments and follow them up periodically.
3. **Career opportunities**

- Attaché in the taxation department;
- Support staff in MINATD;
- Collaborator of the Secretary General and of the head of service of administrative litigations
- Chargé d’études of mayors.
4. Organization of the Teachings

- First semester

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<thead>
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<th>Hourly Volume</th>
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Fundamental courses 30% (2 UC) 9 credits 135 hours

Professional courses  60% (4 UC) 18 credits 270 hours

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<td>LGT 116</td>
<td>Tax Law and Public Finance I</td>
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Cross-sectional courses 10% (1 UC) 3 credits 45 hours

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<td>LGT 117</td>
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Total 270 95 50 35 450 30

- Second semester

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Fundamental courses 30% (2 UC) 9 credits 135 hours

Professional courses  60% (4 UC) 18 credits 270 hours

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Cross-sectional courses 10% (1 UC) 3 credits 45 hours

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### Third semester

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<td>Management of CTL</td>
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#### Fundamental UC 30% (2 UC) 9 credits 135 hours

#### Professional UC 60% (4 UC) 18 credits 270 hours

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<td>LGT 235</td>
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#### Cross-sectional courses 10% (1 UC) 3 credits 45 hours

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**Total**

|        |                                                   | L  | T  | P  | SPW | Total |
|--------|---------------------------------------------------|----------------|-------------------|
|        |                                                   | 220 | 120 | 70 | 35 | 450 | 30 |

### Fourth semester

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#### Fundamental courses 30% (2 UC) 9 credits 135 hours

#### Professional courses 60% (4 UC) 18 credits 270 hours

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<td>Local public services and collection of local taxes</td>
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<td>The work of end of mandate and ASP</td>
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#### Cross-sectional courses 10% (1 UC) 3 credits 45 hours

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<td>T</td>
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<td>LGT 247</td>
<td>Legal environment and civic education II</td>
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**Total**

|        |                                                   | L  | T  | P  | SPW | Total |
|--------|---------------------------------------------------|----------------|-------------------|
|        |                                                   | 135 | 165 | 115 | 35 | 450 | 30 |

SPW: Students' Personal Work
5. Courses Content

- LGT111: Accounting and Informatics I

- General Ledger I: 2 credits (30 hours); L, T, P, SPW
  1. General information
     - Definition evolution and the role of the accounting;
  2. The balance sheet
     - Notion of employment and resource.
  3. The account and the principle of the double part
  4. The accounting transfer
  5. The accounting systems (conventional and computerized)
  6. Purchase and sale of the goods
     - The elements that decrease the invoice (reductions);
     - The elements that increases the invoice (transportation costs, VAT, packaging (see only logging and deconsignment).

- General Computing I: 1 credit (15 hours); L, T, SPW

A- The Hardware
  1. The peripheral components
     - The devices of input
     - The output devices ( storage devices )
     - The devices of input and output
  2. The central unit
     - The central memory
     - The microprocessor
     - The windows
     - The motherboard
     - The chipset
     - The power supply
     - The cards of extension
     - Other internal organs
  3. The unit of exchange (or bus)
     - Role
     - Types of bus:
       - Data bus;
- Control bus;
- Address bus.

B- The software

1. The application software
   - Definition
   - Role
   - Types and examples of software

2. The basic software (or software systems)
   - Definition
   - Types of basic software:
     - The drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation.
   - Features
   - Roles
   - Types of operating system
   - Structure of an operating system
   - Architecture
   - Concept of free software and propriatory software

System of numeration and Codification

A- The numbering systems

1. A few basic concepts
   - The base of the system;
   - Weight
   - Alphabet of the language
   - Format of the word (length of the word)
   - Power of language

2. A few numbering systems
   - The decimal system
   - The binary system
   - the octal system
   - The hexadecimal system

3. The basic changes
- Of Decimal to another base b
- To a base b of any kind to the decimal basis
- Of the binary in octal and vice versa
- From binary to hexadecimal and vice versa

4. Arithmetic operations
   - Binary numbers signed
   - Exact representation
   - Representation in 2 complement
   - Addition of binary numbers
   - Subtraction of binary numbers
   - Using 2 complements in subtraction
   - Multiplication of binary numbers
   - Division of binary numbers

5. Hexadecimal arithmetic
   - The addition of the numbers in hexadecimal
   - Subtraction of numbers in hexadecimal

B- The codes

1. General information on the concept of a code
   - Definitions
   - Objectives of codification
   - Functional codification
   - Types of functional codes
   - Technialogical codification

2. The alphanumeric codes

3. The ASCII code
   - ASCII standard
   - ASCII limit
   - ASCII utilisation

- Public Accounting I: 2 credits (30 hours); L, P, SPW
  - An analysis of the mechanisms of the public accounting
  - The implementation of the budget documents
LG121: Accounting and Informatics II

General Accounting II: 2 credits (30 hours); L, T, P

1. The settlements
   - In cash (cash, bank)
   - Term (commercial bills, creation, encashment)
   **NB**: do not see the movement of the bills of exchange.

2. Trading, profit and loss account (industrial and commercial company)
   **NB**: from management accounts present the significant margins of management.

3. Concept of depreciation (constant and degressive)
   - Terminology
   - Calculation (Table of Depreciation of assets placed in service at the start and in course of the financial year)

4. Concept of Provision
   - For depreciation
   - For charges and losses
   **NB**: For the Chap. IX and X and present the "Extract of the balance sheet" (Brief study and practice).

General Computing II: 1 credit (15 hours); L, P, SPW

A- Computer Networks

1. Basics
   - Definition of a computer network
   - Interest of computer networks
   - Basic vocabulary:
     - Workstation;
     - Node;
     - Server;
     - Packet.

2. Typology of networks
   - According to the media:
     - Wired networks;
     - Unwired network.
   - According the Geographic Limits:
- The local networks (LAN);
- The metropolitan area networks (MAN);
- The wide area networks (WAN).

3. **Network Classification**
   - Physical classification:
     - The bus type;
     - The star type;
     - The ring type;
     - The meb type;
     - The tree type.
   - Logical classification:
     - Broadcasting networks;
     - Point-to-point networks.

4. **Network architectures**
   - Client/server architecture
   - Architecture of equal to equal

5. **The equipment of computer networks**
   - Basic network Equipements:
     - A computer;
     - A network card;
     - A server;
     - A network cable;
     - The transceiver (or adapter);
     - The transmission tools;
     - The socket.
   - The equipment of interconnections:
     - Hubs (hub);
     - Switch (Switch);
     - Routers;
     - Gateways
     - The gateway (gateway);
     - The bridge (Bridge);
     - The repeaters.
6. Concept of IP addressing
   - Structure of an IP address:
     - Network identifier (Net ID);
     - Identifier of host (Host ID).
   - Specific Addresses:
     - Network address;
     - Machine address;
     - Broadcast Address (broadcaste);
     - Limited Broadcast address (multicast);
     - Address of rebroadcast (loopback).
   - IP addressing by classes:
     - Class A;
     - Class B;
     - Class C.

B- Internet network

1. Concept of protocol
   - Definitions and some types of protocols:
     - SMP protocol;
     - POP protocol;
     - NNP protocol;
     - The FP protocol;
     - http protocol;
     - IMAP protocol;
     - Protocol TCP;
     - etc.

2. A few Internet Services
   - The electronic mail
   - Research on the Internet
   - The Newsgroup (discussion forum)
   - The transfer of files
   - The Download (Download a text, download an image, download free software...)
   - The online Trade
   - The IRC (Internet Relay Chat)
3. **The search engines**
   - Definition
   - Role
   - Some search engines

4. **Tools for Internet access**
   - The browsers (definition, examples)
   - The plug-ins (definition, examples)
   - The search engines (definition, examples, use)

5. **The connection to the Internet**
   - Connection hardware
   - Suppliers of access (role, examples)
   - Types of connections (specialized line, phone line, satellite)

- **Public Sector Accounting II: 2 credits (30 hours) ; L,P ,SPW**
  - The principles of public sector accounting
  - Private accounting and public sector accounting

- **LGT 112: Accounting and Management I**

- **Analytical accounting and budgetary management I: 2 credits (30 hours); L, T, P**
  1. **Of the general ledger to the analytical accounting**
     - Generality on the analytical accounting (objectives, role, concept of load)
  2. **Analysis of expenses**
     - Loads liable and not liable
     - Direct costs and indirect
     - Suppletive loads
     - Allocation of Indirect Costs
  3. **Valuation of stocks (FIFO method, LUP)**
  4. **The full costs (cost of purchase, cost of production, introduce the stocks)**

  **NB**: do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products).
5. Partial costs
   • The variable costs
   • The marginal costs

6. The Rational Importance of loads of structure
   ➢ Control of Management I: 2 credits (30 hours); L, TL, P
     • The citizen control
     • The control of legality

❖ LGT 122: Accounting and Management II
   ➢ Analytical accounting and budgetary management II: 2 credits (30 hours); L, T, P
     1. The predetermined costs
        • Identification of gaps on direct costs and indirect and algebraic analysis of these differences (exclude the graphic analysis)
     2. The Budgets (brief study and practice)
        • The budgets of the sales
        • The production budgets
        • The budgets of supply
        • Budgets of investment
        • Budgets of cash flow

❖ LGT 113: Environment of CTL I
   ➢ History and Evolution of CTL: 2 credits (30 hours); L, T, SPW
      • Analysis of the History of CTL in Cameroon
      • Saying of the different types of CTL in the time

   ➢ Organization and operation of the CTL: 2 credits (30 hours); L, T, P, SPW
      • Organization of CTL
      • Skills and management structures of the CTL
LGT 123: Environment of CTL II

- History and Evolution of CTL II: 2 credits (30 hours); L, T, P, SPW
  - Accuracy of different denominations of the territorial community in the political history of Cameroon
  - Guidelines and skills in these CTL

- Organization and operation of the CTL II: 2 credits (30 hours); L, T, P, SPW
  - Scheduling of reports between the different structures of the CTL

LGT 114: Resources and Responsibility in the CTL I

- The resources of the CTL and strategies for mobilizing I: 2 credits (30 hours); L, T, P, SPW
  - Typology of resources of CTL
  - Modalities of management of the said resources

- Responsibility of local elected representatives and collaborators I: 2 credits (30 hours); L, T, SPW
  - Communal competence, departmental and regional authorities
  - The local development plan
  - Communication and Marketing of communal activities

- Practical aspect of decentralization I: 2 credits (30 hours); L, T, P
  - The actual skills of the actors of the local governance
  - Variability of skills based on the geographical determinants

LGT 124: Resources and Responsibility in the CTL II

- The resources of the CTL and strategies for mobilizing II: 2 credits (30 hours); L, T, P, SPW
  - Strategies for optimization of resources
  - Tools/approaches to improvement of financial resources

- Responsibility of local elected representatives and collaborators II: 2 credits (30 hours); L, T, P, SPW
  - Subsequent improvement of the lives of voters on the social plan, educational among others; - development of the Tops points guiding the action of CTL.
Practical aspect of Decentralization II: 2 credits (30 hours); L, T, P, SPW
- Structuring difficulties the daily reports within the CTL; - Issues and Challenges of the process of decentralization.

LGT 115 Right to the Environment and urban development I

The right to the environment: 2 credits (30 hours); L, T, SPW
- The sources of the law of the environment;
- The principles of the law of the Environment.

Right of the Urbanism: 2 credits (30 hours); L, T, P, SPW
- The rules of the urbanization;
- The operations of development.

LGT 125: Right to the Environment and Urban Development II

The right to the environment II: 2 credits (30 hours); L, T, SPW
- The institutions;
- The protection of ecosystems.

Right of the Urbanism II: 2 credits (30 hours); L, T, P
- The modalities of pre-emption in matters of urban planning";
- Operations of development.

LGT 116: Tax Law and Public Finance I

Introduction to the Law of Public Finance I: 2 credits (30 hours); L, T
- History and Foundations of the right of public finance;
- The control of legality;
- The budgetary Control.

General Tax Law I: 2 credits (30 hours); L, T, P, SPW
- Definition of the tax law and its foundations;
- Definition of its components that are the income tax, VAT, tax on the activities, royalties and other.
LGT 126: Methodology, Tax law and Public finance II

Methodology for drafting the report of internship: 1 credit (15 hours); L, P
- The collection of information
- How to make a report
- The plan of the probationary report and the summary
- The table of contents
- The introduction of the report of internship
- The conclusion of the internship report
- The acknowledgments
- How to build the annexes
- When to start his internship report
- How to find a subject of internship report
- The cover page
- How to write effectively
- Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations)
- Instructions and typographical rules of presentation (police, spacing, titles, highlighted, punctuation, graphic charter)
- How to prepare the defense

Introduction to the law of public finance II: 2 credits (30 hours); L, T, P, SPW
- The judgment of the accounts
- The management control

General Tax Law II: 1 credit (15 hours); L, P
- Analysis of the modalities of recovery
- Time and Modes of payment

LGT 117: Bilingual training I and Economic environment I

French expression: 1 credit (15 hours); L, T
1. Form of words in French
   - Prefix, radical
   - Root, suffix
2. Explanation of words and group of words
3. Morphosyntax and rhetoric
- Components and structure of the sentence:
  - Simple sentence;
  - Complex sentence;
  - Sentence composed.
- Figures of style:
  - Figures of analogy;
  - Figures of amplification;
  - Figures of opposition;
  - Figures of mitigation.

4. **Administrative correspondence professional and**
   - The different parts of administrative correspondence and the administrative style
   - Professional correspondence:
     - Note of service;
     - Record (activity, mission);
     - The report (activity, mission).

5. **Professional correspondence to individual dominance**
   - Request for employment
   - CV
   - Letter of motivation

6. **Methodological Considerations on the written exercises**
   - French composition
   - Contraction of text:
     - French composition: methodological reminder and application;
     - Contraction of text: methodological reminder and application.

➢ **General Economics: 2 credits (30 hours); L, T, P**
   1. Business and production
   2. Households and the consumption
   3. Markets and Prices
   4. Training and distribution of income
   5. The currency and the financing of the Economy
   6. The elements of the National Accounts
   7. The macro-economic equilibrium
   8. The socialist system
9. The capitalist economy
10. The State and its interventions
11. The foundations of international trade
12. International payments
13. The balance of payments
14. Economic development and its inequalities
15. Growth and its inequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of problems
18. The development strategies
19. The economic integration and the forms of cooperation in the world
20. The strategies of the International Debt

❖ LGT 127: Bilingual training I and Economic Environment II

❖ English Expression: 1 credit (15hours); L, T

Introduction - Course Content - Syllabus - Importance of English - Style in Business Writing - Punctuation; capitalization - Abbreviations

Parts of speech - Verbs - Question Words - Methodology: - of asking and answering questions

Economic activities - Sectors of activity - Commerce and Trade - Channels of Distribution - Essay writing - specialized shops - active voice and passive voice - direct and indirect speech


Adjectives: Comparisons and comparative irregular - Numbers - Measures and weight.

Vocabulary: Finance - Means of Payment - Banks and Banking

Words denoting gold Professions trades and places

Words denoting Places - tenses - troublesome Verbs - conditional tense, - I wish - had better - I'd rather - its time.

Vocabulary: Transport by Road - By Rail - How to tackle Reading Comprehension and exercise.

Conjunctions and Embedding - Gerund - Numbers - Fractions - Vocabulary - Insolvency and Bankruptcy -Gold Indirect reported speech.

➢ Economics and organization of enterprises: 2 credits (30 hours); L, T, P
1. The company, definition and mode of analysis
2. Classification of Enterprises
3. The structures of organization of enterprises
4. The insertion of the company in the economic fabric
5. The commercial activity of the company
6. The productive activity of the Company
7. Logistics in the Company
8. The financial activity of the company
9. The management of human resources
10. The systemic approach of the company
11. The system of Information
12. The decision-making system
13. The strategic analysis of the Company
14. Choice and implementation of a Strategy
15. The business, society and culture
16. The business, society and the Ethics

➢ LGT 231: Urban Planning and Public domain

➢ Urban planning and taxation: 3 credits (45 hours); L, T, P
  ▪ The resources of the locality
  ▪ Geography of the community
  ▪ Creation of generating activities of local taxes

➢ Public domain and Taxation: 2 credits (30 hours); L, T, P, SPW
  ▪ The determination of the different public domains of the state
  ▪ The district of contents taxable in the public domain
LGT 232: Management of CTL

- **Cash Management:** 2 credits (30 hours); L, T, P
  - Treasury operation
  - Cashier
  - Bank reconciliations

- **Sectoral accounting of CTL:** 2 credits (30 hours); L, T, P
  - The budgetary accounts
  - General ledger
  - Analytical accounting

LGT 233: Public finance and Taxation

- **Public finances:** 2 credits (30 hours); L, T, P, SPW
  - The Actors of public finances
  - The budgetary
  - Principles of public finance
  - The budgetary procedures
  - The control of public finances

- **Specific taxation:** 2 credits (30 hours); L, T, P, SPW
  - Oil taxation
  - Forest taxation
  - Mining Tax

LGT 234: Taxation of CTL

- **Local taxation:** 2 credits (30 hours); L, T, P, SPW
  - General provisions
  - The local taxes
  - The cents communal Additional
  - The municipal taxes
  - Special provisions applicable to urban communities
  - The taxes and fees of the regions
  - The tax procedures specific to local taxes
➢ Taxation of salaries and social contributions: 2 credits (30 hours); L, T, P, SPW
  ▪ Generality on wages
  ▪ Calculation of social security contributions
  ▪ Calculations of salaries
  ▪ Determination and accounting for taxes on wages
  ▪ The recourse mechanisms graceful

➢ Additional cents: 2 credits (30 hours); L, T, P, SPW
  ▪ Taxes on companies
  ▪ Taxes on the income of natural persons
  ▪ Tax on the value added
  ▪ Recovery of ACC
  ▪ Distribution of ACC

❖ LGT 235: Litigation and Administration of CTL

➢ Litigation of local taxation: 1 credit (15 hours); L, T, P, SPW
  ▪ The means of references
  ▪ The skills and time limits of referral; - the remedies

➢ Litigation of Public finances: 1 credit (15 hours); L, T, P, SPW
  ▪ The types of litigation
  ▪ The means of references
  ▪ The skills and time limits of referral; - the remedies

➢ Deliberations, Decisions and Orders of the CTL: 2 credits (30 hours); L, T, P, SPW
  ▪ Elaboration of these decisions
  ▪ The nomenclatures;
  ▪ Time limits
  ▪ Scope of these categories of acts
  ▪ Skills
  ▪ Ampliations
Elaboration and Implementation of the Budget of the CTL: 2 credits (30 hours); L, T, P

- The basics of the budget
- Accounting principles;
- The budgetary principles
- Revenues and expenditures of the CTL
- Budgetary nomenclature
- Steps for Elaboration of the Budget: adoption and approval of the budget;
- The roles and functions of the authorising officer, the accounting officer and imprest administrators
- Operations of Implementation of revenue and expenditure of a CTL
- Establishment of the documents of end of management
- Communication around the execution of the budget and the restitution of the results to the population
- Control of the execution of the budget

LGT 236: Sociology and the Work of Administration

Urban Sociology and Rural: 2 credits (30 hours); L, T, P, SPW

- The definition of each of these frameworks
- The Explanation of models of thoughts traceable to each of these environments
- The Elaboration of development policies urban or rural

The work of Secretariat: 2 credits (30 hours); T, P

- The computerized management of the desktop, applications and folders
- The treatment of text and the mail
- The spreadsheet and the edition of documents
- The concepts of professional communication
- The home and the telephone
- The Internet and electronic mail
LGT 237: Legal environment and Creation of Business

Law on Commercial Companies I: 1 credit (15 hours); L, T
- The status of trader
- The acts of trade
- The fund of commerce
- The different commercial contracts

Civil law: 1 credit (15 hours); L, T, P
- Definition of law
- Characteristics
- Classification
- Sources
- Decree of application
- The dimensions of law (objective and subjective law);
- Judicial organisation
- The concept of legal personality
- The civil status act: the name and the domicile
- Incapacity
- Judicial acts
- Legal facts

Creation of Business: 1 credit (15 hours); L, T, P, SPW
- Concept of contractor
- Motivations to the creation of company
- Search for ideas and evaluation
- Research funding
- Choice of legal status
- Ethical aspects of the business
- Elaboration of the business plan
LGT 241: Human Resources and Quality

- Human Resources management: 3 credits (45 hours); L, T, P, SPW
  - The Evolution of HRM (definition, foundations, issues)
  - Predictive management of the employment (content, methods, issues)
  - Practice of HRM (management of individual relationships: recruitment, training, animation, motivation, conditions of work; the social dialog; techniques at the service of social dialog and the crisis of social dialog)
  - Elements of payroll management
  - Evaluation of the performance of the HRM
  - Place of HRM in the overall strategy of the company

- Quality, Health, Safety and the Environment: 2 credits (30 hours); L, T, P
  - Safety at Work
  - Prevention of risks
  - Hygiene and property
  - System of Management QSE
  - Environment;
  - Security;
  - Quality.

LGT 242: Administrative Police and Municipal Governments

- The Administrative Police: 2 credits (30 hours); L, T, P, SPW
  - Importance and modalities of the Constitution of A administrative police
  - Competence of the administrative police; - acts of the administrative police
  - Obligations of this form of police

- Municipal Police: 2 credits (30 hours); L, T, P, SPW
  - Importance and modalities of the Constitution of a municipal police force
  - Jurisdiction of the municipal police
  - Acts of the municipal police
  - Obligations of this form of police
LGT 243: Procedures and tax returns

- Practice of tax declarations: 3 credits (45 hours); L, T, P, SPW
  - Declaration of the Tax on income
  - Declaration of the Tax on companies
  - Declaration of Value Added Taxes
  - Declaration of Patent and final withholding tax
  - Statements of social contributions
  - - Statistical and tax declarations

- Tax Procedures and local taxes: 3 credits (45 hours); L, T, P, SPW
  - Obligations of taxpayers
  - Emission of local taxes
  - Recovery of local taxes
  - - Control of local taxes

LGT 244: Local public Services and Collection of local taxes

- Local public services: 2 credits (30 hours); L, T, P, SPW
  - Nomenclature of local public services
  - Levels of competence in these services
  - Management of this type of service

- Test procedure for the Recovery of local taxes: 2 credits (30 hours); L, T, P
  - The structures of control and recovery
  - The mechanisms of control and recovery
  - The guarantees of the control and recovery
  - -The skills and remedies

LGT 245: Work of end of Mandate and ASP

- The work of the end of the fiscal year and mandate: 2 credits (30 hours); L, T, P
  - Elaboration of a balance sheet and report by the end of year
  - Elaboration of a predictive report
  - A balance sheet of the end of the mandate
Implementation professional situation: 2 credits (30 hours); T, P, SPW
- Synthesis of the course of administration
- Synthesis of the course of accounting
- Synthesis of management courses
- Synthesis of course of taxation

LGT 246: Professional internship

Professional Internship: 6 credits (90 hours); P, SPW
1. Arrival and Business Integration
2. Working in a company
3. The keeping of the Intern journal
4. The choice of the theme of work: in collaboration with mentors professional and academic supervisors
5. Elaboration of the plan of research
6. The resources to be exploited
7. The organization of study
8. Drafting of the report
9. Presentation of the report before a jury

LGT247: Legal environment and Civic education

Law on Commercial Companies II: 1 credit (15 hours); L, T
- Definition, Object and forms of commercial companies
- The creation of commercial companies
- The operation of the commercial companies; - the dissolution of commercial companies

Labor law: 1 credit (15 hours); L, T, P
- Definition of labour law
- Historical background of labour law
- Labour contracts
- Labour conflicts (individual and collective)
- Staff delegate, trade union etc.
- Industrial accident and illness that is the hygienic and safety conditions at the job site.
Civic Education and Ethics: 1 credit (15 hours); L, SPW

1. The Concepts
   - The citizen;
   - The Nation
   - The State
   - Public Property unto collective property
   - The freedoms
   - The public service
   - Problem of ethics
   - Ethics, Law and reason
   - Management and ethics of responsibility
   - Ethics and management
   - Ethics
   - Civics
   - Deontology
   - Moral consciousness
   - The universal declaration of Human Rights
   - Good governance in public services
   - Explain the importance of civics to the life of the nation
   - Functions of the state and its citizens
   - Deontology, Professional ethics and professionalism
   - Relationship between morality, law and ethics
   - Codes of ethics
Field: MANAGEMENT

Specialty: LOCAL GOVERNMENT MANAGEMENT

Option: LOCAL GOVERNMENT ADMINISTRATION
1. The objective of the training

The objective of this specialty is to train people who will be able to advise and assist local government officials on local politics and policies and how they should be implemented within the framework of the law.

2. Expected skills

→ General skills
  - Lead a team;
  - Master managerial techniques;
  - Have writing skills;
  - Can speak English and French;
  - Be capable of working in a team or independently.

→ Specific Skills
  - Participate in the elaboration of the budget of a local government;
  - Accompany a project in its legal, financial, “human resources”, “evaluation”, and “NIT” aspects;
  - Take care of the public procurement policy of the local government within the framework of public procurement;
  - Develop and optimize a policy by which local governments are covered by insurance;
  - Participate in the recruitment of new staff, management of jobs and skills, and control of payroll;
  - Understand the impact of NIT on the organizations and their partners;
  - Initiate NIT in a local government;
- Conceive and put in place management tools for local governments.

3. Career opportunities

- Local government attaché;
- Decision makers in local governments and other public establishments;
- Attaché in the taxation department;
- Support staff in MINATD and collaborator of the secretary general of the head of service of administrative litigations;
- Chargé d’études of mayors;
- Council officials;
- Official responsible for insurance, markets and public procurement;
- Legal and administrative official;
- Administrative secretary;
- Secretary General of councils.
4. Organization of the Teachings

- **First semester**

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<td>Accounting and computer science I</td>
<td>45</td>
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<td>Accounting and Management I</td>
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<td>The right to the environment and urban planning</td>
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<td>Tax Law and Public Finance I</td>
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<td>15</td>
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- **Second semester**

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<td>LGA125</td>
<td>The mapping and the development plan</td>
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<td>LGA126</td>
<td>Methodology, tax law and finance</td>
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<td><strong>Cross-sectional courses 10% (1 UC) 3 credits 45 hours</strong></td>
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<tr>
<td>LGA127</td>
<td>Bilingual Training II and Economic Environment II</td>
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### Third semester

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<tr>
<td><strong>Fundamental courses 30% (2 UC) 9 credits 135 hours</strong></td>
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<tr>
<td>LGA231</td>
<td>Urban Planning and Public Domain</td>
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<td>LGA232</td>
<td>Management of CT</td>
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<tr>
<td><strong>Professional courses 60% (4 UC) 18 credits 270 hours</strong></td>
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<tr>
<td>LGA233</td>
<td>Public Finance and Administrative Account</td>
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<tr>
<td>LGA234</td>
<td>Taxation of CT</td>
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<td>LGA235</td>
<td>Management of the heritage and projects</td>
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<td>LGA236</td>
<td>Sociology and the work of administration</td>
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<td><strong>Cross-sectional courses 10% (1 UC) 3 credits 45 hours</strong></td>
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<tr>
<td>LGA237</td>
<td>The legal environment and the creation of business</td>
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<td>LGA241</td>
<td>Human Resources and Quality</td>
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<td>LGA242</td>
<td>Administrative police and municipal governments</td>
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<td><strong>Professional courses 60% (4 UC) 18 credits 270 hours</strong></td>
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<tr>
<td>LGA243</td>
<td>The work of end of mandate and ASP</td>
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<td>LGA244</td>
<td>Local public services and collection of local taxes</td>
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<td>LGA245</td>
<td>Professional practice</td>
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<td>LGA246</td>
<td>Professional internship</td>
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<tr>
<td>LGA247</td>
<td>Legal environment and Civic Education</td>
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SPW: Students’ Personal Work
5. Courses content

❖ LGA111: Accounting and computer science I

- Financial accounting I: 2 credits (30 hours); L, T, P

1. General information
   - Definition, evolution and the role of the accounting;

2. The balance sheet
   - Notion of application and source

3. The account and the principle of the double entry

4. The accounting transfer

5. The accounting systems (classical and computerized)

6. Purchase and sale of the goods
   - The elements that decrease the invoice (reductions);
   - The elements that increases the invoice (transportation costs, VAT, packaging expenses; excluding consignments).

❖ General Computing I: 1 credit (15 hours); L, T, SPW

A- The Hardware

1. The peripheral components
   - The devices of input
   - The ouput devices (storage devices )
   - The devices of input and ouput

2. The central unit
   - The central memory
   - The microprocessor
   - The windows
   - The motherboard
   - The chipset
   - The power supply
   - The cards of extension
   - Other internal organs

3. The unit of exchange (or bus)
   - Role
   - Types of bus:
- Data bus;
- Control bus;
- Address bus.

B- The software

1. The application software
   - Definition
   - Role
   - Types and examples of software

2. The basic software (or software systems)
   - Definition
   - Types of basic software:
     - The drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation.
   - Features
   - Roles
   - Types of operating system
   - Structure of an operating system
   - Architecture
   - Concept of free software and propriatory software

System of numeration and Codification

A- The numbering systems

1. A few basic concepts
   - The base of the system;
   - Weight
   - Alphabet of the language
   - Format of the word (length of the word)
   - Power of language

2. A few numbering systems
   - The decimal system
   - The binary system
   - The octal system
   - The hexadecimal system
3. **The basic changes**
   - Of Decimal to another base $b$
   - To a base $b$ of any kind to the decimal basis
   - Of the binary in octal and vice versa
   - From binary to hexadecimal and vice versa

4. **Arithmetic operations**
   - Binary numbers signed
   - Exact representation
   - Representation in 2 complement
   - Addition of binary numbers
   - Subtraction of binary numbers
   - Using 2 complements in subtraction
   - Multiplication of binary numbers
   - Division of binary numbers

5. **Hexadecimal arithmetic**
   - The addition of the numbers in hexadecimal
   - Subtraction of numbers in hexadecimal

B- The codes

1. **General information on the concept of a code**
   - Definitions
   - Objectives of codification
   - Functional codification
   - Types of functional codes
   - Technological codification

2. **The alphanumeric codes**

3. **The ASCII code**
   - ASCII standard
   - ASCII limit
   - ASCII utilisation

- **Public Accounting I: 2 credits (30 hours); L, P, SPW**
  - An analysis of the mechanisms of the public accounting
  - The implementation of the budget documents
LGA121: Accounting and computer science II

- General Accounting II: 2 credits (30 hours); L, T, P
  5. The settlements
  - In cash (cash, bank)
  - Term (commercial bills, creation, encashment)
    \textbf{NB}: do not see the movement of the bills of exchange.
  6. Trading, profit and loss account (industrial and commercial company)
    \textbf{NB}: from management accounts present the significant margines of management.
  7. Concept of depreciation (constant and degressive)
    - Terminology
    - Calculation (Table of Depreciation of assets placed in service at the start and in course of the financial year)
  8. Concept of Provision
    - For depreciation
    - For charges and losses
    \textbf{NB}: For the Chap. IX and X and present the "Extract of the balance sheet" (Brief study and practice).

- General Computing II: 1 credit (15 hours); L, P, spw
  A- Computer Networks
  1. Basics
    - Definition of a computer network
    - Interest of computer networks
    - Basic vocabulary:
      - Workstation;
      - Node;
      - Server;
      - Packet.
  2. Typology of networks
    - According to the media:
      - Wired networks;
      - Unwired network.
According the Geographic Limits:
- The local networks (LAN);
- The metropolitan area networks (MAN);
- The wide area networks (WAN).

3. **Network Classification**
   - Physical classification:
     - The bus type;
     - The star type;
     - The ring type;
     - The meb type;
     - The tree type.
   - Logical classification:
     - Broadcasting networks;
     - Point-to-point networks.

4. **Network architectures**
   - Client/server architecture
   - Architecture of equal to equal

5. **The equipment of computer networks**
   - Basic network Equipemnts:
     - A computer;
     - A network card;
     - A server;
     - A network cable;
     - The transceiver (or adapter);
     - The transmission tools;
     - The socket.
   - The equipment of interconnections:
     - Hubs (hub);
     - Switch (Switch);
     - Routers;
     - Gateways
     - The gateway (gateway);
     - The bridge (Bridge);
     - The repeaters.
6. **Concept of IP addressing**

- Structure of an IP address:
  - Network identifier (Net ID);
  - Identifier of host (Host ID).
- Specific Addresses:
  - Network address;
  - Machine address;
  - Broadcast Address (broadcaste);
  - Limited Broadcast address (multicast);
  - Address of rebroadcast (loopback).
- IP addressing by classes:
  - Class A;
  - Class B;
  - Class C.

B- Internet network

1. **Concept of protocol**

- Definitions and a some types of protocols:
  - SMP protocol;
  - POP protocol;
  - NNP protocol;
  - The FP protocol;
  - http protocol;
  - IMAP protocol;
  - Protocol TCP;
  - etc.

2. **A few Internet Services**

- The electronic mail
- Research on the Internet
- The Newsgroup (discussion forum)
- The transfer of files
- The Download (Download a text, download a image, download a free software...)
- The online Trade
3. **The search engines**
   - Definition
   - Role
   - Some search engines

4. **Tools for Internet access**
   - The browsers (definition, examples)
   - The plug-ins (definition, examples)
   - The search engines (definition, examples, use)

5. **The connection to the Internet**
   - Connection hardware
   - Suppliers of access (role, examples)
   - Types of connections (specialized line, phone line, satellite)

- **Public Sector Accounting II: 2 credits (30 hours); L,P ,spw**
  - The principles of public sector accounting
  - Private accounting and public sector accounting

- **LGA112: Accounting and Management I**

  - **Cost accounting and budgetary management I: 2 credits (30 hours); L, T, P**
  1. **Of the general accounting to the cost accounting**
     - Generality on the cost accounting (objectives, role, concept of charge)
  2. **Analysis of expenses**
     - Incorporable and non-incorporable charges
     - Direct and indirect charges
     - Suppletive charges
     - Allocation of Indirect charges
  3. **Valuation of stocks (FIFO method, LUP)**
  4. **The full costs (cost of purchase, cost of production, introduce the stock in progress)**
NB: do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products).

5. Partial costs
   - The variable costs; - the marginal costs

6. The Rational Importance of fixed charges
   - Control of Management I: 2 credits (30 hours); L, T, P
     - The citizen control
     - The control of legality

**LGA122: Accounting and Management II**

- Cost accounting and budgetary management II: 2 credits (30 hours); L, T, P
  1. The predetermined costs
     - Identification of gaps on direct and indirect costs and indirect and algebraic analysis of these differences (exclude the graphic analysis).
  2. The Budgets (brief study and practice)
     - The budgets of the sales
     - The production budgets
     - The budgets of supply
     - Budgets of investment
     - Budgets of cash flow

- Management Control II: 2 credits (30 hours); L, T, P
  - The control of legality
  - Legality
  - The Budgetary Control

**LGA113: Environment of CT**

- History and Evolution of CT: 2 credits (30 hours); L, T, SPW
  - Analysis of the History of CT in Cameroon;
  - Saying of the different types of CT in the time;
  - Accuracy of different denominations of the territorial community in the political history of Cameroon;
Guidelines and skills in the CT Format.

- Organization and operation of the CT: 2 credits (30 hours); L, T, P, PE
  - Organization of CT
  - Skills and management structures of the CT
  - Scheduling of reports between the different structures of the CT

- LGA114: Resources and Responsibility in the CT I

  - The Resources of the CT and Strategies for Mobilizing I: 2 credits (30 hours); L, T, P, PE
    - Typology of resources of CT
    - Modalities of management of the said resources
  
  - Responsibility of local elected representatives and collaborators I: 2 credits (30 hours); L, T, PE
    - Communal competence, departmental and regional authorities
    - The local development plan
    - Communication and Marketing of communal activities

  - Practical aspect of decentralization I: 2 credits (30 hours); L, T, P
    - The actual skills of the actors of the local governance
    - Variability of skills based on the geographical determinants

- LGA124: Resources and Responsibility in the CT II

  - Resources of the CT and strategies for mobilizing II: 2 credits (30 hours); L, T, P, PE
    - Strategies for optimization of resources
    - Tools/approaches to improvement of financial resources

  - Responsibility of local elected representatives and collaborators II: 1 credit (15 hours); L, T, P, PE
    - Subsequent improvement of the lived of voters on the social plan, educational among others
    - Development of the Tops points guiding the action of CT
- **Practical aspect of decentralization II**: 1 credit (15 hours); L, T, P, PE
  - Structuring difficulties the daily reports within the CT
  - Issues and Challenges of the process of decentralization

- **LGA115: Right of the Environment and Urban planning**
  - **The right of the environment**: 2 credits (30 hours); L, T, SPW
    - The sources of the law of the Environment
    - The principles of the law of the Environment
    - The institutions
    - The protection of ecosystems
  - **Right of the Urbanism**: 2 credits (30 hours); L, T, P, SPW
    - The rules of the urbanization
    - The operations of development
    - The modalities of pre-emption in matters of urban planning
    - Operations of development

- **LGA116: Tax Law and Public Finance I**
  - **Introduction to the Law of Public Finance I**: 2 credits (30 hours); L, T
    - History and Foundations of the right of public finance
    - The control of legality
    - The Budgetary Control
  - **General Tax Law I**: 2 credits (30 hours); L, T, P, SPW
    - Definition of the tax law and its foundations
    - Definition of its components that are the income tax, VAT, tax on the activities, royalties and other

- **LGA126: Methodology, Tax law and Public finance II**
  - **Methodology for Drafting the report of internship**: 1 credit (15 hours); L, P
    - The collection of information
    - How to make a report
    - The plan of the Probationary report and the summary
    - The table of contents
• The introduction of the report of internship
• The conclusion of the internship report
• The acknowledgments
• How to build the annexes
• When to start his internship report
• How to find a subject of internship report
• The cover page
• How to write effectively
• Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations)
• Instructions and typographical rules of presentation (police, interline, titles, highlighted, punctuation, graphic charter)
• How to prepare the defense.

➢ Introduction to the law of public finance II: 2 credits (30 hours); L, T, P, SPW
  • The judgment of the accounts; - the management control

➢ General Tax Law II: 1 credit (15 hours); L, SPW
  • Analysis of the modalities of recovery
  • Time and Modes of payment

❖ LGA117: Bilingual training I and economic environment I

➢ French: 1 credit (15 hours); L, T
  1. Vocabulaire
     • Vocabulaire technique usuel
  2. Grammaire
     • Du verbe : conjugaison aux temps communément utilisés : présent, passé composé, imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
     • De l’adjectif : qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
     • Du nom et son article : masculin/féminin, singulier/pluriel, dénombrable, et non-dénombrable ;
     • Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
- De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
- Des fonctions grammaticales.

3. **Expression et communication**

- Compréhension et interaction au cours d’une discussion technique ;
- Communication orale courante ;
- Communication orale interactive
- De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
- Lecture rapide et compréhension de texte ;
- Synthèse d’un long texte ;
- De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance, d’une lettre de recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
- Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
- Expressions figées

- ➢ **Economics: 2 credits (30hours); L, T, P**
  1. Business and production
  2. Households and the consumption
  3. Markets and Prices
  4. Training and distribution of income
  5. The currency and the financing of the Economy
  6. The elements of the National income
  7. The macro-economic equilibrium
  8. The socialist system
  9. The capitalist economy
  10. The State and its interventions
  11. The foundations of international trade
  12. International payments
  13. The balance of payments
  14. Economic development and its inequalities
  15. Growth and its inequalities
  16. Inflation, unemployment, industrial change
  17. The force of development and the globalization of problems
18. The development strategies
19. Economic integration and the forms of cooperation in the world
20. Strategies of the International Debt

**LGA127: Bilingual training II and Economic Environment II**

- **English Expression:** 1 credit (15 hours); L, T

  Introduction - Course Content - Syllabus - Importance of English - Style in Business Writing - Punctuation; capitalization - Abbreviations

  Parts of speech - Verbs - Question Words - Methodology: - of asking and answering questions

  Economic activities - Sectors of activity - Commerce and Trade - Channels of Distribution - Essay writing - specialized shops - active voice and passive voice - direct and indirect speech


  Adjectives: Comparisons and comparative irregular - Numbers - Measures and weight.

  **Vocabulary:** Finance - Means of Payment - Banks and Banking

  Words denoting gold Professions trades and places

  Words denoting Places - Tenses - troublesome Verbs - conditional tense, - I wish - had better - Id rather - its time.

  **Vocabulary:** Transport by Road - By Rail - How to tackle Reading Comprehension and exercise.

  **Vocabulary:** Transport by air - by sea. - Other means of payments: bill of exchange; Promissory Note - words denoting Numbers - The use of: lot of - Much - Many - Little - Few - a little - a few - exercises relating to the preparation of the 1st continuous assessment.


  Conjunctions and Embedding - Gerund - Numbers - Fractions - Vocabulary - Insolvency and Bankruptcy - Gold Indirect reported speech.

- **Economy and organization of enterprises:** 2 credits (30 hours); L, T, P

  1. The company, definition and mode of analysis
  2. Classification of Enterprises
  3. The structures of organization of enterprises
  4. The insertion of the company in the economic fabric
5. The commercial activity of the company
6. The productive activity of the Company
7. Logistics in the Company
8. The financial activity of the company
9. The management of human resources management
10. The systemic approach of the company
11. Information system
12. The decision-making system
13. The strategic analysis of the Company
14. Choice and implementation of a Strategy
15. Enterprise, society and culture
16. Enterprise, society and the Ethics

❖ LGA123: Administration of CT I and II

❖ Role of the Secretary General: 1 credit (15 hours); L, T, P, SPW
   ▪ Its jurisdiction, and its role in the activities of the municipality or of the Community
   ▪ His Career Profile
   ▪ Its relationship with the mayor and other members of the communal executive
   ▪ The challenges and other issues faced on a daily basis.

❖ The civil state: 1 credit (15 hours); L, T, P, SPW
   ▪ Texts Governing the civil status
   ▪ Organization and operation of the system of civil status
   ▪ Regulations for civil status
   ▪ Legal procedures of Registration of Births, marriages and deaths;
   ▪ Civil State of Foreigners in Cameroon
   ▪ Transmission Circuits documents of civil status
   ▪ Obligations and Sanctions in the field of civil status
   ▪ The process of digitisation of acts of civil status

❖ Deliberations, decisions and orders of the CT: 2 credits (30 hours); L, P, SPW
   ▪ Elaboration of these decisions
   ▪ The nomenclatures
   ▪ Time limits
   ▪ Scope of these categories of acts
• Skills
• Ampliations

➢ The elaboration and the implementation of the budget of the CT: 2 credits (30 hours); L, T, P
  • The basics of the budget
  • Accounting principles
  • The budgetary principles
  • Revenues and expenditures of the CT
  • Budgetary nomenclature
  • Steps for Elaboration of the Budget: adoption and approval of the budget
  • The roles and functions of the authorising officer, the accounting officer and imprest administrators
  • Operations of Implementation of revenue and expenditure of a CT
  • Establishment of the documents of end of management
  • Communication around the execution of the budget and the restitution of the results to the population
  • Control of the execution of the budget

❖ LGA125: Mapping and Development Plan

➢ Mapping: 2 credits (30 hours); L, T, P, SPW
  • Principles on the general topography
  • The delimitation of areas; - the reading of cards

➢ Plan of communal development: 2 credits (30 hours); L, T, P
  • An analysis of the modalities of development of a plan of communal development :
    - By putting in light of its nomenclature
    - By an explanation of its execution

❖ LGA231: Urban Planning and Public Domain

➢ Urban planning and taxation: 3 credits (45 hours); L, T, P
  • The resources of the locality
  • Geography of the collectivity
  • Creation of activities generating local taxes

➢ Public domain and Taxation: 2 credits (30 hours); L, T, P, SPW
  • The determination of the different public domains of the state
  • The district of contents taxable in the public domain.
LGA232: Management of CT

- **Administrative writing: 2 credits (30 hours); L, T, P**
  - The communicational codes in the administration
  - The requirements of the administrative writing
  - Administrative vocabulary
  - The fundamental principles of administrative style
  - Characteristics of the administrative style
  - Characters common to administrative documents
  - Main types of administrative documents
  - Routing of matches
  - The Administrative letter and eminent personalities
  - The internal information in the administration

- **Sectoral accounting of CT: 2 credits (30 hours); L, T, P**
  - The budgetary accounts
  - General accounting
  - Analytical accounting

LGA233: Public Finance and Administrative Account

- **Public finances: 2 credits (30 hours); L, T, P, SPW**
  - The Actors of public finances
  - The budgetary principles of public finance
  - The budgetary procedures
  - The control of public finances.

- **The making of the Administrative Account of CT: 2 credits (30 hours); L, T, P, SPW**
  - Objectives
  - Roles in the process of manufacture
  - Identification of actors
  - Steps techniques, management and planning

LGA234: Taxation of CT

- **Local taxation: 2 credits (30 hours); L, T, P, SPW**
  - General provisions
  - The local taxes
  - The cents communal Additional
- The municipal tax
- Special provisions applicable to urban communities
- The taxes and rates of the regions; - the tax procedures specific to local taxes

➢ Taxation of salaries and social contributions: 2 credits (30 hours); L, P, SPW
  - Generality on wages
  - Calculation of social security contributions
  - Additional council tax
  - Determination and accounting for taxes on wages
  - The recourse mechanisms graceful

➢ Local communities: 2 credits (30 hours); L, T, P, SPW
  - Establish the typology of the local communities
  - Integrate the participating structures in the establishment of this local communities
  - See the actors and procedures in the field of local communities

❖ LGA235: Patrimony Management and Projects

➢ Realising and financing of projects of CT: 2 credits (30 hours); L, T, P, SPW
  - Definition of concepts
  - Elaboration of development project of the CT
  - Feasibility Study and mounting itself of A project
  - Preparation, development of the project
  - Technical monitoring of the projects of the CT
  - Mechanisms for research funding; - Justification for funding.

➢ Management of the Land heritage of CT: 2 credits (30 hours); L, T, P, SPW
  - Concept of land heritage of CT
  - Consistency of the land heritage of CT
  - Management of the real estate field of CT
  - Tools for the management of the land in the CT
  - Organization of the land regime in Cameroon
  - Procedure for Registration of buildings
LGA236: Sociology and the Work of administration

- Urban Sociology and rural: 2 credits (30 hours); L, T, P, SPW
  - The definition of each of these frameworks
  - The Explanation of models of thoughts traceable to each of these environments
  - The elaboration of development policies urban or rural

- The Secretariat duties: 2 credits (30 hours); T, P
  - The computerized management of the desktop, applications and folders
  - The treatment of text and the mail
  - The spreadsheet and the edition of documents
  - The concepts of professional communication
  - The home and the telephone
  - The Internet and electronic mail

LGA237: Legal Environment I and Creation of an enterprise

- Law on Commercial Companies I: 1 credit (15 hours); L, T
  - The status of trader
  - The acts of trade
  - The business
  - The different commercial contracts

- Civil law: 1 credit (30 hours); L, T, P
  - Definition of law
  - Characteristics
  - Classification
  - Sources
  - Decree of application
  - The dimensions of law (objective and subjective law)
  - Judicial organisation
  - The concept of legal personality
  - The civil status act: the name and the domicile
  - Incapacity
  - Judicial acts
  - Legal facts
Creation of enterprise: 1 credit (15 hours); L, T, P, SPW
- Concept of contractor
- Motivations to the creation of an enterprise
- Search for ideas and evaluation
- Research funding
- Choice of legal status
- Ethical aspects of the business
- Elaboration of the business plan

LGA241: Human Resources and Quality

Human resources management: 3 credits (45 hours); L, T, P, SPW
- The "Evolution of HRM (definition, foundations, issues)
- Predictive management of the employment (content, methods, issues)
- Practice of HRM (management of individual relationships: recruitment, training, animation, motivation, conditions of work
- the social dialogue: techniques at the service of social dialog and the crisis of social dialog)
- Elements of payroll management
- Evaluation of the performance of the HRM
- Place of HRM in the overall strategy of the enterprise

Quality, Health, Safety and the Environment: 2 credits (30 hours); L, T, P
- Safety at Work
- Prevention of risks
- Hygiene and property
- System of Management QSE
- Environment
- Security
- Quality

LGA242: Administrative police and Municipal police

Administrative Police: 2 credits (30 hours); L, T, P, SPW
- Importance and modalities of the Constitution of A administrative police
- Competence of the administrative police
- Acts of the administrative police
- Obligations of this form of police
➢ **Municipal Police**: 2 credits (30 hours); L, T, P, SPW
   - Importance and modalities of the Constitution of a municipal police force
   - Jurisdiction of the municipal police
   - Acts of the municipal police
   - Obligations of this form of police

✈️ **LGA243: Work of end of mandate and ASP**

➢ The work of the end of the fiscal year and mandate: 2 credits (30 hours); L, T, P
   - Elaboration of a balance sheet and report by the end of year
   - Elaboration of a predictive report
   - A balance sheet of the end of the mandate

➢ Implementation professional situation: 2 credits (30 hours); T, P, SPW
   - Synthesis of the course of administration
   - Synthesis of the course of accounting
   - Synthesis of management courses
   - Synthesis of course of taxation

✈️ **LGA244: Local public services and Collection of Local Taxes**

➢ Local public services: 2 credits (30 hours); L, T, P
   - Nomenclature of local public services
   - Levels of competence in these services
   - Management of this type of service

➢ Test procedure for the recovery of local taxes: 2 credits (30 hours); L, T, P
   - The structures of control and recovery
   - The mechanisms of control and recovery
   - The guarantees of the control and recovery
   - The skills and remedies
LGA245: Professional Practice

- The case of synthesis of taxation: 2 credits (30 hours); L, T, P
  - Case study of taxation
  - Case study of local taxation

- The case of synthesis of accounting: 2 credits (30 hours); L, T, P
  - Case Study for the budgetary accounts
  - Study of cases of public accounting
  - A case study of analytical accounting

LGA246: Professional Internship

- Professional Internship: 6 credits (90 hours); P, SPW
  1. Arrival and Business Integration
  2. Working in a company
  3. The keeping of the Intern journal
  4. The choice of the theme of work: in collaboration with mentors professional and academic supervisors
  5. Elaboration of the plan of research
  6. The resources to exploited
  7. The organization of study
  8. Drafting of the report
  9. Presentation of the report before a jury

LGA247: Legal Environment II and Civic Education

- Law on Commercial Companies II: 1 credit (15 hours); L, T
  - Definition, Object and forms of commercial companies;
  - The creation of commercial companies;
  - The operation of the commercial companies; - the dissolution of commercial companies.

- Labor law: 2 credits (30 hours); L, T, P
  - Definition of labour law
  - Historical background of labour law
  - Labour contracts
• Labour conflicts (individual and collective)
• Staff delegate, trade union etc.
• Industrial accident and illness that is the hygienic and safety conditions at the job site

➢ Civic Education and Ethics / 1 credit (15 hours); L, SPW

The Concepts

• The citizen
• The Nation
• The State
• Public Property unto collective property
• The freedoms
• The public service
• Problem of ethics
• Ethics, Law and reason
• Management and ethics of responsibility
• Ethics and management
• Ethics
• Civics
• Deontology
• Moral consciousness
• The universal declaration of Human Rights
• Good governance in public services
• Explain the importance of civics to the life of the nation
• Functions of the state and its citizens
• Deontology, Professional ethics and professionalism
• Relationship between morality, law and ethics
• Codes of ethics
Field: MANAGEMENT

Specialty:

STATISTICS
1. The objective of the training

The objective of an HND in statistics is to train managers who will be literate in the use of computers to treat data. The holder of this certificate will be an actor recognized in the management and analysis of statistics in medium-size enterprises and large companies; in the administration or research centers. He will be a privileged collaborator of hierarchy in the process of decision-making.

2. Skills Sought After

   → General skills
      - Can adapt to a field of study;
      - Be leader in a project;
      - Understand the structure, functioning and strategic issues of an organization;
      - Understand the stakes in the treatment of information in organizations;
      - Know the economic environment of his enterprise;
      - Observe and analyze rigorously a given situation;
      - Self-training;
      - Can adapt to an international environment;
      - Can use office software.

   → Specific Skills
      - Should understand the determinants of purchase and sale in a competitive foreign market;
      - Should know probabilities and statistics in mathematics;
      - Can conceive, create, update and administer a data base;
      - Can gather data, control the quality, organization and stockage, extraction and presentation of pertinent information, and analyze statistics and present the results.
      - Monitor technology in his area of competence;
      - Use specialized software for the statistical treatment of data;
      - Respect the law when gathering, using and disseminating data and the results;
      - Contribute in the conception of studies and investigations and to the realization of analysis of statistics;
      - Develop programmes / statistics analysis software / or reporting;
      - Analyze needs and carry out audit

3. Outlets

   - Chargé d’études for statistics
   - Statistics developer;
   - Data-manager.
### 4. Organization of the Teachings

#### Semester 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Hourly Volume</th>
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<td>Algorithms and programming in C</td>
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<td>Case study, statistical programming II</td>
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<td>Domain of Application I and II</td>
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<td>STA244</td>
<td>Data mining, data base III</td>
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<td>STA245</td>
<td>Financial mathematics ; Survey</td>
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5. Courses content

- **STA111: Fundamental algebraic Concepts**
  - Algebraic concepts fundamental: 4 appropriations (60 hours); L, T, P, SPW
    1. Elements of Logic
    2. Arithmetic in Z
    3. Concepts on sets
    4. Relationship of equivalence, relationship of order, canonical decomposition of an application
    5. Laws of composition and groups
    6. links and body
    7. Polynomials and rational functions
    8.

- **STA112: Principles economics**
  - General Economy: 3 credits (45 hours); L, T, P, SPW
    1. Major economic concept
    2. Major issues posed by economists (what choices are in a world with limited resources? What can be produced and can it be measured The major macro-economic equilibrium)
    3. Coordination by the market (definition, operation of a competitive market, imperfectly competitive market, market failures)
    4. Elements of Public Economy (externalities, public goods, common resources)
    5. Productive process (production, investment and labor factor)
    6. Production Function, factorial yields, economies of scale
    7. Analysis of the labor market (definitions and measurement of the activity, employment and unemployment, explanatory theories of unemployment)
    8. Elements of National income (GDP, aggregates, indicators and indices)

- **Knowledge of business: 1 credit (15 hours); L, T, P, SPW**
  1. The enterprise: definitions, diversity and theoretical approaches
  2. Functions and structures of the enterprise
  3. Evolution of modes of production and distribution circuits
  4. Evolution of the modes of management
STA113: Surveys and databases I

- **Survey**: 1 credits (15 hours); L, T, P, SPW
  1. Achievement of a statistical study simple (survey, work on data available, seizure, treatments, simple statistics)
  2. Quality and cleaning of data (missing values, outliers, coding...)
  3. The practical implementation of the tools of descriptive statistics, with software Methods
  4. Drafting of report
  5. Survey protocol

The databases I: 4 credits (60 hours); L, T, P, SPW

- **Spreadsheet**
  1. Import of data in a text format
  2. Formula for calculating, data base management, graphic, solver, etc.

- **Relational Database Management System (RDBMS)**
  1. Database management systems and their functions, users of a database, data models
  2. Relational model: vocabulary, mathematical formalities, notion of coding
  3. Data Definition Language (SQL): presentation of the language, creation of databases, modification of the structure of a database, modification of the tables of a database (adding, modification, deletion of a column)
  4. Relational algebra: selections, projections, links, union, intersection, Difference
  5. Tools available in the market
  6. Graphical query of a Relational Database (RDB)

STA114: Algorithms and programming in C

- **Algorithms and programming in C**: 5 credits (55 hours); L, T, P, SPW
  1. Methodology of the programming: objectives, approach, definitions
  2. Basic elements: data, expressions, actions, derived types, sub-programs
  3. Basics of the C language: The syntax, data types, enumerations, tables, structures, functions, pointers and dynamic management of the memory, modular programming, file management
  4. Linear data structure: abstract types of data, lists, stacks, queues, Search algorithms, route, insertion, deletion

Practicals: the use of formal calculation software for solving problems of algebra and analysis.

- The UNIX environment;
- Programming languages (C) and implementation of algorithms;
- Softwares;
- Implementation of an algorithm in an evolved language;
- Validation of a software solution by the implementation of tests;
- Drafting of a technical documentation and the user’s guide.

**STA115: Descriptive Statistics**

- **Descriptive Statistics: 4 credits (60 hours); L, T, P, SPW**
  1. Population concept;
  2. Notion of variable, understanding and identification of the type of variable;
  3. Tables of numbers and frequencies, distribution of a variable
  4. Exploration, presentation and visualization of qualitative or quantitative data of a variable in the form of tables and graphs
  5. Indicators of central tendency, dispersions and form
  6. Presentation and visualization of data from the crossing of two variables (Qualitative and/or quantitative) in the form of tables and crossed graphs
  7. Simultaneous description of two variables, contingency tables, joint distribution
  8. Marginal distributions, conditional distributions
  9. Studies of the connections between two quantitative and/or qualitative variable:
     Graphic representations, measures of association. **NB:** We will use a software tool adapted

**STA116: Introduction to the analysis, architecture, operating system**

- **Introduction to the analysis: 3 credits (45 hours); L, T, P, SPW**
  1. Typology of R
  2. Functions of a real variable; composed functions
  3. Monotonic functions, basic functions, limits of the usual functions; comparison of functions; calculations of limits and asymptotes
  4. Continuity, derivation, calculation and interpretation
  5. Primitive, calculations and interpretation; initiation to the integral calculation, calculation of areas
  6. Calculation of the index amount (one and two indices); change of indices

- **Architecture of computers: 1 credits (15 hours); L, T, P, SPW**
  1. The Arithmetic Calculations and logics used following the different bases, as well as the logical combinatory and sequential circuits
  2. General operation of computer and its internal components (Microprocessor, memory), and the principle of the management of external devices
  3. The chain of development of a program
  4. Language: Management of the memory with registers, the instructions (transfer, arithmetic, logic, connections, conditional gaps, methods of programming

- **Operating System: 1 credits (15 hours); L, T, P, SPW**
  1. The role of an operating system
2. Main features of Unix (file system and listing of orders)
3. Good methods of use and autonomous users (presentations by group on the NFS file servers and NIS, on DNS servers as the bind, on the compilation of a nutshell, on Servers SSH, SCP, SFP, Webmail)
4. Introduction to Programming system under Unix in C
5. Introductions to the process, process of synchronization (semaphores), signals and Tubes
6. Management of the Inputs and Outputs
7. Management of shared resources

STA117: Bilingual training I and Civic Education and Ethics

- **French expression**: 1 credit (15 hours); L, T
  
  1. **Vocabulaire**
     - Vocabulaire technique usuel
  
  2. **Grammaire**
     - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
     - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
     - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
     - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
     - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
     - Des fonctions grammaticales.

  3. **Expression et communication**
     - Compréhension et interaction au cours d’une discussion technique ;
     - Communication orale courante ;
     - Communication orale interactive
     - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
     - Lecture rapide et compréhension de texte ;
     - synthèse d’un long texte
     - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
     - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
     - Expressions figées

- **Civic Education and Ethics**: 2 credits (30 hours); L, T, P, SPW
  
  1. **The professionalism and the values of the profession**
     - Definition of professionalism;
     - The professionalism to ensure equality or equilibrium ;
     - What are values of senior technician today?
• The frame of references of professionalism; the types of responsibilities.

2. Ethics
• What is ethics?
• Distinction between ethics and deontology;
• Ethical decision-making; testing of an ethical decision;
• The ethics and social standards.

❖ STA121: Linear algebra

➢ Linear algebra: 4 credits (60 hours); L, T, P, SPW
1. Vector spaces, sub-spaces, sum of sub-spaces, free and generic part, bases
2. Linear applications, image, centre, Rank of a linear application, theorem of the rank.
3. Barycenter
4. Matrices, operations on the matrices, the of square matrices, inversible matrices, transposition, equivalent matrix, matrices of a linear application, change of base
5. Scaling of a matrix: application to the determination of the rank, the Inverse of a matrix
6. Systems of linear equations, Resolution by the method of Gauss, Rank of a system, system of Cramer
7. The determinants: determinant of a system of vectors; determinant of an endomorphism or a square matrix, calculation by development of a determinant, link with the linear independence; tracing of a square matrix

❖ STA122: Differential and integral calculus, adjustment of curves and statistical series

➢ Differential and integral calculus: 2 credits (30 hours); L, T, P, SPW
1. Differentiation, theorems of complete increases, formulas of Taylor, Limited Developments
2. Construction of the curves (Cartesian in, Parametric curves, curves in polar)
3. Series of functions: ad hoc convergence and uniform convergence
4. Integral of Riemann, explicit calculation of primitives and integrals of real functions of one real variable, improper integrals
5. Resolution of differential equations of the 1 order and linear differential equations of the second order with constant coefficients

➢ Adjustment of the curves and the statistical series: 3 credits (45 hours); L, T, P, SPW
1. Linear adjustment and adjustment of curves between two quantitative characters
   • Method of least squares; R2.
2. Time series:
   • The models of decomposition additive and multiplicative;
- Calculation of a trend and seasonal components by the methods of moving averages and of least squares:
- Calculation of the Corrected Series of seasonal variations: exponential smoothing simple and double; Forecast.
- Simple and double exponential smoothing
- Forecast

**STA123 : Web development, databases II**

- Web development: 2 credits (30 hours); L, T, P, SPW
  1. Introduction to the basic standards of the web: HTML, XML, XHTML, CSS, JavaScript, Ajax
  2. LS like Joomla
  3. Web Application in PHP
  4. MySQL database
  5. association MySQL and PHP

- The Databases ii: 2 credits (30 hours): L, T, P, SPW
  1. Functional dependencies and normalization, Normal Forms
  2. Language of Data Manipulation (SQL): selections, Tris, queries on several tables, joins, union, intersections, functions of aggregation, updates, views, indices, transactions
  3. Databases and programming: use of databases with a programming language (C), creation of databases, inserting data, data recovery
  4. Graphic language and SQL language management of" BDR
  5. Quality criteria for BDR (normal forms)

**STA124: Inferential Statistics, Statistical Programming**

- Inferential statistics: 2 credits (30 hours); L, T, P, SPW
  1. Fluctuation of Sampling
     - fluctuation of a mean, variance, proportion on a simple random sample;
     - interval of fluctuation, sample size for a given data.
  2. Estimate
     - The estimators, methods of construction of estimators, qualities of an estimator;
     - Estimation of a mean, a variance and a proportion;
     - Confidence intervals;
     - Estimation by interval of a mean a variance and a proportion; introduction to the tests of hypothesis: test on a proportion or a mean.

- Statistical programming: 3 credits (45 hours); L, T, P, SPW
  1. Learning of script languages
  2. Creation of program of automatic import of data in different formats within a statistical software
3. Management of data within a statistical software: Programming of automatic controls applied to a database to identify missing data or aberrant and edition of listings of anomalies or controls

4. Simple automation of Analyzes Descriptive statistics: creation of standard programs (or macros) allowing the edition of statistical tables directly embeddable in a report or a presentation of results

### STA125: Probability and simulations, Project I

- **Probability and simulations: 2 credits (30 hours); L, T, P, SPW**
  
  1. Modeling of basic probabilistic situations in the help of random variables:
     - Definition of the concept of real random variable in the case discrete and continuous, distribution function, probability distribution/density, mean and variance
  
  2. Usual discrete and continuous law

  3. Calculations of probabilities from the probability law and of the distribution function of a random variable

  4. Use of software for the representation of distribution functions/density

  5. Simulation of random experiences of reference, according to a known distribution

  6. Law of large numbers

  7. Pairs of random variables, random vectors

  8. Simulation of random vectors

  9. Independence, concept of covariance

  10. The theorems of convergence (Central Limit Theorem - TCL)

- **Project I: 3 credits (45 hours); L, T, P, SPW**

  A. **Classroom teaching:**

     1. The project process

     2. The actors of Project Management: contracting authority, contractor, subcontractor, of nBook, Master work, subcontracting, Steering Committee

     3. The Project Team: distribution of roles

     4. The specifications: analysis and understanding of the needs of a client

     5. The definition of tasks, planning and sequencing, allocation of resources

     6. Risk Analysis

     7. Organisational tools: PERI GRAPH, Gantt Chart

     8. The instrument panel of the follow-up of the state of advancement of a project

     9. Documentations

     10. The specificities of an economic project or decision-making

  B. **Practical Implementation of methodology (Work in group of 4 to 6 students)**

     **NB**: The project must have a multidisciplinary character; and cover a statistical and computerized base. Its scope must be realistic to implement the All the activities, tasks and constraints of the conduct of an industrial project, enterprise or service, namely:
1. Drafting of a Specification
2. Constitution of a team (4 to 6 students)
3. Distribution and planning tasks
4. Management of time and deadlines
5. Use of project management software and tools for Sequencing
6. Search Constraints
7. Documentation, memory and oral presentation

**STA126: Financial Management**

- **Management**: 2 credits (30 hours); L, T, P, SPW
  2. Analysis of the summary documents: Intermediate Balance of Management (GIS), Ability to self-facing" (FCA), and the analysis of activity. The Working Capital Fund (FR), the need for working capital (BFR), cash flow and analysis of funding
  3. Production and analysis of data in the cost accounts;
  4. Costs and margins; marginal cost
  5. Influence of the activity on the calculations of management, variable cost, rational imputation.
  6. Monitoring and evaluation of the performance for the help to the decision making

- **Reporting, evaluation and Feedback system dashboards**: 2 credits (30 hours); L, T, P, SPW
  1. Reporting: Definition, Forms (ad-hoc, ground)
  2. Components of a report, formatting (ergonomy), Dissemination
  3. To reporting solutions in office and accounting environment
  4. Basic notions of computer graphics
  5. Synthesis of results
  6. The choice of indicators and techniques of Computer Graphics
  7. Software of computer graphics and web interfaces dedicated

**STA127: Expression and communication I, ethics and citizenship II**

- **Expression and communication I**: 1 credits (15 hours); L, T, P, PE
  1. Documentary research and processing of documents: reading, analysis, reformulation, representation of data in the form of tables, data-visualization, graphs, illustration, legends. Awareness of the social environment, economic, political and cultural
  2. Drafting and editing of documents according to standards in force (presentation, typographical errors, bibliographic and sitographique)
  3. Techniques of record, summary and synthesis.
4. Semiology of the Image: written and oral argument by the Image
5. Presentation of the results of an investigation of a complaint choice of relevant information, graphic representations (data-visualization, computer graphics)

- Ethics and citizenship II: 2 credits (30 hours); L, T, P, SPW
  1. Code of Ethics and the obligations of the senior technician
    - Summary Presentation of the Code of Ethics
    - Obligations to the public
    - Obligations to customer or employer
    - Obligations to the profession and the Confreres
    - Obligations relating to the advertising and professional representation
  2. The senior technician in the face of corruption and to the collusion
    - Offenses related to corruption
    - Offenses related to the collusion

- STA231: Reduction of matrices and scalar product, Discrete Mathematics
  1. Reduction of matrices and scalar product: 2 credits (30 hours); L, T, P, SPW
    1. Values and vectors of a matrix; characteristic of polynomial, diagonal matrix
    2. The diagonal, in particular that of symmetric matrices
    3. Scalar product, standard; orthogonal, base orthographic; orthogonal projection on a sub-Space

- STA232: Economics and Management
  1. Principles of Economics: 3 credits (45 hours); L, T, P, SPW
    1. Training, distribution and redistribution of income (tools in report: Economic Table of sets, indicators of the level of income inequality)
    2. The role and impact of taxation and social transfers (theoretical elements and descriptive elements)
    3. Purchasing power, consumption and savings
    4. Relationship between savings and investment
    5. Growth (measure, role of technical progress, endogenous growth) and development (Definition, indicators, concept of sustainable development)
6. Economic policies (cyclical policies and structural policies): measures and statistical evaluations
7. Currency, monetary creation, guiding rate
8. The opening of economies: explanatory theories of the international exchange, balance of payments, internationalization of the productive process

- **Management of organizations: 2 credits (30 hours); L, T, P, SPW**
  1. Principles of management and decision
  2. Strategic management of organizations (strategic diagnosis, adoption of a strategy and generic strategies)

- **STA233: Information systems, development of applications**

- **The information systems: 2 credits (30 hours); L, T, P, SPW**
  1. General introduction: Basic notion of the modeling of a system of information, overview of different data models
  2. Understand the passage of the model to the implementation of the associated database
  3. Components of a global decision-making system (power, storage, restitution)
  4. Data base models of decisional information systems (datawarehouse, datamart), multidimensional model
  5. Tools of Business Intelligence (BI): extraction, storage and restitution of data
  6. Functions of a operating system server and language of associated commands
  7. Decision-making tools available on the market

- **Development of applications: 2 credits (30 hours); L, T, P, SPW**
  1. Specifications
  2. Modeling Needs
  3. Technical Solution: specific development through the use of specialized tools.
  4. Tests of integration
  5. Specifications
  6. Modeling Needs
  7. Technical Solution: specific development or through the use of specialized tools.
  8. Tests of integration

- **STA234: Case study, statistical programming II**

- **Case study: 2 credits (30 hours); L, T, P, SPW**
  1. Development of a case study involving the skills acquired in statistics and informatics, on the basis of a specification
  2. Further software
  3. Interpretation of results obtained
  4. Drafting of a synthesis document
Statistical Programming II: 2 credits (30 hours); L, T, P, SPW

1. Development/programming of the management of data, their statistical analysis and the restitution of the results
2. Advanced automation of statistical analysis using script language
3. Connecting to data sources and realization of user interfaces
4. Notions of test and validation of application in link with the main standards and guidelines

STA235: Hypothesis Test, linear model, Project II

Hypothesis Test: 2 credits (30 hours); L, T, P, SPW

1. Confidence intervals for a difference of means, a difference in proportions, ratio of variances
2. Definitions, principles of tests. hypothesis, decision rule, errors of first and second species, power, degree of significance
3. Tests on the means hopes, variances, proportions: comparison with a reference value, comparison of two distributions (independent samples or paired)
4. Tests of chi square: adjustment and independence on contingency tables

Linear model: 2 credits (30 hours); L, T, P, SPW

1. Simple linear regression: method of least squares, R2,
2. Confidence intervals and parametric testing forecasting
3. Multiple linear regression: extension of the inference to multidimensional frameworks
4. Selection of variables and choice of models, detection and treatment of multicollinearity
5. Validation of the model: homogeneity of variances, analysis of residuals, influential observations and/or aberrant
6. Analysis of Variance with 1 factor: modeling and testing of hypothesis 7. Multiple comparisons tests

Project II: 2 credits (30 hours); L, T, P, SPW

1. classroom Teaching
   Bring the student to acquire more advanced knowledge in one or several of the areas of the economy, such as: income-consumption-savings-investment, measures and statistical evaluations, analytical accounting, management control, marketing, production, socio-economy. This will should be done with in the aid of advanced methods specific to the areas of application: Non parametric tests, analysis of variance to 2 factors, analysis of covariance, logistic regression, factorial analysis of multiple correspondence (AFL), financial mathematics, linear programming, etc.
2. Implementation in practice (Work in group of 4 to 6 students)

The project presents a multidisciplinary character and take into consideration the teachings of the first 3 semesters. It's a continuation of Project 1, and included the realization and the presentation of results achieved:

- Achievement of the technical solution used;
- Drafting of step report;
- Drafting of synthesis reports;
- Oral Presentation of the project;
- The memory of synthesis will incorporate a summary of a page in English;
- To be accompanied by a recommended professional stakeholder. (It is desirable that the project is led in partnership with a professional organization which may be the sponsor).

STA236: Series, analysis of data

- **Series:** 2 credits (30 hours); L, T, P, SPW
  1. numerical series: to positive terms and any terms
  2. Series of functions: convergences simple and uniform: continuity of limits
  3. Full series: Differentiation and integration: complex exponential functions. Trigonometric series

- **Data analysis:** 3 credits (45 hours); L, T, P, SPW
  1. **Introduction**
     • Representation of data, factorial analysis and classification, software tools.
  2. **Principal component analysis** (ACP)
     • Definitions and principles, areas of application, processing of data, analysis of clouds, simultaneous representation and interproation.
  3. **Factorial Analysis of correspondence** (AFC)
     • Relationship between AFC and ACP, areas of application, processing of the data, methodology of analysis, representation of terms and interproation.
  4. **Multiple correspondence analysis** (AL)
     • Applications, processing of data, basic principle, data representation, interproation of the results.
  5. **Discriminant analysis** (AFD)
     • Definitions, logistic regression, Bayesian classification, decision trees, linear analysis discriminant, discrimination, affectation.
  6. **The classification of data**
     • Transformation of the data, the methods of classification, the method of mobile centers, the hierarchical classification, the classification mixed.

STA237: Bilingual training II, Ethics and citizenship III

- **English:** 1 credits (15 hours); L, T, P, SPW
  1. **Vocabulary**
     • Technical and usual vocabulary of the specialty
  2. **Grammar**
3. Bilingual expression
- Understanding in interaction in Technical Discussions
- Continuous oral communication: Show, explain, develop, summarize, account, comment;
- Interactions oral communication

4. Autonomous reading of "writings" of all levels
- Lead by a quick reading to understand the general sense;
- Browse a text long enough to locate desired information;
- Gather information from different parts of the document or of the different documents in order to accomplish a specific task.

5. Write clear, detailed texts
- Essay writing;
- Application for employment;
- C.V.;
- Letter of motivation;
- Letter/memo writing and minutes of a meeting

- Ethics and citizenship III: 2 credits (30 hours); L, T, P, SPW

1. Use of the title
   - The order (or association) senior technicians and the reserved title;
   - Professionals, titles
   - The titles of function;
   - Academic, grade;
   - Example of a professional card.

2. The Ethics of the Environment
   - Context and history;
   - Philosophical Foundations;
   - The modern beliefs of the relationships between man and the environment;
   - Areas concerned by the ethics of the environment;
   - Situation in several regions of the world;
   - Practical application of the ethics of the environment; trends, developments, projects.

 STA241: Operational Research, Optimization

- Operational research: 3 credits (45 hours); L, T, P, SPW

1. Linear programming: modeling of linear programs, method of the simplex, sensitivity analysis and duality
2. Graph Theory: trees of recovery, trees of research, relations, equivalencies, orders and lattice
3. Models of networks: transport, assignment, coupling, more short path, maximum stream and stream at minimum cost, problems of tours on the arcs and on nodes
4. Dynamic programming: heuristic methods

- Optimization: 2 credits (30 hours); L, T, P, SPW
1. Concepts on the convexity
2. Multipliers of Lagrange and problems of points-saddle
3. Conditions of optimisation in the presence of constraints
4. Duality
5. Problem of Kuhn and Tucker
6. Digital methods of optimization for the problems without constraints

**STA242: Management and Law**

- **Management: 2 credits (30 hours); L, T, P, SPW**
  1. Budgetary management and management control
     - Predictive management of sales
     - Management of the production, supply and stocks
     - Cashflow budgets: Analysis of Variances
  2. Quantitative techniques of management
     - Linear programming and programs for production
     - Financial mathematics, decision trees, and investment decision
     - Detail studies of some areas of management: the quality, marketing, human resources management or the accounting and financial management

- **Law: 2 credits (30 hours); L, T, P, SPW**
  1. The common Labor Code (Act No. 92-007 of 14 August 1992)
  2. Author right and protection of digital work of acts
  3. The technologies of the Information and Communication Technology (ICT) and the protection of personal data: act relating to the Computing, Files and Freedoms
  4. Elements of Rights of organizations (according OHADA)

**STA243: Areas of Application I and II**

- **Areas of Application I: 2 credits (30 hours); L, T, P, SPW**
  - The presentation of problems Treated and statistical methods used in areas such as:
    - Biostatistics, environment, development;
    - Control of management, marketing, production;
    - Socio-economics, etc. ;
    - Basic elements of areas presented.

- **Areas of Application II: 2 credits (30 hours); L, T, P, SPW**
  - In some areas of application possible among the following:
    - Biostatistics;
    - Environment;
    - Development;
    - Management control, marketing, production;
- Socio-economics, etc.
Implement advanced methods of specific areas of application studied:
- Non parametric tests;
- Analysis of the Variance to 2 factors;
- Analysis of covariance;
- Logistic regression;
- Factorial Analysis of Multiple Matches (AFL), etc.

▶ STA244: Data mining, data base III

- Data Mining: 2 credits (30 hours); L, T, P, SPW

1. Big Data (mass of data)
   • Structured data, non-structured, semi-structured;
   • External Data, open, media-social, ...;
   • Overview of methods that can be implemented on these data (Text Mining, Web Mining);
   • Architecture of the mass data (Big Data).

2. Data Mining (data search).
   • Supervised classification (decision trees, logistic regression, discriminant analysis, methods of nearest neighbors ...);
   • Selection of predictors, Assessment of forecasting quality of a classification rule;
   • Sample for learning, validation and testing.

▶ Basis of data III: 2 credits (30 hours); L, T, P, SPW

1. The programming language within a system of management of BDR: Triggers (), stored procedures
2. Optimization of SQL queries (Structured Query Language) of querying
3. Meta-data, navigation tool OLAP (On-Line Analysis Process)

▶ STA245: Financial mathematics, Survey

- Financial Mathematics: 2 credits (30 hours); L, T, P, SPW

1. Various measures of Interest
2. Equation of Value
3. Annuities with fixed or unfixed payment or not
4. Reimbursement of a loan: progressive amortization, sinking fund, possibilities of early repayment and refinancing

- Survey: 2 credits (30 hours); L, T, P, SPW
1. Vocabulary and basic principles of the survey theories
2. Random simple sampling without discount
3. Stratified sampling and cluster sampling
4. Methods of adjusting sample: The example the post-stratification
5. Presentation of a plan of simple survey adapted to the objective of the study and taking into account the information available
6. Sources of bias in survey
7. The method of quotas

ref{STA246: Professional internship}

- Professional Internship: 6 credits (90 hours); P, SPW
  1. Arrival and Business Integration
  2. Working in a business environment
  3. The holding of Intern journal
  4. The choice of theme of work: in collaboration with professional and academic
  5. Elaboration of the canvas of research
  6. Resources to operate
  7. The organization of work
  8. Writing of report
  9. Presentation of the report before a jury

- Expression and Communication II, Ethics and Citizenship IV, Methodology

- Expression and Communication II: 2 credits (30 hours); L, T, P, SPW
  1. The elements common to the Professional Documents: preliminary, body text, complements, stamp, date, Featured, registration, object and reference, call, greeting and making contact, parts annexes or attachments, initials of identification
  2. Record and minutes: types of accounts and of PV, uses, formats and qualities, development of opinions, characteristics, individual position, method of making notes, role, artificial insertion of titles, synthesis, viewing.
  3. Corporate language; every gesture is a word: A gesture is worth a thousand words, five ways to improve body language or body expression
  4. Technical report: research work, problematization, writing guide (introduction, approach, presentation, recommendations, bibliography, webography, Annexes, acknowledgments, dedications, Summary, Summary, proofreading), information, structure, language, oral presentation
  5. Motivation letter and Curriculum Vitae: Studies of requests for employment

- Ethics and Citizenship IV: 1 credit (15 hours); L, T, P, SPW
  1. The Ethics of the consumption
  2. The civics and citizenship
  3. The Good citizenship in the workplace
Methodology for drafting the report of internship: 1 credit (15 hours); L, P

1. collection of Information
2. How to make a report
3. The plan of a probationary report and the Executive Summary
4. The Table of Contents
5. The introduction part of an internship report
6. The conclusion of an Internship report
7. The Acknowledgments
8. How to build an annex
9. When to start his internship report
10. How to title an Internship report
11. The cover page
12. How to write effectively
13. Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations)
14. Instructions and typographical rules of presentation (police, spacing, titles, highlighted, punctuation, graphic charter)
15. How to prepare for a defense
Field: MANAGEMENT

Specialty: EVENTS MANAGEMENT
1. The objective of the training

The objective of this specialty is to provide technicians with the skills necessary to undertake the material and logistics conception, preparation and organization of events (marriage, receptions, seminars, conferences, etc) for individuals, local communities, associations, public or private enterprises.

2. Skills Sought After

   → General skills
      - Be physically and intellectually fit;
      - Have good general knowledge and be very sensible to arts;
      - Be creative, motivated, dynamic and innovative and capable of making good proposals;
      - Be rigorous, have the capacity to mange production and organization at short notice, be autonomous and open to criticisms;

   → Specific Skills
      - Conceive events;
      - Organize professional events;
      - Develop a network of partners;
      - Develop communication actions;
      - Develop a customer portfolio and prospects;
      - Organize and propose a catering service;
      - Control the conformity of realization of suppliers, contractors, etc. to contract specifications.

3. Outlets

   - Event strategist;
   - Multichannel communication strategist;
   - Wedding planner;
   - Organization of shows;
   - Manager of events.
### 4. Organization of the Teachings

#### Semester 1

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5. Courses content

EMA111: Mathematics and Computing I

- General Mathematics I: 3 credits (45 hours); L, T, SPW

- Algebra vector spaces
  1. Polynomials
     • Polynomials characteristics.
  2. Vectorspace
     • Linear applications.
  3. Matrices
     • Operations on the matrices;
     • Matrices relating to a linear application; matrices and determinants.
  4. The Determinants
     • Determinant of a square matrix;
     • Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     • Inversion of matrix of order less than or equal to 3 - method of Gauss;
     • Resolution of systems of linear equations by the method of; Pivot
     • Application of the matrix calculation on the resolution of systems of linear equations.
  6. Reduction of square matrices
     • Own values;
     • Eigenvectors.
  7. Differential equations and linear récurrentielles of order 2 with constant coefficients
  8. Mathematical applications in Economics and Management

- General Computing I: 2 credits (30 hours); L, T, SPW

The hardware and software on a computer system

has- the Hardware

1. The peripheral components
   • The devices of input;
   • The output devices;
   • The storage devices;
   • The devices of input and output.

2. The central unit
   • The central memory;
   • The microprocessor;
   • The ports;
   • The motherboard;
   • The chipset;
   • The powersupply;
   • The cards of extension;
   • Other internal organs.
3. **The unit of exchange (or bus)**
   - Role;
   - Types of bus:
     - Data bus;
     - Control bus; - Bus of address.

B- The Software

1. **The application software**
   - Definition;
   - Role;
   - Types and examples of software.

2. **The basic software (or software systems)**
   - Definition;
   - Types of basic software;
     - The drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation:
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of a operating system;
       - architecture.
   - Concept of Free Software and proprietary software.

System of numeration and codification

C- The numberingsystems

1. **A few basic concepts**
   - The base of the system;
   - Weight;
   - Alphabet of the language;
   - Format of the word (length of the word);
   - power of language.

2. **A few numberingsystems**
   - The decimal system;
   - The binary system;
   - the octal system;
   - the hexadecimal system.

3. **The basic changes**
   - Of Decimal to another base b;
   - To"a base b of any kind to the decimal basis;
   - of the binary in octal and vice versa;
   - from binary to hexadecimal and vice versa.

4. **Arithmetic operations**
   - binary binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
     - addition of binary numbers;
   - Subtraction of binary numbers;
• Use of the complement to2 in the subtraction; multiplication of binary numbers; division of binary numbers.

5. **Hexadecimal arithmetic**
   
   addition of numbers in Hexadecimal; subtraction of numbers in hexadecimal.

D- The codes

1. **General information on the concept of a code**
   - Objectives of the codification;
   - The functional codification;
   - Types of functional codes;
   - the codification of technology.

2. **The alphanumeric codes**
   - The ASCII code:
     - Standard ASCII;
     - Extended ASCII;
   - Use.

EMA121: Mathematics and Computing II

- **General Mathematics II: 2 credits (30 hours); T, P, SPW**

**Analysis**

1. The Real Numbers
2. Numerical Functions of a real variable, limit, Continuity
3. Differentiability, extrema, theorem of Rolle and finished increases
4. Polynomials, fractions, rational
5. Study and graphic representation, reciprocal functions
6. Limited developments, integrals and applications to calculations of Aires
7. Logarithmic functions and exponential
8. Digital Suites: Direction of variation, convergence
9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
10. Mathematical applications in Economics and Management

- **General Computing II: 2 credits (30 hours); T, P, SPW**

- **General Mathematics II: 3 credits (45 hours); T, P, SPW**

**Analysis**

1. The Real Numbers
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10. Mathematical applications in Economics and Management

- **General Computing II: 2 credits (30 hours); T, P, SPW**
A- Computer Networks

1. General information
   - Definition of a computer network; interest of computer networks;
   - basic vocabulary:
   - Workstation;
   - Node;
   - Server;
   - Packet.

2. Typology of networks according to the media:
   - Wired Networks;
   - Networks Not Wired.
   - According The GeographicExtent:
     - The Local Networks (LAN);
     - The Metropolitan Area Networks (MAN);
   - The wide area networks (WAN).

3. Network Topologies
   - Physical Topology
     - The bus topology;
     - The star topology;
     - The ring topology;
     - The topology in mesh;
   - Logical Topology
     - The topology in shaft.
     - Point-to-point networks.

4. Network architectures
   • client/server architecture;
   • architecture of equal to equal.

5. The equipment of computer networks
   - Equipements of basis of a network:
     ✓ The computer;
     ✓ The network card;
     ✓ The server;
     ✓ The network cable;
     ✓ The transceiver (or adapter);
     ✓ The transmission Mounts;
     ✓ The socket.
   - The equipment of interconnections:
     ✓ Hubs (hub);
     ✓ Switch (Switch);
     ✓ Routers;
     ✓ Gateways
     ✓ The gateway (gateway);
     ✓ The router;
     ✓ The bridge (Bridge);
     ✓ the repeaters .

6. Concept of IP addressing
   - structure of an IP address:
     - Network identifier (Net ID);
- Identifier of host (Host ID).
- Specific addresses
  ✓ Network addresses;
  ✓ Machine address;
  ✓ Broadcast Address (broadcaste);
  ✓ Limited Broadcast address (multicast);
  ✓ Address of rebroadcasting (loopback).
- IP addressing by classes:
  ✓ CLASS A;
  ✓ CLASS B;
  ✓ CLASS C.

B- Internet network

6. Concept of protocol
   □ definitions and a few types of protocols
   - SMP protocol;
   - POP protocol;
   - NNP protocol;
   - The FP protocol;
   - HTP protocol;
   - IMAP protocol; - Protocol TCP; - other.

7. A few Internet Services
   • The e-mail;
   • Research on the Internet;
   • The Newsgroup (discussion forum);
   • The transfer of files;
   • The Download (Download A text, download An image, download a free software...);
   • The online Trade; □ The IRC (Internet Relay Chat); □ Other.

8. The search engines
   • Definition;
   • Role;
   • Some search engines.

9. Tools for Internet access
   • The browsers (definition, examples);
   • The plug-ins (definition, examples);
   • The search engines (definition, examples, use).

10. The connection to the Internet
    • Connection hardware;
    • Suppliers of access (role, examples);
    • Types of connections (specialized line, phone line, satellite).

EMA112: quantitative techniques I

➢ Financial Mathematics I: 2 credits (30 hours); L, T, SPW

1. The Basics
   • Simple Interest;
   • Calculation of the value gained;
   • Current value commercial and current value rational one;
   • précompté interest and effective interest.
2. Calculation of the average rate of a series of simultaneous investments
3. Equivalence and replacement of effect
4. Short-term financial transactions - Current Account and interest
5. Commercial Discount - real rate of discount
6. Compound interest
   • Acquired value;
   • Current value;
   • Rate equivalent and proportional rate;
   • rate of "Interest apparent;
   • rate of "real interest.

➢ Statistics: 2 credits (30 hours); L, T, SPW
1. Statistical series to a variable
2. Definition and vocabulary;
   • Graphical representation;
   • Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Gap-type;
     - Quantiles;
     - Coefficient of variation.
3. Statistical series of two variables
   • Definition and vocabulary;
   • Cloud of points;
   • Average point;
   • Covariance and covariance matrix of 2 variables;
   • The coefficient of correlation and regression;
   • Linear adjustment by the method of least squares.
4. Estimate of an average, proportion and a standard deviation
5. Confidence interval and confidence coefficient
6. Tests of hypotheses and the KHI-two

➢ EMA122: legal and accounting Environment

➢ Audiovisual law: 2 credits (30 hours); T, P, SPW
   - The legal framework and legislature.

➢ Principles of Accounting I: 2 credits (30 hours); L, T, P, SPW
   1. General information
      • Definition evolution and the role of accounting;
      • Principles of accounting.
   2. The balance sheet
      □ notion of Employment and Resource
   3. The account and the principle of the double Entry
   4. The transfer accounts
5. The accounting systems (conventional and computerized)
6. Purchase and sale of the goods
   • The elements that decrease the invoice (reductions);
   • The elements that increases the invoice (transportation costs, VAT, packaging (see only logging and déconsignation)).
7. The Regulations
   - In cash (broken, bank);
   - A term (effect of trade: creation, cashing).
**NB**: do not see the movement of the effects of trade.
8. The significant balances of Management (industrial and commercial company)

**NB**: from management accounts present the significant balances of management.
9. Concept of amortization (constant and degressive)
   - Terminology;
   - Calculation (Table D Depreciation of assets placed in service at the beginning and the course of exercise).
10. Concept of provision
    - for depreciation;
    - For charges and losses.
**NB**: for the Chapters IX and X and present the Extract from the balance sheet (brief study and practice).

❖ EMA113: Management I

➢ Production ofEvents: 2 credits (30 hours): L, T, P, SPW

1. The production Department in the event Project
   - Descriptive of A project events;
   - Part of creation/production in an event, dispatch and issues areas of intervention;
   - The role of the Director of production.
2. Support for the mission of production
   - The brief of the project leader;
   - Inventory of different “trades to coordinate.
3. Choose a place and the optioning
   - Define the selection criteria;
   - the principles of options;
   - make the right choice.
4. The tracking
   - Preparation and interlocutors;
   - Principle and conduct on site;
   - The reporting.
5. The budget
   - Elaboration of the budget;
   - management of the budget.
6. Organize a mission of event production
   - Principle of pilotage;
Introduction to Management I: 2 credits (30 hours); L, T, P

General introduction

1. Conceptual Framework of Management
   - Concept of organization;
   - Etymology of the term management;
   - History of the concept of management;
   - Definition of management;
   - The roles of the manager.

2. Study of the Enterprise as Operational Framework of Management
   - The concept of enterprise;
   - Classification of Enterprises;
   - The essential functions of the company;
   - Environment of the business.

EMA123: Management II

Production of Events II: 2 credits (30 hours); L, T, P, SPW.

1. Available means
   - Choice of providers;
   - Brief of the providers;
   - Put in competition;
   - Ethics and negotiation technique.

2. Management of the registration
   - Write a bulletin of enrollment;
   - Communication with participants and follow-up;
   - Put in place a web site of inscriptions.

3. Production control
   - Secure the command;
   - Secure the quality of the benefits.

4. Finish before the due date I
   - Planning of intervention;
   - Construction of the road-book;
   - Prepare the departure.

5. Manage the due date I
   - Principles of organization and field attitude: team, brief, production office;
   - Planning, working conditions and safety of the Yard;
   - Contingency management: how to react, what to do?


Introduction to Management II : 2 credits (30 hours); L, T, P, SPW

1. The process of management
   - The planning;
   - Formulation of the Strategic Plan;
   - Establishment of operational plans;
   - Determination of the budget;
- leadership;
- Conflict;
- Command; - change; - control.

2. approaches
- The classical approaches;
- Préclassical approach
- Human Relations Approach;
- Modern approaches;
- The trends in the evolution of the management.

EMA114: Fundamentals of Marketing

➢ Fundamental Marketing: 2 credits (30 hours); L, T, SPW

1. The basis of Marketing
   - History of marketing;
   - Definition and objective of marketing;
   - Balance Sheet of marketing;
   - Field of application of marketing; - customer satisfaction.

2. The Market
   - The environment;
   - The concept of the market;
   - The segmentation;
   - Indicators of the market;
   - Analysis of the competition (competitive positions, competitive strategies,).

3. information Marketing
   - The Analysis of consumer markets;
   - consumer buying behaviour (Models of analysis, the consumer,
   The determinants of the purchase, the process of purchase);
   - The techniques of market research (Phase of the conduct, techniques of descriptive studies, processing of information).

4. Introduction to Marketing Planning
   - The strategic analysis in marketing (the environmental analysis and determination of the opportunities / threats, Diagnosis of the company and determination of the strengths/weaknesses);
   - The Strategy formulation (formulation of objectives, targeting and positioning, choice of strategic vectors);
   - The marketing mix (the contours of the concept of marketing mix, the product, the price, the distribution, the commercial communication / FDV);
   - The product life cycle of the product (from idea to product, phases of the cycle of life);
   - Management of brands;
   - Identification of the product;
   - Product functions.

➢ Operational Marketing: 3 credits (45 hours); L, T, P, SPW

1. The strategic decisions in marketing
   - Analyze the situation
- Internal analysis (SWOT);
- External Analysis.

• **Develop a marketing strategy**
  - Formulation of objectives;
  - the strategic options.

• **formulate a plan of action**
  - The plan of commercial action;
  - Estimate of the commercial budget; - monitoring and control of results.

• **segment the market and positioning**
  - The concept of segmentation;
  - Segmentation criteria;
  - The choice of target segments;
  - The choice of the position;

2. **The tools of action (marketing mix)**
   - the product, policy;
   - The determination of prices;
   - commercial communication;
   - The Action by the distribution.

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**EMA124 : Methodology and communication alrelationship**

- **Methodology for writing an internship report: 1 credit (15 hours): L, T, P, SPW**
  1. The collection of Information
  2. How to write a report
  3. The format of internship report and the Executive Summary
  4. The Table of Contents
  5. The introduction of the internship report
  6. The conclusion of the Internship report
  7. The Acknowledgments
  8. How to build the annexs
  9. When to start your Internship report
  10. How form an Internship report topic
  11. The cover page
  12. How to writeeffectively
  13. Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations)
  14. Instructions and typographical rules of presentation (police, spacing, titles, highlighted, punctuation, graphic charter)
  15. How to prepare the defense

- **Press relationship and media: 2 credits (30 hours): L, T, P, SPW**
  - Writing, fundamental to the press, style, written expression;
  - Interviews, interviews, oral expression, debates;
  - Writing, mastery of technical tools in radio, television, Internet;
  - New Media;
  - Television, radio, interview, oral expression and gestures;
  - Manage a media-training;
- Prepare and manage a press conference;
- Production: written, audio-visual, graphic design, communication tools;
- Internal communication, political, institutional, mark;
- Studies and interview of opinion.

➢ Coaching of events: 3 credits (45 hours); L, T, P, SPW

Introduction

1. Determine the objective of the event
   - Validate the opportunity to mount an event;
   - The different types of events: Choose the event;
   - Identify the issues and the expected returns: define targets and objectives;
   - budget Evaluation.

2. Events Planning
   - Identify and manage the materials constraints;
   - Establish a retro schedule;
   - Locate a suitable place: the conditions for success;
   - Identify its suppliers;
   - Create a theme and an image for the event;
   - Define a list of stakeholders;
   - Coordinate the consistency of the content.

3. Successful communication in event
   - Identify the target;
   - Prepare and Send Invitations;
   - Establish a follow-up of responses and restart;
   - Choose the correct media: the documents to submit to the participants;
   - Select the products to present;
   - Check before the due day signage, fixtures, reception...

4. Living the day I: Be an actor of the event
   - Receive the stakeholders;
   - Welcome guests or visitors;
   - Make yourself available to take into account the specific requests;
   - Ensure public relations;
   - Assume your role of coordinator with representatives of the company.

5. Evaluate the "benefits" of the event
   - Measure the impacts "image", commercial;
   - Consolidate database with a view to a follow up;
   - Prepare a follow up;
   - Valuing the internal event.

➢ EMA115: Communication and art

➢ Communication Strategy: 2 credits (30 hours); L, T, P, SPW
   - Issues and objectives of the communication of an Enterprise;
   - The territories of the communication of Enterprise;
   - Advertising;
   - The relations of the company’;
   - The tools of communication.
- History of art: 2 credits (30 hours); L, T, P, SPW
  - This course concerns the History of the art as a whole (music, painting, sculpture, drawing etc.).

- EMA125: personalized commercial communication

- Public relations and lobbying: 2 credits (30 hours); L, T, P, SPW
  - Concept of lobbying;
  - Brief historical evolution;
  - Who are lobbyists?
  - Lobbying a profession?

- Sponsorship and Patronage: 2 credits (30 hours); L, T, P
  - The event communication and its different techniques: sponsoring, patronage, sponsorship;
  - The interest of the choice of the Event as the support of communication;
  - Effectiveness and impact of an action of event communication;
  - The place of event communication in a plan of global communication.

- EMA116: Technical communication and control I

- Editing Techniques I: 2 credits (30 hours); L, T, P, SPW
  - Realization of the model, the headlines the Interior”.

- Sound Recording: 3 credits (45 hours); L, T, P, PE - equipment.
  Graphical interface, the Foley.

- EMA126: Technical Communication and control II

- Editing Techniques II: 2 credits (30 hours); L, T, P, SPW
  - The design;
  - The graphic charter.

- Sounds Recording II: 2 credits (30 hours); L, T, P, SPW
  - Its analog;
  - Its digital;
  - Mixing.

- EMA117: bilingual training I and economic environment I

- French expression: 1 credit (15 hours); L, T
1. **Vocabulaire**
   - Vocabulaire technique usuel

2. **Grammaire**
   - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
   - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
   - Du nom et son article : masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
   - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
   - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
   - Des fonctions grammaticales.

3. **Expression et communication**
   - Compréhension et interaction au cours d’une discussion technique ;
   - Communication orale courante ;
   - Communication orale interactive
   - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
   - Lecture rapide et compréhension de texte ;
   - synthèse d’un long texte
   - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
   - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
   - Expressions figées

- **General principles of economics: 2 credits (30hours); L, T, P**

  1. Business and production
  2. Households and the consumption
  3. Markets and Prices
  4. Training and distribution of income
  5. The currency and the financing of the Economy
  6. The elements of the National Accounting
  7. The macro-economicequilibrium
  8. The socialist system
  9. The capitalisteconomy
  10. The State and its interventions
  11. The foundations of international trade;
  12. International payments
  13. The balance of payments
  14. Economic development and its inequalities
  15. Growth and its inequalities
  16. Inflation, unemployment, industrial change
  17. The issues of development and the globalization of problems
18. The development strategies
19. The economic integration and the forms of cooperation in the world
20. The strategies of the International Debt

EMA127: bilingual training I and Economic Environment II

- **English Expression**: 1 credit (15 hours); L, T, SPW

1. **Vocabulary**
   - Technical and usual vocabulary of the specialty
2. **Grammar**
3. **Bilingual expression**
   - Understanding in interaction in Technical Discussions
   - Continuous oral communication: Show, explain, develop, summarize, account, comment;
   - Interactions oral communication
4. **Autonomous reading of “writings” of all levels**
   - Lead by a quick reading to understand the general sense;
   - Browse a text long enough to locate desired information;
   - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
5. **Write clear, detailed texts**
   - Essay writing;
   - Application for employment;
   - C.V.;
   - Letter of motivation;
   - Letter/memo writing and minutes of a meeting

- **Economy and organization of enterprises**: 2 credits (30 hours); L, T, P

- The Enterprise, definition and mode of analysis;
- Classification of Enterprises;
- The Organisational Structure of enterprises;
- The insertion of the company in the economic fabric;
- The commercial activity of the enterprise;
- The productive activity of the enterprise;
- Logistics in the enterprise;
- The financial activity of the enterprise;
- The management of human resources;
- The systemic approach of the enterprise;
- Information system;
- The decision-making process;
- The strategic analysis of the company;
- Choice and implementation of a strategy;
- The business, society and culture;
- The business, society and the Ethics.
EMA231: Human Sciences and Accounting

- Cost accounting and budgetary management: 3 credits (45 hours); L, T, P, SPW
  1. Of the general ledger to the cost accounting
     - generality on the analytical accounting (objectives, role, concept of load)
  2. Analysis of expenses
     - Corporeal and non-incorporable charges;
     - Direct and indirect costs;
     - Supplementary charges;
     - Allocation of indirect Costs.
  3. Valuation of stocks (FIFO method, LUP)
  4. The full costs (cost of purchase, cost of production, introduce the stocks)
     NB: do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products)
  5. Partial costs
     - The variable costs;
     - The marginal costs.
  6. The Rational Importance of charges of structure
  7. The predetermined costs
     Determination of variances on direct costs and indirect and algebraic analysis of these differences (exclude the graphic analysis)
  8. The Budgets (brief study and practice)
     - The sales budgets;
     - The production budgets;
     - The supply budgets; investment budgets; cash flow budgets.

Psychology: 2 credits (30 hours); L, T, P, SPW

- The social representations;
- The social identity;
- The relations between groups;
- The social comparison:
  The social influence, persuasion;
  - The development and operations socio-cognitives.

EMA241: Social Sciences of Communication

- public Communication: 3 credits (45 hours); L, T, P, SPW
  - Introduction;
  - Definition and specificity;
  - Propagande and publicity;
  - Report with the power;
  - Handling setting in scene;
  - Through the political communication;
- Crisis communication.
- Conclusion.

- The sociology of communication: 2 credits (30 hours); L, T, P
- The legal framework and legislature.

EMA232: Legal Environment and Management

- Right of author I: 2 credits (30 hours); L, T, P, SPW
  - Introduction;
  - Legal and legislative framework;
  - Attribute of moral order.

- The tools of management: 2 credits (30 hours); L, T, SPW

  Introduction
  - Definitions, governance, cycle of exploitation and cycle of renewal.

1. The strategy
  - The strategic analysis (issues, tools and methods);
  - Portfolio Strategy and Business Strategy, segmentation;
  - Key success factors, generic strategies, return to the portfolio, strategic maneuvers.

2. The Organization: From SMES to the multinational
  - Forms of organization;
  - Conceptualisation;
  - The structure and organizational processes, organizational culture.

3. The management of Operations
  - The industrial organization, factors of production;
  - The cost-quality-Flexibility-Date line, flows;
  - The accounts and the financial analysis.

5. The management of project
  - The management of the information systems.

6. HR Management
  - transfer, the recruitment, mobility, the GPEC, training, compensation.

7. The leadership, the animation of the collaborators – Teams management, internal communication, the relational.

EMA242: Legal and Political Environment

- Author rights II: 2 credits (30 hours); L, T, P
  - Attributes of heritage order;
  - Suppression of counterfeiting;
  - Conclusion.

- Geopolitics: 2 credits (30 hours); L, T, P, SPW

First part: geopolitics of a globalized world
  - Introduction to the geopolitics of the Middle East;
- Geopolitics of a globalised world;
- Geopolitics of the border;
- Geopolitics of the Water (invited);
- The geopolitics of peace missions (Guest).

Second part: Case Studies
- The geopolitics of the genocide;
- The geopolitics of the United States;
- The geopolitics of the genocide;
- The geopolitics of the cyber space.

EMA233: summary of work and synchronized organization of events I

- **Summary of work I**: 2 credits (30 hours); T, P
  - A dozen of practical cases mounted and animated by a group of teachers of the specialty.

- **Project Events I**: 1 credit (15 hours); L, T, P, SPW
  - Wedding and event planning;
  - Luxury event;
  - Business tourism and hotel management.

- **Event scenography I**: 1 credit (15 hours); L, T, P
  - Space Representation;
  - Scenographic devices.

EMA243: summary of work and synchronized organization of events II

- **The work of Synthesis II**: 2 credits (30 hours); T, P
  - A dozen of practical cases mounted and animated by a group of teachers of the specialty.

- **Project Events II**: 1 credit (15 hours); L, T, P, SPW
  - Sports events;
  - Associative events, charitable and humanitarian
  - Cultural events: arts and performances.

- **Event scenography II**: 1 credit (15 hours); L, T, P
  - Putting in place;
  - Light, sound, video.

EMA234: tourism industry and communication I

- **Cultural and artistic industry I**: 2 credits (30 hours); L, T, P
  1. **Economic elements of cultural industries**
     - Economic Portrait: define and quantify the cultural industry;
     - Explanation of the structure of the market;
2. History of the cultural industries

- Advertising Practice I: 2 credits (30 hours); T, P, SPW
  - Advertising Techniques, means, tools;
  - Preparation for the advertising campaign.

- MEV244: tourism industry and communication II

  - Cultural and artistic Industry II: 2 credits (30 hours); L, T, P

1. The cultural industries versus digital industry
  - The transformation of cultural property into information property;
  - The new practices of consumption;
  - The digital business models;
  - How to regulate?

- Advertising Practice II: 2 credits (30 hours); T, P, SPW
  - Preparation for the advertising campaign;
  - Design, realization and dissemination of spots.

- EMA235: Strategy and control of Communication Event I

  - Diagnosis and campaign plan: 2 credits (30 hours); L, T, P, SPW
    - Of the plan of campaign to markets and targets (primary, secondary, heart of target).

  - Light control I: 2 credits (30 hours); L, T, P, SPW
    - Basic Concept, colorimetry, equipment.

- EMA245: Event Communication Strategy and control II

  - Light control II: 2 credits (30 hours); T, P, PE - Equipments, installation and games of light.

  - Act in a professional situation: 2 credits (30 hours); T, P, SPW
    - Brainstorming, strategy tools, educational strategies...

- EMA236: Audiovisual techniques and photography I and II

  - P video I: 2 credits (30 hours); L, T, P
    - The video, the shooting.
- **P photograph I**: 2 credits (30 hours); L, T, P
  - Photography, The photographic camera.

- **Video P II**: 1 credit (15 hours); L, T, P, SPW
  - The filming, techniques of taken views.

- **P Photography II**: 1 credit (15 hours); L, T, P, SPW
  - Of the silver-halide to digital, the techniques of taken views.

- **EMA246: Professional internship**

  - **Professional Internship**: 6 credits (90 hours); P, SPW
    1. Arrival and reception
    2. Working in a Enterprise
    3. The holding of the Intern journal
    4. The choice of the theme of work: in collaboration with mentors professional academic and supervisors
    5. Elaboration of the report format
    6. The resources available
    7. The organization of work
    8. Drafting of the report
    9. Presentation of the report before a jury

- **EMA237: The legal environment and the creation an enterprise**

  - **Law on Commercial Companies I**: 1 credit (15 hours); L, T
    1. The status of trader
    2. The acts of commerce
    3. The fund of commerce
    4. The different commercial contracts

  - **Civil law**: 1 credit (15 hours); L, T, P
    1. Definition, characters, the branches and the sources of the law
    2. The field of application of the Act
    3. The dimensions of the law (objective, subjective right)
    4. The Legal organization
    5. The right to legalpersonality
    6. The civil status, the name and the residence
    7. The Disabilities /incapacities
    8. The legalacts
    9. The legalfacts

  - **Creation an enterprise**: 1 credit (15 hours); L, T, P, SPW
    - Concept of Entrepreneurship;
    - Motivations for the creation of enterprise;
- Search for ideas and evaluation;
- Sources of finance;
- Choice of legal status;
- Ethical aspects of the business;
- Preparation of the business plan.

EMA247: The legal environment and civic education II

- **Company law II: 1 credit (15 hours); L, T**
  1. Definition, Object and forms of commercial companies
  2. The creation of commercial companies
  3. The operation of the Commercial Companies
  4. The dissolution of commercial companies

- **Labor law: 1 credit (150 hours); L, T, P**
  1. Definition of the right of labor, birth and evolution of labor law and sources
  2. The contract of work (conclusion, implementation and rupture)
  3. The conflicts of work (individual and collective)
  4. The delegate of the staff, unions
  5. Work accidents and occupational diseases
  6. The health and safety in the workplace

- **Civic Education and Ethics: 1 credit (15 hours); L, SPW**

  **The Concepts**
  
  - The citizen;
  - The Nation;
  - The State;
  - Public Property unto collective property;
  - The freedoms;
  - The public service;
  - Problem of ethics;
  - Ethics, Law and reason;
  - Management and ethics of responsibility;
  - Ethics and management.
  - Ethics
  - Civics
  - Deontology
  - Moral consciousness
  - The universal declaration of Human Rights
  - Good governance in public services
  - Explain the importance of civics to the life of the nation
  - Functions of the state and its citizens
• Deontology, Professional ethics and professionalism
• Relationship between morality, law and ethics
• Codes of ethics
Field: MANAGEMENT

Specialty:

PORTS AND SHIPPING MANAGEMENT
1. The objective of the training

The HND programme in Port and Shipping Management (PSM) seeks to provide students with the necessary intellectual, practical technical knowhow required to operate effectively within the Shipping Industry. Specifically it is to: Equip students with a comprehensive understanding of the practice of shipping and how it relates to International trade; expose students to the operational issues within the Shipping Industry; produce workers who can perform management functions within the Shipping Industry; train students who will be able to meet up with the challenges faced by the modern Shipping industry.

2. The Skills sought

→ **Generic skills**
  - Have general knowledge of the national, regional and international social and economic environment;
  - Demonstrate rigor in the organization of work and a capacity for responsiveness and creativity;
  - Have a general knowledge of foreign languages, English in particular;
  - Have the sense of negotiation, commercial relations and sales, as well as after-sales.

→ **Specific skills**
  - Ensure the management of a logistic chain, especially maritime logistic chains;
  - Know a wide range of techniques related to the logistic chain (warehousing, handling, transit, production, transport, etc.);
  - Facilitate and coordinate the exchange between the internal actors of a maritime company;
  - Contribute to the quick resolution of problems between stakeholders of the shipping industry;
  - Manage change and promote solutions necessary for the adhesion of partners;
  - Design adaptable structures, in permanent interaction with the multiple components of the environment;
  - Implement methods that are both flexible and rational, to materialize its action and allow the regulation of flows through the development of a shipping logistics system and efficient information networks;
  - Have knowledge of accounting and financial management as well as management control (more focused on real-time control tools than on accounting methods);
- Know the tools needed to optimize the quality and safety of physical and information flows;
- Provide efficient alternatives in the event of disturbances of current flows;
- To be able to use specific software, to contribute to their choice by the company and to favour their exploitation;
- Managing a work team.

3. Outlets

The following are some of the employment prospects of students completing the programme:
- Intermediate staff members of the Maritime Administration
- Import & Export Agents
- Port Officials/Administrators
- Shipping Lines/Agency Personnel
- Maritime Controllers / Brokers
- Customs Brokers / Customs approved agent;
- Maritime/Shipping Teachers
- Marine Insurance Professionals
- Freight forwarder and logistics provider;
- Commercial agents
- Terminal Operators
4. Organization of the Teachings.

First Year: First Semester

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<tr>
<th>Code</th>
<th>Course Title</th>
<th>Number of Hours</th>
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<tr>
<td>PSM 111</td>
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**Fundamental Courses 30% 9 credits 135 hours**

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**Professional Courses 60% 18 credits 270 hours**

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**Common courses 10% 3 credits 45 hours**

Total: 275 100 35 450 30

First Year: Second Semester

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**Professional Courses 60% 18 credits 270 hours**

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**Common courses 10% 3 credits 45 hours**

Total: 275 100 35 450 30
## Second Year: First Semester

### Field: Management

#### Option: Ports and Shipping Management

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**Total**

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## Second Year: Second Semester

### Field: Management

#### Option: Ports and Shipping Management

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</table>
5. Course Contents

❖ PSM 111: General Mathematics and Computer Science I

➢ General Mathematics I: 3 credits (45 hours); L, T, SPW

- Algebra vector spaces
  1. Polynomials
     • Polynomials characteristics.
  2. Vector space
     • Linear applications.
  3. Matrices
     • Operations on the matrices;
     • Matrices associated with a linear application;
     • Matrices and determinants.
  4. The Determinants
     • Determinant of a square matrix;
     • Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     • Inversion of matrix of order less than or equal to 3
     • Method of Gauss;
     • Resolution of systems of linear equations by the method of Pivot;
     • Application of matrix calculation on the resolution of systems of
       linear equations.
  6. Reduction of square matrices
     • Own values; vectors.
  7. Differential equations and linear récurrentielles of order 2 with
     constant coefficients
  8. Mathematical applications in Economics and Management

➢ General Computing I: 2 credits (30 hours); L, T, SPW

The hardware and software on a computer system - the Hardware

1. The peripheral components
   • The devices of input;
   • The ouPut devices; the storage devices;
   • The devices of input and ouPut.

2. The central unit
   • The central memory;
   • The microprocessor;
   • The ports;
   • The motherboard;
   • The chipset;
   • The powersupply;
   • The cards of extension;
   • Other internal organs.

3. The unit of exchange (or bus)
   • Role;
   • Types of bus:
B- The Software

1. The application software
   - Definition;
   - Role;
   - Types and examples of software.

2. The basic software (or software systems)
   - Definition;
   - Types of basic software: - Drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation:
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of an operating system;
       - architecture.
   - Concept of Free Software and proprietary software.

System of numeration and Codification

A- The numbering systems

1. A few basic concepts
   - The base of the system;
   - Weight;
   - Alphabet of the language;
   - Format of the word (length of the word);
   - power of language.

2. A few numberingsystems
   - The decimal system;
   - The binary system;
   - The octal system;
   - The hexadecimal system.

3. The basic changes
   - Of Decimal to another base b;
   - To a base b of any kind to the decimal basis;
   - Of the binary in octal and vice versa;
   - From binary to hexadecimal and vice versa.

4. Arithmetic operations
   - Binary binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
   - Addition of binarynumbers;
   - Subtraction of binarynumbers;
   - Use the add-in to 2 in the subtraction;
   - Multiplication of binary numbers;
   - Division of binary numbers.
5. **Hexadecimal arithmetic**
   - addition of numbers in Hexadecimal;
   - subtraction of numbers in hexadecimal.

**B- The codes**

1. **General information on the concept of a code**
   - Definitions;
   - Objectives of the codification;
   - The functional codification;
   - Types of functional codes;
   - the codification of technology.

2. **The alphanumeric codes**
   - The ASCII code:
     - Standard ASCII; - Extended ASCII;
     - Use.

---

**PSM 121: General Mathematics and Computer Science II**

- **General Mathematics II: 3 credits (45 hours); L, T, P, SPW**
  1. The Real Numbers
  2. Numerical Functions of a real variable, limit, Continuity
  3. Differentiability, extremer, theorem of Rolle and finished increases
  4. Polynomials, fractions, rational
  5. Study and graphic representation, reciprocal Functions
  6. Limited developments, integrals and applications to calculations of Aire
  7. Logarithmic functions and exponential
  8. Digital Suites: Direction of variation, convergence
  9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
  10. Mathematical applications in Economics and Management

- **Computer Science II: 2 credits (30 hours); L, T, P, SPW**

**A- Computer Networks**

1. **General information**
   - Definition of A computer network;
   - interest of computer networks;
   - basic vocabulary:
     - Workstation;
     - Node;
     - Server;
     - packet.

2. **Typology of networks according to the media:**
   - Wired networks;
   - Networks not wired.
   - according the GeographicExtent:
     - The local networks (LAN);
     - The metropolitan area networks (MAN);
     - The wide area networks (WAN).
3. **Network Topologies:**
   - Physical Topology;
   - The bus topology;
   - The star topology;
   - The ring topology;
   - The topology in mesh;
   - the topology in shaft;
   - Logical Topology;
   - Networks to dissemination;
   - Point-to-point networks.

4. **Network architectures:**
   - client/server architecture;
   - architecture of equal to equal.

5. **The equipment of computer networks:**
   - Equipments of basis of a network; The computer; The network card; The server; The network cable; The transceiver (or adapter); the transmission mounts; the socket.
   - The equipment of Interconnections; Hubs (hub); Switch (Switch); Routers; Gateways the gateway (gateway); The router; The bridge (Bridge); the repeaters.

6. **Concept of IP addressing**
   - Structure of an IP address - network identifier (Net ID); - Identifier of host (Host ID).
   - Specific addresses;
   - Network address;
   - Machine address;
   - Broadcast Address (broadcast);
   - Limited Broadcast address (multicast);
   - Address of rebroadcasting (loopback);
   - Classification IP addressing; CLASS A; CLASS B; CLASS C.

**B- Internet network**

1. **Concept of protocol**
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
     - NNP protocol;
     - The FP protocol;
     - HTP protocol;
     - IMAP protocol; - Protocol TCP; - other.

2. **A few Internet Services**
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
   - The Download (Download A text, download An image, download a free software...);
   - The online Trade;
   - The IRC (Internet Relay Chat);
   - Other.
3. The searchengines
   - Definition;
   - Role;
   - Some search engines.

4. Tools for Internet access
   - The browsers (definition, examples);
   - The plug-ins (definition, examples);
   - The search engines (definition, examples, use).

5. The connection to the Internet
   - Connection hardware;
   - Suppliers of access (role, examples);
   - Types of connections (specialized line, phone line, satellite).

C. Applied computing
1. The study of the Graphical Environment Windows
   - Presentation;
   - Management of Windows;
   - Managing Files and Folders.

2. What is a file, a folder?
   - Path of access to a file.

3. Practical Study of Microsoft Word
   - Study of basic functions.

4. Practical Study of Microsoft Excel
   - Presentation;
   - Arithmetic operations.

5. Construction of a formula
   - Use of the integrated functions: - definition;
   - Syntax of the integrated functions;
   - Some integrated functions;
   - Relative reference, absolute reference and joint reference; - summary case.

D. Computer sciences for supply chains
   - The role of Information Communication Technology in the Supply Chain
   - Electronic Data Interchange
   - Point of Sale Information
   - Value Added Logistics
   - Commodity Related Systems

*PSM 112: BUSINESS MATHEMATICS AND STATISTICS I*

- Financial Mathematics I: 2 credits (30 hours); L, T, P, SPW
  1. The Basics
     - Simple Interest;
     - Commercial present value and rational present value;
     - Forecasted interest and effective interest
  2. Calculation of the average rate of a series of simultaneous investments
  3. Equivalence and replacement of effect
4. **Short-term financial transactions - Current Account and interest**

5. **Commercial Discount - real rate of discount**

6. **Compound interest**
   - Acquired value;
   - Current value;
   - Rate equivalent and proportional rate;
   - Rate of interest apparent;
   - Rate of real interest.

➢ **Statistics: 2 credits (30hours); L, T, P, SPW**

1. **Statistical series to a variable**
   - Definition and vocabulary;
   - Graphical representation;
   - Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Gap-type;
     - Quantiles;
     - Coefficient of variation.

2. **Statistical series of two variables**
   - Definition and vocabulary;
   - Cloud of points;
   - Average point;
   - Covariance and covariance matrix of 2 variables;
   - The coefficient of correlation and regression;
   - Linear adjustment by the method of least squares.

➢ **PSM 122: Business Mathematics and Statistics II**

➢ **Financial Mathematics II: 2 credits (30 hours); L, T, P, SPW**

1. **The Annuities**
   - Constant annual installments;
   - Annuities in arithmetic progression; □ annuities in geometric progression;
   - Perpetual annuities.

2. **The undivist debentures**
   - Reimbursement by constant annual installments;
   - Table of amortization;
   - Laws followed by depreciation recovery of the debt still alive;
   - Laws followed by the annuities;
   - Applications on the borrowings undivided.

3. **The bond loans**
• Reimbursements to the pair;
• Constant annual installments;
• Constant depreciation;
• Rate of yield and rates of returns of a debenture loan;
• Rate of returns of the borrowing to the Broadcast;
• Choice of Investments.

Statistics II: 2 credits (30 hours); L, T, P, SPW
1. Estimation of an average, a proportion and a gap type;
2. Confidence interval and confidence coefficient;
3. Tests of assumptions and the KHI-square.

PSM 113 International Trade and Transport Management I

This Course examines the nature of world trade and its relationship to Logistics. It explores the interfaces between Logistics services and world trade as well as an overview of the International Logistics Industry. The core of the topics to be covered is as follows:

I. INTRODUCTION TO INTERNATIONAL TRADE 3 credits (45 hours); L, T, P, SPW
• Marketing Environment
• World trade development
• International Trade Operations and Techniques
• International Trade Management Tool
• International trade, Trade Balance and Trade Routes

2. TRANSPORT MANAGEMENT 2 credits (30 hours); L, T, P, SPW
• Air, sea and river transport chains
• Railway and road transport chains
• Demand for Logistics services
• Economics of sea transport
• The impact of Transport cost
• Shipping markets
• Shipping companies
• International institutions and their role in maritime trade and transport

PSM 123 INTERNATIONAL TRADE AND TRANSPORT MANAGEMENT II

CARRIAGE OF GOODS BY SEA 3 credits (45 hours); L, T, P, SPW

The module introduces students to the concept of sea transport and its service nature to International trade. It explores the nature and philosophy behind sea transport, its relationship to the trading community and examines the basic local/international institutions and methods used in the industry. It also exposes students to the contractual terms in Charter parties and how to obtain the best terms. Some of the topics to be covered are as follows:
• Introduction to Maritime Transport
• International Organizations and regulation in maritime Transport
• Shipping services and Sea ports
• Documents in shipping
• Pricing of Ocean Freight
• Registration and Licensing of Ships
• What is a Charter Party
• Types of Charter parties
• Commercial context of charter parties
• Examples of charter parties used in different trades
• Key issues of contract law as applicable to charter parties
• Brokers’ role in negotiating and fixing charter parties
• Other aspects of International transport Management

➢ INTRODUCTION TO CUSTOMS OPERATION WORLD WIDE2 credits (30 hours); L, T, P, SPW

This Module explains the role of Customs with its economic and fiscal mission in a Trade facilitation driven World economy development. It also touches on Customs Tariff, and valuation methods. Some of the topics to be discussed are as follows:
• Functions of Customs Administration worldwide
• Customs Tariff
• The entry making process, clearance and Shipping of goods
• Customs examination techniques
• Customs Valuation and WTO concept
• Customs Valuation.

➢ PSM 114 LOGISTICS MANAGEMENT 4 credits (60 hours); L, T, P, SPW

This course provides students with the skills and knowledge in coordinating the movement of goods, both imports and exports. Some of the topics to be covered are as follows:
• Important Concepts in Logistics management: Logistics, Forwarding, Outsourcing, Tendering, Quality management etc.
• Information handling and control issues
• Introduction to Warehousing
• Construction, Layout and Safety
• Customer Service.

➢ PSM 115 PRINCIPLES OF MANAGEMENT 4 credits (60 hours); L, T, P, SPW

This is a beginning course designed to study management theory and practice. The topics to be treated in this course include:
• Functions of management
• History of management thought
• Executive functions of a manager
• Functional areas (Marketing, Production, Personnel, Financial, Operations)
• Business organizations.

❖ PSM 116 MARITIME ADMINISTRATION I  5 credits (75 hours); L, T, P, SPW

This course is designed to introduce that organ of the administration of a coastal state that provides advisory services to the government with regard to transport in general and maritime transport in particular. It also examines the classification, documentation and registration of vessels and the legal and P effect arising from these processes With respect to statutory functions and activities.

The following topics should be examined:

• Basic maritime problems of developing countries
• Participation of developing countries in the evolution of global maritime standards
• Development of Maritime legislation
• Structures and sub structures of the Maritime Administration
• Maritime Safety (ship registration, inspections, etc.)
• Accidents and casualty investigations
• Conflicts and conflict resolutions
• Administration Safety Administration
• National maritime training facilities
• Port development and the role of the Maritime Administration
• Statutory inspections and controls
• Flag state activities (ship registration and related issues such as ship classification, management, charter markets, etc.)

❖ PSM 117: BILINGUAL TRAINING I AND ECONOMIC ENVIRONMENT I

➢ French expression: 1 credit (15 hours); L, T

1. Vocabulaire
   - Vocabulaire technique usuel
2. Grammaire
   - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
   - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
   - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
   - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
   - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
   - Des fonctions grammaticales.
3. Expression et communication
   - Compréhension et interaction au cours d’une discussion technique ;
- Communication orale courante ;
- Communication orale interactive
- De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
- Lecture rapide et compréhension de texte ;
- synthèse d’un long texte
- De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance – d’une lettre recommandation ou de motivation, d’une demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
- Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
- Expressions figées

➢ General Economics: 2 credits (30hours); L, T, P

1. Business and production
2. Households and the consumption
3. Markets and Prices
4. Training and distribution of income
5. The currency and the financing of the"Economy
6. The elements of the National Accounting
7. The"macro-economic equilibrium
8. The socialist system
9. The"capitalist economy
10. The"State and its interventions
11. The foundations of international trade;
12. International payments
13. The balance of payments
14. Economic development and its inequalities
15. Growth and its inequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of problems
18. The development strategies
19. The"economic integration and the forms of cooperation in the world
20. The strategies of the"International Debt

➢ PSM 127: BILINGUAL TRAINING II AND ECONOMIC ENVIRONMENT II

➢ English Expression: 1 credit (15hours); L, T, SPW

1. Vocabulary
   - Technical and usual vocabulary of the specialty
2. Grammar
3. Bilingual expression
   - Understanding in interaction in Technical Discussions
   - Continuous oral communication: Show, explain, develop, summarize, account, comment;
- Interactions oral communication

4. Autonomous reading of "writings" of all levels
   - Lead by a quick reading to understand the general sense;
   - Browse a text long enough to locate desired information;
   - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.

5. Write clear, detailed texts
   - Essay writing;
   - Application for employment;
   - C.V.;
   - Letter of motivation;
   - Letter/memo writing and minutes of a meeting

➢ Economy and organization of enterprises: 2 credits (30 hours); L, T, P
   - The Enterprise, definition and mode of analysis;
   - Classification of Enterprises;
   - The Organisational Structure of enterprises;
   - The insertion of the company in the economic fabric;
   - The commercial activity of the enterprise;
   - The productive activity of the enterprise;
   - Logistics in the enterprise;
   - The financial activity of the enterprise;
   - The management of human resources;
   - The systemic approach of the enterprise;
   - Information system;
   - The decision making process
   - The strategic analysis of the company;
   - Choice and implementation of a strategy;
   - The business, society and culture;
   - The business, society and the Ethics.

➢ PSM 124 MARITIME ADMINISTRATION II 5 credits (75 hours); L, T, P, SPW

The focus here will be on:

- STATUTORY CONTROLS (PORT STATE CONTROL)

This Course explores the various obligations and requirements imposed on flag, port, and coastal states to ensure the good condition, state and conduct of vessels and crew, as well as the powers imposed on them. Some of the topics to be discussed are as follows:

- Background
- Flag State Controls and Inspections
- Coastal State Controls
- IMO Port State Control Inspection guidelines
- PSC MOU (Memorandum of Understanding)
- Legislation
- PSC Inspections and detentions
• PSC forms and their completion
• PSC: ISM code - ISPS code interaction

Casualty Investigation that shall include inquiries into marine/maritime disasters.

♥ PSM 125: PORT MANAGEMENT AND OPERATIONS I 4 credits (60 hours); L, T, P, SPW

This Course in the first place, is designed to provide a good Introduction to the nature and functions of terminals in International trade examining as it were, the relationship between the port authority and the terminal operator, related legal obligations, ownership and operating structures and the pricing of port services. The topics to be considered here shall include:

• Introduction to port and Terminal Operations
• Duties and Responsibilities - Port Authority, terminal operator
• Legal obligations and powers of Ports and Terminals
• Role of the Port authority
• Port ownership
• Deregulation of Port and Terminal activities
• Port/Terminal responsibility
• Improving Port and Terminals performance
• Value added services in ports.

♥ PSM 126: ANCILLARY PROFESSIONS 4 credits (60 hours); L, T, P, SPW

This course will introduce on the one hand shore-based personnel who offer supporting services to maritime transport, and on the other hand, port-based firms specialized in cargo handling activities. These shall include the:

- **SHIP REPRESENTATION** where the topics to be treated shall include:
  • Legal status and functions (municipal and international legal instruments)
  • Activities carried out
  • Warehousing of cargo and relationship with both the freight forwarder and the cargo handling firm.
  • Different appearances or ‘caskets’ worn (port agent, protecting agent, husbandry agent).
  • Relationship with the Maritime Administration, ships chandlers, customs’ services and the port’s authorities,

- **FREIGHT FORWARDING (CARGO REPRESENTATION)** with the following topics to be treated:
  • International Freight Forwarder and Freight Business
  • Interaction between International Trade and Forwarding Activities
  • Forwarding services and the Legal position of the Forwarder
  • International Commercial terms
- Customs brokerage
- Documentation in Forwarding
  - **CARGO HANDLING** that introduces the principles of material handling and their application to the movement of general cargo. The different facets of this firm shall be explained. The topics to be examined shall include:

  - Legal status
  - Cargo handling equipment
  - Types of cargo and cargo gear
  - Cargo stowage and legal responsibilities
  - Cargo warehousing and relationship with freight forwarders and shipping agent
  - Contractual partners

  ❖ **PSM 231: DANGEROUS GOODS 5 credits (75 hours): L, T, P, SPW**

This module attempts to outline and discuss the distinct features of dangerous goods transportation and the regulatory requirements for handling dangerous goods. It further elucidates on the classification of dangerous goods as outlined in International Conventions and guidelines. Some of the topics to be covered are as follows:

  - Dangerous Goods (introduction)
  - Dangerous Goods Regulation (Focus on IMDG code)
  - Classification of Dangerous goods
  - Identification of Dangerous Goods
  - Description of Dangerous Goods
  - Marking and labeling of hazardous cargo

Responsibilities in handling Dangerous Goods

  ❖ **PSM 232: MARINE ENVIRONMENTAL MANAGEMENT 4 credits (60 hours): L, T, P, SPW**

This course provides a comprehensive introduction to the principles underpinning maritime environmental management before examining the numerous environmental impacts associated with maritime operations. The topics to be discussed include the following:

  - Introduction to the Marine and Coastal Environment
  - Sustainable development
  - Key issues facing marine and coastal environment
  - Environmental impacts associated with maritime operations
  - Maritime environmental Governance and enforcement
PSM 233 INTRODUCTION TO OIL AND GAS MANAGEMENT 4 credits (60 hours); L, T, P, SPW

This course shall also include an introductory course on oil and gas management that shall introduce students to the Oil and Gas industry. It gives a good understanding of petroleum exploration, production and decommissioning. Some of the topics to be discussed are as follows:

- Introducing Oil and Gas
- Finding Oil and Gas
- Extracting and Processing Oil and Gas
- Oil Refining and gas Treatment
- Selling Oil and Gas
- Managing Oil and Gas

PSM 234: MARINE INSURANCE 4 credits (60 hours); L, T, P, SPW

This is an awareness course that exposes students to the Insurance policies utilized within the marine/maritime Industry. It addresses the issue of maritime risk, and how this risk is managed through available insurance policies. It also considers cargo insurance. The topics to be examined are as follows:

- The need to spread risk
- General average
- Legal background - Cargo vs. Hull, Utmost good faith, Disclosure and warranties
- Hull and machinery insurance - Premium and claims, Insured perils, Exclusions, Port risks
- Protection and Indemnity Insurance
- Cargo Insurance (general average, hull and machinery insurance, protection and indemnity insurance, etc.).

PSM 235 TOTAL QUALITY MANAGEMENT 5 credits (75 hours); L, T, P

The course is intended to expose students to contemporary knowledge and techniques that will enable them to articulate and implement quality improvement processes in the workplace that are in line with the TQM philosophy.

Course Contents

- Evolution of TQM
  - Historical development
  - Definitions of quality
  - Understanding TQM
  - The Quality Management System
  - The Quality Movement
  - TQM concept and system
  - The Cost of Quality (COQ)
• TQM tools and Techniques
  - Seven Tools of Quality
  - New Seven Tools
  - Management Tools
  - Statistical Quality Control
  - Taguchi methods
  - Quality Function Deployment
  - Quality Circles
  - Just in Time (JIT)

• TQM principles and strategies
  Briefly comment on the:
  - Customer focus including over view of Kano model
  - Process Improvement and Total Involvement
  - Quality Management strategies

• The quality movement
  Briefly comment on the:
  - Contributions of quality gurus (Shewart, Deming, Juran, Crosby, Ishikawa and Taguchi)
  - Zero Defects
  - Kaizen System
  - Poka
  - Yoke (Shingo)

• Implementing TQM
  - Managing key processes, steps in process improvement
  - Measuring process improvements, and performance measures
  - Benchmarking for TQM
  - Quality Management Systems –ISO 9000/9001

❖ PSM 236 PORT MANAGEMENT AND OPERATIONS II 5 credits (75 hours); L, T, P, SPW

In the second place, the course shall look at key issues in the operations of the various terminal types, along with an investigation of the various terminal operators and the benchmarking of terminals. The topics to be examined here will be as follows:
• Ship and cargo characteristics
• Types of Terminals - Liquid bulk, Dry bulk, General cargo, container, Ro-Ro, Cruise and passenger
• Terminal Infrastructure and equipment
• Terminal operating systems
• Major terminal operators
• Process of cargo movement
• Safe working in terminals
• Measuring and benchmarking terminal performance.
LEGAL ENVIRONMENT I

1 (a) CARRIAGE LAW 1.5 credits (30 hours); L, T, P, SPW

This is an introductory course that announces the various international instruments that regulate the different types of transport modes whether maritime, surface, air, or inland waterways. This course has an International focus, providing insight into the International rules governing the carriage of goods. The following topics will be treated:

- General Common Law rules for carriage of goods (Duties and Liabilities of the common carrier)
- International Law rules for carriage of goods by Road (CMR rules)
- International Rules for Carriage of goods by Air (Warsaw Convention)
- International Rules for Carriage of goods by Sea (Hague, Hague Visby, Hamburg and Rotterdam Rules).

INTERNATIONAL COMMERCIAL LAW 1.5 credits (30 hours); L, T, P, SPW

This course provides a comprehensive overview of the legal framework for International commerce with particular emphasis on the law relating to International commercial terms. Some of the topics of interest include:

- Elements of The Contract for the Sale of goods
- Passing of title
- Passing of Risk
- Delivery
- International Commercial terms
- INCOTERMS and International Conventions.

PSM 241 PROJECT MANAGEMENT 5 credits (75 hours); L, T, P, SPW

This is an introductory course. That exposes students to the elements and principles of project management (quality and strategic) and its application. Some of the courses of interest include:

- Terminal planning
- Project business case
- Project lifecycle
- Project planning and scheduling
- Managing a project budget
- Monitoring and control
- Managing change orders
- Managing risk
- Effective communication
• Managing a team
• Project leadership.

**PSM 242 STRATEGIC MANAGEMENT 4 credit (60 hours); L, T, P, SPW**

The course focuses on providing future managers with relevant strategic management concepts to advance their skills and abilities so that they can contribute towards an organisation’s competitive advantage. To achieve this, the course will explore the nature of strategies and strategic decision-making mechanisms in an organization. The following will therefore be examined: strategy formulation; strategy analysis and choice; strategy implementation; strategy evaluation and control, not leaving out ethical considerations.

Topics to be covered will include:

1. Introduction to strategy: What is Strategy, Strategic Management?
2. External Analysis: emphasize on The Five Competitive Forces that Shape Strategy
5. Designing Corporate Level Strategies: Diversification, Vertical Integration, Portfolio vs Synergy, BCG Matrix
7. Global Strategies: Internationalization: Motivations & Patterns, Building Transnational Corporations

**PSM 243: MULTI-MODAL TRANSPORT 4 credit (60 hours); L, T, P, SPW**

The module aims to provide a fundamental knowledge in multi-modal transport and containerization operations. It explains the concept of multimodal transport and the physical infrastructure required for multimodal transport. It also discusses the commercial aspects of such as multi-modal transport pricing, Cargo and container handling techniques will be studied. The topics to be studied are:

• Concept of Multi-modalism
• Components of Intermodal Transport chain
• Multimodal Transport operations
• Project Transport
• Documents used in Multimodal Transport
• Applicable Law in Multimodal transport.
PSM 244: 2. MARITIME FINANCE 4 credit (60 hours); L, T, P, SPW

The aim of this specialized finance course is to bring the students awareness of and basic knowledge about principles in maritime finance, sources of maritime finance, financing structures, risk analysis and the role of commercial banks and other financial institutions in the maritime market. After the course, students will be able to assess proposals for maritime investments and to make a structure for financing a maritime activity. Thus, by the end of the course, students should be able to develop/appraise/analyse/implement:

- Principles and terminology of maritime accounting
- Major accounting ratios and annual financial reports
- Financial management principles and analysis for investment purposes in shipping
- Cash flow budgeting and investment appraisal for shipping projects
- Alternative sources of capital for shipping projects
- Shipping bank loans and the issuance of private and public equity and debt
- The cost of capital and the capital structure of a shipping company

Topics to be treated should include:

- Financial assessment
- Capital budgeting in shipping
- Investment appraisal (NPV and IRR) in shipping
- Bank shipping loans and bank syndication
- Bank credit analysis
- Issuance of a shipping loan
- Public and private equity in shipping
- Risks-returns across listed shipping companies
- Cost of capital and capital structure in shipping

PSM 245 TRANSPORT SAFETY AND SECURITY 4 credit (60 hours); L, T, P, SPW

This module begins with a general introduction relating to all modes of transport. It covers the regulatory skills required to document, classify, prepare, offer and accept shipments of dangerous goods intended for transportation by air and sea. It also covers the related ground transportation requirements as well as specific International requirements on safety.

Some of the topics to be covered are as follows:

- Safety and Security requirement for Shipments
- ISPS code in sea borne traffic
- Safety and Security Inspections at Interfaces and preventive actions
- Safety of life at sea
- Maritime security
PSM 246: INTERNSHIP 6 credits (90 hours); P, SPW

At least an Internship lasting 12 weeks and in a functional role in any of the following places:

- Ports Authority
- Clearing and Forwarding Agency
- Shipping Line
- Shipping Agency
- Destination Inspection Company
- Customs Administration

Professional Internship:

1. Arrival and Reception
2. Working in a company
3. The holding of the Intern journal
4. The choice of the theme of work: in collaboration with mentors professional academic and
5. Elaboration of the canvas of research
6. The resources to operate
7. The organization of work
8. Drafting of the report
9. Presentation of the report before a jury

The report in question should be at least Ten Thousand (10,000) words and should be based on a defined theme that is related to the field. Data to be collected should be from the shipping industry and applying the theories and concepts discussed in the programme.

PSM 247 LEGAL ENVIRONMENT II AND CIVIC EDUCATION II 3 credit (30 hours); L, T, P, SPW

MARITIME LAW I (Public International) 1 credits (30 hours); L, T, P, SPW

The module will basically expose students to the public International law aspects of maritime law. It is interested in examining the legal order of the oceans particularly the United Nations Convention on the Law of the Sea. Some of the topics to be examined are as follows:
- Coastal State, Flag State and Port State Jurisdictions
- Maritime Zones
- Environmental requirements for shipping under UNCLOS
- MARPOL convention
- SOLAS convention
- Navigational rights of States

**MARITIME LAW II (Private) 1 credits (30 hours): L, T, P, SPW**

The focus of this course will be the International rules regulating the International carriage of goods by sea as well as the evolution of these rules and their legal consequences. The topics to be explored are as follows:

- Overview of the Law of Carriage (General common Law rules)
- Hague Rules
- Hague Visby Rules
- Hamburg Rules
- Rotterdam rules
- Multimodal Transport and applicable Laws

**CIVIC EDUCATION AND ETHICS: 1 credits (30 hours): L, T, P, SPW**

**The Concepts**

- The citizen;
- The Nation;
- The State;
- Public Property unto collective property;
- The freedoms;
- The public service;
- Problem of ethics;
- Ethics, Law and reason;
- Management and ethics of responsibility;
- Ethics and management.
- Ethics
- Civics
- Deontology
- Moral consciousness
- The universal declaration of Human Rights
• Good governance in public services
• Explain the importance of civics to the life of the nation
• Functions of the state and its citizens
• Deontology, Professional ethics and professionalism
• Relationship between morality, law and ethics
• Codes of ethics
Field : BUSINESS AND FINANCE

Specialty :
ACCOUNTANCY
1. The objective of the training

The objective of this specialty is to provide students with the requisite knowledge and know-how to enable them translate according to accounting rules, all the marketing and financial transactions of the enterprise and to establish corresponding documents, analyze information at their disposal necessary for the preparation of decisions to be taken by management.

2. Skills Sought After

→ General skills
  - Understand the economic environment and enterprises;
  - Master the use of the computer;
  - Be apt in oral and written communication;
  - Be capable of team leadership.

→ Specific Skills
  - Realize the management of accounting, fiscal and social operations (keep accounting books, prepare financial statements, etc.);
  - Analyze the profitability of the activities of the organization;
  - Prepare budgets and follow up their execution;
  - Centralize, organize and redress the accounts of the enterprise;
  - Collaborate efficiently with hierarchy in the management of the enterprise;
  - Control and plan production;
  - Master accounting software.

3. Outlets

- Accountant in enterprises;
- Account collaborator in a firm;
- Assistant accountant in large companies;
- Payroll manager;
- Accounting manager;
- Treasurer;
- Management controller; etc.
4. Organization of the Teachings

Semester 1

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**Fundamental courses 30% (2 UC) 9 credits 135 hours**

**Professional courses 60% (4 UC) 18 credits 270 hours**

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**Cross-Sectional Courses 10% (1 UC) 3 Credits 45 hours**

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**Fundamental courses 30% (2 UC) 9 credits 135 hours**

**Professional courses 60% (4 UC) 18 credits 270 hours**

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**Common courses 10% (1 UC) 3 credits 45 hours**

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5. Courses content

❖ ACC111: Mathematics and Computer Sciences I

➢ General Mathematics I: 3 credits (45 hours); L, T, SPW

- Algebra vector spaces
  1. Polynomials
     • Polynomials characteristics.
  2. Vector space
     • Linear applications.
  3. Matrices
     • Operations on the matrices;
     • Matrices associated with a linear application;
     • Matrices and determinants.
  4. The Determinants
     • Determinant of a square matrix;
     • Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     • Inversion of matrix of order less than or equal to 3
     • Method of Gauss;
     • Resolution of systems of linear equations by the method of Pivot;
     • Application of matrix calculation on the resolution of systems of linear equations.
  6. Reduction of square matrices
     • Own values; vectors.
  7. Differential equations and linear récurrentielles of order 2 with constant coefficients
  8. Mathematical applications in Economics and Management

➢ General Computing I: 2 credits (30 hours); L, T, SPW

The hardware and software on a computer system - the Hardware
  1. The peripheral components
     • The devices of input;
     • The ouPut devices; the storage devices;
     • The devices of input and ouPut.
  2. The central unit
     • The central memory;
     • The microprocessor;
     • The ports;
     • The motherboard;
     • The chipset;
     • The powersupply;
     • The cards of extension;
     • Other internal organs.
3. **The unit of exchange (or bus)**
   - Role;
   - Types of bus:
     - Data bus;
     - Control bus;
     - Bus of address.

**B- The Software**

1. **The application software**
   - Definition;
   - Role;
   - Types and examples of software.

2. **The basic software (or software systems)**
   - Definition;
   - Types of basic software:
     - Drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation:
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of an operating system;
       - architecture.
   - Concept of Free Software and proprietary software.

**System of numeration and Codification**

**C- The numbering systems**

1. **A few basic concepts**
   - The base of the system;
   - Weight;
   - Alphabet of the language;
   - Format of the word (length of the word);
   - power of language.

2. **A few numberingsystems**
   - The decimal system;
   - The binary system;
   - The octal system;
   - The hexadecimal system.

3. **The basic changes**
   - Of Decimal to another base b;
   - To a base b of any kind to the decimal basis;
   - Of the binary in octal and vice versa;
   - From binary to hexadecimal and vice versa.

4. **Arithmetic operations**
   - binary binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
   - Addition of binarynumbers;
   - Subtraction of binarynumbers;
   - Use the add-in to 2 in the subtraction;
• Multiplication of binary numbers;
• Division of binary numbers.

5. **Hexadecimal arithmetic**
   • addition of numbers in Hexadecimal;
   • subtraction of numbers in hexadecimal.

**D- The codes**

1. **General information on the concept of a code**
   • Definitions;
   • Objectives of the codification;
   • The functional codification;
   • Types of functional codes;
   • the codification of technology.

2. **The alphanumeric codes**
   • The ASCII code:
     • Standard ASCII; - Extended ASCII;
     • Use.

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**ACC121: Mathematics and Computing Sciences II**

- **General Mathematics II: 3 credits (45 hours); T, P, SPW**
  1. The Real Numbers
  2. Numerical Functions of a real variable, limit, Continuity
  3. Differentiability, extrema, theorem of Rolle and finished increases
  4. Polynomials, fractions, rational
  5. Study and graphic representation, reciprocal Functions
  6. Limited developments, integrals and applications to calculations of Aires
  7. Logarithmic functions and exponentials
  8. Digital Suites: Direction of variation, convergence
  9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
  10. Mathematical applications in Economics and Management

- **General Computing II: 2 credits (30 hours); T, P, SPW**

**A- Computer Networks**

1. **General information**
   • Definition of A computer network; interest of computer networks; basic vocabulary:
     - Workstation;
     - Node;
     - Server; - Packet.

2. **Typology of networks according to the media:**
   - Wired networks;
   - Networks not wired.
   • According to the Geographic Extent:
     - The local networks (LAN);
     - The metropolitan area networks (MAN); - the wide area networks (WAN).
3. **Network Topologies**
   - Physical topology
     - The bus topology;
     - The star topology;
     - The ring topology; - the topology in mesh; - the topology in shaft.
   - Logical Topology
     - Networks to dissemination;
     - Point-to-Point networks.

4. **Network Architectures**
   - Client/Server architecture; ☐ architecture of equal to equal.

5. **The equipment of computer networks** ☐ basic equipments of a network:
   - The computer;
   - The network card;
   - The server;
   - The network cable;
   - The transceiver (or adapter); - the transmission mounts; - the socket.
   - The equipment of interconnections:
     - Hubs (hub);
     - Switch (Switch);
     - Routers;
     - Gateways
     - The gateway (gateway);
     - The router; - the bridge (Bridge); - the repeaters.

6. **Concept of IP addressing**
   - Structure of an IP address
     - Network identifier (Net ID); - Identifier of host (Host ID).
   - Specific addresses
     - Network addresses;
     - Machine address;
     - Broadcast Address (broadcaste);
     - Limited Broadcast address (multicast); - Address of rebloucaging (loopback).
   - Classification of IP addressing
     - Class A;
     - Class B; - Class C.

b- Internet network

1. **Concept of Protocol**
   - definitions and a few types of Protocols
     - SMTP Protocol;
     - POP Protocol;
     - NNTP Protocol;
     - The FTP Protocol;
     - HTTP Protocol;
     - IMAP Protocol; - Protocol TCP; - others.

2. **A few Internet Services**
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
• The Download (Download A text, download An image, download a free software...);
• The online Trade; □ The IRC (Internet Relay Chat);
• Others.

3. **The searchengines**
   - Definition;
   - Role;
   - Some searchengines.

4. **Tools for Internet access**
   - The browsers (definition, examples);
   - The Plug-ins (definition, examples);
   - The search engines (definition, examples, use).

5. **The connection to the Internet**
   - Connection hardware;
   - Suppliers of access (role, examples);
   - Types of connections (specialized line, Phone line, satellite).

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**ACC232: Mathematics and Computing Sciences III**

- **Financial Mathematics I: 2 Credits (30 Hours), Teaching,**

  **PRACTICALS**
  1. Basic notions
     - Simple interest
     - Determination of acquired value
     - Determination of commercial value and the rational actual value
     - Proportional rate and effective rate
  2. Calculation of the average rate of a series of simultaneous investments

- **Statistics I: 2 Credits (30 Hours), Teaching, Practicals**

  1. Statistical series with one variable
     - Terminology
     - Graphical representation of data
     - Measures of central tendency and measures of dispersion
       - The mean
       - The mode
       - The median
       - The standard deviation
       - Quartiles
       - Coefficient of variation
  2. Statistical series with two variables
     - Terminology
     - Scatter plot
     - Line of best fit
     - Covariance
     - Correlation coefficient and linear regression
     - The least square method
ACC 122: Quantitative Technique II

- Financial Mathematics II
  1. Equivalence of bills
  2. Short term financial operations-current accounts and interest
  3. Commercial discounts
  4. Compound interest
  5. Acquired value-actual value-equivalent rate and proportional rate-apparent rate of interest

- Statistique II
  1. Point estimation of mean, Proportion and standard deviation
  2. Confidence interval
  3. Hypothesis testing and chi square tests

ACC 231: Quantitative Techniques III

- Operational Research I: 3 Credits (45 Hours) Teaching, Practicals
  1. The concept of combinational optimization
    - Constraints/Objectives
    - Feasibility
    - Limiting factors
    - Local optimum, etc
  2. Theory of graphs
    - Modeling
    - Coloring
    - Patterns
    - Trees
    - Flow charts ...
  3. Linear Programming
    - Programming with two variables
    - Programming with more than two variables
  4. The simplex algorithm – the simplex tableau
    - Analysis of the simplex table
    - The duality Problem
    - Stock management

- Probabilities I: 2 Credits (30 Hours) Teaching, Practicals
  1. The set theory
    - Illustrations
    - The universal set
  2. Fundamental set related to a random experiment
    - Probability
    - Conditional Probability
    - BAYES THEOREM
• BERNOULLI THEOREM
3. Discrete random variables
• The laws of Probabilities
• Illustration

❖ ACC 241: Quantitative Techniques IV

➢ Operational Research II: 3 Credits (45 Hours) Teaching, Practicals

1. Project management
• TERT analysis
  - Illustrations of the TERT
• Choice of investments
2. Modeling
3. Decision rule under uncertainty
4. The transportation problem
5. The network problem

➢ Probabilities II: 2 Credits (30 Hours) Teaching, Practicals

1. Random variables
• Law of Probability
• Application
2. Continuous random variable
• Density
• Expectation
• Variance
• Standard deviation
• Moments
3. Classical laws
• Binomial distribution
• Normal distribution

Poisson distribution

❖ ACC 113: Financial Accounting I

➢ Daily Operations I: 5 Credits (75 Hours), Teaching, Practicals

1. The Patrimony
2. Economic flows in an enterprise
3. Relationship between trial balance, balance sheet and income statement
4. Accounting law and the chart of accounts
5. Purchases and sales operations
6. Additions and deductions on an invoice
7. Related revenues and expenses
8. Accounting for industrial enterprises
9. Commercial containers  
10. Transport expenses  
11. The classical accounting system  
12. Cash settlements  
13. Bills of exchange  
14. Acquisition and manufacturing of fixed assets  
15. VAT, excise duties, deductions at source on rents  
16. Personal expenses  

- Specific Operations and end of year adjustments  
  1. Depreciation  
  2. provisions  
  3. Outgoing of fixed assets  

- ACC 123: Financial accounting II  

- DAILY OPERATIONS II: 4 CREDITS (60 HOURS), TEACHING, PRACTICALS  
  1. The minimum cashed based system  
  2. The central accounting system  
  3. Adjustment of management accounts  
  4. Operations in foreign currency  
  5. Loans  
  6. Subsidies  
  7. The financing cycle  
  8. Accounting for banks  
  9. Consolidated and combined accounts  
  10. Accounting for insurance companies  
  11. Accounting for service providers  

- SPECIFIC OPERATIONS AND END OF YEAR ADJUSTMENTS II: 3 CREDITS (45 HOURS), TEACHING, PRACTICALS  
  1. The trial balance after inventory works  
  2. Closure and opening of accounts and allocation of points  
  3. Presentation of STR  

- ACC 114: Cost and Management Accounting I  

- FULL COSTING I: 2 CREDITS (30 HOURS) TEACHING, PRACTICALS  
  1. Objectives and organization of cost accounting  
  2. General pattern of accounting analysis  
  3. Incorporation of charges in costing  
  4. Direct and indirect charges
MARGINAL COSTING AND THE BREAK-EVEN ANALYSIS I: 3 CREDITS (45 HOURS) TEACHING, PRACTICALS

1. Variability of charges
2. The break-even Point
3. Variable costs and the contribution margin

ACC 124: Cost and Management Accounting II

FULL COSTING II: 2 CREDITS (30 HOURS) TEACHING, PRACTICALS

1. Marginal costing
2. Rational imputation

MARGINAL COSTING AND THE BREAK-EVEN ANALYSIS II: 2 CREDITS (30 HOURS) TEACHING, PRACTICALS

1. The method of cost centers
2. Determination of various costs and stock valuation
3. The cost Trice
4. Adjustment of the analytical results with the financial Profit or loss

ACC 235: Forecasting

BUDGETARY MANAGEMENT I: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS

1. The sales budget
2. The distribution cost budget
3. The supplying budget
4. The Production budget

COST VOLUME PROFIT ANALYSIS

1. Break-even Point
2. Break-even point with multiple Products

BUDGETARY MANAGEMENT II: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS

1. Investment budget
2. Cash budget
3. Financing Plan
4. Master budget

STANDARD COSTING AND VARIANCE ANALYSIS

1. Tre-established cost
2. Table of comparison
3. Variance analysis (algebraically graphically)
4. The flexible budget...
VIDEO ACC 115: Taxation I

- INTRODUCTION TO TAXATION: 3 CREDITS (45 HOURS), TEACHING, PRACTICALS

General introduction
1. Importance of taxes
2. Source of the Cameroon fiscal law
3. Structure of the Cameroonian fiscal system
4. Administration of taxes
5. Classification of taxes

VIDEO ACC 125: Taxation and Methodology

- METHODOLOGY FOR THE PRESENTATION OF END OF INTERNSHIP RETORT: 1 CREDIT (15 HOURS), TEACHING, PRACTICALS

1. Data collection
2. How to write a report
3. Plan of an internship report and the summary
4. Table of content
5. Introduction of the internship report
6. Conclusion of the internship report
7. Acknowledgements
8. Constitution of appendices
9. When to start the internship report
10. How to choose a topic
11. The foreword
12. How to write effectively
13. Format and Presentation of the work
14. How to prepare for the defence

- VAT and TIT: 3 CREDITS (45 HOURS), TEACHING, PRACTICALS

1. VAT and Excise Duties
   - Scope of application
   - Tax Payers’ obligations and Penalties therein
   - Tax Point and tax incidence under the VAT and excise duties
   - Determination of the VAT due/credit
   - VAT declaration and supplements

2. The Personal Income Tax
   - Generalities
   - Tax Payers regimes
   - Determination of the net taxable income Per category
   - Determination of the TIT liability
   - Payment of the TIT
ACC 236: Taxation and end of year works I

END OF YEAR WORKS I: 2 CREDITS (30 HOURS) PRACTICALS

Tens of cases built-up by course instructors of the specialty to be treated by students under their supervision

COMPANY TAX: 3 CREDITS (45 HOURS), TEACHING, PRACTICALS

1. Scope of application
   - Taxable Persons
   - Exempt Persons
   - Partially exempt tax payers
   - Periodicity and territoriality
   - The principle for the taxation of corporate income

2. Fiscal analysis of expenses
   - Commission on Purchases and sales of goods and materials abroad
   - Fees of technical assistance
   - Rental charges
   - Gifts and donations
   - Taxes, rates, fines and Penalties
   - Insurance Policy
   - Other charges
   - Financial charges
   - Maintenance charges
   - Depreciation and Provision
   - Transactions in foreign currency

3. Fiscal analysis of revenues
   - Operating expenses
   - Accessory revenue
   - Financial revenue
   - Income from subsidiaries

ACC 245: Taxation and end of year adjustment

END OF YEAR WORKS II: 2 CREDITS (30 HOURS) PRACTICALS

Tens of cases built-up by course instructors of the specialty to be treated by students under their supervision

DETERMINATION OF TAXABLE PROFIT AND TAX LIABILITY: 3 CREDITS (45 HOURS), TEACHING, PRACTICALS

1. Determination of the definitive fiscal Profit and the company tax
   - Previous losses (Ordinary loss, Privilege loss)
   - Reinvestments
   - Determination of the definitive fiscal loss
   - Finding table 22 and 23 of the STR
   - Tax payer obligations and sanctions therein
2. **Taxation of activities**
   - The global tax
   - The business license
   - Filling STR

3. **Taxation of capital**
   This section concerns duties, rates and rights paid during the

   - **ACC 116**: Introduction to Financial Analysis and accounting to the computer I

   **FINANCIAL ANALYSIS**

   - **ACC 116**: Introduction to financial analysis and computer assisted accounting

   ➢ **INTRODUCTION TO FINANCIAL ANALYSIS I**: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS
      1. Reparation of financial statements and notes to accounts
         - The balance sheet
         - The income statement

   ➢ **COMPUTER ASSISTED ACCOUNTING I**: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS
      1. General accounting
         - Creation of a company
         - Stepping up of the company parameters
         - Preparing for recording
         - Accounting entries of transactions
         - Cash management
         - Control of accounting entries
         - Management of fixed assets

   - **ACC 126**: Introduction to financial analysis and computer assisted accounting

   ➢ **INTRODUCTION TO FINANCIAL ANALYSIS II**: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS
      1. The income statement
      2. Notes to financial statements

   ➢ **COMPUTER ASSISTED ACCOUNTING II**: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS
      1. Balancing of accounts
      2. Entering transactions for a new month
3. Generation of financial statements at a given date
4. Generation of financial statements at a year end
5. Closure of financial year N-1 and creation of financial year N
6. Programming Parameters for the determination of salaries
7. Creation of salary brackets
8. Cost accounting
9. Creation of a company on analysis mode
10. Preparation for accounting recordings
11. Accounting entry into the system

**ACC 234: Financial analysis I**

- **ANALYSIS OF THE INCOME STATEMENT I: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS**
  2. Ratio analysis
  3. Financial equilibrium
  4. Significant managerial balances

- **ANALYSIS OF THE BALANCE SHEET I: 1 CREDIT (15 HOURS), TEACHING, PRACTICALS**
  1. Functional and differential analysis
  2. The break-even point
  3. Break-even point with Probabilities

**ACC 244: Financial analysis II**

- **ANALYSIS OF THE INCOME SYSTEM II: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS**
  1. Presentation of the Profit and loss account
  2. Auto financing capacity and auto financing
  3. Profitability ratios and the earnings before interest, taxes depreciation and amortization (EBITA)

- **ANALYSIS OF THE BALANCE SHEET II: 1 CREDIT (15 HOURS), TEACHING, PRACTICALS**
  1. The cash flow statement
  2. The working capital need
  3. Financial Plan

**ACC 117: Bilingual training I and economic environment I**

- **French expression: 1 credit (15 hours); L, T**
  1. Vocabulaire
     - Vocabulaire technique usuel
2. Grammaire
- Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
- De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
- Du nom et son article : masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
- Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
- De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
- Des fonctions grammaticales.

3. Expression et communication
- Compréhension et interaction au cours d’une discussion technique ;
- Communication orale courante ;
- Communication orale interactive
- De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
- Lecture rapide et compréhension de texte ;
- synthèse d’un long texte
- De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
- Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
- Expressions figées

➢ General Economics: 2 credits (30 hours); L, T, P

1. Business and Production
2. Households and the consumption
3. Markets and Price
4. Training and distribution of income
5. The currency and the financing of the Economy
6. The elements of the National Accounts
7. The macro-economy equilibrium
8. The socialist system
9. The capitalist economy
10. The State and its interventions
11. The foundations of international trade
12. International Payments
13. The balance of Payments
14. Economic development and its inequalities
15. Growth and its inequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of Problems
18. The development strategies
19. The economic integration and the forms of cooperation in the world
20. The strategies of the International Debt
ACC 127: Bilingual training I and Economic Environment II

- English Expression: 1 credit (15 hours); L, T, SPW
  1. Vocabulary
     - Technical and usual vocabulary of the specialty
  2. Grammar
  3. Bilingual expression
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. Autonomous reading of "writings" of all levels
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. Write clear, detailed texts
     - Essay writing;
     - Application for employment;
     - C.V.;
     - Letter of motivation;
     - Letter/memo writing and minutes of a meeting

- Economy and organization of enterprises: 2 credits (30 hours); L, T, P
  • The Enterprise, definition and mode of analysis;
  • Classification of Enterprises;
  • The Organisational Structure of enterprises;
  • The insertion of the company in the economic fabric;
  • The commercial activity of the enterprise;
  • The productive activity of the enterprise;
  • Logistics in the enterprise;
  • The financial activity of the enterprise;
  • The management of human resources;
  • The systemic approach of the enterprise;
  • Information system;
  • The decision-making process
  • The strategic analysis of the company;
  • Choice and implementation of a strategy;
  • The business, society and culture;
  • The business, society and the Ethics.

ACC 233: Company Accounting I

- FORMATION OF COMPANIES I: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS
  1. Generalities
  2. Formation of commercial companies
➢ DISSOLUTION OF COMPANIES I: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS
   1. Liquidation of commercial companies
   2. Debenture loans

❖ ACC 243: COMPANY ACCOUNTING II

➢ FORMATION OF COMPANIES II: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS
   1. Profit appropriation
   2. Company tax
   3. Evaluation of social titles
   4. Increase of capital
   5. Reduction of capital
   6. Redemption of capital

➢ DISSOLUTION OF COMMERCIAL COMPANIES
   1. Mergers and take-over bids
   2. Consolidated and combined accounts

❖ ACC 244: Financial Analysis II

➢ ANALYSIS OF THE INCOME SYSTEM II: 2 CREDITS (30 HOURS), TEACHING, PRACTICALS
   1. Presentation of the Profit and loss account
   2. Auto financing capacity and auto financing
   3. Profitability ratios and the earnings before interest, taxes, depreciation and amortization (EBITA)

➢ ANALYSIS OF THE BALANCE SHEET II: 1 CREDIT (15 HOURS), TEACHING, PRACTICALS
   1. The cash flow statement
   2. The working capital need
   3. Financial Plan

❖ ACC 235: Forecasting Management I and II

➢ DAILY OPERATIONS I: 5 CREDITS (75 HOURS), TEACHING, PRACTICALS
   - Sales budget
   - Budget for distribution expenses
   - Supplying budget
   - Production budget

➢ Breakeven Point and forecasting I : 1 credit
   - breakeven Point
   - breakeven Point with many Products.
- **Budgetary management II: 2 credits (30 hours); L, T, P**
  - Investment budget
  - Treasury budget
  - Financing Plan
  - General budget and dashboard.

- **Breaking Point and forecasting II (1 credit)**
  - Foreseen cost

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**ACC 236: Taxation and work of Synthesis I**

- **END OF YEAR WORKS I: 2 CREDITS (30HOURS) PRACTICALS**

  Tens of cases built-up by course instructors of the specialty to be treated by students under their supervision.

- **COMPANY TAX: 3 CREDITS (45 HOURS), TEACHING, PRACTICALS**

  1. **Scope of application**
     - Taxable Persons
     - Exempted Persons
     - Partially exempted tax payers
     - Periodicity and territoriality
     - The Principle for the taxation of corporate income

  2. **Fiscal analysis of expenses**
     - Commission on Purchases and sales of goods and materials abroad
     - Fees of technical assistance
     - Rental charges
     - Gifts and donations
     - Taxes, rates, fines and Penalties
     - Insurance policy
     - Other charges
     - Financial charges
     - Maintenance charges
     - Depreciation and provision
     - Transactions in foreign currency

  3. **Fiscal analysis of revenues**
     - Operating expenses
     - Accessory revenue
     - Financial revenue
     - Income from subsidiaries

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**ACC 245: Taxation and work of summary II**

- **END OF YEAR WORKS II: 2 CREDITS (30 HOURS) PRACTICALS**
Tens of cases built-up by course instructors of the specialty to be treated by students under their supervision

- **DETERMINATION OF TAXABLE PROFIT AND TAX LIABILITY: 3 CREDITS (45 HOURS), TEACHING, PRACTICALS**

1. **Determination of the definitive fiscal Profit and the company tax**
   - Previous losses (Ordinary los, privilege loss)
   - Reinvestments
   - Determination of the definitive fiscal loss
   - Finding table 22 and 23 of the STR
   - Taxpayer obligations and sanctions therein

2. **Taxation of activities**
   - The global tax
   - The business license
   - Filling STR

3. **Taxation of capital**
   - This section concerns duties, rates and rights Paid during the

- **ACC 237 legal environment and civic education I**

- **Law on Commercial Companies I: 1 credit (15 hours); L, T**
  
  1. The status of trader
  2. The acts of commerce
  3. The fund of commerce
  4. The different commercial contracts

- **Comon law: 2 credits (30 hours); L, T, P**
  
  1. Definition, characters, the branches and the sources of the law
  2. The field of application of the Act
  3. The dimensions of the law (objective, subjective right)
  4. The Legal organization
  5. The right to legal Personality
  6. The civil status, the name and the Domicile
  7. The Disabilities
  8. The legalacts
  9. The legalfacts

- **ACC 246 : Professional internship**

- **The Professional internship: 6 credits (90 hours); P, T**
  
  1. Arrival and Business Integration
  2. Working in a company
  3. The holding of the Intern journal
  4. The choice of the theme of work: in collaboration with mentors
     Professional academic and
5. Elaboration of the canvas of research
6. The resources to operate
7. The organization of work
8. Drafting of the report
9. Presentation of the report before a jury

❖ ACC 247: The legal environment and civic education II

➢ Law on Commercial Companies II: 1 credit (15hours); L, T
  1. Definition, Object and forms of commercial companies
  2. The creation of commercial companies
  3. The operation of the Commercial Companies
  4. The dissolution of commercial companies

Labor law: 1 credit (15 hours); L, T, P
  1. Definition of the right of labor, birth and evolution of labor law and sources
  2. The contract of work (conclusion, implementation and rupture)
  3. The conflicts of work (individual and collective)
  4. The delegate of the staff, unions
  5. Work accidents and occupational diseases
  6. The hygiene and safety in the workplace

➢ Civic Education and Ethics: 1 credit (15 hours); L, T

The Concepts
  • The citizen;
  • The Nation;
  • The State;
  • Public Property unto collective property;
  • The freedoms;
  • The public service;
  • Problem of ethics;
  • Ethics, Law and reason;
  • Management and ethics of responsibility;
  • Ethics and management.
  • Ethics
  • Civics
  • Deontology
  • Moral consciousness
  • The universal declaration of Human Rights
  • Good governance in public services
  • Explain the importance of civics to the life of the nation
  • Functions of the state and its citizens
  • Deontology, Professional ethics and professionalism
  • Relationship between morality, law and ethics
  • Codes of ethics
Field: BUSINESS AND FINANCE

Specialty: MARKETING-TRADE-SALE
1. **The objective of the training**

This specialty aims to respond to a need expressed by businesses: surround of commercial equipped, perfectly impregnated with the logic marketing, sensitized on the changing needs of the consumer and oriented toward the development of sales in an environment characterized by the competition.

2. **The powers sought**

   → **General Skills**
   - The understanding of the international economy;
   - The mastery of foreign languages; cross cultural
   - The Ability to negotiate;
   - The understanding of the professional environment;
   - To be able to work under pressure;
   - The adaptability.

   → **Specific Skills**
   - Understand strategic logic marketing;
   - Understand the challenges faced by the business in a competitive environment;
   - Understand the determinants of the commercial success of the company;
   - Sell in an affordable manner and cost effective;
   - Lead a sales team toward the achievement of objectives;
   - Animate a point of sale;
   - Do the carry out benchmarking to increase sales.

3. **Outlets**

   - Facilitator of the sales;
   - Attached to the customership;
   - Sales representative;
   - Responsible for the sales.
4. Organization of the Teachings

Semester 1

<table>
<thead>
<tr>
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5. Courses content

❖ MTS 111: Mathematics and Computer skills I

➢ General Mathematics I: 3 credits (45 hours); L, T, SPW

- Algebra vector spaces
  1. Polynomials
     • Polynomials characteristics.
  2. Vectorspace
     • Linear applications.
  3. Matrices
     • Operations on the matrices;
     • Matrices associated with a linear application;
     • Matrices and determinants.
  4. The Determinants
     • Determinant of a square matrix;
     • Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     • Inversion of matrix of order less than or equal to 3 - method of Gauss;
     • Resolution of systems of linear equations by the method of Pivot;
     • Application of matrix calculation on the resolution of systems of linear equations.
  6. Reduction of square matrices
     • Own values;
     • Own vectors.
  7. Differential equations and linear récurrentielles of order 2 with constant coefficients
  8. Mathematical applications in Economics and Management

➢ General Computing I: 2 credits (30 hours); L, T, SPW

The hardware and software on a computer system has- the Hardware

4. The peripheral components
   • The devices of input;
   • The output devices;
   • The storage devices;
   • The devices of input and output.

5. The central unit
   • The central memory;
   • The microprocessor;
   • The ports;
   • The motherboard;
   • The chipset;
   • The powersupply;
   • The cards of extension;
   • other internal organs.
6. **The unit of exchange (or bus)**
   - Role;
   - Types of bus:
     - Data bus;
     - Control bus;
     - Bus of address.

B- **The Software**

1. **The application software**
   - Definition;
   - Role;
   - Types and examples of software.

2. **The basic software (or software systems)**
   - Definition;
   - Types of basic software:
     - Drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation:
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of a operating system;
       - architecture.
   - Concept of Free Software and proprietary software.

**System of numeration and Codification**

C- **The numberingsystems**

1. **A few basic concepts**
   - The base of the system;
   - Weight;
   - Alphabet of the language;
   - Format of the word (length of the word)
   - power of language.

2. **A few numberingsystems**
   - The decimal system;
   - The binary system;
   - the octal system;
   - the hexadecimal system.

3. **The basic changes**
   - Of Decimal to another base b;
   - To a base b of any kind to the decimal basis;
   - of the binary in octal and vice versa;
   - from binary to hexadecimal and vice versa.

4. **Arithmetic operations**
   - Binary binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
• Addition of binary numbers;
• Subtraction of binary numbers;
• Use the add-in to 2 in the subtraction;
• multiplication of binary numbers;
• division of binary numbers.

5. **Hexadecimal arithmetic**
• addition of numbers in Hexadecimal;
• subtraction of numbers in hexadecimal.

**D- The codes**

1. **General information on the concept of a code**
   • Definitions;
   • Objectives of the codification;
   • The functional codification;
   • Types of functional codes;
   • the codification of technology.

2. **The alphanumeric codes**
   • The ASCII code:
     • Standard ASCII;
     • Extended ASCII;
     • Use.

---

**MTS 121: Mathematics and Computing II**

- **General Mathematics II: 3 credits (45 hours); T, P, SPW**

  **Analysis**
  11. The Real Numbers
  12. Numerical Functions of a real variable, limit, Continuity
  13. Differentiability, extrema, theorem of Rolle and finished increases
  14. Polynomials, fractions, rational
  15. Study and graphic representation, reciprocal Functions
  16. Limited developments, integrals and applications to calculations of Aires
  17. Logarithmic functions and exponential
  18. Digital Suites: Direction of variation, convergence
  19. Arithmetic Suites, Suites geometrical, recurring suites of order 1
  20. Mathematical applications in Economics and Management

- **General Computing II: 2 credits (30 hours); T, P, SPW**

  **A- Computer Networks**
  1. **Generalities**
     • Definition of a computer network;
     • interest of computer networks;
     • basic vocabulary:
       - Workstation;
       - Node;
       - Server;
       - packet.
2. **Typology of Networks**
   - networks according to the media:
     - Wired networks;
     - Networks not wired.
   - according the Geographic Extent:
     - The local networks (LAN);
     - The metropolitan area networks (MAN); - the wide area networks (WAN).

3. **Network Topologies**
   - Physical Topology
     - The bus topology;
     - The star topology;
     - The ring topology;
     - The topology in mesh; - the topology in shaft.
   - Logical Topology
     - Networks to dissemination;
     - Point-to-point networks.

4. **Network architectures**
   - client/server architecture;
   - architecture of equal to equal.

5. **The equipment of computer networks**
   - Equipments of basis of a network:
     - The computer;
     - The network card;
     - The server;
     - The network cable;
     - The transceiver (or adapter);
     - the transmission mounts;
     - the socket.
   - The equipment of interconnections:
     - Hubs (hub);
     - Switch (Switch);
     - Routers;
     - Gateways
     - The gateway (gateway);
     - The router;
     - The bridge (Bridge);
     - the repeaters.

6. **Concept of IP addressing**
   - Structure of an IP address
   - network identifier (Net ID)
   - Identifier of host (Host ID).
   - Specific addresses
     - Network address;
     - Machine address;
     - Broadcast Address (broadcaste);
     - Limited Broadcast address (multicast);
     - Address of rebroadcasting (loopback).
   - Classes of IP addressing
- CLASS A;
- CLASS B; - CLASS C.

B- Internet network

1. Concept of protocol
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
     - NNP protocol;
     - The FP protocol;
     - HTP protocol;
     - IMAP protocol; - Protocol TCP; - other.

2. A few Internet Services
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
   - The Download (Download a text, download An image, download a free software...);
   - The online Trade;
   - TheIRC (Internet Relay Chat);
   - Other.

3. The search engines
   - Definition;
   - Role;
   - Somesearchengines.

4. Tools for Internet access
   - The browsers (definition, examples);
   - The plug-ins (definition, examples);
   - The search engines (definition, examples, use).

5. The connection to the Internet
   - Connection hardware;
   - Suppliers of access (role, examples);
   - Types of connections (specialized line, phone line, satellite).

❖ MTS 112: Quantitative techniques of management

➢ Financial Mathematics I : 2 credits (30 hours); L, T, SPW

1. The Basics
   - Simple Interest;
   - Calculation of the value gained;
   - Current value commercial and current value rational one; précompté interest and effective interest.

2. Calculation of the average rate of a series of simultaneous investments

3. Equivalence and replacement of effect

4. Short-term financial transactions - Current Account and interest

5. Commercial Discount - real rate of discount
6. Compound interest
   • Acquired value;
   • Current value;
   • Rate equivalent and proportional rate;
   • Rate of interest apparent; rate of real interest.

7. The Annuities
   • Constant annual installments;
   • Annuities in arithmetic progression;
   • Annuities in geometric progression; perpetual annuities.

8. The undivided borrowings
   • Reimbursement by constant annual installments;
   • Table amortization;
   • Laws followed by depreciation recovery of the debt still alive;
   • Laws followed by the annuities;
   • Applications on the borrowings undivided.

9. The bond loans
   • Reimbursements to the pair;
   • Constant annual installments;
   • Constant depreciation;
   • Rate of yield and rates of returns of a debenture loan; rate of returns of the borrowing to the broadcast; Choice of Investments.

📈 Statistics: 2 credits (30 hours); L, T, SPW

1. Statistical series to a variable
   • Definition and vocabulary;
   • Graphical representation;
   • Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Standard deviation;
     - Quantiles;
     - Coefficient of variation.

2. Statistical series of two variables
   • Definition and vocabulary;
   • Cloud of points;
   • Average point;
   • Covariance and covariance matrix of 2 variables;
   • The coefficient of correlation and regression;
   • Linear adjustment by the method of least squares.

3. Estimate of an average, proportion and a standard deviation
4. Confidence interval and confidence coefficient
5. Tests of hypotheses and the KHI-two
MTS 122: Mathematics and accounting

Financial Mathematics II: 3 credits (45 hours); T, P, SPW

1. The Annuities
   • Constant annual installments;
   • Annuities in arithmetic progression; ð annuities in geometric progression; ð perpetual annuities.

2. The undivided borrowings
   • Reimbursement by constant annual installments;
   • Table amortization;
   • Laws followed by depreciation recovery of the debt still alive;
   • Laws followed by the annuities;
   • Applications on the borrowings undivided.

3. The bond loans
   • Reimbursements to the pair;
   • Constant annual installments;
   • Constant depreciation;
   • Rate of yield and rates of returns of a debenture loan; ð rate of returns of the borrowing to the Broadcast; ð Choice of investments.

General Ledger: 2 credits (30 hours); T, P, SPW

1. The heritage
2. The flow in the company and their registration
3. Relationship balance, balance sheet, Result
4. Accounting Law and the accounting plan
5. Purchases and sales
6. The loads and the products
7. Incidental expenses on purchases and on sales
8. Accounting for industrial enterprises
9. The packaging
10. The transport
11. The conventional financial system
12. The regulations in cash
13. The regulations in the long term
14. Acquisition and production of immobilization
15. Val, right of excise duty, withholding tax levy on Rent
16. Salaries and Wages

MTS 113: Marketing Environment I

Fundamentals of Marketing

Fundamental of Marketing I: 2 credits (30 hours); L, T, P, SPW

1. Introduction to marketing;
2. Market Analysis;
3. Consumer behavior;
4. Relationship marketing.
- **International Marketing I**: 2 credits (30 hours); L, T, P
  1. Problems of International Marketing
  2. International Marketing
  3. Reasons and strategy of international marketing
  4. Selection and study of foreign markets

- **MTS 123: Marketing Environment II**

- **Fundamentals of Marketing II**: 2 credits (30 hours); L, T, P, SPW
  1. Marketing strategy: Segmentation-targeting-positioning
  2. Product portfolio analysis
  3. Introduction to the marketing mix

- **International Marketing II**: 2 credits (30 hours); L, T, P, SPW
  1. Approaches or method (strategies) uses to enter international markets
  2. International marketing management (pricing policy)
  3. Organization of International marketing

- **MTS 234: Marketing Environment III**

- **Operational Marketing I**: 2 credits (30 hours); L, T, P, SPW
  1. Difference between strategic marketing and operational one
  2. The focus of Operational Marketing
  3. Points to consider
  4. The different points when carrying out operational marketing

- **Relationship marketing I**: 1 credit (15 hours); L, T, P, SPW
  1. Customer Loyalty
  2. Internal relationship marketing techniques
  3. Techniques of retention
  4. External relationship marketing tools

- **MTS 244: Marketing Environment IV**

- **Operational Marketing II**: 2 credits (30 hours); L, T, SPW
  1. Design of the Micros cases in the area of food
  2. Design of the Micros cases in the field of non-food
  3. Design of the Micros cases in the field of services
- **Relationship Marketing II**: 1 credit (15 hours); L, T, SPW
  1. Design a micro case
  2. Present the approach, the Techniques
  3. Illustrate

- **MTS 114: Marketing mix I**

- **Product Policy**: 2 credits (30 hours); L, T, SPW
  1. Focus of product policy
  2. The importance of product in the marketing mix
  3. Classification of the products
  4. Policy of the product range
  5. Product Life cycle
  6. The attributes of products
  7. Brand Strategy

- **Pricing Policy**: 2 credits (30 hours); L, T, P, SPW
  1. Factors influencing pricing decision
  2. Pricing objectives
  3. Constraints setting prices (mistakes)
  4. Methods used in setting price
  5. Pricing Strategies
  6. Determination of the Net to pay (Reduction and Increase on price)
  7. Return on investment

- **MTS 124: Marketing mix II**

- **Distribution policy**: 2 credits (30 hours); L, T, P, SPW
  1. The role of distribution policy
  2. The functions of distribution
  3. The distribution strategy
  4. The factors to consider before selecting a channel of distribution
  5. The implementation of the distribution network
  6. Case of services

- **Marketing Communication Policy**: 2 credits (30 hours); L, T, P, SPW
  1. The focus of communication policy
  2. Techniques of institutional communication
  3. Techniques of commercial communication (promotional mix)

- **MTS 114: Marketing research I**

- **Market research I**: 2 credits (30 hours); L, T, P, SPW
  1. Focus of research
2. Specificity of qualitative marketing research
3. Collection Tools

- **Commercial Management I: 2 credits (30 hours); L, T, P, SPW**
  1. Commercial function
  2. Various forms of commerce
  3. The Urban Planning commercial
  4. Documents relating to purchase

- **MTS 124: Marketing Research II**

- **Market Survey II: 2 credits (30 hours); L, T, P, SPW**
  1. Focus of market research
  2. Specificity of quantitative marketing research
  3. Collection Tools

- **Commercial Management II: 3 credits (45 hours); L, T, P, SPW**
  1. Stocks management
  2. The implementation of sales point
  3. Supply management

- **MTS 235: Marketing Research III**

- **Market survey III: 1 credit (15 hours); L, T, P, SPW**
  1. Case study
  2. Put the students in a situation
  3. Achieve the study
  4. Provide the advice

- **Commercial Management III: 1 credit (15 hours); L, T, P, SPW**
  1. The sales forecasts
  2. Analysis of the profitability of the company
  3. The cash budget

- **Market survey IV: 2 credits (30 hours); T, P, SPW**
  1. Fit a case
  2. Put the students in a situation
  3. Achieve the study
  4. Compile - treat - analyze
  5. Provide the advice

- **Commercial Management IV: 2 credits (30 hours); T, P, SPW**
  1. Adapted case study
  2. Form groups
3. Animate the Case
4. Learn the lessons to the outcome of each case

❖ MTS 116: Marketing techniques I

➢ Sales Technics: 2 credits (30 hours); L, T, P

1. The characteristics of the sale person
   • Customer approach;
   • Qualities of a sales person;
   • The different types of sellers.
2. The knowledge of the product
   • Why do I need to know the product?
   • Analysis of the concept of product;
   • The definition of the characteristics of a product.
3. Self-knowledge
   • Self image;
   • The choice of projects;
   • The commitment for an objective profession (the golden sale); The implementation of a professional project.
4. The knowledge of the customer
   • Research and analysis of information relating to the client/sector;
   • Analysis of the information;
   • Research and analysis of information relating to the customer; anticipation of the reaction of a client.
5. Prospecting
   • Presentation and analysis of a situation of sale;
   • Exploration and performance of the seller;
   • The techniques of prospecting;
   • Design a personal strategy for prospecting;
   • The management and evaluation of the work of prospecting;
   • Exploration of the sales force file;
6. Making contact
   • Know how to present;
   • The phone and the making of appointments;
   • A good physical preparation;
   • Prepare its strategy; be in shape physically; be in shape psychologically.
7. The argument/demonstration
   • The offer;
   • Preparation of a sales argument
8. Overcoming Objections
   • Why the customer objected? Various objections;
   • How to deal with Objections attitude the objections; handling of objections.
9. Closing the sale
• close the sale
10. The consolidation
• Follow up sales;
• Feedback;
• after Sales Services.

➢ Competitive Intelligence: 2 credits (30 hours); L, T, P

1. The focus of policy of Competitive analysis
2. The Internal organization
3. The Field Deployment
4. The tricks for the success of a policy of Competitive Intelligence

➢ Sales Force I: 2 credits (30 hours); L, T, P

1. The concept of sales force
   • Commercial location;
   • Statutes of the sales force;
   • Criteria for the choice of a sales force.
2. The determination of the size of the sales force and recruitment
   • Method of potential of sale (Semlow);
   • Method Based on the workload (Talley);
   • Potentials of the seller;
   • Recruitment of the sales force.
3. Organization of the sales force
   • Structure of the sales force;
   • Establishment of sectors of sale;
   • Distributing criteria for a sector
4. Sales Objectives
   • General objectives of sale quotas;
   • Definition of a good objective;
   • Different forms of sale objectives;
   • The Establishment of quotas.
5. The work of a seller in a sector
   • Organization of Tours;
   • The frequency of visits;
   • The routes;
   • The material organization of the work;
   • Journey cycles;
   • Cost of a visit;
   • Monitoring of sales;
   • Documents relating to the reports with the customers.

❖ MTS 126: Marketing Techniques II

➢ Techniques of commercial negotiation: 2 credits (30 hours); L, T, P

1. Concept of commercial negotiation
2. The preparation of the commercial negotiation
3. The conduct of the commercial negotiation
4. The conclusion
5. The after commercial negotiation

- **Sales Force II: 2 credits (30 hours); L, T, P**

1. **The remuneration of the sales force**
   - Conditions for the proper functioning of a remuneration system;
   - The types of policy of remuneration feasible;
   - Modes of remuneration practiced.

2. **The control and the diagnosis of the sales force**
   - The framework of the control;
   - The modalities of an effective control;
   - The evaluation of the activity of the sales force.

3. **Animation and stimulation of the sales force**
   - The animation of the sales persons;
   - The motivation of the sales people.

4. **Productivity and optimization of the activity of the seller**
   - The elements of productivity;
   - The measurement of productivity;
   - The optimization of the activity of the seller.

5. **After-sale Marketing**
   - The follow-up;
   - The guarantee;
   - The insurance of after-sales services (VAS); The strength of marketing after-sale (MAV).

- **Methodology for drafting the report of internship: 1 credit (15 hours); L, P**

1. The collection of information
2. How to make a report
3. The plan of the Probationary report and the Executive Summary
4. The Table of Contents
5. The introduction of the report of internship
6. The conclusion of the Internship report
7. The Acknowledgments
8. How to build the annexes
9. When to start his internship report
10. How to find a subject of Internship report
11. The cover page
12. How to write effectively
13. Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations)
14. Instructions and typographical rules of presentation (police, spa INT g, titles, highlighted, punctuation, graphic charter)
15. How to prepare the defense
MTS117: Bilingual training I and Economic environment I

French expression: 1 credit (15 hours); L, T

1. Vocabulaire
   - Vocabulaire technique usuel

2. Grammaire
   - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
   - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
   - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
   - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
   - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
   - Des fonctions grammaticales.

3. Expression et communication
   - Compréhension et interaction au cours d’une discussion technique ;
   - Communication orale courante ;
   - Communication orale interactive
   - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
   - Lecture rapide et compréhension de texte ;
   - synthèse d’un long texte
   - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
   - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
   - Expressions figées

General Economics: 2 credits (30 hours); L, T, P

1. Business and production
2. Households and the consumption
3. Markets and Prices
4. Training and distribution of income
5. The currency and the financing of the Economy
6. The elements of the National Accounts
7. The macro-economic equilibrium
8. The socialist system
9. The capitalist economy
10. The State and its interventions
11. The foundations of international trade
12. International payments
13. The balance of payments
14. Economic development and its inequalities
15. Growth and its inequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of problems
18. The development strategies
19. The economic integration and the forms of cooperation in the world
20. The strategies of the International Debt

MTS 127: Bilingual training I and Economic Environment II

- English Expression: 1 credit (15 hours); L, T, SPW
  1. Vocabulary
     - Technical and usual vocabulary of the specialty
  2. Grammar
  3. Bilingual expression
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. Autonomous reading of "writings" of all levels
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. Write clear, detailed texts
     - Essay writing;
     - Application for employment;
     - C.V.;
     - Letter of motivation;
     - Letter/memo writing and minutes of a meeting

- Economy and organization of enterprises: 2 credits (30 hours); L, T, P
  - The Enterprise, definition and mode of analysis;
  - Classification of Enterprises;
  - The Organisational Structure of enterprises;
  - The insertion of the company in the economic fabric;
  - The commercial activity of the enterprise;
  - The productive activity of the enterprise;
  - Logistics in the enterprise;
  - The financial activity of the enterprise;
  - The management of human resources;
  - The systemic approach of the enterprise;
  - Information system;
  - The decision-making process;
  - The strategic analysis of the company;
  - Choice and implementation of a strategy;
  - The business, society and culture;
  - The business, society and the Ethics.
MTS 231: Quantitative Technics and computer training

- Probabilities and operational research i: 3 credits (45 hours); L, T, P, SPW
  1. Algebra of sets
     • Applications;
     • The Counts.
  2. Basic Set linked to a random experiment
     • Probabilisation;
     • Conditional probabilities;
     • Formula of Bayes;
     • Tests in BERNOUILLI.
  3. Random variables discrete
     • Law of probability;
     • Distribution function.
  4. Random variables continuous
     • Density,
     • Hope;
     • Variance;
     • Standard deviation;
     • moments.
  5. Conventionallaws
     • Binomial
     • Normal;
     • fish;
     • exponential.

- Applied computing i: 2 credits (30 hours); L, T, P, SPW
  1. The study of the Graphical Environment Windows
     • Presentation;
     • Management of Windows;
     • Managing Files and Folders.
  2. What is a file, a folder?
     • Path of access to a file.
  3. Practical Study of Microsoft Word
     study of basic functions.
  4. Practical Study of Microsoft Excel
     • Presentation;
     • Arithmetic operations.
  5. Construction of a formula
     • Use of the integrated functions: - definition;
       - Syntax of the integrated functions;
       - A few integrated functions;
       - Relative reference, absolute reference and joint reference; - Case of synthesis.
MTS 241: Quantitative Technics and Computer training II

Probabilities and Operational Research II: 3 credits (45 hours); L, T, P, SPW

1. Concepts of the combinatorial optimization:
   - Constraints/objectives;
   - Feasible solution/best;
   - Terminal;
   - Local optima, etc.

2. Graph Theory:
   - Modeling;
   - Coloring;
   - Roads;
   - The treesmaskingfluid;
   - The Waves...

3. The linearprogramming
   - Program to two variables;
   - program to more than two variables.

4. The algorithm of the simplex - the table method
   - Analysis of the final table of the simplex; problem of duality; the management of stocks.

5. The problems of scheduling - General Information on the Graphs
   - The PERT method:
     - Applications on the PERT;
     - The choice of investment in deterministic universe.

6. Modeling
7. Decision in uncertain future
8. Transportation problems
9. The problems of assignment

Applied computing II: 2 credits (30hours); L, T, P

Specific work
△ Software Marketing.

MTS 232: Accounting and Information System I

Analytical accounting and budgetary management I: 2 credits (30hours); L, T, SPW

1. Of the general ledger to the cost accounting
   - Generality on the analytical accounting (objectives, role, and the concept of the load).

2. Analysis of expenses
   - Loads liable and not liable;
   - Direct costs and indirect;
3. **Suppletiveloads;**
   • Allocation of Indirect Costs.

4. **Valuation of stocks (FIFO method, LUP)**
   • The full costs (cost of purchase, cost of production, introduce the stocks)
   
   NB: do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products)

5. **Partial costs**
   • The variable costs;
   • The marginal costs.

6. **The Rational Importance of loads of structure**

   ➢ **System of information I: 2 credits (30 hours): L, T, SPW**

   **A- Concept information systems**

   1. **Introduction**
      • Systemic Analysis of the Company

   2. **The information system**
      • Functions of the IF; ☐ roles of the IF; ☐ qualities of IF.

   3. **Computerization of IF**
      • The parties to IF; ☐
      • Software;
      • Definitions;
      • The purpose of a system of information;
      • The functions of a system of information; ☐ the organizational system; ☐ the processing of information.

   **B- Concept of algorithmic and programming initiation**

   1. **Objects:**
      • Circumstances;
      • Variables;
      • The operators ...

   2. **Basic treatments and sequential**

   3. **Choice and repetition**

   4. **Function and procedures**

   5. **Structure of the data**
      • Vectors;
      • Table;
      • Registration;
      • file.

   6. **Application with Basic or Pascal**
MTS 242: Accounting and Information System II

- Analytical accounting and budgetary management II: 2 credits (30 hours); L, T, P

1. The predetermined costs
   - Determination of variances on direct costs and indirect and algebraic analysis of these differences (exclude the graphic analysis).

2. The Budgets (brief study and practice)
   - The budgets of the sales;
   - The production budgets;
   - The budgets of supply; √ budgets of investment; √ budgets of cash flow.

- System of Information II: 2 credits (30 hours); L, T, P

  A- The conceptual model of data: mcd

1. Constitution of the data dictionary DD
   - Goal (objective);
   - Basic Concepts: Elementary data-Rubrique-Document;
   - Techniques of collection of information;
   - Purge of the dictionary;
   - Highlighted objects;
   - Identification of entities;
   - Definition of the relations of dependency between the objects.

2. Elaboration of the model entity - Association
   - Basic Concepts:
     - Entity and entity type;
     - Attribute (property);
     - Association;
     - Occurrence of a property; - the identifier (key); - cardinality.

  B- The logic model for relational data: MLDR

1. Purpose
2. Basic concepts
   - Primary key;
   - Foreign key;
   - relationship;
   - Registration.
3. The model entity/association
   - Relationship of the entities;
   - Definition of other relations of dependencies between objects; √ cardinalities.
4. Passage of the MCD at the MLD
   - Transformation of entities; √ Transformation of associations:
     - Binary relationship to the cardinalities (x, 1) - (x, n) with X = 0 or x = 1;
     - Relationship n-AREA (regardless of the cardinality);
- Reflexive relationship to the cardinalities \((x, 1)-(x, n)\) with \(X = 0\) or \(X = 1\); - a binary relationship to the cardinalities \((0.1) - (1.1)\).

C- Physical Data Model: implementation of the database

1. Creation of the database
2. Creation of tables
3. Entering the data in the tables
4. Relationship of the tables
5. Creating Forms
6. Relational model (relationship, degree, schema, PRIMARY KEY/secondary, cardinality, domain, ... P of base or access)
7. The languages of requests (SQL...)
8. Study of a few SQL commands

❖ MTS 233: Marketing Management I

Sales Force Management

- Management of the commercial team I: 1 credit (15 hours); L, T, P
  1. Focus of sale force management of the commercial team
  2. Management Style

- Merchandising I: 2 credits (30 hours); L, T, P, SPW
  1. Concept of merchandising
  2. The challenges
  3. The organization of the shelves space

❖ MTS 243: Marketing Management II

- Management of the commercial team II: 1 credit (15 hours); T, P
  1. Management style adapted to a selling team
  2. Criteria for assessment

- Merchandising II: 2 credits (30 hours); T, P
  1. The management of shelves
  2. The fixing of prices (price staking)

❖ MTS 236: Work of synthesis and Sales Policy I

- Trade Policy I: 2 credits (30 hours); L, T, P
  1. Focus of a Commercial policy
  2. The components of a marketing plan

- Commercial Prospecting: 2 credits (30 hours); L, T, P
  1. Focus of prospection
  2. Preapproach
  3. Presentation planning
4. presentation
5. Monitoring and Evaluation
6. Summary In terms of Action:
   • Before;
   • During;
   • and after.

➢ Commercial Prospecting: 2 credits (30 hours); L, T, P
   1. Fit the synthesis review type to the business, context or contextual case study
   2. Organize the students in groups
   3. Animate the groups and proceed to CORRECTIONS
   4. Prepare students to carry out demonstrations

❖ MTS 245: Work of synthesis and Sales policy II

➢ Sales Policy II: 2 credits (30 hours); L, T, P, PE
   1. The different areas to review
   2. Ingredients for successful implementation of a marketing plan

➢ Promotion on the place of sale: 2 credits (30 hours); L, T, P
   1. Focus of promotion on the point of sales
   2. Difference between the promotion and advertising on the place of sale
   3. Organization of a promotion on the place of sale
   4. Summary In terms of Action:
      • Before;
      • During;
      • and after.

➢ The work of Synthesis II: 2 credits (30 hours); T, P, SPW
   1. Fit the case of synthesis review type adapted to the business, to the Cameroonian context or sub-regional
   2. Organize the students as a group
   3. Animate the groups and proceed to the CORRECTIONS
   4. Prepare students to face this trial to the review

❖ MTS 237: Legal environment and Civic education I

➢ Law on Commercial Companies I: 1 credit (15 hours); L, T
   1. The status of trader
   2. The acts of commerce
   3. The fund of commerce
   4. The different commercial contracts

➢ Civil law: 2 credits (30 hours); L, T, P
   1. Definition, characters, the branches and the sources of the law
   2. The field of application of the Act
3. The dimensions of the law (objective, subjective right)
4. The Legal organization
5. The right to legal personality
6. The civil status, the name and the Domicile
7. The Disabilities
8. The legal acts
9. The legal facts

❖ MTS 246: Professional internship

➢ The professional internship: 6 credits (90 hours); P, SPW

1. Arrival and Business Integration
2. Working in a company
3. The holding of the Intern journal
4. The choice of the theme of work: in collaboration with mentors professional academic and
5. Elaboration of the canvas of research
6. The resources to operate
7. The organization of work
8. Drafting of the report
9. Presentation of the report before a jury

❖ MTS 247: Legal environment and Civic education II

➢ Company law II: 1 credit (15 hours); L, T

1. Definition, Object and forms of commercial companies
2. The creation of commercial companies
3. The operation of the Commercial Companies
4. The dissolution of commercial companies

➢ Labor law: 2 credits (30 hours); L, T, P

1. Definition of the right of labor, birth and evolution of labor law and sources
2. The contract of work (conclusion, implementation and rupture)
3. The conflicts of work (individual and collective)
4. The delegate of the staff, unions
5. Work accidents and occupational diseases
6. The hygiene and safety in the workplace

➢ Civic Education and Ethics: 1 credit (15 hours); L, SPW

The Concepts
- The citizen;
- The Nation;
- The State;
- Public Property unto collective property;
- The freedoms;
• The public service;
• Problem of ethics;
• Ethics, Law and reason;
• Management and ethics of responsibility;
• Ethics and management.

• Ethics
• Civics
• Deontology
• Moral consciousness
• The universal declaration of Human Rights
• Good governance in public services
• Explain the importance of civics to the life of the nation
• Functions of the state and its citizens
• Deontology, Professional ethics and professionalism
• Relationship between morality, law and ethics
• Codes of ethics
Field : BUSINESS AND FINANCE

Spéciality :

BANKING AND FINANCE
1. The objective of the training

The objective of this specialty is to cover the deficit in number and quality, of human resources which credit establishments need to carry out their business. Besides, the training will provide enterprises, no matter their area of activity, with collaborators who will enable them seize the opportunities offered them by the financial system to evolve, expand and align their business to the world financial system.

2. Skills Sought After

→ General skills
  - Understand the professional and economic environment;
  - Be apt in oral and written communication;
  - Be skillful in sale and commercial negotiation;
  - Master the legal framework of the activity and be apt in analyzing applicable taxation rules.
  - Master the use of NIT applicable to banks;
  - Be flexible
  - Be able to work under pressure;

→ Specific Skills
  - Construct and develop a relationship of confidence with each customer, in line with the marketing policy of the enterprise;
  - Develop quantitatively and qualitatively the goodwill of the business, notably by increasing the rate of goods and services offered to clients;
  - Contribute personally to quality reception;
  - Manage and develop quantitatively and qualitatively a professional customer portfolio within the framework of the marketing policy of the enterprise;
  - Contribute to the development of the enterprise through his/her marketing strategies with profession customers;
  - Develop a comprehensive approach to professional customers;

The holder of the HND in Banking and Finance may also be entrusted with:
  - Open and manage accounts;
  - Distribute products and services where payments are made through accounts;
  - Promote and use information transmission technologies;
- Distribute banking and non-banking saving products and manage the finance of the enterprise;
- Distribute products linked to savings, notably those under collective management;
- Promote consumer credits awards, award of building construction loans to individuals, and preparing files;
- Promote modes of financing during exploitation and investment period of enterprises and prepare files;
- Promote insurance products offered by the bank;
- Follow-up and management of risks customers are exposed to;
- Carry out economic and financial analyses of the situation of customers, evaluating and follow-up of risks.

3. **Outlets**

- Commercial banks;
- Credit establishments;
- Stock Exchange;
- Insurance companies;
- Central Bank;
- Bank commission;
- Ministries in charge of finance and economic and financial matters;
- Microfinance establishments;
- Savings banks and the service responsible for finance of the post office, etc.
4. Organization of the Teachings

Semester 1

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5. Courses content

**BFI 111: Mathematics and Computer Science I**

- **General Mathematics I**: 3 credits (45 hours); L, T, SPW

  - **Algebra vector spaces**
    1. **Polynomials**
       - Polynomials characteristics.
    2. **Vector space**
       - Linear applications.
    3. **Matrices**
       - Operations on the matrices;
       - Matrices associated with a linear application;
       - Matrices and determinants.
    4. **The Determinants**
       - Determinant of a square matrix;
       - Calculation of determinants of order less than or equal to 3.
    5. **Linear Systems**
       - Inversion of matrix of order less than or equal to 3
       - Method of Gauss;
       - Resolution of systems of linear equations by the method of Pivot
       - Application of matrix calculation on the resolution of systems of linear equations.
    6. **Reduction of square matrices**
       - Own values; vectors.
    7. **Differential equations and linear récurrentielles of order 2 with constant coefficients**
    8. **Mathematical applications in Economics and Management**

- **General Computing I**: 2 credits (30 hours); L, T, SPW

  **The hardware and software on a computer system - the Hardware**
  1. **The peripheral components**
     - The devices of input;
     - The ouPut devices; the storage devices;
     - The devices of input and ouPut.
  2. **The central unit**
     - The central memory;
     - The microprocessor;
     - The ports;
     - The motherboard;
     - The chipset;
     - The powersupply;
     - The cards of extension;
     - Other internal organs.
  3. **The unit of exchange (or bus)**
     - Role;
• Types of bus:
  - Data bus;
  - Control bus;
  - Bus of address.

B- The Software

1. The application software
   • Definition;
   • Role;
   • Types and examples of software.

2. The basic software (or software systems)
   • Definition;
   • Types of basic software: - Drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation”:
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of an operating system;
       - architecture.
   • Concept of Free Software and proprietary software.

System of numeration and Codification

C- The numbering systems

1. A few basic concepts
   • The base of the system;
   • Weight;
   • Alphabet of the language;
   • Format of the word (length of the word);
   • power of language.

2. A few numberingsystems
   • The decimal system;
   • The binary system;
   • The octal system;
   • The hexadecimal system.

3. The basic changes
   • Of Decimal to another base b;
   • To a base b of any kind to the decimal basis;
   • Of the binary in octal and vice versa;
   • From binary to hexadecimal and vice versa.

4. Arithmetic operations
   • binary binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
   • Addition of binary numbers;
   • Subtraction of binary numbers;
   • Use the add-in to 2 in the subtraction;
   • Multiplication of binary numbers;
   • Division of binary numbers.
5. **Hexadecimal arithmetic**
   - addition of numbers in Hexadecimal;
   - subtraction of numbers in hexadecimal.

D- **The codes**

1. **General information on the concept of a code**
   - Definitions;
   - Objectives of the codification;
   - The functional codification;
   - Types of functional codes;
   - the codification of technology.

2. **The alphanumeric codes**
   - The ASCII code:
     - Standard ASCII; - Extended ASCII;
     - Use.

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**BFI 121: Mathematics and Computing II**

- **General Mathematics II: 3 credits (45 hours); T, P, SPW**
  
  **Analysis**
  
  1. The Real Numbers
  2. Numerical Functions of a real variable, limit, Continuity
  3. Differentiability, extrema, theorem of Rolle and finished increases
  4. Polynomials, fractions, rational
  5. Study and graphic representation, reciprocal Functions
  6. Limited developments, integrals and applications to calculations of Aires
  7. Logarithmic functions and exponential
  8. Digital Suites: Direction of variation, convergence
  9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
  10. Mathematical applications in Economics and Management

- **General Computing II: 2 credits (30 hours); T, P, SPW**
  
  **A- Computer Networks**
  
  1. **General information**
     - Definition of A computer network;
     - interest of computer networks;
     - basic vocabulary:
       - Workstation;
       - Node;
       - Server;
       - packet .
  2. **Typology of networks according to the media:**
     - Wired networks;
     - Networks not wired.
     - according the GeographicExtent:
       - The local networks (LAN);
       - The metropolitan area networks (MAN);
       - The wide area networks (WAN).
  3. **Network Topologies:**
     - PhysicalTopology;
- The bus topology;
- The star topology;
- The ring topology;
- The topology in mesh;
- the topology in shaft;
- Logical Topology;
- Networks to dissemination;
- Point-to-point networks.

4. **Network architectures:**
   - client/server architecture;
   - architecture of equal to equal.

5. **The equipment of computer networks**:
   - Equipments of basis of a network; The computer; The network card; The server; The network cable; The transceiver (or adapter); the transmission mounts; the socket.
   - The equipment of Interconnections; Hubs (hub); Switch (Switch); Routers; Gateways the gateway (gateway); The router; The bridge (Bridge); the repeaters.

6. **Concept of IP addressing**
   - Structure of an IP address - network identifier (Net ID); - Identifier of host (Host ID).
   - Specific addresses;
   - Network address;
   - Machine address;
   - Broadcast Address (broadcast);
   - Limited Broadcast address (multicast);
   - Address of rebroadcasting (loopback);
   - Classification IP addressing; CLASS A; CLASS B; CLASS C.

B- Internet network

6. **Concept of protocol**
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
     - NNPP protocol;
     - The FTP protocol;
     - HTP protocol;
     - IMAP protocol; - Protocol TCP; - other.

7. **A few Internet Services**
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
   - The Download (Download A text, download An image, download a free software...);
   - The online Trade;
   - The IRC (Internet Relay Chat);
   - Other.

8. **The searchengines**
   - Definition;
9. **Tools for Internet access**
   - The browsers (definition, examples);
   - The plug-ins (definition, examples);
   - The search engines (definition, examples, use).

10. **The connection to the Internet**
    - Connection hardware;
    - Suppliers of access (role, examples);
    - Types of connections (specialized line, phone line, satellite).

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### BFI 232: Mathematics and Computing III

**Financial Mathematics III: 2 credits (30 hours); L, T, P, SPW**

1. **The Annuities**
   - Constant annual installments;
   - Annuities in arithmetic progression; □ annuities in geometric progression; □ perpetual annuities.

2. **The undivided borrowings**
   - Reimbursement by constant annual installments; □ Table of depreciation.

### Applied computer I: 2 credits (30 hours); L, T, P

1. **The study of the Graphical Environment Windows**
   - Presentation;
   - Management of Windows;
   - Managing Files and Folders.

2. **What is a file, a folder?**
   - Path of access to a file.

3. **Practical Study of Microsoft Word** □ study of basic functions.

4. **Practical Study of Microsoft Excel**
   - Presentation;
   - Arithmetic operations.

5. **Construction of a formula**
   - Use of the integrated functions: - definition;
     - Syntax of the integrated functions;
     - A few integrated functions;
     - Relative reference, absolute reference and joint reference; - Case of synthesis.

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### BFI 242: Mathematics and Computing IV

**Financial Mathematics IV: 2 credits (30 hours); T, P, SPW**

1. **Project management**
   - PERT analysis
- Illustrations of the PERT
  - Choice of investments
2. Modeling
3. Decision rule under uncertainty
4. The transportation problem
5. The network problem

➤ **PROBABILITIES II: 2 CREDITS (30 HOURS) TEACHING, PRACTICALS**

1. Random variables
   - Law of probability
   - Application
2. Continuous random variable
   - Density
   - Expectation
   - Variance
   - Standard deviation
   - Moments
3. Classical laws
   - Binomial distribution
   - Normal distribution
   - Poisson distribution

➤ **Applied computers II: 2 credits (30 hours); T, P, SPW**

**Specific work**
- Software Bank (Elage Bank, Delta Bank, Barbarossa, Hannibal, etc.)

❖ **BFI 112: Quantitative Techniques I**

➤ **Financial Mathematics I: 2 credits (30hours); L, T, SPW**

1. The Basics
   - Simple Interest;
   - Calculation of the value gained;
   - Current value commercial and current value rational one; predefined interest and effective interest.
2. Calculation of the average rate of a series of simultaneous investments

❖ **The statistics I: 2 credits (30hours); L, T, PE**

1. Statistical series to a variable
   - Definition and vocabulary;
   - Graphical representation;
   - Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Standard deviation;
     - Quantiles;
2. **Statistical series of two variables**
   - Definition and vocabulary;
   - Cloud of points;
   - Average point;
   - Covariance and covariance matrix of 2 variables;
   - The coefficient of correlation and regression;
   - Linear adjustment by the method of least squares.

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**BFI 122: Quantitative Techniques II**

- **Financial Mathematics II: 2 credits (30 hours); T, P, SPW**
  1. Equivalence of bills
  2. Short term financial operations-current accounts and interest
  3. Commercial discounts
  4. Compound interest

Acquired value-actual value-equivalent rate and proportional rate-apparent rate of interest and real rate of interest

- **Statistics II: 2 credits (30 hours); T, P, SPW**
  1. Estimation of an average, a proportion and a standard deviation
  2. Confidence interval and confidence coefficient;
  3. Tests of assumptions and the KHI-two

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**BFI 231: Quantitative Techniques III**

- **Operational research I: 3 credits (45 hours); L, T, P, SPW**
  1. **Concepts of the combinatorial optimization**
     - Constraints/objectives;
     - Feasible solution/best;
     - Terminal;
     - Local optima, etc.
  2. **Graph Theory**
     - Modeling;
     - Coloring;
     - Roads;
     - The treesmaskingfluid;
     - The Waves...
  3. **The linear programming**
     - program to two variables;
     - program to more than two variables.
  4. **The algorithm of the simplex - the table method**
     - analysis of the final table of the simplex; problem of duality; the management of stocks.
Probabilities I: 2 credits (30 hours); L, T, SPW

1. Algebra of sets
   - Applications;
   - The Counts.

2. Basic Set linked to a random experiment
   - Probabilisation;
   - Conditional probability;
   - Formula of Bayes; Tests In BERNOUILLI.

3. Random variables discrete
   - Law of probability; distribution function.

BFI 241: Quantitative Techniques IV

Operational Research II: 3 credits (45 hours); T, P, SPW

1. The problems of scheduling - General Information on the Graphs
   - The PERT method:
     - Applications on the PERT.

   2. Modeling

   3. Decision in Uncertain Future

   4. Transportation problems

   5. The problems of transfer

Probabilities II: 2 credits (30 hours); T, P, SPW

1. Random variables discrete
   - Law of probability;
   - Distribution function.

2. Random variables continuous
   - Density,
   - Hope;
   - Variance;
   - Standard deviation; moments.

3. Conventionallaws
   - Binomial
   - Normal; fish; exponential.

BFI 113: Accounting I, ethics, ethics and regulatory

FINANCIAL ACCOUNTING I: 2 CREDITS (30 HRS)

1) Generalities
- Definition, evolution and role of accounting.
- Study of the accounting laws, sources and principles:

2) The balance sheet:
   - Notion of uses of funds and resources

3) An account and principle of double entry recordings

4) Accounting transfers

5) The accounting systems (classical and computerized system)

6) Purchases and sale transaction of goods
   - Invoicing (elements of reduction, increasing and taxes)

➤ FINANCIAL ACCOUNTING II AND METHODOLOGY: 3 CREDITS (45 HRS)

1) Settlements
   - Immediate settlements (cash and cheque)
   - Differed settlements (trade bills creation and encashment). No circulation of trade bills

2) Management accounts (results) for commercial and industrial companies or enterprises

3) Notion of depreciation (constant and degressive methods)
   - Terminology
   - Calculations (amortigation tables of assets acquired at the beginning of the year and in the course of the year)

4) Notion of provisions
   - For depreciation
   - For losses and charges

ACCOUNTING III

III -1- ACCOUNTING FOR BANKING TRANSACTIONS I: 2 Credits (30 HRS)
   - Recording of daily bank transactions
   - Management accounts (results) of banks

III -2- FINANCIAL ANALYSIS I (2 credits: 30 HRS)
   - Preparing activities to financial analysis (retreatment from accounting balance sheet to a financial balance sheet)
   - The procedure of financial analysis

ACCOUNTING IV

IV-1- Accounting for banks transactions 3 credits (45 HRS)
   - Management accounts and the bank’s profit and loss account.
   - The balance sheet.
IV-2- Financial analysis II: 1 credit (15 HRS)
- Financial analysis procedure
- The tools of financial analysis (ratios of the balance sheet and the profit and loss account and interpretations).

➢ Methodology of Drafting of report of internship: 1 credit (15 hours); L, P

1. The collection of Information
2. How to make a report
3. The plan of the Probationary report and the Executive Summary
4. The Table of Contents
5. The introduction of the report of internship
6. The conclusion of the Internship report
7. The Acknowledgments
8. How to build the annexs
9. When to start his Internship report
10. How to find a subject of Internship report
11. The cover page
12. How to write effectively
13. Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations)
14. Instructions and typographical rules of presentation (police, spacing, titles, highlighted, punctuation, graphic charter)
15. How to prepare the defense

➢ Taxation of operations of bank: 1 credit (15 hours); L, T

1. The Schemes of exemption of the operations of banks
2. The VAT on the operations of a bank
3. The Taxes on securities on bank operations

❖ BFI 233: Accounting III

➢ ACCOUNTING FOR BANKING AND TRANSACTIONS II: 2 Credits (30 HRS)
- Recording of daily bank transactions
- Management accounts (results) of banks

➢ FINANCIAL ANALYSIS I (2 credits: 30 HRS)
- Preparing activities to financial analysis (retreatment from accounting balance sheet to a financial balance sheet)
- The procedure of financial analysis

❖ BFI 243: Accounting IV

➢ Accounting for banks transactions (3 credits (45 HRS)
- Management accounts and the bank’s profit and loss account.
- The balance sheet.

- Financial analysis II: 1 credit (15 HRS)
  - Financial analysis procedure
  - The tools of financial analysis (ratios of the balance sheet and the profit and loss account and interpretations).

- BFI 114: Operations and banking techniques I

- Banking techniques and individuals market: 2 credits (30 hours); L, T, P, SPW
  1. The opening to the closing of the account
  2. The management of means of payment
  3. The sale of banking products and non-banking products
  4. The Cameroon fiscal system in the financial market
  5. The financial market
  6. The sale of credit to individuals
  7. The Insurance
  8. The management of risk

- Cross-border banking I: 2 credits (30 hours); L, T, P, SPW

Foreign exchange risk management

A- The foreign exchange market
  1. The components of the foreign exchange market
     • The cash market; the market of deposit;
     • The long term market.
  2. The different regimes of exchange
     • The fixed exchange rate regimes;
     • The regimes of floating exchange rates.

B- The exchange risk
  1. The risk of transactions
     • The case of an importer;
     • The case of an exporter; The exchange position; policy of coverage.
  2. The risk of loss due to competition
     • The case of the export: an example; The case of an importer: an example;
     • General rules.
  3. Exchange rate movement calculations
     • The economic analysis;
     • Statistical analysis.
Strategic Marketing management in banking: 1 credit (15 hours); L, T

1. The specificities of the Banking Market
2. The strategies of conquest and loyalty of the Bank customers
3. Practice of exploration in banking environment
4. Elaboration of a Marketing Plan Payment

BFI 124: Operations and banking techniques II

Banking techniques and corporate market I: 2 credits (30 hours); L, T, P, SPW

1. The needs of professionals and large enterprises in the face of a bank
2. Characteristics of clientele and corporate professionals
3. Procedure of opening of a current account and its operation
4. Current account

Cross-border banking II: 2 credits (30 hours); L, T, P, SPW

Foreign Exchange Risk Management

A- The techniques of coverage of exchange risk

1. The internal techniques:
   • The choice of the billing currency;
   • Contracts indexing clauses;
2. The External Techniques
   • The exchange insurance;
   • The cover on the foreign exchange markets to term;
   • The coverage on the monetary market;
   • The markets of currency options.
3. The choice of a technique of Coverage: synthesis

B- Main Processes of payment to an international

1. Terminology
2. The instruments of payment
   • The check;
   • Trade bills;
   • Bank transfers;
   • The documentary credit;
   • Discounting document.

BFI 234: Operations and banking techniques III

Banking techniques and exporate market II: 2 credits (30 hours); L, T, P

1. Simple with dawal;
2. Contrat remboursements;
3. Documentary withdrawal;
4. Bank payment obligations.

Cross-border banking III: 2 credits (30 hours); T, P, SPW

A- The major processes of payment to the international
1. **The techniques of payment**
   - Simple withdrawal;
   - Contra reimbursement;
   - The documentary collection:
     - The documentary credit (documentary credit or letter of credit L/C);
     - The documentary discount (D/P documents against payment; D/P documents against acceptance);
     - The stand-by letter of credit (SBLC).
   - (Bank Payment Obligation - The BPO).

B- **Banking correspondence to an international**

1. **Definition of the concept of banking correspondence - perimeter of the principles sectorial application.**
   - At the international level;
   - Domain of application retained.
2. **The classification of specific risk to the activity of banking correspondence**
   - Countries risk;
   - The risk “client facility”;
   - Products/services risk.

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**BFI 244: Operations and banking techniques IV**

- **Banking techniques companies market III**: 2 credits (30 hours); L, T, P
  1. The specific risks to the appropriations intended for professionals and corporate and securities adapted
  2. Mounting and study of the files of credit professionals and corporate
  3. Financing of public markets
  4. Management of cash surpluses

- **Cross-border banking IV**: 2 credits (30 hours); L, T, P

**Banking correspondence to the international**

1. **Entry into business relationship**
   - General Considerations:
     - Evaluation in the light of country risk;
     - Evaluation in the light of the client’s risk;
     - Evaluation in the light of the products/services risk.
   - Convention of banking correspondence;
   - Vigilance light;
   - Enhanced vigilance;
   - A profile of relationship business.
2. **Measures of vigilance in respect of the “client facility”**
   - General considerations; constant vigilance.
3. **Update of the assessment of the level of risk of money laundering and financing of terrorism measures of vigilance.**
4. **Group approach in the framework of the banking correspondence**
   - Case of the group supervised by the ACP;
   - Case of the group supervised by another authority;
• Taking into account the state of implantation of the parent undertaking of the client facility.

5. Third party relationship and externalisation of banking correspondence
   • Third party relationship;
   • Outsourcing;
   • Fictitious institutions;
   • Procedures;
   • Internal control.

❖ BFI 115: Finance I

➢ Decentralized financial systems I: 1 credit (15 hours); L, T

CEMAC regulations of the MFI

1. The operations and services authorized
   • collection of deposit;
   • Credit operations;
   • The financial investments; other resources.

2. The organization of the MFI
   • Networks, umbrella organ body and financial body;
   • Special provisions for certain establishments;
   • The organization of the profession.

➢ Islamic Finance I: 1 credit (15 hours); L, T

1. Management of the islamicsavings

➢ Financial markets I: 2 credits (30 hours); L, T, P, SPW

1. Principal money market instruments
   2. money market operation.

❖ BFI 125: Finance II

➢ Decentralized financial systems II: 2 credits (30 hours); L, T, P

CEMAC regulations on MFI

1. The approvals, prior authorisation, statement and prohibitions.
   • The Approval:
     - Approval of establishments;
     - Approval of leaders and of auditors.
   • Prior authorisations and declarations: - the prior authorization; - the simple statement. Limits of MFlactivities.

2. Regulatory standards for the surveillance and control of the establishments
Islamic Finance II: 1 credit (15 hours); L, T

1. Main techniques of Islamic finance

Financial Markets II: 2 credits (30 hours); L, T, P

1. The foreign exchange market and determinants of currencies exchange rates
2. The main transactions on the foreign exchange market

BFI 235: finance and work of Synthesis I

Decentralized financial systems III: 2 credits (30 hours); T, P, SPW

1. CEMAC regulations of the MFI
   • The sanctions and the provisional administration; the liquidation.
2. The operations of the SFD with the banks
   • Institutional Operations; Technical Operations.

The work of Synthesis I: 2 credits (30 hours); L, T, P, SPW

A dozen of practical cases mounted and animated by a group of teachers of the specialty.

Financial markets III: 2 credits (30 hours); T, P, SPW

1. Principal tools of financial market
2. Stock exchange entry procedures.

BFI 245: Finance and work of summary II

Decentralized financial systems IV: 2 credits (30 hours); L, T, P

1. The operations of the SFD with the banks
   • The Financial Operations; other operations.
2. Inter-MFI payments.

The work of Synthesis II: 2 credits (30 hours); L, T, P, SPW

A dozen of practical cases mounted and animated by a group of teachers of the specialty.

Financial markets IV: 2 credits (30 hours); T

1. Orders on the stock exchange and Rating
2. Arbitration and stock market speculation
BFI 116 : Monetary Economics and banking I

- Monetary economics I: 2 credits (30 hours); L, T,
  1. Monetary creation

- Economics of Banking I: 2 credits (30 hours); L, T, P
  1. The general banking risks

BFI 126: Monetary economy banking and II

- Monetary Economics II: 2 credits (30 hours); L, T, P
  1. Monetary creation
  2. Monetary policy

- Economics of Banking II: 2 credits (30 hours); L, T, P
  1. The general banking risks
  2. Asymmetry of information, vagaries of morality, relationship of agency

BFI 236 : Monetary Economics and banking III and IV

- Monetary economics III: 1 credit (15 hours); L, T, P
  1. Currency market

- Economics of Banking III: 1 credit (15 hours); L, T, P
  1. Asymmetry of information, vagaries of morality, relationship of agency
  2. The bankarisation of the Economy

- Monetary economics IV: 2 credits (30 hours); L, T, P, SPW
  1. Monetary policy
  2. Currency market

- Economics of Banking IV: 2 credits (30 hours); L, T, P, SPW
  1. The bankarisation of the Economy
  2. Banking internationalisation

BFI 117: Bilingual training I and Economic environment I

- French expression: 1 credit (15 hours); L, T
  1. Vocabulaire
    - Vocabulaire technique usuel
2. Grammaire
   - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
   - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
   - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
   - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
   - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
   - Des fonctions grammaticales.
3. Expression et communication
   - Compréhension et interaction au cours d’une discussion technique ;
   - Communication orale courante ;
   - Communication orale interactive
   - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
   - Lecture rapide et compréhension de texte ;
   - synthèse d’un long texte
   - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
   - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
   - Expressions figées

- General Economics: 2 credits (30hours); L, T, P
  1. Business and production
  2. Households and the consumption
  3. Markets and Prices
  4. Training and distribution of income
  5. The currency and the financing of the Economy
  6. The elements of the National Accounts
  7. The macro-economicequilibrium
  8. The socialist system
  9. The capitalisteconomy
  10. The State and its interventions
  11. The foundations of international trade
  12. International payments
  13. The balance of payments
  14. Economicdevelopment and itsinequalities
  15. Growth and itsinequalities
  16. Inflation, unemployment, industrial change
  17. The issues of development and the globalization of problems
  18. The developmentstrategies
  19. The economic integration and the forms of cooperation in the world
  20. The strategies of the International Debt
BFI 127: Bilingual training II and Economic Environment II

- **English Expression:** 1 credit (15 hours); L, T, SPW
  1. **Vocabulary**
     - Technical and usual vocabulary of the specialty
  2. **Grammar**
  3. **Bilingual expression**
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. **Autonomous reading of "writings" of all levels**
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. **Write clear, detailed texts**
     - Essay writing;
     - Application for employment;
     - C.V.;
     - Letter of motivation;
     - Letter/memo writing and minutes of a meeting

- **Economy and organization of enterprises:** 2 credits (30 hours); L, T, P
  - The Enterprise, definition and mode of analysis;
  - Classification of Enterprises;
  - The Organisational Structure of enterprises;
  - The insertion of the company in the economic fabric;
  - The commercial activity of the enterprise;
  - The productive activity of the enterprise;
  - Logistics in the enterprise;
  - The financial activity of the enterprise;
  - The management of human resources;
  - The systemic approach of the enterprise;
  - Information system;
  - The decision-making process;
  - The strategic analysis of the company;
  - Choice and implementation of a strategy;
  - The business, society and culture;
  - The business, society and the Ethics.

BFI 237: The legal environment and Civic education I

- **Law on Commercial Companies I:** 1 credit (15 hours); L, T
  1. The status of trader
  2. The acts of commerce
3. The fund of commerce
4. The different commercial contracts

➢ Civil law: 2 credits (30 hours); L, T, P
1. Definition, characters, the branches and the sources of the law
2. The field of application of the Act
3. The dimensions of the law (objective, subjective right)
4. The Legal organization
5. The right to legal personality
6. The civil status, the name and the Domicile
7. The Disabilities
8. The legal acts
9. The legal facts

➢ BFI 246: Professional internship

➢ The professional internship: 6 credits (90 hours); P, SPW
1. Arrival and Business Integration
2. Working in a company
3. The holding of the Intern journal
4. The choice of the theme of work: in collaboration with mentors professional academic and
5. Elaboration of the canvas of research
6. The resources to operate
7. The organization of work
8. Drafting of the report
9. Presentation of the report before a jury

➢ BFI 247: The legal environment and Civic education II

➢ Law on Commercial Companies II: 1 credit (15 hours); L, T
1. Definition, Object and forms of commercial companies
2. The creation of commercial companies
3. The operation of the Commercial Companies
4. The dissolution of commercial companies

➢ Labor law: 1 credit (15 hours); L, T, P
1. Definition of the right of labor, birth and evolution of labor law and sources
2. The contract for the work. (Conclusion, execution, and rupture)
3. The conflicts of work (individual and collective)
4. The delegate of the staff, unions
5. Work accidents and occupational diseases
6. The hygiene and safety in the workplace
Civic Education and Ethics: 1 credit (15 hours); L, SPW

The Concepts

- The citizen;
- The Nation;
- The State;
- Public Property unto collective property;
- The freedoms;
- The public service;
- Problem of ethics;
- Ethics, Law and reason;
- Management and ethics of responsibility;
- Ethics and management.
- Ethics
- Civics
- Deontology
- Moral consciousness
- The universal declaration of Human Rights
- Good governance in public services
- Explain the importance of civics to the life of the nation
- Functions of the state and its citizens
- Deontology, Professional ethics and professionalism
- Relationship between morality, law and ethics
- Codes of ethics
Field : BUSINESS AND FINANCE

Speciality :

INTERNATIONAL TRADE
1. The objective of the training

The objective of this specialty is to train intermediate staff workers for departments or services in enterprises responsible for foreign trade. They should have good knowledge of trade negotiations techniques and foreign markets (culture, functioning, and their peculiarities). Also, they should have elementary knowledge of economics and law. They should also be conversant with international logistics of trade and the functioning of customs.

2. Skills Sought After

→ General skills
  - Understand the international economy;
  - Master other languages;
  - Be apt or skillful in negotiation;
  - Understand the professional milieu;
  - Be capable of working under pressure;
  - Be flexible.

→ Specific Skills
  - Understand the factors determining competitive buying and selling in international trade transactions;
  - Manage the commercial activities of an enterprise linked to sales, buying and financing, taking into account the complexity and risks of the international market;
  - Take the necessary steps for exportation;
  - Analyze the foreign market;
  - Do clearance of goods at the customs;
  - Manage the risks linked to international payments and exchange rates;
  - Choose the sales method best adapted at the international level;
  - Buy under competitive conditions;
  - Establish import-export contracts.

3. Outlets

- Export agent;
- Customs clearance operators;
- Manage international trade transactions;
- Commercial export;
- Manage financial houses;
- Commercial Assistant in import and export;
- Buying and selling agents in international transactions.
### 4. Organization of the Teachings

#### Semester 1

<table>
<thead>
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<td><strong>Professional courses 60% (4 UC) 18 credits 270 hours</strong></td>
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<td>INT113</td>
<td>Marketing Environment I</td>
<td>35</td>
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<td>INT114</td>
<td>Techniques of International Trade</td>
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<tr>
<td>INT115</td>
<td>Tools for management of international trade I</td>
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<td>The operations of the International Trade I</td>
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<td>INT124</td>
<td>Tools for management of International Trade II</td>
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<td>INT125</td>
<td>Legal Aspect and commercial offer</td>
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<td>Transport Risk</td>
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5. Courses content

- INT111: Mathematics and Computer skills I

  ➢ General Mathematics I: 3 credits (45 hours); L, T, SPW

- Algebra vector spaces
  1. Polynomials
     • Polynomials characteristics.
  2. Vector space
     • Linear applications.
  3. Matrices
     • Operations on the matrices;
     • Matrices associated with a linear application;
     • Matrices and determinants.
  4. The Determinants
     • Determinant of a square matrix;
     • Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     • Inversion of matrix of order less than or equal to 3
     • Method of Gauss;
     • Resolution of systems of linear equations by the method of Pivot;
     • Application of matrix calculation on the resolution of systems of linear equations.
  6. Reduction of square matrices
     • Own values; vectors.
  7. Differential equations and linear récurrentielles of order 2 with constant coefficients
  8. Mathematical applications in Economics and Management

- General Computing I: 2 credits (30 hours); L, T, SPW

The hardware and software on a computer system - the Hardware

  1. The peripheral components
     • The devices of input;
     • The ouPut devices; the storage devices;
     • The devices of input and ouPut.
  2. The central unit
     • The central memory;
     • The microprocessor;
     • The ports;
     • The motherboard;
     • The chipset;
     • The powersupply;
     • The cards of extension;
     • Other internal organs.
  3. The unit of exchange (or bus)
     • Role;
     • Types of bus:
B- The Software

1. The application software
   - Definition;
   - Role;
   - Types and examples of software.

2. The basic software (or software systems)
   - Definition;
   - Types of basic software: - Drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation:
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of an operating system;
       - architecture.
   - Concept of Free Software and proprietary software.

System of numeration and Codification

C- The numbering systems

1. A few basic concepts
   - The base of the system;
   - Weight;
   - Alphabet of the language;
   - Format of the word (length of the word);
   - power of language.

2. A few numbering systems
   - The decimal system;
   - The binary system;
   - The octal system;
   - The hexadecimal system.

3. The basic changes
   - Of Decimal to another base b;
   - To a base b of any kind to the decimal basis;
   - Of the binary in octal and vice versa;
   - From binary to hexadecimal and vice versa.

4. Arithmetic operations
   - binary binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
   - Addition of binary numbers;
   - Subtraction of binary numbers;
   - Use the add-in to 2 in the subtraction;
   - Multiplication of binary numbers;
   - Division of binary numbers.

5. Hexadecimal arithmetic
• addition of numbers in Hexadecimal;
• subtraction of numbers in hexadecimal.

D- The codes

1. General information on the concept of a code
   • Definitions;
   • Objectives of the codification;
   • The functional codification;
   • Types of functional codes;
   • the codification of technology.

2. The alphanumeric codes
   • The ASCII code:
     • Standard ASCII; - Extended ASCII;
     • Use.

INT 121: Mathematics and Computing II

- General Mathematics II: 3 credits (45 hours); T, P, SPW
  Analysis
  1. The Real Numbers
  2. Numerical Functions of a real variable, limit, Continuity
  3. Differentiability, extrema, theorem of Rolle and finished increases
  4. Polynomials, fractions, rational
  5. Study and graphic representation, reciprocal Functions
  6. Limited developments, integrals and applications to calculations of Aires
  7. Logarithmic functions and exponential
  8. Digital Suites: Direction of variation, convergence
  9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
  10. Mathematical applications in Economics and Management

- General Computing II: 2 credits (30 hours); T, P, SPW
  A- Computer Networks
  1. General information
     • Definition of A computer network;
     • interest of computer networks;
     • basic vocabulary:
       - Workstation;
       - Node;
       - Server;
       - packet.
  2. Typology of networks according to the media:
     - Wired networks;
     - Networks not wired.
     - according the Geographic Extent:
       - The local networks (LAN);
       - The metropolitan area networks (MAN);
       - The wide area networks (WAN).
  3. Network Topologies:
     - Physical Topology;
- The bus topology;
- The star topology;
- The ring topology;
- The topology in mesh;
- the topology in shaft;
- Logical Topology;
- Networks to dissemination;
- Point-to-point networks.

4. **Network architectures:**
   - client/server architecture;
   - architecture of equal to equal.

5. **The equipment of computer networks :**
   - Equipments of basis of a network; The computer; The network card; The server; The network cable; The transceiver (or adapter); the transmission mounts; the socket.
   - The equipment of Interconnections; Hubs (hub); Switch (Switch); Routers; Gateways the gateway (gateway); The router; The bridge (Bridge); the repeaters.

6. **Concept of IP addressing**
   - Structure of an IP address - network identifier (Net ID); - Identifier of host (Host ID).
   - Specific addresses;
   - Network address;
   - Machine address;
   - Broadcast Address (broadcast);
   - Limited Broadcast address (multicast);
   - Address of rebroadcasting (loopback);
   - Classification IP addressing; CLASS A; CLASS B; CLASS C.

**B- Internet network**

1. **Concept of protocol**
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
     - NNProtocoll;
     - The FP protocol;
     - HTP protocol;
     - IMAP protocol; - Protocol TCP; - other.

2. **A few Internet Services**
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
   - The Download (Download A text, download An image, download a free software...);
   - The online Trade;
   - The IRC (Internet Relay Chat);
   - Other.

3. **The searchengines**
   - Definition;
4. **Tools for Internet access**
   - The browsers (definition, examples);
   - The plug-ins (definition, examples);
   - The search engines (definition, examples, use).

5. **The connection to the Internet**
   - Connection hardware;
   - Suppliers of access (role, examples);
   - Types of connections (specialized line, phone line, satellite).

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**INT112: Quantitative techniques**

- **Financial Mathematics I: 2 credits (30hours): L, T,SPW**

1. **The Basics**
   - Simple Interest;
   - Calculation of the value gained;
   - Current value commercial and current value rational one; précompté interest and effective interest.

2. **Calculation of the average rate of a series of simultaneous investments**

3. **Equivalence and replacement of effect**

4. **Short-term financial transactions - Current Account and interest**

5. **Commercial Discount - real rate of discount**

6. **Compound interest**
   - Acquired value;
   - Current value;
   - Rate equivalent and proportional rate; rate ofinterest apparent; rate ofreal interest.

7. **The annuities:**
   - Constant annualinstallments;
   - Annuities in arithmetic progression; annuities in geometric progression; perpetual annuities.

8. **The undivistdebenture**
   - Reimbursement by constant annual installments;
   - Table damortization;
   - Laws followed by depreciation recovery of the debt still alive;
   - Laws followed by the annuities;
   - Applications on the indivist debenture.

9. **The bond loans**
   - Reimbursements to the pair;
   - Constant annualinstallments;
   - Constant depreciation;
   - Rate of yield and rates of returns ofa debenture I;
   - rate of returns of theborrowing ;
   - Choices of Investments.
➢ Statistics: 2 credits (30hours); L, T, SPW

1. **Statistical series to a variable** □ Definition and vocabulary;
   - Graphical representation;
   - Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Gap-type;
     - Quantiles;
     - Coefficient of variation.

2. **Statistical series of two variables**
   - Definition and vocabulary;
   - Cloud of points;
   - Average point;
   - Covariance and covariance matrix of 2 variables;
   - The coefficient of correlation and regression;
   - Linear adjustment by the method of least squares.

3. **Estimate of an average, proportion and a standard deviation**
4. **Confidence interval and confidence coefficient**
5. **Tests of hypotheses and the KHI-two.**

✓ **INT122: Mathematics and accounting**

➢ **Financial Mathematics II: 2 credits (30hours); L, T, P, SPW**

1. **The Annuities**
   - Constant annual installments;
   - Annuities in arithmetic progression; □ annuities in geometric progression; □ perpetual annuities.

2. **The undivisde debenture**
   - Reimbursement by constant annual installments;
   - Table amortization;
   - Laws followed by depreciation recovery of the debt still alive;
   - Laws followed by the annuities;
   - Applications on the indivist debenture.

3. **The bond loans**
   - Reimbursements to the pair;
   - Constant annual installments;
   - Constant depreciation;
   - Rate of yield and rates of returns of a debenture; □ rate of returns of the borrowing; □ Choices of Investments.

➢ **General ledger: 2 credits (30hours); T, P, SPW**

1. The heritage
2. The flow in the company and their registration
3. Relationship balance, balance sheet, Result
4. Accounting Law and the accounting plan
5. Purchases and sales
6. The loads and the products
7. Incidental expenses on purchases and on sales
8. Accounting for industrial enterprises
9. The packaging
10. The transport
11. The conventional financial system
12. The regulations in cash
13. The regulations in the long term
14. Acquisition and production of immobilization
15. Vat, right of excise duty, withholding tax levy on Rent
16. Salaries and Wages

- **INT113: Environmental marketing I**

  - **International Marketing I:** 2 credits (30 hours); L, T, P, SPW
    1. Problem of Marketing and of International Marketing
    2. The international environment of the Company
    3. Reason and strategy of internationalization of the company
    4. Selection and study of foreign markets

  - **Commercial negotiation:** 2 credits (30 hours); L, T, P
    1. The specificities of the commercial negotiation to the International
    2. Interest of the parties in a trade negotiation
    3. Prior to the commercial negotiation
    4. Conduct of a trade negotiation
    5. The operation of a sales pitch
    6. The rules to observe before during and after the commercial negotiation

- **INT123: Marketing Environment II**

  - **International Marketing II:** 2 credits (30 hours); L, T, P, SPW
    1. The forms of presence abroad
    2. International marketing environment (term to study in the variable price)
    3. The commercial organization of the International Company

  - **Initiation to the logistics:** 2 credits (30 hours); L, T, P, SPW
    1. Basic elements of the logistics (definition of logistics, relationship of logistics and transport)
    2. Concept of flows in logistics
    3. Presentation of the logistics process
    4. Management of resources in logistics (cost, time, quality, safety)

- **INT114: Techniques of International Trade**

  - **Solution of transportation:** 2 credits (30 hours); L, T, SPW
    1. Define the Possible Solutions
    2. Choose the solution optimal transport
3. Determine the practical implications of the chosen solution
4. Audit of a transport solution

➢ **Choice of Incoterm : 2 credits (30 hours); L, T, P, SPW**

1. The logistics of International trade
2. Genesis of the INCOTERMS
3. Benefits and limitations of INCOTERMS
4. Detailed studies of INCOTERMS
5. Liners terms
6. Approach leading to the wise choice of an Incoterm
7. Calculation of the INCOTERMS
8. Determination of International pricing policy.

❖ **INT115: management tools of international trade I**

➢ **Study of Market: 2 credits (30 hours); L, T, P, SPW**

1. Interest of a market study
2. Specificity of a Study of qualitative market
3. The tools for the collection of a Study of qualitative market
4. Specificity of a Study of quantitative market
5. The tools for the collection of a Study of quantitative market
6. Case study
7. Put the students in a situation
8. Achieve the Study
9. Compile - treat - analyze
10. Provide the advice

➢ **E-Commerce: 1 credit (15 hours); L, T, P**

**A- What is electronic commerce?**

1. Plan in view of the Electronic Commerce
2. Sell on its Web site
3. Security and Protection of Personal Information
4. Possible options for the sale of products on its site
5. Choose an electronic commerce solution for its Web site
6. Choose the features of electronic commerce
7. List of Resources: Software and electronic commerce solutions
8. The establishment and the maintenance of its e-commerce site
9. Tips on how to attract and retain customers
10. Ensure a fast shipping
11. Other options of purchase and sale online
12. The marketplaces
13. Auction Sites
14. Best practices in electronic commerce
15. The future of electronic commerce
B- The Company and its approach to the e-commerce:
   1. Possible strategies
   2. The principles to take into account

C- Advantages and Disadvantages of E-Commerce
   1. The Benefits
   2. The Disadvantages

D-Stream Geography: 3 credits (45 hours); L, T, P, SPW
   1. The incidence of the new techniques of international transport on the structuring of flows
   2. Role and importance of public transportation

❖ INT124: Management Tools of International Trade II

➢ Customs: 2 credits (30 hours); L, T, P, SPW
   1. Mission of customs
   2. The customs system
   3. Elements of calculation of the customs debt
   4. The assessment of customs debt
   5. Customs regimes
   6. Administrative management of Customs Operations
   7. Procedure for the customs clearance of the goods
   8. The customs liquidation

➢ Geography of flows II: 2 credits (30 hours); L, T, P, SPW
   1. Urban transport and inter urban traveler
   2. Notion of public service

❖ INT125: Legal Aspect and commercial offer

➢ Legal aspect of international trade: 2 credits (30 hours); L, T, P, SPW
   1. Organization of International Trade
      • The actors of international trade;
      • The rules organizing trade.
   2. The operations of the International Trade
      • The International sales contract; International Commercial Contracts; the guarantees of international trade.
   3. Settlement of disputes in international trade, choice of the jurisdiction
      • Appeal to the courts of State; The arbitration.
- commercial offer in the Export: 3 credits (45 hours); L, T, P, SPW
  1. The offer and the pro forma invoice
  2. The importance of the pro forma
  3. The general conditions of sales
  4. The acceptance
  5. The clauses of the sales contract
  6. The contact with the customer
  7. The sales presentation
  8. Follow up of sales
     - The International marketing environment request to offers of the foreign;
     - The study of the foreign country, the sectoral analysis of the foreign country concerning the sector of the product and the external fault finding; The internal diagnostic of the local company.
  9. The international market finding policy.

- INT116: Operations of international trade I

- Road transport: 2 credits (30 hours); L, T, P, SPW
  1. Organization and legislation of transport by way of road
  2. The techniques of the TR
  3. The contract of the TR
  4. The documents of the TR
  5. The pricing of the TR
  6. The composition of an industrial park and calculation of the Payload

- Rail transportation: 3 credits (45 hours); L, T, P
  1. The documents of the TF
  2. The printing of TF

- INT126: Operations of the International Trade II and methodology

- Air transport: 2 credits (30 hours); L, T, P, SPW
  1. The documents of the TA
  2. The air Rating
  3. Introduction to the Incoterms specific to the multimodal transport

- Maritime and inland waterway transport: 2 credits (30 hours); L, T, P, SPW
  1. The documents of the TM
  2. The rating in maritime transport (Incoterms specific to the tm).

- Methodology for drafting the report of internship: 1 credit (15 hours); L, P
  1. The collection of information
  2. How to make a report
3. The plan of the Probationary report and the Executive Summary
4. The Table of Contents
5. The introduction of the report of internship
6. The conclusion of the Internship report
7. The Acknowledgments
8. How to build the annexes
9. When to start his internship report
10. How to find a subject of Internship report
11. The cover page
12. How to write effectively
13. Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations)
14. Instructions and typographical rules of presentation (police, spacing, titles, highlighted, punctuation, graphic charter)
15. How to prepare the defense

INT117: Bilingual training I and economic environment I

- French expression: 1 credit (15 hours); L, T

1. Vocabulaire
   - Vocabulaire technique usuel
2. Grammaire
   - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’imparfait, l’infinitif, voix passive ;
   - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
   - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
   - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
   - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
   - Des fonctions grammaticales.
3. Expression et communication
   - Compréhension et interaction au cours d’une discussion technique ;
   - Communication orale courante ;
   - Communication orale interactive
   - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
   - Lecture rapide et compréhension de texte ;
   - synthèse d’un long texte
   - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
   - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
   - Expressions figées
- **General Principles of Economics: 2 credits (30 hours): L, T, P**
  1. Business and production
  2. Households and the consumption
  3. Markets and Prices
  4. Training and distribution of income
  5. The currency and the financing of the economy
  6. The elements of the National Accounts
  7. The macro-economic equilibrium
  8. The socialist system
  9. The capitaliste conomy
  10. The State and its interventions
  11. The foundations of international trade
  12. International payments
  13. The balance of payments
  14. Economic development and its inequalities
  15. Growth and its inequalities
  16. Inflation, unemployment, industrial change
  17. The issues of development and the globalization of problems
  18. The development strategies
  19. The economic integration and the forms of cooperation in the world
  20. The strategies of the international Debt

- **INT127: Bilingual training II and Economic Environment II**

- **English Expression: 1 credit (15 hours); L, T, SPW**
  1. **Vocabulary**
     - Technical and usual vocabulary of the specialty
  2. **Grammar**
  3. **Bilingual expression**
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. **Autonomous reading of "writings" of all levels**
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. **Write clear, detailed texts**
     - Essay writing;
     - Application for employment;
     - C.V.;
     - Letter of motivation;
     - Letter/memo writing and minutes of a meeting

- **Economy and organization of enterprises: 2 credits (30 hours): L, T, P**
  - The Enterprise, definition and mode of analysis;
  - Classification of Entreprises;
• The Organisational Structure of enterprises;
• The insertion of the company in the economic fabric;
• The commercial activity of the enterprise;
• The productive activity of the enterprise;
• Logistics in the enterprise;
• The financial activity of the enterprise;
• The management of human resources;
• The systemic approach of the enterprise;
• Information system;
• The decisionmaking process;
• The strategic analysis of the company;
• Choice and implementation of a strategy;
• The business, society and culture;
• The business, society and the Ethics.

❖ INT231: Quantitative Technics and Computer training!

➢ Probabilities and operational research i: 3 credits (45 hours); L, T, P, SPW

1. Algebra of sets
   • Applications;
   • The Counts.

2. Basic Set linked to a random experiment
   • Probabilisation;
   • Conditional probability;
   • Formula of Bayes;
   • Tests in BERNOUILLI.

3. Random variables discrete
   • Law of probability;
   • Distribution function.

4. Random variables continuous
   • Density,
   • Hope;
   • Variance;
   • Standard deviation; □ moments.

5. Conventionallaws
   • ; Binomial
   • Normal; □ fish; □ exponential.

➢ Applied informatics i: 2 credits (30 hours); L, T, P, SPW

1. The study of the Graphical Environment Windows
   • Presentation;
   • Management of Windows;
   • Managing Files and Folders.

2. What is a file, a folder?
   • Path of access to a File
3. **Practical Study of Microsoft Word**  
   - study of basic functions.

4. **Practical Study of Microsoft Excel**  
   - Presentation;  
   - Arithmetic operations.

5. **Construction of a formula**  
   - Use of the integrated functions: - definition;  
     - Syntax of the integrated functions;  
     - A few integrated functions;  
     - Relative reference, absolute reference and joint reference; - Case of synthesis.

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**INT241 : Quantitative Technics and Computer training II**

- **Probabilities and Operational Research II**: 3 credits (45 hours); L, T, P, SPW

1. **Concepts of the combinatorial optimization**  
   - Constraints/objectives;  
   - Feasible solution/best;  
   - Terminal;  
   - Local optima, etc.

2. **Graph Theory**  
   - Modeling;  
   - Coloring;  
   - Roads;  
   - The treesmaskingfluid;  
   - The Waves...

3. **The linear programming**  
   - Program to two variables;  
   - program to more than two variables.

4. **The algorithm of the simplex - the table method**  
   - Analysis of the final table of the simplex;  
   - problem of duality;  
   - the management of stocks.

5. **The problems of scheduling - General Information on the Graphs**  
   - The PERT method:  
     - Applications on the PERT;  
   - The choice of investment in deterministic universe.

6. **Modeling**

7. **Decision in Uncertain Future**

8. **Transportation problems**

9. **The problems of Assessment**

   - **Applied Computer II**: 2 credits (30 hours); L, T, P

**Specific work**

- Software Marketing.
INT232: Accounting and Information System I

Analytical accounting and budgetary management I: 2 credits (30 hours); L, T, SPW

1. Of the general ledger to the analytical accounting
   • Generality on the analytical accounting (objectives, role, concept of load)
2. Analysis of expenses
   • Loads liable and not liable;
   • Direct costs and indirect;
   • Suppletive loads;
   • Allocation of Indirect Costs.
3. Valuation of stocks (FIFO method, LUP)
4. The full costs (cost of purchase, cost of production, introduce the stocks)
   NB: do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products).
5. Partial costs
   • The variable costs;
   • The marginal costs.
6. The Rational Importance of loads of structure

System of information I: 2 credits (30 hours); L, T, SPW

A- Concept of Information Systems

1. Introduction
   • Systemic Analysis of the business.
2. The information system
   • Functions of the IF; roles of the IF; qualities of the IF.
3. Computerization of IF
   • The parties to the IF;
   • Software;
   • Definitions;
   • The purpose of a system of information;
   • The functions of a system of information; the organizational system; the processing of information.

B- Concept of algorithmic and Programming Initiation

1. Objects:
   • Cumstances;
   • Variables;
   • The operators ...
2. Basic treatments and sequential
3. Choice and repetition
4. Function and procedures
5. Structure of the data
   - Vectors;
   - Table; Registration; file.

6. Application with Basic or Pascal

   **INT242: Accounting and Information System II**

   ➢ **Analytical accounting and budgetary management II**: 2 credits (30 hours); L, T, P
   1. The predetermined costs
      - determination of variances on direct costs and indirect and algebraic analysis of these differences (exclude the graphic analysis).
   2. The Budgets (brief study and practice)
      - The budget of sales;
      - The production budget;
      - The budget of supply; budgets of investment; budgets of cash flows.

   ➢ **System of Information II**: 2 credits (30 hours); L, T, P
   A- The conceptual model of data: mcd
   1. Constitution of the data dictionary DD
      - Goal (objective);
      - Basic Concepts: Elementary data-heading- Document;
      - Techniques of collection of information;
      - Purge of the dictionary;
      - Highlighted objects;
      - Identification of entities;
      - Definition of the relations of dependency between the objects.
   2. The development of the entity model- association
      - Basic Concepts:
        - Entity and entity type;
        - Attribute(property);
        - Association;
        - Occurrence of a property; - the identifier (key); - cardinality.

   B- The logic model for relational data: MLD
   1. Purpose
   2. Basic concepts
      - Primary key;
      - Foreign key;
      - relationship;
      - Registration.
   3. The model entity/association
      - Relationship of the entities;
      - Definition of other relations of dependencies between objects; cardinalities.
   4. Passage of the MCD at the MLD
• Transformation of entities;
• Transformation of Insociations;
  - Binary relationship to the cardinalities \((x, 1)-(x, n)\) with \(X = 0\) or \(x = 1\);
  - Relationship \(n\)-area (regardless of the cardinality);
  - Reflexive relationship to the cardinalities \((x, 1)-(x, n)\) with \(X = 0\) or \(X = 1\);
  - a binary relationship to the cardinalities \((0.1) - (1.1)\).

C- Physical Data Model: implementation of the database

1. Creation of the database
2. Creation of tables
3. Entering the data in the tables
4. Relationship of the tables
5. Creating Forms
6. Relational model (relationship, degree, schema, PRIMARY KEY/secondary, cardinality, domain, … P of base or access)
7. The languages of requests (SQL…)
8. Study of a few SQL commands

✈️ INT233: Transport Risk

➢ Foreign exchange risk management: 1 credit (15 hours); T, P

1. Illustration of the exchange-rate risk
2. Prior concepts to master
3. Possible strategy in the face of a foreign exchange risk
4. Internal and external technical blankets against the exchange risk

➢ Formalities to be completed in case damage: 2 credits (30 hours); L, T, P, SPW

1. Concept of damage
2. Specificity of the damage
3. Approach in the case of apparent damage
4. Approach in case of damage non-apparent
5. Monitoring and Evaluation

✈️ INT234: Practice of International Trade I and II

➢ International trade in raw materials: 1 credit (15 hours); L, T, P, SPW

1. The place of the raw materials in the International Trade
2. The place of the raw materials in the external trade of Cameroon

➢ Trade policy: 2 credits (30 hours); L, T, P, SPW

1. Interest of the Commercial policy
2. The joints of the Commercial policy
3. The specificities arising from the foreign market
4. The integration of these specificities in the marketing mix
5. Monitoring and Evaluation
Choice of a Transport Packaging: 2 credits (30 hours); L, T, P, SPW

1. Distinction between packing and packaging
2. The importance of a reflection on the wise choice of a transport packaging
3. The categories of packaging
4. Criteria for the choice of a transport packaging
5. Type of pallets
6. Type of container and mobile boxes

Pictogram and marking of packages: 1 credit (15 hours); T, P

1. The interest of pictograms
2. The usual pictograms
3. The interest marking of packages
4. Techniques for marking of packages

INT235: Prior to the Export

Achievement of an export diagnostic: 1 credit (15 hours); L, T, P, SPW

1. Reminder of the interest of an Export Diagnostic
2. Reminder of the joints
3. Show how it reviews each articulation
4. Presentation of the Final Report

Transport insurance: 2 credits (30 hours); L, T, P, SPW

1. Reminder on the limitation of liability of the carrier by mode of transport
2. Show the interest to subscribe a transport insurance
3. Present the specificities of each type of risk and products adapted
4. Management of the disaster

INT236: Professional Activities I

Approach import-export: 3 credits (45 hours); L, T, P

1. The interest of an approach export
2. The interest of an approach import
3. The points to review

The work of Synthesis I: 3 credits (45 hours); T, P, SPW

1. Case study adapted to the business, in the Cameroonian context or sub-regional
2. Organize the students in a group
3. Animate the groups and proceed to the CORRECTIONS
4. Prepare students to face this trial to thereview
INT243: Professional Activities II and language

- **Approach import-export II**: 1 credit (15 hours); L, T, P
  1. The points to review
  2. Evaluation of the approach

- **Language 2 (at your choice) Allemand-Espagnol-Chinese**: 1 credit (15 hours); L,T
  1. The civilities
  2. The expressions of usage in the profession
  3. How to Initiate a dialog Primary/supported?

- **The work of Synthesis II**: 2 credits (30h hours); T, P, SPW
  1. the case study adapted to the business, in the Cameroonian context or sub-regional
  2. Organize the students as a group
  3. Animate the groups and proceed to the CORRECTIONS
  4. Prepare students to face this trial.

INT244: Sale Abroad foreigntrade

- **International trade II**: 2 credits (30 hours); L, T, P, PE
  1. The individual mechanisms, national or institutional stabilization of course (case of exports)
  2. The risk management in financial markets

- **Choice of a foreign market**: 2 credits (30 hours); L, T, P, SPW
  1. The screening of foreign markets
  2. The exploitation of secondary data
  3. Calculation of rates of coverage and penetration
  4. The selection itself (criteria for Accessibility and potentiality)

INT245: Documents of International Trade

- **The transport documents**: 2 credits (30 hours); L, T, P, SPW
  1. Role of transport documents
  2. Typology of transport documents
  3. Fill with a transport document
  4. Points of vigilance by Transport Document

- **A shipping document**: 2 credits (30 hours); L, T, P, SPW
  1. The goods shipped regularly
  2. The required documents
  3. The procedure for obtaining
INT237: the legal environment and civic education I

- Law on Commercial Companies I: 1 credit (15 hours); L, T
  1. The status of trader
  2. The acts of commerce
  3. The fund of commerce
  4. The different commercial contracts

- Civil law: 2 credits (30 hours); L, T, P
  1. Definition, characters, the branches and the sources of the law
  2. The field of application of the Act
  3. The dimensions of the law (objective, subjective right)
  4. The Legal organization
  5. The right to legal personality
  6. The civil status, the name and the Domicile
  7. The Disabilities
  8. The legal acts
  9. The legal facts

INT246: Professional internship

- The professional internship: 6 credits (90 hours); P, SPW
  1. Arrival and Business Integration
  2. Working in a company
  3. The holding of the Intern journal
  4. The choice of the theme of work: in collaboration with mentors professional academic and
  5. Elaboration of the canvas of research
  6. The resources to operate
  7. The organization of work
  8. Drafting of the report
  9. Presentation of the report before a jury

INT247: the legal environment and civic education II

- Law on Commercial Companies II: 1 credit (15 hours); L, T
  1. Definition, Object and forms of commercial companies
  2. The creation of commercial companies
  3. The operation of the Commercial Companies
  4. The dissolution of commercial companies

- Labor law: 1 credit (15 hours); L, T, P
  1. Definition of the right of labor, birth and evolution of labor law and sources
  2. The contract of work (conclusion, implementation and rupture)
3. The conflicts of work (individual and collective)
4. The delegate of the staff, unions
5. Work accidents and occupational diseases
6. The hygiene and safety in the workplace

- Civic Education and Ethics : 1 credit (15 hours); L, SPW

  The Concepts
  - The citizen;
  - The Nation;
  - The State;
  - Public Property unto collective property;
  - The freedoms;
  - The public service;
  - Problem of ethics;
  - Ethics, Law and reason;
  - Management and ethics of responsibility;
  - Ethics and management.
  - Ethics
  - Civics
  - Deontology
  - Moral consciousness
  - The universal declaration of Human Rights
  - Good governance in public services
  - Explain the importance of civics to the life of the nation
  - Functions of the state and its citizens
  - Deontology, Professional ethics and professionalism
  - Relationship between morality, law and ethics
  - Codes of ethics
Field: BUSINESS AND FINANCE

Specialty: MICROFINANCE
1. **The objective of the training**

The objective of this specialty is to cover the deficit in number and quality of human resources which credit establishments need to carry out their business. Besides, the training will provide enterprises, no matter their area of activity, with collaborators who will enable them seize the opportunities offered them by the financial system to evolve, expand and align their business to the world financial system.

2. **Skills Sought After**

   → **General skills**
   
   - Understand the professional and economic environment;
   - Be apt in oral and written communication;
   - Be skillful in sale and commercial negotiation;
   - Master the legal framework of the activity and be apt in analyzing applicable taxation rules.
   - Master the use of NIT applicable to banks;
   - Be capable of having a second look at a problem and finding the solution that meets the expectations of the client and the marketing policy of the enterprise;
   - Be flexible

   → **Specific Skills**
   
   - Construct and develop a relationship of confidence with each customer, in line with the marketing policy of the enterprise;
   - Develop quantitatively and qualitatively the goodwill of the business, notably by increasing the rate of goods and services offered to clients;
   - Contribute personally to quality reception;
   - Manage and develop quantitatively and qualitatively a professional customer portfolio within the framework of the marketing policy of the enterprise;
   - Contribute to the development of the enterprise through his/her marketing strategies with profession customers;
   - Develop a comprehensive approach to professional customers;
   - Open and manage accounts;
   - Distribute products and services where payments are made through accounts;
   - Promote and use information transmission technologies;
   - Distribute banking and non-banking saving products and manage the finance of the enterprise;
- Distribute products linked to savings, notably those under collective management;
- Promote consumer credits awards, award of building construction loans to individuals, and preparing files;
- Promote modes of financing during exploitation and investment period of enterprises and prepare files;
- Promote insurance products offered by the bank;
- Follow-up and management of risks customers are exposed to;
- Carry out economic and financial analyses of the situation of customers, evaluating and follow-up of risks.

3. **Outlets**

   - Consultant in microfinance;
   - Account manager;
   - Cashier or teller;
   - Paymaster;
   - Microcredit analyst; etc.
4. Organization of the Teachings

Semester 1

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<td>MIF111</td>
<td>Mathematics and Computer Science I</td>
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<td>MIF112</td>
<td>Quantitative techniques I</td>
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Professional courses 60% (4 UC) 18 credits 270 hours

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<td>MIF115</td>
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<td>MIF116</td>
<td>Monetary economics and microfinance activities I</td>
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Cross-sectional courses 10% (1 UC) 3 credits 45 hours

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Total 275 105 35 35 450 30

Semester 2

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Professional courses 60% (4 UC) 18 credits 270 hours

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Cross-sectional courses 10% (1 UC) 3 credits 45 hours

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<td>MIF232</td>
<td>Mathematics and Computer Science III</td>
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<tr>
<td><strong>Professional courses 60% (4 UC) 18 credits 270 hours</strong></td>
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<td>MIF233</td>
<td>Accounting III</td>
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<tr>
<td>MIF234</td>
<td>Operations and banking techniques III</td>
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<td>MIF235</td>
<td>Finance and the work of Synthesis I</td>
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<td>MIF236</td>
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<td><strong>Cross-sectional courses 10% (1 UC) 3 credits 45 hours</strong></td>
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## Semester 4

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<td><strong>Field: Management</strong></td>
<td><strong>Specialty: Microfinance</strong></td>
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<td><strong>Hourly Volume</strong></td>
<td><strong>Number Of Credits</strong></td>
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<tr>
<td><strong>Fundamental courses 30% (2 UC) 9 credits 135 hours</strong></td>
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<tr>
<td>MIF241</td>
<td>Quantitative techniques of management IV</td>
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<td>MIF242</td>
<td>Mathematics and Computer Science IV</td>
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<tr>
<td><strong>Professional courses 60% (4 UC) 18 credits 270 hours</strong></td>
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<td>MIF243</td>
<td>Accounting IV</td>
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<tr>
<td>MIF244</td>
<td>Operations and banking techniques IV</td>
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<td>15</td>
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<tr>
<td>MIF245</td>
<td>Finance II and the work of Synthesis II</td>
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<td>30</td>
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<tr>
<td>MIF246</td>
<td>Professional internship</td>
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<td>60</td>
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<tr>
<td><strong>Cross-sectional courses 10% (1 UC) 3 credits 45 hours</strong></td>
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<tr>
<td>MIF247</td>
<td>Legal environment and civic education</td>
<td>25</td>
<td>15</td>
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<tr>
<td><strong>Total</strong></td>
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</table>
5. Courses content

❖ MIF 111: Mathematics and Computer science I

➢ General Mathematics I: 3 credits (45hours); L, T, SPW

- Algebra vector spaces
  1. Polynomials
     • Polynomials characteristics.
  2. Vector space
     • Linear applications.
  3. Matrices
     • Operations on the matrices;
     • Matrices associated with a linear application;
     • Matrices and determinants.
  4. The Determinants
     • Determinant of a square matrix;
     • Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     • Inversion of matrix of order less than or equal to 3
     • Method of Gauss;
     • Resolution of systems of linear equations by the method of Pivot;
     • Application of matrix calculation on the resolution of systems of
       linear equations.
  6. Reduction of square matrices
     • Own values; vectors.
  7. Differential equations and linear récurrentielles of order 2 with
     constant coefficients
  8. Mathematical applications in Economics and Management

➢ General Computing I: 2 credits (30hours); L, T, SPW

The hardware and software on a computer system - the Hardware
  1. The peripheral components
     • The devices of input;
     • The ouPut devices; the storage devices;
     • The devices of input and ouPut.
  2. The central unit
     • The central memory;
     • The microprocessor;
     • The ports;
     • The motherboard;
     • The chipset;
     • The powersupply;
     • The cards of extension;
     • Other internal organs.
  3. The unit of exchange (or bus)
     • Role;
     • Types of bus:
- Data bus;
- Control bus;
- Bus of address.

B- The Software

1. The application software
   - Definition;
   - Role;
   - Types and examples of software.

2. The basic software (or software systems)
   - Definition;
   - Types of basic software: - Drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation":
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of an operating system;
       - architecture.
   - Concept of Free Software and proprietary software.

System of numeration and Codification

C- The numbering systems

1. A few basic concepts
   - The base of the system;
   - Weight;
   - Alphabet of the language;
   - Format of the word (length of the word);
   - power of language.

2. A few numberingsystems
   - The decimal system;
   - The binary system;
   - The octal system;
   - The hexadecimal system.

3. The basic changes
   - Of Decimal to another base b;
   - To a base b of any kind to the decimal basis;
   - Of the binary in octal and vice versa;
   - From binary to hexadecimal and vice versa.

4. Arithmetic operations
   - binary binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
   - Addition of binarynumbers;
   - Subtraction of binarynumbers;
   - Use the add-in to 2 in the subtraction;
   - Multiplication of binary numbers;
   - Division of binary numbers.
5. **Hexadecimal arithmetic**
   - addition of numbers in Hexadecimal;
   - subtraction of numbers in hexadecimal.

D- **The codes**

1. **General information on the concept of a code**
   - Definitions;
   - Objectives of the codification;
   - The functional codification;
   - Types of functional codes;
   - the codification of technology.

2. **The alphanumeric codes**
   - The ASCII code:
     - Standard ASCII; - Extended ASCII;
     - Use.

**MIF 121: Mathematics and Computing II**

- **General Mathematics II:** 3 credits (45 hours); T, P, SPW
  **Analysis**
  1. The Real Numbers
  2. Numerical Functions of a real variable, limit, Continuity
  3. Differentiability, extrema, theorem of Rolle and finished increases
  4. Polynomials, fractions, rational
  5. Study and graphic representation, reciprocal Functions
  6. Limited developments, integrals and applications to calculations of Aires
  7. Logarithmic functions and exponential
  8. Digital Suites: Direction of variation, convergence
  9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
  10. Mathematical applications in Economics and Management

- **General Computing II:** 2 credits (30 hours); T, P, SPW
  **A- Computer Networks**
  1. **General information**
     - Definition of A computer network;
     - interest of computer networks;
     - basic vocabulary:
       - Workstation;
       - Node;
       - Server;
       - packet .
  2. **Typology of networks according to the media:**
     - Wired networks;
     - Networks not wired.
     - according the Geographic Extent:
       - The local networks (LAN);
       - The metropolitan area networks (MAN);
       - The wide area networks (WAN).
  3. **Network Topologies:**
     - Physical Topology;
- The bus topology;
- The star topology;
- The ring topology;
- The topology in mesh;
- the topology in shaft;
- Logical Topology;
- Networks to dissemination;
- Point-to-point networks.

4. **Network architectures:**
- client/server architecture;
- architecture of equal to equal.

5. **The equipment of computer networks:**
- Equipments of basis of a network; The computer; The network card; The server; The network cable; The transceiver (or adapter); the transmission mounts; the socket.
- The equipment Interconnections; Hubs (hub); Switch (Switch); Routers; Gateways the gateway (gateway); The router; The bridge (Bridge); the repeaters.

6. **Concept of IP addressing**
- Structure of an IP address - network identifier (Net ID); - Identifier of host (Host ID).
- Specific addresses;
- Network address;
- Machine address;
- Broadcast Address (broadcast);
- Limited Broadcast address (multicast);
- Address of rebroadcasting (loopback);
- Classification IP addressing; CLASS A; CLASS B; CLASS C.

**B- Internet network**

1. **Concept of protocol**
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
     - NNP protocol;
     - The FP protocol;
     - HTP protocol;
     - IMAP protocol; - Protocol TCP; - other.

2. **A few Internet Services**
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
   - The Download (Download A text, download An image, download a free software...);
   - The online Trade;
   - The IRC (Internet Relay Chat);
   - Other.

3. **The search engines**
   - Definition;
4. **Tools for Internet access**
   - The browsers (definition, examples);
   - The plug-ins (definition, examples);
   - The search engines (definition, examples, use).

5. **The connection to the Internet**
   - Connection hardware;
   - Suppliers of access (role, examples);
   - Types of connections (specialized line, phone line, satellite).

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**MIF 232 : Mathematics and Computing III**

- **Financial Mathematics III: 2 credits (30 hours); L, T, P, SPW**
  1. The concept of combinational optimization
     - Constraints /Objectives
     - Feasibility
     - Limiting factors
     - Local optimum, etc
  2. Theory of graphs
     - Modeling
     - Coloring
     - Patterns
     - Trees
     - Flow charts ...
  3. Linear programming
     - Programming with two variables
     - Programming with more than two variables
  4. The simplex algorithm – the simplex tableau
     - Analysis of the simplex table
     - The duality problem
     - Stock management

- **PROBABILITIES I: 2 CREDITS (30 HOURS) TEACHING, PRACTICALS**
  4. The set theory
     - Illustrations
     - The universal set
  5. Fundamental set related to a random experiment
     - Probability
     - Conditional probability
     - BAYES THEOREM
     - BERNOULLI THEOREM
  6. Discrete random variables
     - The laws of probabilities
     - Illustration

- **Applied Computer I: 2 credits (30 hours); L, T, P**
  1. **The study of the Graphical Environment Windows**
     - Presentation;
• Management of Windows;
• Managing Files and Folders.

2. **What is a file, a folder?**
   • Path of access to a file.

3. **Practical Study of Microsoft Word** study of basic functions.

4. **Practical Study of Microsoft Excel**
   • Presentation;
   • Arithmetic operations.

5. **Construction of a formula**
   • Use of the integrated functions: - definition;
     - Syntax of the integrated functions;
     - A few integrated functions;
     - Relative reference, absolute reference and joint reference; - Case of synthesis.

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**MIF 242: Mathematics and Computing IV**

1. The concept of combinational optimization
   • Constraints / Objectives
   • Feasibility
   • Limiting factors
   • Local optimum, etc

2. Theory of graphs
   • Modeling
   • Coloring
   • Patterns
   • Trees
   • Flow charts ...

3. Linear programming
   • Programming with two variables
   • Programming with more than two variables

4. The simplex algorithm – the simplex tableau
   • Analysis of the simplex table
   • The duality problem
   • Stock management

---

**PROBABILITIES I: 2 CREDITS (30 HOURS) TEACHING, PRACTICALS**

1. The set theory
   • Illustrations
   • The universal set

2. Fundamental set related to a random experiment
   • Probability
   • Conditional probability
   • BAYES THEOREM
   • BERNOULLI THEOREM

3. Discrete random variables
   • The laws of probabilities
   • Illustration
OPPORTUNAL RESEARCH II: 3 CREDITS (45 HOURS) TEACHING, PRACTICALS

1. Project management
   - PERT analysis
     - Illustrations of the PERT
   - Choice of investments
2. Modeling
3. Decision rule under uncertainty
4. The transportation problem
5. The network problem

Applied computer science II: 2 credits (30 hours); T, P, SPW

Specific work
- Software Bank (Eloge Bank, Delta Bank, Barbarossa, Hannibal, ...etc.).

MIF 112: Quantitative Techniques I

Financial Mathematics I : 2 credits (30 hours); L, T, SPW

1. The Basics
   - Simple Interest;
   - Calculation of the value gained;
   - Current value commercial and current value rational one;
   - Pre-accounted interest and effective interest.

2. Calculation of the average rate of a series of simultaneous investments

Statistics: 2 credits (30 hours); L, T, SPW

3. Statistical series to a variable
   - Definition and vocabulary;
   - Graphical representation;
   - Characteristics of central tendency and dispersal characteristics:
     - Average;
     - Mode;
     - Median;
     - Gap-type;
     - Quantiles;
     - Coefficient of variation.

4. Statistical series of two variables
   - Definition and vocabulary;
   - Cloud of points;
   - Average point;
   - Covariance and covariance matrix of 2 variables;
   - The coefficient of correlation and regression;
   - Linear adjustment by the method of least squares.
MIF 122: Quantitative Techniques II

1. Equivalence of bills
2. Short term financial operations-current accounts and interest
3. Commercial discounts
4. Compound interest
5. Acquired value-actual value-equivalent rate and proportional rate-apparent rate of interest and real rate of interest

STATISTIQUE II : 2 credits (30 hours); T, P, SPW

1. Point estimation of mean, proportion and standard deviation
2. Confidence interval
3. Hypothesis testing and chi square tests

MIF 231: Quantitative Techniques III

OPERATIONAL RESEARCH I: 3 CREDITS (45 HOURS) TEACHING, PRACTICALS

1. The concept of combinational optimization
   - Constraints /Objectives
   - Feasibility
   - Limiting factors
   - Local optimum, etc
2. Theory of graphs
   - Modeling
   - Coloring
   - Patterns
   - Trees
   - Flow charts ...
3. Linear programming
   - Programming with two variables
   - Programming with more than two variables
4. The simplex algorithm – the simplex tableau
   - Analysis of the simplex table
   - The duality problem
   - Stock management

PROBABILITIES I: 2 CREDITS (30 HOURS) TEACHING, PRACTICALS

1. The set theory
   - Illustrations
   - The universal set
2. Fundamental set related to a random experiment
   - Probability
   - Conditional probability
   - BAYES THEOREM
   - BERNOULLI THEOREM
3. Discrete random variables
   - The laws of probabilities
   - Illustration
MIF 241: Quantitative Techniques IV

- OPERATIONAL RESEARCH II: 3 CREDITS (45 HOURS) TEACHING, PRACTICALS

1. Project management
   - PERT analysis
     - Illustrations of the PERT
   - Choice of investments
2. Modeling
3. Decision rule under uncertainty
4. The transportation problem
5. The network problem

- PROBABILITIES II: 2 CREDITS (30 HOURS) TEACHING, PRACTICALS

1. Random variables
   - Law of probability
   - Application
2. Continuous random variable
   - Density
   - Expectation
   - Variance
   - Standard deviation
   - Moments
3. Classical laws
   - Binomial distribution
   - Normal distribution
   - Poisson distribution

MIF 113: Accounting I, ethics, ethics and regulatory

- FINANCIAL ACCOUNTING I :2 CREDITS (30 HRS)

1) Generalities
   - Definition, evolution and role of accounting,
   - Study of the accounting laws, sources and principles:
2) The balance sheet:
   - Notion of uses of funds and resources
3) An account and principle of double entry recordings
4) Accounting transfers
5) The accounting systems (classical and computerized system)
6) Purchases and sale transaction of goods
   - Invoicing (elements of reduction, increasing and taxes)
FINANCIAL ACCOUNTING II AND METHODOLOGY: 3 CREDITS (45 HRS)

1) Settlements
   - Immediate settlements (cash and cheque)
   - Differed settlements (trade bills creation and encashment). No circulation of trade bills

2) Management accounts (results) for commercial and industrial companies or enterprises

3) Notion of depreciation (constant and degressive methods)
   - Terminology
   - Calculations (amortization tables of assets acquired at the beginning of the year and in the course of the year)

4) Notion of provisions
   - For depreciation
   - For losses and charges

ACCOUNTING III

III -1- ACCOUNTING FOR BANKING TRANSACTIONS I: 2 Credits (30 HRS)
   - Recording of daily bank transactions
   - Management accounts (results) of banks

III -2- FINANCIAL ANALYSIS I (2 credits: 30 HRS)
   - Preparing activities to financial analysis (retreatment from accounting balance sheet to a financial balance sheet)
   - The procedure of financial analysis

ACCOUNTING IV

IV-1- Accounting for banks transactions 3 credits (45 HRS)
   - Management accounts and the bank’s profit and loss account.
   - The balance sheet.

IV-2- Financial analysis II: 1 credit (15 HRS)
   - Financial analysis procedure
   - The tools of financial analysis (ratios of the balance sheet and the profit and loss account and interpretations).

Methodology of Drafting of report of internship: 1 credit (15 hours); L, P

1. The collection of Information
2. How to make a report
3. The plan of the Probationary report and the Executive Summary
4. The Table of Contents
5. The introduction of the report of internship
6. The conclusion of the Internship report
7. The Acknowledgments
8. How to build the annexes
9. When to start his Internship report
10. How to find a subject of Internship report
11. The cover page
12. How to write effectively
13. Form and presentation (coverage, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations)
14. Instructions and typographical rules of presentation (police, spacing, titles, highlighted, punctuation, graphic charter)
15. How to prepare the defense

➢ Taxation of microfinance operations, and I: 1 credit (15 hours); L, T

1. The Schemes of exemption Microfinance Operations
2. The VAT on the Microfinance operations, and

❖ MIF 233: Accounting III

➢ Accounting for banking transactions I: 2 credits (30 hours); L, T, P

1. Accounting for day-to-day operations of the EMF
2. The balances characteristics of management and the account of the results of a EMF

➢ Taxation of microfinance operations, and II: 2 credits (30 hours); L, T, P

1. The VAT on the microfinance operations, and
2. The PRL

❖ MIF 243: Accounting IV

➢ Accounting for the operations of microfinance II: 2 credits (30 hours); L, T, P

1) Settlements
   - Immediate settlements (cash and cheque)
   - Differed settlements (trade bills creation and encashment). No circulation of trade bills

2) Management accounts (results) for commercial and industrial companies or enterprises

3) Notion of depreciation (constant and degressive methods)
   - Terminology
   - Calculations (amortization tables of assets acquired at the beginning of the year and in the course of the year)

4) Notion of provisions
   - For depreciation
   - For losses and charges
MIF 114: operations and banking techniques I

Marketing strategies of microfinance I: 2 credits (30 hours); L, T
1. The basics of marketing
2. Importance of marketing
3. The Tools of Marketing

The foundations of the microfinance I: 2 credits (30 hours); L, T, SPW.
1. The operations of the SFD with the banks
2. The payments between EMF

MIF 124: Operations and banking techniques II

Marketing strategy of microfinance II: 2 credits (30 hours); L, T, SPW
1. The marketing approach
2. The main strategies of marketing

The foundations of microfinance II: 2 credits (30 hours); L, T, P, SPW
1. Structure of the banking system
2. Origins and Principles of Microfinance

MIF 234: operations and banking techniques III

Microfinance Techniques and corporate markets I: 2 credits (30 hours); L, T, P, SPW
1. The needs of professionals and firms in the face of the MFI
2. Characteristics of clientele and corporate professional
3. Opening of the current account and its operation procedures
4. Current account management

Cross-border banking I: 2 credits (30 hours); L, T, P, SPW

Foreign exchange risk management
1. The foreign exchange market
   - The components of the foreign exchange market:
     - The cash market; - The market of deposits;
     - The market in long term.
   - The different regimes of exchange:
     - The fixed exchange rate regimes;
     - The regimes of floating exchange rates.
2. The exchange rate risk
   - The risk of transaction:
   - The case of the importer;
   - The case of the exporter;
   - The foreign exchange position;
   - Cover Policy
• The risk of loss of competitiveness:
  - The case of the export: an example;
  - The case of the import: an example;
  - The general rules.
• Estimate of the evolution of exchange rates: - The economic analysis; -The statistical analysis.

3. The techniques of coverage of exchange risk
   □ The internal techniques:
     - The choice of the billing currency;
     - The termeillage ;
     - Contracts indexing clauses;
     - The internal compensation; - The swaps.
• The external techniques:
  - The exchange insurance;
  - The cover on the foreign exchange markets in the long term;
  - The cover on the monetary market;
  - The markets of currency options;
• The choice of a technique of Coverage: Synthesis.

4. The major processes of payment to international
• Terminology;
• The instruments of payment:
  - The check;
  - Trade bills;
  - The transfer instruments;
  - The documentary credit; -
  - Discount instruments.

niej MIF 244: operations and banking techniques IV

➢ Microfinance Techniques and corporate market II: 2 credits (30hours); L, T, P
  - Management of the cash surpluses;
  - Financing of the general needs of cash;
  - The appropriations of investment;
  - The specific risks to the appropriations intended for professionals and the Collateral adapted;
  - Mounting and study of credit files;
  - Financing markets.

➢ Cross-border banking II: 2 credits (30hours); L, T, P

The major processes of payment to the international

1. The techniques of payment
• Simple encashment;
• Contrareimbursement.
• The documentary collection :
  - documentary credit(2) (documentary credit or letter of credit The/C);
  - Discounting tools (3) (D/P documents against payment; D/P documents against acceptance);
  - The stand-by letter of credit (4) (SBLC).
(Bank Payment Obligation - The BPO)
Banking correspondence to international

1. Definition of the concept of banking correspondence - perimeter of the principles of application sectional
   • At the international level;
   • Field of application routines in the principles of sectoral application.

2. The classification of risks specific to the activity of banking correspondence
   • The risk countries;
   • Customer facility risks;
   • products and services risk.

3. Entry into business relationship
   - General Considerations:
     - Evaluation in the light of country risk;
     - Evaluation in the light of customer facility risk;
     - Evaluation in the light of products or services risk.
   • Convention of banking correspondence;
   • Vigilance lighte;
   • Enhanced vigilance;
   • A profile of business relation:
     - Measures of vigilance in respect of the client’s facility.
     - Updating the Evaluation of the level of risk of money laundering and financing of terrorism measures of vigilance.
     - Applicable principles of sectorial banking
     - Group approach in the framework of the banking correspondence:
       ▪ Case of the group supervised by the ACP;
       ▪ Case of the group supervised by another authority;
       ▪ Taking into account the state of implantation of the parent undertaking of the client facility.
     - Third party relation and externalisation of banking correspondence.
       ▪ Outsourcing;
       ▪ Fictitious institutions;
       ▪ Procedures;
       ▪ internal control.

❖ MIF 115: Microfinance and conventional financial system I

➢ Operations and Techniques of microfinance I: 3 credits (45hours); L, T, P
  - The needs of the customer;
  - Characteristics of the clientele of micro finance;
  - Processes of opening of account, Major Accounts;
  - The cashier services;
  - The investments offered by the MFI;
  - The appropriations to consumption;
  - The appropriations to housing and the credits risk.

➢ Conventional Financial System I: 2 credits (30hours); L, T, P, SPW
  - The foundations of the micro finance;
  - The operations of the SFD with the banks.
MIF 125: Microfinance and conventional financial system II

- Operations and Techniques of microfinance II: 3 credits (45 hours); L, T, P
  - Security interests in the area of credit to individuals;
  - Mounting and study of credit files;
  - The keeping of accounts (general principle of Registration of operations and determination of value dates;
  - The means of payment;
  - Inter MFI payments.

- Conventional financial system ii: 2 credits (30 hours); L, T, P
  - The operations of the SFD with the banks;
  - The payments between EMF.

MIF 116: monetary economics and microfinance I

- Monetary economics I: 2 credits (30 hours); L, T, P, SPW
  - basic notions on currency:
    - Definition;
    - Functions;
    - Qualities;
    - Properties; - Forms; - Etc.

- Economy of the microfinance I: 2 credits (30 hours); L, T, P, SPW
  - Actors of the system of microfinance.

MIF 126: monetary economics and microfinance II

- Monetary Economics II: 2 credits (30 hours); L, T, P
  - Earth and monetary base and the relationship of the multiplier of currency;
  - The counterparties of the currency.

- Economy of microfinance II: 2 credits (30 hours); L, T, P
  - Functioning of the system of FMI.

MIF 236: monetary economics and microfinance III and IV

- Monetary economics III: 1 credit (15 hours); L, T, P, SPW
  - Monetary creation;
  - Monetary Policy.

- Economy of microfinance III: 1 credit (30 hours); L, T, P, SPW.
  - The intermediation in microfinance and its specificities.

- Monetary economics IV: 2 credits (30 hours); L, T, P, SPW
  - Monetary policy; - market of the currency.
- Economy of the microfinance IV: 2 credits (30 hours); L, T, P, SPW
  - Functioning of the system of MFI;
  - The intermediation in micro finance and its specificities.

- MIF 117: bilingual training I and economic environment I

- French expression: 1 credit (15 hours); L, T
  1. Vocabulaire
     - Vocabulaire technique usuel
  2. Grammaire
     - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
     - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
     - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
     - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
     - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
     - Des fonctions grammaticales.
  3. Expression et communication
     - Compréhension et interaction au cours d’une discussion technique ;
     - Communication orale courte ;
     - Communication orale interactive
     - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
     - Lecture rapide et compréhension de texte ;
     - synthèse d’un long texte
     - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
     - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
     - Expressions figées

- General Economics: 2 credits (30 hours); L, T, P
  1. Business and production
  2. Households and the consumption
  3. Markets and Prices
  4. Training and distribution of income
  5. The currency and the financing of the Economy
  6. The elements of the National Accounts
  7. The macro-economics equilibrium
  8. The socialist system
9. The capitalisteconomy
10. The State and its interventions
11. The foundations of international trade
12. International payments
13. The balance of payments
14. Economic development and its inequalities
15. Growth and its inequalities
16. Inflation, unemployment, industrial change
17. The issues of development and the globalization of problems
18. The development strategies
19. The economic integration and the forms of cooperation in the world
20. The strategies of the International Debt

**MIF 127: bilingual training II and Economic Environment II**

- **English Expression**: 1 credit (15 hours); L, T, SPW
  1. **Vocabulary**
     - Technical and usual vocabulary of the specialty
  2. **Grammar**
  3. **Bilingual expression**
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. **Autonomous reading of "writings" of all levels**
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. **Write clear, detailed texts**
     - Essay writing;
     - Application for employment;
     - C.V.;
     - Letter of motivation;
     - Letter/memo writing and minutes of a meeting

- **Economy and organization of enterprises**: 2 credits (30 hours); L, T, P
  - The Enterprise, definition and mode of analysis;
  - Classification of Enterprises;
  - The Organisational Structure of enterprises;
  - The insertion of the company in the economic fabric;
  - The commercial activity of the enterprise;
  - The productive activity of the enterprise;
  - Logistics in the enterprise;
  - The financial activity of the enterprise;
  - The management of human resources;
  - The systemic approach of the enterprise;
• Information system
• The decision-making process
• The strategic analysis of the company;
• Choice and implementation of a strategy;
• The business, society and culture;
• The business, society and the Ethics.

❖ MIF 235: Finance and the work of Synthesis

➢ Financial Systems classes III: 1 credit (15 hours); T, P.
  - The payments between MFI;
  - Structure of the banking system.

➢ The work of Synthesis I: 2 credits (30 hours); T.
  - A dozen of practical cases mounted and animated by a group of teachers of the Specialty.

➢ Financial markets I: 1 credit (15 hours); L, T, P, SPW.
  - Main carriers of operation on the monetary market;
  - Main operations on the monetary market and mechanism of their realization; - foreign exchange market and determinants of currencies; - Main transactions on the foreign exchange market.

❖ MIF 235: Finance and the work of Synthesis I

➢ Financial Systems classes IV: 1 credit (15 hours); T, P
  - Structure of the banking system;
  - Origins and principles of microfinance.

➢ The work of Synthesis II: 2 credits (30 hours); T
  - A dozen of practical cases mounted and animated by a group of teachers of the specialty.

➢ Financial Markets II: 2 credits (30 hours); L, T, P
  - Main carriers of operation on the financial market;
  - Processes of Introduction on a stock exchange;
  - Orders on the stock exchange and rating;
  - Arbitration and speculation boursières.

❖ MIF 237: the legal environment and the creation of business

➢ Law on Commercial Companies I: 1 credit (15 hours); L, T
1. The status of trader
2. The acts of commerce
3. The fund of commerce
4. The different commercial contracts

- Civil law: 1 credit (15 hours); L, T, P
  1. Definition, characters, the branches and the sources of the law
  2. The field of application of the Act
  3. The dimensions of the law (objective, subjective right)
  4. The Legal organization
  5. The right to legal personality
  6. The civil status, the name and the Domicile
  7. The Disabilities
  8. The legal acts
  9. The legal facts

- Creation of business: 1 credit (15 hours); L, T, P, SPW
  - Concept of contractor;
  - Motivations to the creation of company;
  - Search for ideas and evaluation;
  - Research funding;
  - Choice of legal status;
  - Ethical aspects of the business;
  - Preparation of the business plan.

- MIF 246: Professional internship

- Professional Internship: 6 credits (90 hours); P, SPW
  1. Arrival and Business Integration
  2. Working in a company
  3. The holding of the intern journal
  4. The choice of the theme of work: in collaboration with mentors professional academic and
  5. Elaboration of the canvas of research
  6. The resources to operate
  7. The organization of work
  8. Drafting of the report
  9. Presentation of the report before a jury

- MIF 247: the legal environment and civic education

- Law on Commercial Companies II: 1 credit (15 hours); L, T
  1. Definition, Object and forms of commercial companies
  2. The creation of commercial companies
  3. The operation of the Commercial Companies
  4. The dissolution of commercial companies
- **Labor law: 1 credit (15 hours); L, T, P**
  1. Definition of the right of labor, birth and evolution of labor law and sources
  2. The contract for the work. (Conclusion, execution, and rupture)
  3. The conflicts of work (individual and collective)
  4. The delegate of the staff, unions
  5. Work accidents and occupational diseases
  6. The hygiene and safety in the workplace.

- **Civic Education and Ethics: 1 credit (15 hours); L, SPW**

  **The Concepts**
  - The citizen;
  - The Nation;
  - The State;
  - Public Property unto collective property;
  - The freedoms;
  - The public service;
  - Problem of ethics;
  - Ethics, Law and reason;
  - Management and ethics of responsibility;
  - Ethics and management.
  - Ethics
  - Civics
  - Deontology
  - Moral consciousness
  - The universal declaration of Human Rights
  - Good governance in public services
  - Explain the importance of civics to the life of the nation
  - Functions of the state and its citizens
  - Deontology, Professional ethics and professionalism
  - Relationship between morality, law and ethics
  - Codes of ethics
Field: BUSINESS AND FINANCE

Specialty:

INSURANCE
1. **The objective of the training**

The objective of this specialty is to train professionals who may be called upon to perform activities of a commercial, technical and management nature relating to insurance; impact in them knowledge on subscription modalities and indemnification of companies for loss covered by insurance and social security protection through the integration of clients.

2. **Skills Sought After**

   → **General skills**
   - Have sales and negotiation skills;
   - Master the legal framework of insurance;
   - Be apt in oral and written communication;
   - Understand the professional milieu;
   - Be capable of team leadership.

   → **Specific Skills**
   - Identify and determine the economic and legal framework of the insurance sector;
   - Use techniques peculiar to the different types of insurance;
   - Advise clients and propose to them insurance contracts;
   - Manage relations with clients;
   - Communicate in a professional, legal, fiscal and financial environment;
   - Contribute to obtaining the goodwill of clients and to the development of the portfolio of the company;

3. **Outlets**

   - Insurance subscriber;
   - Insurance consultant;
   - Manage individual and collective life assurance;
   - Underwriter and/or regulation;
   - Collaborator of general agents or insurance brokers;
   - Insurance expert.
## Organization of the Teachings

### Semester 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Field: Management</th>
<th>Specialty: Insurance</th>
<th>Course Title</th>
<th>Hourly Volume</th>
<th>Number Of Credits</th>
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<td>Fundamental courses 30% (2 UC) 9 credits 135 hours</td>
<td>Mathematics and Computer Science I</td>
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<td>Quantitative techniques of management I</td>
<td>40</td>
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<td>Cross-sectional courses 10% (1 UC) 3 credits 45 hours</td>
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<td>Legal theory of the insurance I</td>
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<td>Methodology and legal theory of insurance II</td>
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<td><strong>Specialty: Insurance</strong></td>
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<td>INS231</td>
<td>Quantitative techniques and computer skills I</td>
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<td>INS232</td>
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**Fundamental courses 30% (2 UC) 9 credits 135 hours**

**Professional Courses 60% (4 UC) 18 credits 270 hours**

<table>
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<td>Practice of Accounting and insurance I</td>
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<td>INS234</td>
<td>Accounting of insurance intermediaries I</td>
<td>15</td>
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<td>INS235</td>
<td>International approach and technique of Insurance I + international approach and Insurance techniques II</td>
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<tr>
<td>INS236</td>
<td>The work of synthesis and multimodal Insurance I</td>
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**Cross sectional courses 10% (1 UC) 3 credits 45 hours**

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<th>Number Of Credits</th>
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<td>INS237</td>
<td>Legal environment and civic education I</td>
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**Total**

|       | L | T   | P | SPW | Total |         |
|-------|---|-----|---|-----|-------|         |
|       | 200 | 125 | 105 | 20   | 450   | 30      |

### Semester 4

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**Fundamental Courses 30% (2 UC) 9 credits 135 hours**

**Professional courses 60% (4 UC) 18 credits 270 hours**

<table>
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<th>Code</th>
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<td>Accounting of insurance intermediaries II</td>
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<td>INS245</td>
<td>Synthesis and multimodal Insurance II</td>
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**Cross sectional courses 10% (1 UC) 3 credits 45 hours**

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<td>Legal environment and civic education II</td>
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**Total**

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<th>P</th>
<th>SPW</th>
<th>Total</th>
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<td>155</td>
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</table>
5. Courses content

❖ INS111: Mathematics and Computer I

➢ General Mathematics I: 3 credits (45hours); L, T, SPW

- Algebra vector spaces
  1. Polynomials
     • Polynomials characteristics.
  2. Vector space
     • Linear applications.
  3. Matrices
     • Operations on the matrices;
     • Matrices associated with a linear application;
     • Matrices and determinants.
  4. The Determinants
     • Determinant of a square matrix;
     • Calculation of determinants of order less than or equal to 3.
  5. Linear Systems
     • Inversion of matrix of order less than or equal to 3
     • Method of Gauss;
     • Resolution of systems of linear equations by the method of Pivot;
     • Application of matrix calculation on the resolution of systems of linear equations.
  6. Reduction of square matrices
     • Own values: vectors.
  7. Differential equations and linear récurrentielles of order 2 with constant coefficients
  8. Mathematical applications in Economics and Management

➢ General Computing I: 2 credits (30hours); L, T, SPW

The hardware and software on a computer system - the Hardware

1. The peripheral components
   • The devices of input;
   • The ouPut devices; the storage devices;
   • The devices of input and ouPut.

2. The central unit
   • The central memory;
   • The microprocessor;
   • The ports;
   • The motherboard;
   • The chipset;
   • The powersupply;
   • The cards of extension;
   • Other internal organs.

3. The unit of exchange (or bus)
   • Role;
   • Types of bus:
- Data bus;
- Control bus;
- Bus of address.

B- The Software

1. The application software
   - Definition;
   - Role;
   - Types and examples of software.

2. The basic software (or software systems)
   - Definition;
   - Types of basic software: - Drivers;
     - The compilers;
     - The utilities;
     - The systems of exploitation":
       - Features;
       - Roles;
       - Types of operating system;
       - Structure of an operating system;
       - architecture.
   - Concept of Free Software and proprietary software.

System of numeration and Codification

C- The numbering systems

1. A few basic concepts
   - The base of the system;
   - Weight;
   - Alphabet of the language;
   - Format of the word (length of the word);
   - power of language.

2. A few numberingsystems
   - The decimal system;
   - The binary system;
   - The octal system;
   - The hexadecimal system.

3. The basic changes
   - Of Decimal to another base b;
   - To a base b of any kind to the decimal basis;
   - Of the binary in octal and vice versa;
   - From binary to hexadecimal and vice versa.

4. Arithmetic operations
   - binary binary numbers signed:
     - Exact representation;
     - Representation in complement to 2.
   - Addition of binarynumbers;
   - Subtraction of binarynumbers;
   - Use the add-in to 2 in the subtraction;
   - Multiplication of binary numbers;
   - Division of binary numbers.
5. **Hexadecimal arithmetic**
   - addition of numbers in Hexadecimal;
   - subtraction of numbers in hexadecimal.

**D- The codes**

1. **General information on the concept of a code**
   - Definitions;
   - Objectives of the codification;
   - The functional codification;
   - Types of functional codes;
   - the codification of technology.

2. **The alphanumeric codes**
   - The ASCII code:
     - Standard ASCII; - Extended ASCII;
     - Use.

---

**INS 121: Mathematics and Computing II**

- **General Mathematics II: 3 credits (45 hours); T, P, SPW**
  **Analysis**
  1. The Real Numbers
  2. Numerical Functions of a real variable, limit, Continuity
  3. Differentiability, extrema, theorem of Rolle and finished increases
  4. Polynomials, fractions, rational
  5. Study and graphic representation, reciprocal Functions
  6. Limited developments, integrals and applications to calculations of Aires
  7. Logarithmic functions and exponential
  8. Digital Suites: Direction of variation, convergence
  9. Arithmetic Suites, Suites geometrical, recurring suites of order 1
  10. Mathematical applications in Economics and Management

- **General Computing II: 2 credits (30 hours); T, P, SPW**
  **A- Computer Networks**
  1. **General information**
     - Definition of A computer network;
     - interest of computer networks;
     - basic vocabulary:
       - Workstation;
       - Node;
       - Server;
       - packet .
  2. **Typology of networks according to the media:**
     - Wired networks;
     - Networks not wired.
     - according the GeographicExtent:
       - The local networks (LAN);
       - The metropolitan area networks (MAN);
       - The wide area networks (WAN).
3. **Network Topologies:**
   - Physical Topology;
   - The bus topology;
   - The star topology;
   - The ring topology;
   - The topology in mesh;
   - the topology in shaft;
   - Logical Topology;
   - Networks to dissemination;
   - Point-to-point networks.

4. **Network architectures:**
   - client/server architecture;
   - architecture of equal to equal.

5. **The equipment of computer networks:**
   - Equipments of basis of a network: The computer; The network card; The server; The network cable; The transceiver (or adapter); the transmission mounts; the socket.
   - The equipment of Interconnections: Hubs (hub); Switch (Switch); Routers; Gateways the gateway (gateway); The router; The bridge (Bridge); the repeaters.

6. **Concept of IP addressing**
   - Structure of an IP address - network identifier (Net ID); - Identifier of host (Host ID).
   - Specific addresses;
   - Network address;
   - Machine address;
   - Broadcast Address (broadcast);
   - Limited Broadcast address (multicast);
   - Address of rebroadcasting (loopback);
   - Classification IP addressing; CLASS A; CLASS B; CLASS C.

B- **Internet network**

1. **Concept of protocol**
   - definitions and a few types of protocols
     - SMP protocol;
     - POP protocol;
     - NN P protocol;
     - The F P protocol;
     - HTP protocol;
     - IMAP protocol; - Protocol TCP; - other.

2. **A few Internet Services**
   - The e-mail;
   - Research on the Internet;
   - The Newsgroup (discussion forum);
   - The transfer of files;
   - The Download (Download A text, download An image, download a free software...);
   - The online Trade;
   - The IRC (Internet Relay Chat);
• Other.
3. **The search engines**
   - Definition;
   - Role;
   - Some search engines.
4. **Tools for Internet access**
   - The browsers (definition, examples);
   - The plug-ins (definition, examples);
   - The search engines (definition, examples, use).
5. **The connection to the Internet**
   - Connection hardware;
   - Suppliers of access (role, examples);
   - Types of connections (specialized line, phone line, satellite).

---

**INS112: Quantitative techniques of management I**

- **Financial Mathematics I: 2 credits (30 hours); L, T, SPW**

  1. **The Basics**
     - Simple Interest;
     - Calculation of the value of gained;
     - Commercial present value and rational present value; **Forecasted Interest** and effective interest.
  2. **Calculation of the average rate of a series of simultaneous investments**
  3. **Equivalence and replacement of effect**
  4. **Short-term financial transactions - Current Account and interest**
  5. **Cash Discount - real rate of discount**
  6. **Compound interest**
     - Acquired value;
     - Present value;
     - Equivalent rate and proportional rate;
     - apparent Interest rate;
     - rate of real interest.

- **The statistics I: 2 credits (30 hours); L, T, SPW**

  1. **Statistical series to a variable**
     - Definition and vocabulary;
     - Graphical representation;
     - Characteristics of central tendency and dispersal characteristics:
       - Average;
       - Mode;
       - Median;
       - Standard deviation;
       - Quantiles;
       - Coefficient of variation.
  2. **Statistical series of two variables**
     - Definition and vocabulary;
     - Scattered diagram;
• Average point;
• Covariance and covariance matrix of 2 variables;
• The coefficient of correlation and regression;
• Linear adjustment by the method of least squares.

❖ INS122: Quantitative techniques of management II

➢ Financial Mathematics II: 2 credits (30hours); T, P, SPW

1. The Annuities
   • Constant annuities;
   • Annuities in arithmetic progression;
   • Annuities in geometric progression;
   • perpetual annuities.

2. The joint loans
   • Reimbursement by constant annuities;
   • Amortisations schedule;
   • Laws followed by depreciation recovery of the debt still in process;
   • Laws followed by the annuities;
   • Applications on the joint loans.

3. The bond loans /Debenture loans
   • Reimbursements at par;
   • Constant annuities;
   • Constant amortisation;
   • yield rate and rates of returns of a debenture loan;
   • Rate of returns of the debenture loan at issue;
   • Choice of Investments.

➢ Statistics II: 2 credits (30hours); L, T, SPW

1. Estimation of an average, a proportion and a standard deviation
2. Confidence interval and confidence coefficient
3. Tests hypothesis and the KHI-square

❖ INS113: Principles of taxation I

➢ General Accounting I: 2 credits (30 hours); L, T, P, SPW

1. Generalities
   • Definition evolution and the role of accounting;
   • Study of the accounting law: sources and Principles (briefly).

2. The balance sheet
   □ Notion of application and source
   3. The account and the principle of the double entry
   4. The accounting transfer
   5. The accounting systems (classical and computerized)
   6. Purchase and sale of the goods
      • The elements that decrease the invoice (reductions);
• The elements that increases the invoice (transportation costs, VAT, packaging (see only consignment).

- **Introduction to Taxation I: 3 credits (45 hours); L, T, P, SPW**
  
  1. **General introduction**
     - Role of the Tax;
     - Sources of the tax law in Cameroon;
     - Structure of the tax system in Cameroon;
     - Establishment of the tax (liquidation Base - recovery); classification of the tax.
  
  2. **VAT and excise duty**
     - Field of application;
     - Assessment system;
     - Tax point and exigibility of VAT and excise duty;
     - Calculation of the VAT to be repaid to the treasury or VAT credit (with filling of the VAT Declaration);
     - Regularizations of VAT.

- **INS123: Principles of taxation II**

- **Financial Accounting II: 3 credits (45 hours); L, T, P**
  
  1. **The settlements**
     - (cash, bank);
     - Term (Commercial bills: creation and encashment).

  **NB:** do not see circulation of commercial bills.

  2. **The significant balances of Management (industrial and commercial company)**

  **NB:** from management accounts present the significant balances of management.

  3. **Concept of depreciation (constant and degressive)**
     - Terminology;
     - Calculation (Table of Depreciation of assets placed in service at the beginning and in the course of period).

  4. **Concept of provision for depreciation; for charges and losses.**

  **NB:** for the chap IX and X and present the Extract of the balance sheet (brief study and practice).

- **Introduction to Taxation II: 2 credits (30 hours); L, T, P**

**Tax on the income of individuals**

  1. General information
  2. Assessment system
  3. Determination of tax base by category of income as well as the aggregate net income
  4. Calculation of the tax
  5. Modalities of perception
INS114: Fundamentals of Insurance

- **Introduction to the management of insurance and risks I**: 2 credits (30 hours); L, T, P, SPW
  1. Manage the risks of an enterprise
  2. Insure the enterprise
- **Introduction to insurance**: 2 credits (30 hours); L, T, P, SPW
  1. Historical overview on Insurance
  2. The operation of Insurance
  3. Classification of insurance
  4. The Contract of Insurance
  5. Insurance Industry

INS124: Fundamentals of Insurance II

- **Introduction to the management of Insurance and Risk II**: 2 credits (30 hours); L, T, P, SPW
  1. Insuring an enterprise
  2. Audit of the assurances of an enterprise
- **Automobile insurance**: 2 credits (30 hours); L, T, P
  1. Formation of the contract
  2. The guarantees of contracts of automobile insurance
  3. The rating
  4. The life of contracts of automobile insurance File
  5. The file instruction disaster
  6. Settlement of Property Damage
  7. Settlement of personal injury

INS115: Taxation and AIARD I

- **Taxation of insurance contracts and companies I**: 2 credits (30 hours); L, T, P
  1. General information on the Taxation of Income
  2. The main taxes on the Profits
  3. The rights and taxes Registration
- **Fire insurance, and various social risk I**: 2 credits (30 hours); L, T, P
  1. Unforseen Events and insured damages
  2. Fire insurance: Damage insurance
  3. Fire insurance: Insurance of expenses and financial losses
  4. Limits of guarantees
  5. Fire insurance: Civil Liability Insurance
  6. Rating
  7. Settlement of Claims of disasters
الف. INS125: Taxation and AIARD II

- Taxation of insurance contracts and companies II: 2 credits (30 hours); L, T, P
  1. The VAT
  2. Controls and Tax adjustments - Recovery of Taxes
  3. Tax Litigation

- Fire insurance, and various social risks II: 2 credits (30 hours); L, T, P, SPW
  1. Insurance in waters Damage
  2. Flight insurance by burglary
  3. Insurance of ice Breakage
  4. The civil liability insurance
  5. Insurance of agricultural risks

الف. INS116: Legal theory of insurance I

- Law of contract of insurance I: 2 credits (30 hours); L, T, SPW
  1. The stakeholders in the contract of insurance”
  2. The formation of the contract of insurance”
  3. The premium or contribution

- Regulatory framework and legislation of insurance undertakings I: 2 credits (30 hours); L, T, SPW
  1. Historical context and regulatory framework of insurance industry within the CIMA Zone
  2. The institutional framework of the Insurance Industry

الف. INS126: Methodology and legal theory of insurance II

- Methodology for drafting Internship Report: 1 credit (15 hours); L, P
  1. Collection of Information
  2. How to make a report
  3. The plan of the Probationary report and Executive Summary
  4. The Table of Contents
  5. Introduction of Internship report
  6. Conclusion of the Internship report
  7. Acknowledgments
  8. How to build the annexes
  9. When to start Internship report
  10. How to find a subject of Internship report
  11. Cover page
  12. How to write effectively
  13. Form and presentation (cover, MSDS, summary, bibliography, glossary, index of figures, tables and illustrations)
14. Instructions and typographical rules of presentation (police, spacing, titles, highlighting, punctuation, graphic chart)
15. preparing the defense

➢ Law of contract of insurance II: 2 credits (30 hours); L, T, P, SPW

1. Modifications of Contractual Conditions
2. Execution of contract of insurance

➢ Legislation and Regulatory framework of insurance undertakings II: 2 credits (30 hours); L, T, P, SPW

1. Constitution and operation of business/companies to Insurance
2. Winding-up activities by Insurance companies

❖ INS117: Bilingual training I and economic environment I

➢ French expression: 1 credit (15 hours); L, T

1. Vocabulaire
   - Vocabulaire technique usuel
2. Grammaire
   - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
   - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
   - Du nom et son article: masculin/féminin ; singulier/pluriel : dénombrable, et non-dénombrable ;
   - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
   - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
   - Des fonctions grammaticales.
3. Expression et communication
   - Compréhension et interaction au cours d’une discussion technique ;
   - Communication orale courante ;
   - Communication orale interactive
   - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
   - Lecture rapide et compréhension de texte ;
   - synthèse d’un long texte
   - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
   - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
   - Expressions figées
- General Economics: 2 credits (30 hours); L, T, P
  1. Business and production
  2. Households and consumption
  3. Markets and Prices
  4. Training and distribution of income
  5. Money and the financing of the Economy
  6. The elements of the National Accounts
  7. The macro-economic equilibrium
  8. The socialist system
  9. The capitalist economy
  10. The State and its interventions
  11. The foundations of international trade
  12. International payments
  13. The balance of payments
  14. Economic development and its inequalities
  15. Growth and its inequalities
  16. Inflation, unemployment, industrial change
  17. The forces of development and the globalization of problems
  18. The development strategies
  19. Economic integration and the forms of cooperation in the world
  20. Strategies of International Debt

- INS127: Bilingual training II and Economic Environment II

- English Expression: 1 credit (15 hours); L, T, SPW
  1. Vocabulary
     - Technical and usual vocabulary of the specialty
  2. Grammar
  3. Bilingual expression
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. Autonomous reading of "writings" of all levels
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. Write clear, detailed texts
     - Essay writing;
     - Application for employment;
     - C.V.;
     - Letter of motivation;
     - Letter/memo writing and minutes of a meeting
➢ Economy and organization of enterprises: 2 credits (30 hours); L, T, P

- The Enterprise, definition and mode of analysis;
- Classification of Enterprises;
- The Organisational Structure of enterprises;
- The insertion of the company in the economic fabric;
- The commercial activity of the enterprise;
- The productive activity of the enterprise;
- Logistics in the enterprise;
- The financial activity of the enterprise;
- The management of human resources;
- The systemic approach of the enterprise;
- Information system;
- The decision making process;
- The strategic analysis of the company;
- Choice and implementation of a strategy;
- The business, society and culture;
- The business, society and the Ethics.

❖ INS231: Quantitative Techniques Computer Science I

➢ Probabilities and operational research i: 3 credits (45 hours); L, T, P, SPW

1. Algebra of sets
   - Applications;
   - The Counting.
2. Basic Set linked to a random experiment
   - Probabilisation;
   - Conditional probability;
   - Formula of Bayes;
   - Tests in BERNOUILLI.
3. Random variables discrete
   - Law of probability;
   - Distribution function.
4. Random variables continuous
   - Density,
   - Expectation;
   - Variance;
   - Standard deviation; moments.
5. Conventional laws
   - Binomial
   - Normal;
   - fish;
   - exponential.
Computer science applied to Insurances I: 2 credits (30 hours); L, T, P, PE

1. The study of the Graphical Environment Windows
   - Presentation;
   - Management of Windows;
   - Managing Files and Folders.

2. What is a file, a folder?
   - Path of access to a file.

3. Practical Study of Microsoft Word
   - study of basic functions.

4. Practical Study of Microsoft Excel
   - Presentation;
   - Arithmetic operations.

5. Construction of a formula
   - Use of the integrated functions: - definition;
     - Syntax of the integrated functions;
     - A few integrated functions;
     - Relative reference, absolute reference and joint reference; - Case of synthesis.

INS241: Quantitative Techniques and computer science II

Probabilities and Operational Research II: 3 credits (45 hours); L, T, P, PE

1. Concepts of the combinatorial optimization
   - Constraints/objectives;
   - Feasible solution/best;
   - Terminal;
   - Local optima, etc.

2. Graph Theory
   - Modeling;
   - Coloring;
   - Pathways;
   - Trees;
   - Flow

3. The linear programming
   - Programming with two variables;
   - Programming with more than two variables.

4. The algorithm of the simplex - the table method
   - Analysis of the final table of the simplex;
   - Problem of duality;
   - The management of stocks.

5. The problems of scheduling - General Information on the Graphs
   - The PERT method:
     - Applications on the PERT;
   - The choice of investment in deterministic universe.
6. Modeling
7. Decision in Uncertain Events
8. Transportation problems
9. The problems of allocation

- Computer science applicable to insurance II: 2 credits (30 hours); L, T, P, SPW

Specific work: software for the management of insurance.

- INS232: Economy and ICTS

- Economics applied to insurance: 2 credits (30 hours); L, T, SPW

1. The insurance and the economic activity
   - The market of insurance;
   - The development of insurance activities;
   - The influence of the insurance on economic activity.

2. The economic function of insurance
   - The traditional approach of insurance;
   - The balance of markets in future uncertainty; The financial approach to insurance;
   - The costs of information and the risk of moral hazard.

3. The theory of the insurance application
   - The request of insurance in the framework of the maximization of the hope of usefulness of wealth;
   - The request of assets of coverage in the context of the choice microeconomic.

4. The theory of the insurance undertaking
   - The Insurance and the theory of the firm;
   - The Insurance and the principle of Bernoulli;
   - The management of the Company’s Insurance in the optical of the portfolio.

- Information System I: 2 credits (30 hours); L, T, P, SPW

A- Concept information systems

1. Introduction
   - systemic analysis of Company.

2. The information system
   - functions of the is;
   - roles of the is;
   - qualities of an is.

3. Computerization of IF is
   - The parties to A if; is
• Software;
• Definitions;
• The purpose of information system;
• The functions of informationsystem; the organizational system; the processing of information.

B- Concept of algorithmic and programming initiation

1. Objects:
   • Constances;
   • Variables;
   • The operators ...

2. Basic treatments and sequential

3. Choice and repetition

4. Function and procedures

5. Structure of the data
   • Vectors;
   • Table; Registration; folder.

6. Application with Basic or Pascal

 violet INS242: Accounting and ICTS

 violet Information System II: 2 credits (30 hours): L, T, P

A- The conceptual model of data: mcd

1. Constitution of the data dictionary DD
   • Goal (objective);
   • Basic Concepts: Elementary data-heading- Document;
   • Techniques of collecting of information;
   • Purge of the dictionary;
   • Highlighted objects;
   • Identification of entities;
   • Definition of the relations of dependency between the objects.

2. The development of entity model- association
   • Basic Concepts:
     - Entity and entity type;
     - Attribute (property);
     - association;
     - Occurrence of a property; - the identifier (key); - cardinality.

B- The logic model for relational data: MLDR

1. Purpose

2. Basic concepts
   • Primary key;
   • Foreign key;
   • relationship;
   • Registration.
3. The model entity/Association
   - Placing entities in relation;
   - Definition of Other relations of dependencies between objects; □ cardinalities.

4. Passage of the MCD at the MLD
   - Transformation of entities;
   - Transformation of associations:
     - Binary relationship to the cardinalities \((x, 1)-(x, n)\) with \(X = 0\) or \(x = 1\);
     - Relationship \(n\)-area (regardless of the cardinality);
     - Reflexive relationship to the cardinalities \((x, 1)-(x, n)\) with \(X = 0\) or \(X = 1\); - a binary relationship to the cardinalities \((0.1)-(1.1)\).

C- Physical Data Model: implementation of the database

1. Creation of the database
2. Creation of tables
3. Entering the data in the tables
4. Relationship of the tables
5. Creating Forms
6. Relational model (relationship, degree, schema, PRIMARY KEY/secondary, cardinality, domain, ... P of base or Access)
7. The languages of requests (SQL...)
8. Study of a few SQL commands

➢ cost accounting and budgetary management: 2 credits (30 hours); L, T, P, SPW

1. Of the general accounting to the cost accounting
   - Generality on the cost accounting (objectives, role, and the concept of the load).
2. Analysis of expenses
   - Incorporable and non incorporable charges
   - Direct and indirect charges
   - Suppletive charges
   - Allocation of indirect charges
3. Valuation of stocks (FIFO method, LUP)
4. The full costs (cost of purchase, cost of production, introduce the stocks in progress)

NB : do not address the special notes related to the costs (waste and scrap, semi-finished, sub-products).

5. Partial costs
   - The variable costs;
   - The marginal costs.
6. The Rational Importance of fixed charges
7. The predetermined costs
   - determination of variances on direct and indirect charges and algebraic analysis of these differences (exclude the graphic analysis).
8. The Budgets (brief study and practice)
• The budgets of the sales;
• The production budgets;
• The budgets of supply; □ budgets of investment; □ budgets of cash flow.

❖ INS233: Accounting practice and insurance I

➢ Accounting for insurance companies I: 2 credits (30 hours); L, T, P

  1. The regulation of insurance companies
  2. The accounting rules
  3. The accounting of the current operations
     • case of corporations without intermediaries;
     • case of companies with intermediaries.

➢ Insurance of person I: 1 credit (15 hours); L, T

  1. life assurance;
  2. Personal accident Incidence

❖ INS243: Accounting practice and insurance II

➢ Accounting for insurance companies II: 2 credits (30 hours); L, T, P

  1. The accounting of Investments
  2. The Technical Provisions

➢ person Insurance II : 2 credits (30 hours); T, P, SPW

  1. HealthInsurance
  2. The principle lumps um and its scope

❖ INS234: Accounting of insurance intermediaries I

➢ Accounting of intermediary enterprises in insurance: general agents I : 2 credits (30 hours); L, T, P, SPW

  1. General information on the accounting (General Agents)
  2. The accounts of enterprises of Insurance Intermediation (General Agents)

➢ Accounting by enterprises of intermediation in insurance: brokerage company I: 1 credit (15 hours); L, T, P

  1. General information on the accounting (brokerage company)
  2. Accounting of intermediaty enterprise in Insurance
INS244: Accounting of insurance intermediaries II

- Accounting by enterprises of intermediation in insurance: General Agents II: 2 credits (30 hours); L, T, P, SPW
  1. Accounting connections between the enterprise of intermediation and the company of Insurance (General Agents)
  2. Accounting (General Agents)

- Accounting by enterprises of intermediation in insurance: brokerage company II: 2 credits (30 hours); L, T, P, SPW
  1. Accounting connections between the enterprise of intermediation and the company of Insurance (brokerage company)
  2. Control of the accounting (brokerage company)

INS235: International approach and techniques of insurance I and II

- Reinsurance I: 2 credits (30 hours); L, T, P, SPW
  1. The types of reinsurance
  2. The conclusion of the Treaty of Reinsurance
  3. The execution of the treaty of reinsurance

- Reinsurance II: 1 credit (15 hours); L, T, P
  1. The amendment and the extinction of the treaty of reinsurance
  2. The full subscription and the full of conservation
  3. The settlement of claims

- Insurance technical risks I: 2 credits (30 hours); L, T, P, SPW
  1. Insurance on machine breakage
     - Object;
     - Risk guaranteed;
     - Warranty extensions;
     - Specific exclusions;
     - Rating;
     - Settlement of claims.
  2. Operating loss after breakage of machines
     - Object;
     - Period of compensation;
     - SumInsured; □ Rating.
  3. Insurance on All construction site risks
     - Insurance on construction site risks;
Insurance technical Risk II: 2 credits (30 hours); T, P

1. Gear insurance and site equipments
   - Object;
   - Risk guaranteed;
   - Warranty extensions;
   - Specific exclusions;
   - rating;
   - Settlement of claims.

2. Insurance Computer Science risks
   - Object;
   - Risk guaranteed;
   - Warranty extensions;
   - Specific exclusions;
   - rating;
   - Settlement of claims.

3. Insurance loss of products in refrigerated warehouses or defrozed
   - Object;
   - Risk guaranteed;
   - Warranty extensions;
   - Specific exclusions;
   - rating; settlement of claims.

INS236: Summary of work and multimodal insurance I

The summary I: 2 credits (30 hours); T, P
A dozen of practical cases mounted and animated by a group of teachers of the specialty.

Marine insurance I: 2 credits (30 hours); L, T, P

1. Hull Insurance
2. Ship owner’s liability Insurance
3. Aviation insurance

Transport insurance (air and land) I: 2 credits (30 hours); L, T, P

The insurance of Air Transport:
NB: The course will focus on the coverage of risks suffered by passengers and goods. As I presented, the study will revolve on the essential points below:

1. On the coverage of risks affecting the goods (freight)
   - The nature and the Extent of safeguards;
   - The duration of the warranty;
   - The types of coverage (policy), and the terms and conditions of subscription of guarantees;
   - The value of insurance;
• The conservation of the appeal;
• The process of settlement of damages and losses.

2. **On the coverage of risks affecting passengers**
   • The legal regime on responsibility of the air carrier: the Warsaw and Montreal Conventions:
     - The presumption of responsibility of the air carrier;
     - The limits of responsibility of the air carrier.
   • The regime of compensation of air passengers:
     - The posts of compensable harm;
     - The modalities of compensation of air passengers:
       - The material and immaterial damage; o physical injury.

**INS245: Summary of work and multimodal insurance II**

- The work of Synthesis II: 2 credits (30 hours); T
  - a dozen of practical cases mounted and animated by a group of teachers of the specialty.
- Marine insurance II: 2 credits (30 hours); T, P, SPW
  1. Insurance of Special Risks
  2. The settlement of claims
- Transport insurance (air and land) II: 2 credits (30 hours); L, T, P
  1. The insurance of the transport of goods by land
     - The applicable law;
     - The extent and the duration of the warranty;
     - The types of policies;
     - The regime of indemnification for damages and losses.

**INS237: The legal environment I**

- Law on Commercial Companies I: 1 credit (15 hours); L, T
  1. The status of trader
  2. The acts of commerce
  3. The commercial capital
  4. The different commercial contracts
- Civil law: 2 credits (30 hours); L, T, P
  1. Definition, characters, the branches and the sources of the law
  2. The field of application of the Act
  3. The dimensions of the law (objective, subjective law)
  4. The judicial organization
  5. The right of legal personality
  6. The civil status, the name and the Domicile
  7. The Incapacity
  8. The legal acts
  9. The legal facts
INS246: Professional internship

- The professional internship: 6 credits (90 hours); P, SPW
  1. Arrival and Integration in the company enterprise
  2. Working in a company
  3. The keeping of the Intern journal time table
  4. The choice of the theme of work: in collaboration with mentors professional and academic supervisors
  5. Elaboration of research plan
  6. The resources to be exploited
  7. The organization of study
  8. Drafting of the report
  9. Presentation of the report before a jury

INS247: The Legal Environment II

- Law on Commercial Companies II: 1 credit (15 hours); L, T,
  1. Definition, Object and forms of commercial companies
  2. The creation of commercial companies
  3. The operation of the Commercial Companies
  4. The dissolution of commercial companies

- Labor law: 1 credit (15 hours); L, T, P
  1. Definition of the working right, historical background of labour law and sources
  2. labour contracts (conclusion, implementation and rupture)
  3. labour conflicts (individual and collective)
  4. staff delegate, staff union etc
  5. Industrial accidents and occupational diseases
  6. To hygiene and safety at workplace

- Civic Education and Ethics: 1 credit (15 hours); L, SPW
  1. The Concepts
  2. The citizen;
  3. The Nation;
  4. The State;
  5. Public Property unto collective property;
  6. The freedoms;
  7. The public service;
  8. Problem of ethics;
  9. Ethics, Law and reason;
  10. Management and ethics of responsibility;
  11. Ethics and management.
  12. Ethics
13. Civics  
14. Deontology  
15. Moral consciousness  
16. The universal declaration of Human Rights  
17. Good governance in public services  
18. Explain the importance of civics to the life of the nation  
19. Functions of the state and its citizens  
20. Deontology, Professional ethics and professionalism  
21. Relationship between morality, law and ethics  
22. Codes of ethics

The Minister of Higher Education

Pr Jacques FAME NDONGO
Field: LEGAL CAREERS

Specialty: LEGAL ASSISTANT
1. The objective of the training

The objective of this specialty is to train specialists who can be immediately operational in the service responsible for legal affairs in companies, chambers of lawyers, legal consultants, notary public, process servers, experts in accountancy and taxation. The acquisition of knowledge of the fundamental concepts and their practical application constitute the pedagogic objectives of the study.

2. Skills Sought After

   → General skills
     - Must demonstrate aptitude for adapting easily to new situations and ensuring good organization;
     - Must have a sense of initiative;
     - Must be rigorous and have a spirit of synthesis and an analytical mind;
     - Must be discreet, confidential, reserved and respect the ethics of the profession;
     - Must be efficient in the transmission of information;
     - Must have the necessary skills to facilitate contact with people / be receptive;
     - Must have a mastery, both oral and written, of the use of the technical jargons of the profession;
     - Must use, strictly within the professional context, the techniques of legal drafting;
     - Must master the different types of legal acts;
     - Must be efficient in the use of New Information and Communication Technology.

   → Specific skills
     - Ensure the follow-up of administrative procedures and prepare files;
     - Update the rules and regulations and ensure that they are respected;
     - Ensure the drafting of certain deeds;
     - Do documentary research;
     - Ensure the follow up and execution of administrative and legal formalities.

3. Outlets

   - Could hold senior positions in companies, law firms and legal consultants;
   - Directors or managers of associations;
- Administrators or managers of national and international non-governmental organizations;
- Management staff of international organizations;
- Managers of insurance companies;
- Work in the service responsible for legal affairs in companies;
- Consultants in Finance and investments;
- Public economic administration.
4. Organization of the Teachings

1st SEMESTER

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<td>Family Law I</td>
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<td>LAS112</td>
<td>Public Law I</td>
<td>40 15 0 5 60</td>
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<td>Professional Courses 60% (4 UC) 18 credits 270 hours</td>
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<tr>
<td>LAS113</td>
<td>Law and Banking Regulation I</td>
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<td>Insurance Law</td>
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<td>Financial Institutions and Public Finance</td>
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<td>LAS116</td>
<td>Succession Law</td>
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2nd SEMESTER

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### 3rd Semester

#### Field: Legal Careers  
Specialty: Legal Assistant

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### 4th Semester

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Specialty: Legal Assistant

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5. Courses content

- **LAS111: Family Law**
  - Family Law I : 5 Credits (75 hours); L, T, SPW

- **LAS121: Family Law II**
  - Family Law II : 5 Credits (75 hours); L, T, SPW

- **LAS112: Public Law I**
  - Constitutional Law I : 2 Credits (30 hours); L, T, SPW
  - Administrative Law I : 2 Credits (30 hours); L, T, SPW

- **LAS122: Public Law II**
  - Constitutional Law II : 2 Credits (30 hours); L, T, SPW
  - Administrative Law II : 2 Credits (30 hours); L, T, SPW

- **LAS113: Law and Banking Regulation I**
  - Law and Banking Regulation I : 4 Credits (60 hours); L, T, SPW

- **LAS113: Law and Banking Regulation II**
  - Law and Banking Regulation I : 5 Credits (75 hours); L, T, SPW

- **LAS114: Insurance Law**
  - Insurance Law : 5 Credits (75 hours); L, T, SPW

- **LAS124: Land Law**
  - Land Law : 5 Credits (75 hours); L, T, SPW

- **LAS115: Financial Institutions and Public Finance**
  - Financial Institutions and Public Finance : 5 Credits (75 hours); L, T, SPW
LAS125 : Law of Property

- Law of Property : 4 Credits (60 hours), L, T, SPW

LAS116 : Law of Succession

- Law of Succession : 4 Credits (60 hours), L, T, SPW

LAS126 : Economic Analyses

- Economic Analyses : 4 Credits (60 hours), L, T, SPW

LAS117 : Bilingual Training

- English Expression: 1.5 credit (22 hours 30 min), L, T, SPW

1. Vocabulary
   - Technical and usual vocabulary of the specialty

2. Grammar

3. Bilingual expression
   - Understanding in interaction in Technical Discussions
   - Continuous oral communication: Show, explain, develop, summarize, account, comment;
   - Interactions oral communication

4. Autonomous reading of "writings" of all levels
   - Lead by a quick reading to understand the general sense;
   - Browse a text long enough to locate desired information;
   - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.

5. Write clear, detailed texts
   - Essay writing;
   - Application for employment;
   - C.V.;
   - Letter of motivation;
   - Letter/memo writing and minutes of a meeting

French : 1.5 credits (22 hours 30mn)

1. Vocabulaire
   - Vocabulaire technique usuel

2. Grammaire
   - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
   - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis;
- Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
- Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
- De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
- Des fonctions grammaticales.

3. Expression et communication
- Compréhension et interaction au cours d’une discussion technique ;
- Communication orale courante ;
- Communication orale interactive
- De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
- Lecture rapide et compréhension de texte ;
- synthèse d’un long texte
- De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
- Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
- Expressions figées

✈ LAS127 : Computer Training

➢ Computer Training : 3 Credits (45 hours); L, T, P, SPW

✈ LAS241 : Company Law I

➢ Company Law I : 5 Credits (75 hours); L, T, SPW

✈ LAS241 : Company Law II

➢ Company Law II : 4 Credits (60 hours); L, T, SPW

✈ LAS232: General Principles of Criminal Law and Criminal Procedure I

➢ General Principles of Criminal Law and Criminal Procedure I : 4 Credits (60 hours); L, T, SPW

✈ LAS233 : Labour Law

➢ Labour Law : 5 Credits (75 hours); L, T, SPW
 LAS243 : Bankruptcy Proceedings
  ➢ Bankruptcy Proceedings : 4 Credits (60 hours); L, T, SPW

 LAS234 : Administrative Litigation
  ➢ Administrative Litigation : 5 Credits (75 hours); L, T, SPW

 LAS244 : Civil Procedure I
  ➢ Civil Procedure I : 4 Credits (60 hours); L, T, SPW

 LAS235 : Civil Procedure II
  ➢ Civil Procedure II : 4 Credits (60 hours); L, T, SPW

 LAS245 : Tax and Customs Litigation
  ➢ Tax and Customs Litigation: 4 Credits (60 hours); L, T. SPW

 LAS236: Legal Drafting and Management
  ➢ Legal Drafting and Management: 4 Credits (60 hours); L, T, SPW

 LAS246 : Internship
  ➢ Internship : 6 Credits (90 hours); P, SPW
    • Arrival and reception by the company;
    • Work in the company;
    • Keeping of the log-book of the trainee;
    • Choosing a research topic in collaboration with the professional and academic supervisors;
    • Elaborate the framework of the research;
    • Determine the documents to be consulted;
    • Organize the study;
    • Write the Report;
    • Defend the Report before a jury.

 LAS237: Creation of Enterprise and Internship Reports Methodology
  ➢ Creation of an Enterprise/Company : 1 Credit (15hours); L, T
    - The Notion of Entrepreneur;
    - Reasons / Motivation for Creating the Enterprise;
    - Search for Ideas and Evaluation of same;
- Search for Financing;
- The Legal Status of the Enterprise;
- Ethical Aspects of the Business;
- Elaborating the Business Plan

➤ **Methodology for writing an Internship Report**

1. Gathering of information;
2. How to do a Report;
3. Plan of the Internship Report and Summary;
4. Table of Content;
5. Introduction of the Internship Report;
6. Conclusion of the Internship Report;
7. Acknowledgements;
8. How to do the appendices;
9. When to begin your Internship Report;
10. How to come out with a topic for the Internship Report;
11. The cover page;
12. How to write efficiently
13. Form and presentation (cover page, identification page, summary, bibliography, glossary, list of figures, tables and illustrations);
14. Instructions and typographic rules in the presentation of the Report (font-size, spacing, titles, punctuations, graphic charts);
15. How to prepare for the defence.

❖ **LAS247 : Economics, Civic Education and Ethics**

➤ **General Economics : 2 Credits (30 hours): L, T, SPW**

1. Enterprises and production;
2. Households and consumption;
3. Markets and prices;
4. Creation and distribution of revenue;
5. Money and the financing of the economy;
6. Elements of national accounting;
7. Macro-economic equilibrium;
8. The socialist system;
9. Capitalist economy;
10. State intervention;
11. The bases of international trade;
12. International payments;
13. Balance of payment;
14. Economic development and its inequalities;
15. Growth and its inequalities;
16. Inflation, unemployment, industrial transformations;
17. The stakes of development and the globalization of problems;
18. Development strategies;
19. Economic integration and cooperation;

➢ Civic Education and Ethics: 1 Credit (15 hours); LSPW
The concepts
- Citizenship
- The Nation
- The state
- Public property – collective property
- Liberties
- The public service
- Ethical problem
- Ethics, law and reason
- Management and ethical responsibility
- Ethics and management
  • Civics
  • Deontology
  • Moral consciousness
  • The universal declaration of Human Rights
  • Good governance in public services
  • The importance of civics to the life of the nation
  • Functions of the state and its citizens
  • Deontology, Professional ethics and professionalism
  • Relationship between morality, law and ethics
  • Codes of ethics
Field: LEGAL CAREERS

Specialty:

BUSINESS LAW
**Field:** LEGAL CAREERS  

**Specialty:** Business Law

1. **The objective of the training**

The objective of this specialty is to train specialists in business law and its application at the level of an enterprise, in its national business relations (Security Law, Tax Law, Patrimonial Law) as well as its international activities (International Trade Law, International Transportation Law, Custom Operations).

2. **Skills Sought After**

   → **General skills**
   - Must demonstrate aptitude for adapting easily to new situations and ensure good organization;
   - Must have a sense of initiative;
   - Must be rigorous and have a spirit of synthesis and an analytical mind;
   - Must be discreet, confidential, reserved and respect the ethics of the profession;
   - Must be efficient in the transmission of information;
   - Must be able to bring together people/be receptive;
   - Must have a mastery, both oral and written, of the use of the technical jargons of the profession;
   - Must use, strictly within the professional context, the techniques of legal drafting;
   - Must master the different types of legal acts;
   - Must be efficient in the use of New Information and Communication Technology.

   → **Specific skills**
   - Perform both administrative and fiscal legal formalities;
   - Make use of analyses and indicator tools for the control of management;
   - Draft contracts;
   - Ensure the drafting of certain deeds;
   - Do documentary research;
   - Ensure the follow up and execution of administrative and legal formalities.

3. **Outlets**

   - Company lawyers;
   - Work in law firms;
   - Act as arbitrators in dispute settlement;
   - Management Assistants;
- Administrators or managers of associations;
- Administrators or managers of national and international Non-Governmental Organizations;
- Managers of insurance contracts;
- Work in the Department in charge of Legal Affairs in Companies
- Public economic administrations.
4. Organization of the Teachings

1st SEMESTER

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5. Courses content

- **BLA111: Family Law**
  - Family Law I : 5 Credits (75 hours); L, T, SPW

- **BLA121: Family Law II**
  - Family Law II : 5 Credits (75 hours); L, T, SPW

- **BLA112: Commercial Law I**
  - Commercial Law I : 4 Credits (60 hours); L, T, SPW

- **BLA122: Commercial Law II**
  - Commercial Law II : 4 Credits (60 hours); L, T, SPW

- **BLA113: Banking Law I**
  - Law and Banking Regulation I : 5 Credits (75 hours); L, T, SPW

- **BLA123: Banking Law II**
  - Law and Banking Regulation II (75 hours); L, T, SPW

- **BLA114: Insurance Law**
  - Insurance Law : 5 Credits (75 hours); L, T, SPW

- **BLA124: Settlement of Dispute**
  - Conciliation, Mediation and Arbitration Law: 5 Credits (75 hours); L, T, SPW

- **BLA115: Financial Institutions and Public Finance**
  - Financial Institutions and Public Finance : 5 Credits (75 hours); L, T, SPW
BLA125 : Enterprise Economics and Organization

- Economics and the Organization of Enterprises 4 Credits (60 hours) L, T, SPW

BLA116 : Public Law

- Constitutional Law I : 2 Credits (30 hours); L, T, SPW
- Administrative Law I : 2 Credits (30 hours); L, T, SPW

BLA126 : Principles of Accounting

- Accounting : 4 Credits (60 hours), L, T, SPW

BLA117 : Bilingual Training

- English: 1.5 credits (22 hours 30mn) L, T, P, SPW
  1. Vocabulary
     - Technical and usual vocabulary of the specialty
  2. Grammar
  3. Bilingual expression
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. Autonomous reading of "writings" of all levels
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. Write clear, detailed texts
     - Essay writing;
     - Application for employment;
     - C.V.;
     - Letter of motivation;
     - Letter/memo writing and minutes of a meeting

- French expression: 1.5 credits (22 hours 30mn); L, T
  1. Vocabulaire
     - Vocabulaire technique usuel
  2. Grammaire
- Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
- De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
- Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
- Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
- De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
- Des fonctions grammaticales.

3. Expression et communication
- Compréhension et interaction au cours d’une discussion technique ;
- Communication orale courante ;
- Communication orale interactive
- De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
- Lecture rapide et compréhension de texte ;
- synthèse d’un long texte
- De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
- Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
- Expressions figées

❖ BLA127 : Computer Training

➢ Computer Training : 3 Credits (45 hours); L, TP, SPW

❖ BLA241 : Company Law I

➢ Company Law I : 5 Credits (75 hours); L, T, SPW

❖ BLA241 : Company Law II and Labour Law II

➢ Company Law II : 2 Credits (30 hours); L, T, SPW

➢ Labour Law II : 2 Credits (30 hours); L, T, SPW

❖ BLA232 : Labour Law I

➢ Labour Law I : 4 Credits(60 hours); L, T, SPW
BLA242: Succession Law
- Succession Law: 4 Credits (60 hours); L, T, SPW

BLA233 : Banking and Stock Exchange Law
- Banking and Stock Exchange Law: 5 Credits (75 hours); L, T, SPW

BLA243 : Bankruptcy Proceedings
- Bankruptcy Proceedings: 4 Credits (60 hours); L, T, SPW

BLA234 : Taxation Law
- Administrative Litigation: 5 Credits (75 hours); L, T, SPW

BLA244 : Corporate Criminal Law
- Criminal Business Law: 4 Credits (60 hours); L, T, SPW

BLA235 : Legal and Tax Management
- Legal and Tax Management: 4 Credits (60 hours); L, T, SPW

BLA245 : Law on Special Contract (Civil and Commercial)
- Law on Special Contract (Civil and Commercial): 4 Credits (60 hours); L, T, SPW

BLA236: Intellectual Property Law
- Intellectual Property Law: 4 Credits (60 hours); L, T, SPW

BLA246 : Internship
- Professional Internship: 6 Credits (90 hours); P, SPW
  - Arrival and reception by the company;
  - Work in the company;
• Keeping of the log-book of the trainee;
• Choosing a research topic in collaboration with the professional and academic supervisors;
• Elaborate the framework of the research;
• Determine the documents to be consulted;
• Organize the study;
• Write the Report;
• Defend the Report before a jury.

❖ BLA237: Creation of Enterprise and Internship Reports Methodology

➢ Creating an Enterprise/Company : 1 Credit (15 hours); L, T
  - The Notion of Entrepreneur;
  - Reasons / Motivation for Creating the Enterprise;
  - Search for Ideas and Evaluation of same;
  - Search for Financing;
  - The Legal Status of the Enterprise;
  - Ethical Aspects of the Business;
  - Elaborating the Business Plan

➢ Methodology for writing Internship Report : 2 Credits (30 hours); L, T, SPW

1. Gathering of information;
2. How to do a Report;
3. Plan of the Internship Report and Summary;
4. Table of Content;
5. Introduction of the Internship Report;
6. Conclusion of the Internship Report;
7. Acknowledgements;
8. How to do the appendices;
9. When to begin your Internship Report;
10. How to come out with a topic for the Internship Report;
11. The cover page;
12. How to write efficiently;
13. Form and presentation (cover page, identification page, summary, bibliography, glossary, list of figures, tables and illustrations);
14. Instructions and typographic rules in the presentation of the Report (font-size, spacing, titles, punctuations, graphic charts);
15. How to prepare for the defence.

❖ BLA247 : Economics, Civic Education and Ethics

➢ General Economics : 2 Credits (30 hours); L, T, SPW

1. Enterprises and production;
2. Households and consumption;
3. Markets and prices;
4. Creation and distribution of revenue;
5. Money and the financing of the economy;
6. Elements of national accounting;
7. Macro-economic equilibrium;
8. The socialist system;
9. Capitalist economy;
10. State intervention;
11. The bases of international trade;
12. International payments;
13. Balance of payment;
14. Economic development and its inequalities;
15. Growth and its inequalities;
16. Inflation, unemployment, industrial transformations;
17. The stakes of development and the globalization of problems;
18. Development strategies;
19. Economic integration and the different forms of cooperation in the world;

- Civic education and ethics : 1 Credit (15 hours): LSPW

The concepts
- Citizenship
- The Nation
- The state
- Public property – collective property
- Liberties
- The public service
- Ethical problem
- Ethics, law and reason
- Management and ethical responsibility
- Ethics and management
- Civics
- Deontology
- Moral consciousness
- The universal declaration of Human Rights
- Good governance in public services
- The importance of civics to the life of the nation
- Functions of the state and its citizens
- Deontology, Professional ethics and professionalism
- Relationship between morality, law and ethics
- Codes of ethics
Field : LEGAL CAREERS

Specialty :

LAND LAW
1. The objective of the training

The objective of this specialty is to train specialists in land tenure, that is files on the procedure for the acquisition of land titles or certificates, resolution of conflicts over land, and transfer of national land to private ownership.

2. Skills Sought After

→ General skills
  - Must demonstrate aptitude for adapting easily to new situations and ensure good organization;
  - Must have a sense of initiative;
  - Must be rigorous and have a spirit of synthesis and an analytical mind;
  - Must be discreet, confidential, reserved and respect the ethics of the profession;
  - Must be efficient in the transmission of information;
  - Must be able to bring people together /be receptive;
  - Must have a mastery, both oral and written, of the use of the technical jargons of the profession;
  - Must use, strictly within the professional context, the techniques of legal drafting;
  - Must have a mastery of the different types of legal acts;
  - Must be efficient in the use of New Information and Communication Technology.

→ Specific skills
  - Master land law and national lands;
  - Ensure the follow-up of administrative and taxation procedures for the acquisition of land certificates;
  - Prepare files for the transfer, acquisition, and sale of national and private land;
  - Master the treatment and management of complex litigation files and collect information which are necessary for decision making;
  - Ensure that the regulation is respected;
  - Prepare hearings and take down the minutes;
  - Ensure the drafting of certain deeds;
  - Carry out documentary research;
  - Ensure the follow up and execution of administrative and legal formalities.
3. **Outlets**

- Corporate lawyers;
- Work in Law Firms;
- Management Assistants;
- Legal Consultants;
- Management of contracts;
- Work in the Department in charge of Legal Affairs in Companies.
4. Organization of the Teachings

1st SEMESTER

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**1. Vocabulary**
- Technical and usual vocabulary of the specialty

**2. Grammar**

**3. Bilingual expression**
- Understanding in interaction in Technical Discussions
- Continuous oral communication: Show, explain, develop, summarize, account, comment;
- Interactions oral communication

**4. Autonomous reading of "writings" of all levels**
- Lead by a quick reading to understand the general sense;
- Browse a text long enough to locate desired information;
- Gather information from different parts of the document or of the different documents in order to accomplish a specific task.

**5. Write clear, detailed texts**
- Essay writing;
- Application for employment;
- C.V.;
- Letter of motivation;
- Letter/memo writing and minutes of a meeting

**French : 1.5 credits (22 hours 30mn) L, T, P, SPW**

1. **Vocabulaire**
   - Vocabulaire technique usuel

2. **Grammaire**
- Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
- De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
- Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
- Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
- De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
- Des fonctions grammaticales.

3. Expression et communication
- Compréhension et interaction au cours d’une discussion technique;
- Communication orale courante ;
- Communication orale interactive
- De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
- Lecture rapide et compréhension de texte ;
- synthèse d’un long texte
- De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance – d’une lettre recommandation ou de motivation, d’une demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
- Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
- Expressions figées

❖ LLA127 : Computer Training
➢ Computer Training : 3 Credits (45 hours); L, T, P, SPW

❖ LLA231 : Company Law I
➢ Company Law I : 5 Credits (75 hours); L, T, SPW

❖ LLA241 : Company Law II
➢ Company Law II : 5 Credits (75 hours); L, T, SPW

❖ LLA232 : Labour Law I
➢ Labour Law I : 4 Credits (60 hours); L, T, SPW
- **LLA242: Account Management**
  - Account Management: 4 Credits (60 hours); L, T, SPW

- **LLA233: Private and State Land Taxation**
  - Private and National Land Taxation: 5 Credits (75 hours); L, T, SPW

- **LLA243: Cartography, Topography**
  - Cartography, Topography: 4 Credits (60 hours); L, T, SPW

- **LLA234: Introduction to Public Contracts Law**
  - Administrative Litigation: 5 Credits (75 hours); L, T, SPW

- **LLA244: National and Private Land Litigations**
  - National and Private Land Litigations: 4 Credits (60 hours); L, T, SPW

- **LLA235: Enterprise Economics and Organization**
  - Economics and the Organization of Enterprises: 4 Credits (60 hours); L, T, SPW

- **LLA245: Construction insurance**
  - Construction Insurance: 4 Credits (60 hours); L, T, SPW

- **LLA236: Principles of Accounting**
  - Accounting: 4 Credits (60 hours); L, T, SPW

- **LLA246: Internship**
  - Internship: 6 Credits (90 hours); P, SPW
    1. Arrival and reception by the company
    2. Work in the company;
4. Choosing a research topic in collaboration with the professional and academic supervisors;
5. Elaborate the framework of the research
6. Determine the documents to be consulted
7. Organize the study
8. Write the Report
9. Defend the Report before a jury

 ficken LLA237: Creation of Enterprise and Internship Reports Methodology

- Creation of Enterprise/Company: 1 Credit (15 hours); L, T
  1. The Notion of Entrepreneur;
  2. Reasons / Motivation for Creating the Enterprise;
  3. Search for Ideas and Evaluation of same;
  4. Search for Financing;
  5. The Legal Status of the Enterprise;
  6. Ethical Aspects of the Business;
  7. Elaborating the Business Plan

- Methodology for writing Internship Report: 2 Credits (30 hours); L, T, SPW
  1. Gathering of information;
  2. How to do a Report;
  3. Plan of the Internship Report and Summary;
  4. Table of Content;
  5. Introduction of the Internship Report;
  6. Conclusion of the Internship Report;
  7. Acknowledgements;
  8. How to do the appendices;
  9. When to begin your Internship Report;
  10. How to come out with a topic for the Internship Report;
  11. The cover page;
  12. How to write efficiently
  13. Form and presentation (cover page, identification page, summary, bibliography, glossary, list of figures, tables and illustrations)
  15. How to prepare for the defence

ficken LLA247: Economics, Civic Education and Ethics

- General Principles of Economics: 2 Credits (30 hours); L, T, SPW
  1. Enterprises and production;
  2. Households and consumption;
3. Markets and prices;
4. Creation and distribution of revenue;
5. Money and the financing of the economy;
6. Elements of national accounting;
7. Macro-economic equilibrium;
8. The socialist system;
9. Capitalist economy;
10. State intervention;
11. The bases of international trade;
12. International payments;
13. Balance of payment
14. Economic development and its inequalities;
15. Growth and its inequalities;
16. Inflation, unemployment, industrial transformations;
17. The stakes of development and the globalization of problems;
18. Development strategies;
19. Economic integration and the different forms of cooperation in the world;
20. International indebtedness strategies

➢ Civic Education and Ethics : 1 Credit (15 hours); L SPW

The concepts

- Citizenship
- The Nation
- The state
- Public property – collective property
- Liberties
- The public service
- Ethical problem
- Ethics, law and reason
- Management and ethical responsibility
- Ethics and management
  • Civics
  • Deontology
  • Moral consciousness
  • The universal declaration of Human Rights
  • Good governance in public services
  • The importance of civics to the life of the nation
  • Functions of the state and its citizens
  • Deontology, Professional ethics and professionalism
  • Relationship between morality, law and ethics
  • Codes of ethics
Field : LEGAL CAREERS

Specialty :

STOCK MARKET CAREERS
1. The objective of the training

The objective of this specialization is to train specialists who can manage files relating to activities in the financial market and the Stock Exchange such as acquisition and transfer of securities/bonds, register companies in the Stock Exchange and determine the different litigations related thereto.

2. Skills Sought After

→ General skills
  - Must demonstrate aptitude for adapting easily to new situations and ensuring good organization
  - Must have a sense of initiative;
  - Must be rigorous and have a spirit of synthesis and an analytical mind;
  - Must be discreet, confidential, reserved and respect the ethics of the profession;
  - Must be efficient in the transmission of information;
  - Must be able to bring people together /be receptive;
  - Must have a mastery, both oral and written, of the use of the technical jargons of the profession;
  - Must use, strictly within the professional context, the techniques of legal drafting;
  - Must master the different types of legal acts;
  - Must be efficient in the use of New Information and Communication Technology.

→ Specific skills
  - Master the functioning of financial markets and transactions related thereto;
  - Master the laws relating to financial markets;
  - Carry out legal, administrative and taxation formalities in the Stock market;
  - Draw up financial contracts;
  - Ensure the drafting of certain deeds;
  - Carry out documentary research;
  - Ensure the follow up and execution of administrative and legal formalities.
3. **Outlets**

- Company lawyers;
- Work in law firms;
- Consultants in the management of estates;
- Assist in the counseling of customers;
- Consultants in the management of capital;
- Legal Advisers/Counselors;
- Work in the Department in charge of Legal Affairs in Companies;
- Work as administrators of state-owned companies.
4. Organization of the Teachings

1st SEMESTER

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Fundamentals Courses 30% (2 UC) 9 credits 135 hours

Professionals Courses 60% (4 UC) 18 credits 270 hours

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Inter-Disciplinary Courses 10% (1UC) 3 credits 45 hours

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Fundamentals Courses 30% (2 UC) 9 credits 135 hours

Professionals Courses 60% (4 UC) 18 credits 270 hours

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Inter-Disciplinary Courses 10% (1UC) 3 credits 45 hours

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### 3rd Semester

**FIELD: LEGAL CAREERS**

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### 4th Semester

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5. Courses content

- **SMC111: Family Law**
  - Family Law I: 5 Credits (75 hours); L, T, SPW

- **SMC121: Family Law II**
  - Family Law II: 5 Credits (75 hours); L, T, SPW

- **SMC112: Commercial Law I**
  - Commercial Law I: 4 Credits (60 hours); L, T, SPW

- **SMC122: Commercial Law II**
  - Commercial Law II: 4 Credits (60 hours); L, T, SPW

- **SMC113: General Principles of Economics and Enterprises Organization I**
  - General Principles of Economics and Enterprises Organization I: 5 Credits (75 hours); L, T, SPW

- **SMC123: General Principles of Economics and Enterprises Organization II**
  - General Principles of Economics and Enterprises Organization II: 5 Credits (75 hours); CM, T, SPW

- **SMC114: Insurance Law**
  - Insurance Law: 5 Credits (75 hours); L, T, SPW

- **SMC124: Transportation Law**
  - Transportation Law: 5 Credits (75 hours); L, T, SPW
- SMC115 : Financial Institutions and Public Finance
  - Financial Institutions and Public Finance : 4 Credits (60 hours); L, T, SPW

- SMC125 : Principles of Accounting
  - General Principles of Accounting: 4 Credits (60 hours) L, T, SPW

- SMC116 : Introduction to Finance Marketing and Organization Law
  - Introduction to Financial Markets Law : 2 Credits (30 hours); L, T, SPW
  - Organization of Financial Markets : 2 Credits (30 hours); L, T, SPW

- SMC126 : Statistics
  - Statistics : 4 Credits (60 hours), L, T, SPW

- SMC117 : Bilingual Training
  - English: 1.5 credits (22 hours 30mn)L, T, P, SPW

  1. Vocabulary
     - Technical and usual vocabulary of the specialty
  2. Grammar
  3. Bilingual expression
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. Autonomous reading of "writings" of all levels
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. Write clear, detailed texts
     - Essay writing;
     - Application for employment;
     - C.V.;
     - Letter of motivation;
     - Letter/memo writing and minutes of a meeting
French : 1.5 credits (22 hours 30mn) L, T, P, SPW

1. Vocabulaire
   - Vocabulaire technique usuel

2. Grammaire
   - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
   - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
   - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
   - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
   - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
   - Des fonctions grammaticales.

3. Expression et communication
   - Compréhension et interaction au cours d’une discussion technique ;
   - Communication orale courante ;
   - Communication orale interactive
   - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
   - Lecture rapide et compréhension de texte ;
   - synthèse d’un long texte
   - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
   - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
   - Expressions figées

❖ SMC127 : Computer Training

❖ Computer Training : 3 Credits (45 hours); L, T, P, SPW

❖ SMC231 : Banking Law I

❖ Banking Law I: 5 Credits (75 hours); L, T, SPW

❖ SMC241 : Banking Law II

❖ Banking Law II: 5 Credits (75 hours); L, T, SPW
SMC232 : International Trade Law I
- International Trade Law I: 4 Credits (60 hours); L, T, SPW

SMC242: International Trade Law II
- International Trade Law II: 4 Credits (60 hours); L, T, SPW

SMC233 : Company Law I
- Company Law I: 5 Credits (75 hours); L, T, SPW

SMC243 : Company Law II
- Company Law II: 4 Credits (60 hours); L, T, SPW

SMC234 : Labour Law
- Labour Law: 5 Credits (75 hours); L, T, SPW

SMC244 : Financing of Enterprise
- Financing an Enterprise: 4 Credits (60 hours); L, T, SPW

SMC235 : Financial Analytics (Account Management)
- Financial Analytics (Account Management): 4 Credits (60 hours); L, T, SPW

SMC245 : Payment Instruments and Bank Transactions Taxes
- Payment Instruments and Bank Transactions Taxes: 4 Credits (60 hours); L, T, SPW

SMC236: Banking Law of the Stock Market
- Banking Law of the Stock Market: 4 Credits (60 hours); L, T, SPW

SMC246 : Professional Internship
- Internship: 6 Credits (90 hours); P, SPW

1. Arrival and reception by the company
2. Work in the company;
4. Choosing a research topic in collaboration with the professional and academic supervisors;
5. Elaborate the framework of the research
6. Determine the documents to be consulted
7. Organize the study
8. Write the Report
9. Defend the Report before a jury

❖ SMC237 : Creation of Enterprise and Internship Reports Methodology

➢ Creation of Enterprise/Company : 1 Credit (15 hours); L, T

   1. The Notion of Entrepreneur;
   2. Reasons / Motivation for Creating the Enterprise;
   3. Search for Ideas and Evaluation of same;
   4. Search for Financing;
   5. The Legal Status of the Enterprise;
   6. Ethical Aspects of the Business;
   7. Elaborating the Business Plan

➢ Methodology for writing Internship Report : 2 Credits (30 hours); L, T, SPW

   1. Gathering of information;
   2. How to do a Report;
   3. Plan of the Internship Report and Summary;
   4. Table of Content;
   5. Introduction of the Internship Report;
   6. Conclusion of the Internship Report;
   7. Acknowledgements;
   8. How to do the appendices;
   9. When to begin the Internship Report;
   10. How to come out with a topic for the Internship Report;
   11. The cover page;
   12. How to write efficiently;
   13. Form and presentation (cover page, identification page, summary, bibliography, glossary, list of figures, tables and illustrations);
   14. Instructions and typographic rules in the presentation of the Report (font-size, spacing, titles, punctuations, graphic charts);
   15. How to prepare for the defence.

❖ SMC247 : Economics, Civic Education and Ethics

➢ General Principles of Economics : 2 Credits (30 hours); L, T, SPW

   1. Enterprises and production;
   2. Households and consumption;
3. Markets and prices;
4. Creation and distribution of revenue;
5. Money and the financing of the economy;
6. Elements of national accounting;
7. Macro-economic equilibrium;
8. The socialist system;
9. Capitalist economy;
10. State intervention;
11. The bases of international trade;
12. International payments;
13. Balance of payment;
14. Economic development and its inequalities;
15. Growth and its inequalities;
16. Inflation, unemployment, industrial transformations;
17. The stakes of development and the globalization of problems;
18. Development strategies;
19. Economic integration and the different forms of cooperation in the world;

➢ **Civic Education and Ethics : 1 Credit (15 hours); LSPW**

**The concepts**

- Citizenship
- The Nation
- The state
- Public property – collective property
- Liberties
- The public service
- Ethical problem
- Ethics, law and reason
- Management and ethical responsibility
- Ethics and management
  - Civics
  - Deontology
  - Moral consciousness
  - The universal declaration of Human Rights
  - Good governance in public services
  - The importance of civics to the life of the nation
  - Functions of the state and its citizens
  - Deontology, Professional ethics and professionalism
  - Relationship between morality, law and ethics
  - Codes of ethics
Field: LEGAL CAREERS

Specialty:

CUSTOMS AND TRANSIT
1. The objective of the training

The objective of this area of specialty is to train superior technicians who can accompany foreign business people in the preparation and accomplishment of their import and export transactions. They should equally be able to carry out formalities relating to the payment of custom duties on goods and obtain from the custom administration, on behalf of economic operators, the advantages and privileges provided by the custom law and regulations.

2. Skills Sought After

→ General skills
  - Must be efficient in the use of New Information and Communication Technology;
  - Must have a mastery of the legal and economic instruments relating to business;
  - Must have a mastery of the regulation of foreign trade;
  - Must be good in both oral and written expression;
  - Must have a mastery of the types of legal instruments/acts/deeds of the trade.

→ Specific skills
  - Must be able to accomplish the formalities prior to the importation or exportation of goods;
  - Establish a quotation of import and export;
  - Establish a detailed declaration for all customs’ regimes;
  - Ensure customs clearance of goods imported or exported;
  - Manage customs litigation;
  - Proceed to remove goods at the place of work of the customs;
  - Assist an economic operator (businessman) during customs control.

3. Outlets

- Authorized Customs Agent;
- Work in shipping companies as an authorized Custom Agent;
- Staff in charge of foreign trade in commercial banks;
- Staff in charge of transshipment in public administrations; diplomatic missions, international organizations, commercial, service and production enterprises
- Management of contracts;
- Work in the Department in charge of Legal Affairs in Companies,
4. Organization of the Teachings

1st SEMESTER

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5. Courses content

❖ CTR111: Law and Economics I

➢ Introduction to Law : 2 Credits (30 hours); L, T, SPW

1. Definition of Law
2. The Rule of Law
3. The Sources of Law
4. The Branches of Law
5. Judicial Organization
6. Legal Disciplines
7. Different categories of Law
8. Civil Liability

➢ General Principles of Economics I : 2 Credits (30 hours) L, T, SPW

1. Economic and Social Actors and their Behaviour
   • Manufacturing/production Enterprises;
   • Households and Consumption;
   • The State and its interventions.
2. Adjustment Mechanisms
   • Markets and Prices;
   • The creation of Revenue and their Distribution;
   • Money and the Financing of the Economy.
3. The Results of an Economic Activity
   • The Elements of National Accounting;
   • The Macro-Economic Equilibrium.

❖ CTR121: Law and Economics II

➢ Company Law : 2 Credits (30 hours); L, T, SPW

1. Definitions of Company Law
2. Sources of Company Law
3. Classification of Companies
4. Rules common to all Companies
5. Rules specific to each Company

➢ Economics and the Organization of Enterprises I : 2 c REDITS (30 HOURS); L, T, SPW

1. The Enterprise
2. Typology of Enterprises
3. Structure of the Organization of Enterprises
5. Commercial Activity
6. Productive Activity
7. Logistics  
8. Financial Activity  
9. The know-how commence business  
10. Management of Human Resources

❖ CTR112 : Principles of Accounting and Statistics I

➢ Principles of Accounting I: 3 Credits (45 hours); L, T, P, SPW
   1. General Introduction  
   2. Basic Principles of Accounting  
   3. Analysis of Current Transactions/Operations

➢ Statistics : 2 Credits (30 hours) L, T, P, SPW
   1. Statistical series to one variable (discrete variable, continuous variable)  
   2. Statistical series to two variables  
   3. Chronological series

❖ CTR122 : Principles of Accounting II

➢ Principles of Accounting II: 5 Credits (75 hours); L, T, P, SPW
   1. Intermediate balances  
   2. The concept of depreciation and provisions for depreciation  
   3. Works leading to the establishment of summary documents

❖ CTR113 : Introduction to Customs Law

➢ Introduction to Customs Law: 2 Credits (30 hours); L, T, P, SPW
   1. Sources of Customs Law  
   2. Missions of the Customs Administration  
   3. Organization and Functioning of Customs Services

❖ CTR123 : Custom Clearance Procedure

➢ Clearance Procedure: 4 Credits (60 hours); L, T, SPW
   1. Custom Clearance Procedure with respect to importation
      • Preparation of clearance;  
      • Clearance strictly speaking
   2. Custom Clearance Procedure with respect to exportation
      • Preparation of custom clearance  
      • Export Clearance strictly speaking
CTR114: Custom Regimes

Custom Regimes: 4 Credits (60 hours); L, T, SPW

1. Custom Regime at Ordinary Law
   - The Consumption Regime?
   - The Final Exportation and Expedition Regime

2. Suspensive and Economic Customs Regimes
   - Suspensive Customs Regimes
   - Economic Customs Regimes

CTR124: CustomsDuty Charges

Custom Duties: 2 Credits (30 hours); L, T, SPW

1. Taxing Common Rights (the generating and payable tax, different rights and taxes, the scope of application, tax base and rate)
2. Exceptions (tax incentives, industrial free zones/areas and points francs industriels; taxes on investments, petroleum tax, franchises, exoneration, etc)

CTR115 Transit I

Case Study of Transit I: 4 Credits (60 hours); L, T, P, SPW

1. Status, creation, organization, management of a shipping company or authorized Customs Agent;
2. Transit operators (documentary preparation, declaration, quotation, follow-up of customs clearance, off-loading the goods and delivery)

CTR125: Transportation

Transportation Insurance: 4 Credits (60 hours); L, T, SPW

1. Sales Conditions: les INCOTERMS
2. Maritime and Sea transport
3. Land transport (transport by road and by rail)
4. Air transport
5. Insurance of transported goods

NB: For each mode of transport, emphasis should be made on the technical, regulatory, documentary and pricing aspects.

Transportation Law: 4 Credits (60 hours) L, T, SPW

1. The formation of transportation contract
2. The execution of transportation contracts
3. Transportation litigations
   - The responsibility of the transporter
   - The responsibility of the right holders
   - International Conventions on Transport

**CTR116 : Principles of Taxation I**

- Technology and the classification of tariffs : 4 Credits (60 hours); L, T, SPW
  1. Presentation of the Harmonized System
  2. General principles of classification
  3. Tariff nomenclature – chapters 1 to 71

**CTR126 : Customs Clearance II (The Practice)**

- Case study of transit II: 4 Credits (60 hours), L, T, P, SPW
  1. Preparation towards professional examination questions of synthesis/summary.

**CTR117 : Bilingual Training**

- English: 1.5 credits (22 hours 30mn)L, T, P, SPW
  1. Vocabulary
     - Technical and usual vocabulary of the specialty
  2. Grammar
  3. Bilingual expression
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. Autonomous reading of "writings" of all levels
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. Write clear, detailed texts
     - Essay writing;
     - Application for employment;
- C.V.;
- Letter of motivation;
- Letter/memo writing and minutes of a meeting

- French : 1.5 credits (22 hours 30mn) L, T, P, SPW

1. Vocabulaire
   - Vocabulaire technique usuel

2. Grammaire
   - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l'infinitif, voix passive ;
   - De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
   - Du nom et son article: masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
   - Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
   - De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
   - Des fonctions grammaticales.

3. Expression et communication
   - Compréhension et interaction au cours d’une discussion technique ;
   - Communication orale courante ;
   - Communication orale interactive
   - De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
   - Lecture rapide et compréhension de texte ;
   - synthèse d’un long texte
   - De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance –d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
   - Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
   - Expressions figées

- CTR127 : Computer Training

- Computer Training : 3 Credits (45 hours); L, T, P, SPW

1. Information and computerized systems;
2. The computer;
3. The software or programme;
4. Introduction to the transmission of data and network;
5. Files and data bases.
CTR231: Commercial Law and Labour Law

Commercial Law: 2 Credits (30 hours); L, T, SPW
1. History and source of Commercial Law;
2. Commercial acts and traders;
3. Status of a trader;
4. Quality of a trader
5. The business
6. Principal commercial contracts

Labour Law: 2 Credits (30 hours); L, T, SPW
1. Sources of Labour Law;
2. Employment Contract;
3. The remuneration of the worker;
4. The working conditions;
5. The representation of workers;
6. Employment litigations;
7. Labour accidents and professional illnesses;
8. The Labour Inspector
9. Professional ethics

CTR241: General Principles of Economics and Organization of Enterprises

Economics organization of enterprises II: 2 Credits (30 hours); L, T, SPW
1. The systemic approach of an enterprise;
2. Information system;
3. Decision system;
4. The strategic analysis of the enterprise;
5. Choice and the implementation of a strategy;
6. The enterprise, the society and ethics.

General Principles of Economics II: 2 Credits (30 hours); L, T, SPW.
1. Contemporary Economic Systems
   - The Market Economy;
   - Socialist Economies.
2. International Economic Relations
   - The bases of International Trade;
   - International Exchange Measures: Balance of Payments;
   - International Payments;
   - Forms of International Cooperation and Economic Integration.
3. Development and Growth
   - Economic Development and its inequities;
   - Growth and its inequities;
• Inflation, unemployment, industrial mutations: the contemporary situation;
• The Stakes of Development and the globalization of problems.

❖ CTR232 : Accounting Analytics, Statistics and Probability

➢ Accounting Analytics: 3 Credits (45 hours); L. T. SPW

1. General Principles;
2. Network for the Exploitation of Analytical Accounting;
3. Complete costs;
4. Partial costs.

➢ Statistics and Probability : 2 Credits (30 hours); L, T, SPW

1. Probabilities.
2. Introduction to Referential Statistics.
   • Sampling;
   • Point estimation;
   • Interval estimation;
   • Test on the average (case study of a normal hypothesis).

❖ CTR242: Financial Mathematics and Principles of International Trade

➢ Financial Mathematics : 4 Credits (60 hours); L, T, P, SPW

1. Basic Notions;
2. Short-term Financial Transactions;
3. Equivalence and Replacement Effects;
4. Annuities;
5. Joint Borrowing;
6. Bonds;
7. Profitability of Investments in a Universe/Period of Certainty.

➢ Principles of International Trade : 4 Credits (60 hours); L, T, P, SPW

1. The Parties in International Trade;
2. INCOTERMS;
3. Import and Export Documents;
4. Insurance of the Goods transported;
5. The Modalities of International Transportation;
6. The Instruments and Techniques of Payment, etc.

❖ CTR233 : Management of Custom Litigations

➢ Management of Custom Litigations : 4 Credits (60 hours); L, T, P, SPW

1. Criminal litigation;
2. Civil Litigation.
### CTR234 : General Principles of Taxation II

- **Origin of Goods : 3 Credits (45 hours); L, T, P, SPW**
  1. Non-Preferential Origin;
  2. Preferential Origin.

- **Technology and the Classification of Customs Rate**
  1. Nomenclature of tariffs on goods listed in chapters 72 to 98.

### CTR243 : Custom Practice

- **CTR243 : Custom Practice : 4 Credits (60 hours); L, T, P, SPW**

### CTR244 : Principles of Taxation III

- **Custom Valuation II : 4 Credits (60 hours); L, T, P, SPW**
  1. Case study of the determination of the value of goods according to the transaction value principles by custom authorities;
  2. Case Study of the determination of customs value of goods.

### CTR235 : Transit III

- **Case Study : 4 Credits (60 hours); L, T, P, SPW**
  1. Preparation questions relating to Professional Synthesis/Summary.

### CTR245 : Transit Practice

- **Case Study : 4 Credits (60 hours); L, T, P, SPW**

### CTR236: Applied Computer Knowledge

- **Computer System and Custom : 2 Credits (30 hours); L, T, P, SPW**
  1. Presentation of the Customs Computer System;
  2. Presentation of the different information tables;
  3. Presentation of the scopes of declaration;
  4. Consulting of tariff in the software;
  5. Client Architecture and the server;
  6. Interface Study
CTR246 : Internship

- Internship : 6 Credits (90 hours); P, SPW

  1. Arrival and reception by the company
  2. Work in the company;
  4. Choosing a research topic in collaboration with the professional and academic supervisors;
  5. Elaborate the framework of the research
  6. Determine the documents to be consulted
  7. Organize the study
  8. Write the Report
  9. Defend the Report before a jury

CTR237 : Creation of an Enterprise and Methodology in Writing Internship Reports

- Creation of Enterprise/Company : 1 Credit (15 hours); L, T

  1. The Notion of Entrepreneur;
  2. Reasons / Motivation for Creating the Enterprise;
  3. Search for Ideas and Evaluation of same;
  4. Search for Financing;
  5. The Legal Status of the Enterprise;
  6. Ethical Aspects of the Business;
  7. Elaborating the Business Plan.

- Methodology for writing an Internship Report : 2 Credits (30 hours); L, T, SPW

  A. Writing and Structure of an Internship Report
  1. General Approach
     - Nature and Content of the Internship Report;
     - Paragraph;
     - Style and Spelling.
  2. Structure of the Document
     - Cover Page;
     - Acknowledgements;
     - The Heading (en-tete) of the Internship Report;
     - Summary of Table of Content;
     - List of Figures and List of Tables;
     - Glossary;
     - The Body (content) of the Internship Report;
     - Bibliography;
     - Annexes;
     - Summary and Key Words.
B. Arrangement of the Internship Report

1. General
   - Submission of the Internship Report
   - Choice of Software

2. Rules of Form
   - Length of the Internship Report;
   - Page Layout;
   - Theme Font;
   - Length and Font-size;
   - Spacing;
   - Paging.

3. Footnotes

4. Floating
   - Tables
   - Figures
   - List of Figures, List of Tables
   - Equations
   - Glossary

5. Bibliography
   - Reason for Bibliographical Citations;
   - Format of Contextual Bibliographical Citations;
   - List of Bibliographical References;
   - Bibliographical References for Electronic Documents.

CTR247 : Economics, Civic Education and Ethics

➢ Economics : 2 Credits (30 hours); L, T, SPW

1. General Principles of Economics
   - Introduction;
   - Demand and Supply;
   - The Creation of Income;
   - Money and Credit;
   - Prices;
   - The Concept of Growth and Development.

2. The Enterprise
   - Introduction;
   - Typology of Enterprises;
   - Structure and Organization of an Enterprise;
   - Enterprise and Ethics;
   - How to Create (create, decide, manage).

3. The Place of the Enterprise in the Economic Network
   - Concept of the Environment and the Enterprise;
   - The intra/extra Enterprise Relationship;
   - Commercial Activity;
   - The Concept of Strategy.
4. Productive Activity
   - The Policies and Processes of Production;
   - Commercial Policies;
   - Logistics.

5. The Concept of Management in an Enterprise
   - The Activity and Financial Resources
   - Planning and Management of Human Resources
   - Planning and Management of Material Resources.

6. Information and Communication in the Enterprise
   - The Role of Information and Communication;
   - Collection/Gathering and Organization of Information;
   - Strategic diagnosis
   - System of Decision.

➢ Civic education and ethics : 1 Credit (15 hours); LSPW

The concepts
   - Citizenship
   - The Nation
   - The state
   - Public property – collective property
   - Liberties
   - The public service
   - Ethical problem
   - Ethics, law and reason
   - Management and ethical responsibility
   - Ethics and management
   - Civics
   - Deontology
   - Moral consciousness
   - The universal declaration of Human Rights
   - Good governance in public services
   - The importance of civics to the life of the nation
   - Functions of the state and its citizens
   - Deontology, Professional ethics and professionalism
   - Relationship between morality, law and ethics
   - Codes of ethics
Field : LEGAL CAREERS

Specialty :

TAX MANAGEMENT
1. The objective of the training

The objective of this specialization is to train officials who can centralize, liquidate, declare and defend risks noticed by the tax administration through fiscal controls; treat fiscal effects of current transactions made by clients of the chambers; taxable products, deductible costs, write-offs, depreciations and procurements, with or without VAT.

2. Skills Sought After

→ General skills
  - Must demonstrate aptitude for adapting easily to new situations and ensuring good organization;
  - Must have a sense of initiative;
  - Must be rigorous and have a spirit of synthesis and an analytical mind;
  - Must be discreet, confidential, reserved and respect the ethics of the profession;
  - Must be efficient in the transmission of information;
  - Must be able to bring people together/be receptive;
  - Must have a mastery, both oral and written, of the use of the technical jargons of the profession;
  - Must use, strictly within the professional context, the techniques of legal drafting;
  - Must master the different types of legal acts;
  - Must be efficient in the use of New Information and Communication Technology.

→ Specific skills
  - Must be able to reflect and analyze taxation law;
  - Must master the principal professional techniques (consultancy, enquiry, paper analysis);
  - Have profound knowledge of national and international taxation;
  - Have a mastery of administrative and fiscal procedures;
  - Prepare files on statistical, fiscal and labour declarations;
  - Update the regulation and ensure that they are respected;
  - Prepare audiences;
  - Ensure the drafting of certain deeds;
  - Carry out documentary research;
  - Ensure the follow up and execution of administrative and legal formalities.
3. **Outlets**

- Consultants in Accountancy and Taxation;
- Tax Declaration Officers;
- Assistants in the firms of Tax Consultants;
- Tax Auditors;
- Tax Counselors;
- Tax Controllers;
- Work in the Department in charge of Legal Affairs in Companies;
- Middle class support administrative staff in general and of the Ministry of Finance.
### 4. Organization of the Teachings

#### 1st SEMESTER

<table>
<thead>
<tr>
<th>Code UE</th>
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<th>Number of Hours</th>
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<tr>
<td>TMA111</td>
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<td>TMA113</td>
<td>Organization of Tax and Customs Administration</td>
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<td>TMA114</td>
<td>Principles of Taxation and OHADA Accounting Law</td>
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<td>TMA115</td>
<td>Tax on Personal Income and Income of Legal Entities</td>
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<td>TMA116</td>
<td>Local Taxation and Registration Law</td>
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<td>Tax Recovery and Control Procedure</td>
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<td>Principles of Accounting and Accounting Analytics</td>
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### 3rd SEMESTER

#### FIELD: LEGAL CAREERS

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#### Specialty: TAX MANAGEMENT

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#### Professionals Courses 60% (4 UC) 18 credits 270 hours

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<td>TMA235 Procedure of Tax Declaration</td>
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<td>TMA236 Management Software / SAARI Payment and Accounting/ SYDONIA</td>
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#### Inter-Disciplinary Courses 10% (1UC) 3 credits 45 hours

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**Total**

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### 4th SEMESTER

#### FIELD: LEGAL CAREERS

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#### Specialty: TAX MANAGEMENT

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#### Professionals Courses 60% (4 UC) 18 credits 270 hours

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<td>TMA245 Legal and Tax Management</td>
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<td>TMA246 Internship</td>
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#### Inter-Disciplinary Course 10% (1UC) 3 credits 45 hours

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**Total**

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5. Courses content

- **TMA111: Commercial Law I**
  - Commercial Law I: 5 Credits (75 hours); L, T, SPW

- **TMA121: Commercial Law II**
  - Commercial Law II: 5 Credits (75 hours); L, T, SPW

- **TMA112: Family Law I**
  - Family Law I: 4 Credits (60 hours); L, T, SPW

- **TMA122: Family Law II**
  - Family Law II: 4 Credits (60 hours); L, T, SPW

- **TMA113 Organization of Tax and Customs Administration**
  - Organization of Tax and Customs Administration: 5 Credits (75 hours); L, T, SPW

- **TMA123: Management Control**
  - Management Control: 5 Credits (75 hours); L, T, WSP

- **TMA114: Principles of Taxation and OHADA Accounting Law**
  - OHADA Accounting Law: 3 Credits (45 hours); L, T, SPW
  - Principles of Taxation Law: (45 hours); L, T, SPW

- **TMA124: Tax Recovery and Control Procedure**
  - Tax Recovery and Control Procedure: 5 Credits (75 hours); L, T, SPW

- **TMA115: Tax on Personal Income and Income of Legal Entities**
  - Tax on Personal Income and Income of Legal Entities: 4 Credits (60 hours); L, T, SPW
TMA125 : Specific Customs Duties

- Specific Customs Duties: 4 Credits (60 hours) L, T, SPW

TMA116 : Local Taxation and Registration Law

- Local Taxation: 2 Credits (30 hours); L, T, SPW
- Registration Law: 2 Credits (30 hours); L, T, SPW

TMA26 : Principles of Accounting and Accounting Analytics

- Principles of Accounting and Accounting Analytics: 4 Credits (60 hours), L, T, PE

TMA117 : Bilingual Training

- English: 1.5 credits (22 hours 30mn) L, T, P, SPW

  1. Vocabulary
     - Technical and usual vocabulary of the specialty
  2. Grammar
  3. Bilingual expression
     - Understanding in interaction in Technical Discussions
     - Continuous oral communication: Show, explain, develop, summarize, account, comment;
     - Interactions oral communication
  4. Autonomous reading of "writings" of all levels
     - Lead by a quick reading to understand the general sense;
     - Browse a text long enough to locate desired information;
     - Gather information from different parts of the document or of the different documents in order to accomplish a specific task.
  5. Write clear, detailed texts
     - Essay writing;
     - Application for employment;
     - C.V.;
     - Letter of motivation;
     - Letter/memo writing and minutes of a meeting

- French: 1.5 credits (22 hours 30mn) L, T, P, SPW

  1. Vocabulaire
     - Vocabulaire technique usuel
  2. Grammaire
     - Du verbe : Conjugaison aux temps communément utilisés – présent, passé composé ; imparfait, futur, conditionnel, et plus-que-parfait, l’impératif, l’infinitif, voix passive ;
- De l’adjectif : Qualificatif, possessifs, démonstratifs, interrogatifs, numéraux, indéfinis ;
- Du nom et son article : masculin/féminin ; singulier/pluriel ; dénombrable, et non-dénombrable ;
- Du pronom : personnel, possessif, interrogatif, démonstratif, relatif, indéfini ;
- De l’adverbe et de la locution adverbiale : pour dire comment, où, quand et pourquoi ;
- Des fonctions grammaticales.

3. Expression et communication
- Compréhension et interaction au cours d’une discussion technique ;
- Communication orale courante ;
- Communication orale interactive
- De la phrase : simple, complexe, composée ; interrogative, déclarative, exclamative et impérative ;
- Lecture rapide et compréhension de texte ;
- synthèse d’un long texte
- De la communication : rédaction de texte, d’instructions, de rapport, d’une correspondance – d’une lettre recommandation ou de motivation, d’une, demande d’emploi, d’une demande d’explication, d’une réponse à une demande d’explication, d’un CV ;
- Gestion d’une table ronde/discussion : La prise de notes, la prise de parole
- Expressions figées

❖ TMA127 : Computer Training

➢ Computer Training : 3 Credits (45 hours); L, T, P, SPW

❖ TMA231 : Labour Law

➢ Labour Law : 5 Credits (75 hours); L, T, SPW

❖ TMA241 : Land Tax

➢ Land Tax: 5 Credits (75 hours); L, T, SPW

❖ TMA232 : Company Law

➢ Company Law: 4 Credits (60 hours); L, T. SPW

❖ TMA242: Business Law

➢ Business Law : 4 Credits (60 hours); L, T, SPW
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<td>Keeping of the log-book of the trainee</td>
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<td>Choosing a research topic in collaboration with the professional and academic supervisors</td>
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<td>Elaborate the framework of the research</td>
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6. Determine the documents to be consulted
7. Organize the study
8. Write the Report
9. Defend the Report before a jury

❖ TMA237 : Creation of Enterprise and Methodology of Writing Internship Reports

➢ Creation of Enterprise : 1 Credit (15 hours); L, T

1. The Notion of Entrepreneur;
2. Reasons / Motivation for Creating the Enterprise;
3. Search for Ideas and Evaluation of same;
4. Search for Financing;
5. The Legal Status of the Enterprise;
6. Ethical Aspects of the Business;
7. Elaborating the Business Plan

➢ Methodology for writing Internship Report : 2 Credits (30 hours); L, T, SPW

1. Gathering of information;
2. How to do a Report;
3. Plan of the Internship Report and Summary;
4. Table of Content;
5. Introduction of the Internship Report;
6. Conclusion of the Internship Report;
7. Acknowledgements;
8. How to do the appendices;
9. When to begin the Internship Report;
10. How to come out with a topic for the Internship Report;
11. The cover page;
12. How to write efficiently;
13. Form and presentation (cover page, identification page, summary, bibliography, glossary, list of figures, tables and illustrations);
14. Instructions and typographic rules in the presentation of the Report (font-size, spacing, titles, punctuations, graphic charts);
15. How to prepare for the defence.

❖ TMA247 : Economics, Civic Education and Ethics

➢ General Principles of Economics : 2 Credits (30 hours); L, T, SPW

1. Enterprises and production;
2. Households and consumption;
3. Markets and prices;
4. Creation and distribution of revenue;
5. Money and the financing of the economy;
6. Elements of national accounting;
7. Macro-economic equilibrium;
8. The socialist system;
9. Capitalist economy;
10. State intervention;
11. The bases of international trade;
12. International payments;
13. Balance of payment;
14. Economic development and its inequalities;
15. Growth and its inequalities;
16. Inflation, unemployment, industrial transformations;
17. The stakes of development and the globalization of problems;
18. Development strategies;
19. Economic integration and the different forms of cooperation in the world;

- Civic education and ethics : 1 Credit (15 hours); LSPW

The concepts
- Citizenship
- The Nation
- The state
- Public property – collective property
- Liberties
- The public service
- Ethical problem
- Ethics, law and reason
- Management and ethical responsibility
- Ethics and management
- Civics
- Deontology
- Moral consciousness
- The universal declaration of Human Rights
- Good governance in public services
- The importance of civics to the life of the nation
- Functions of the state and its citizens
- Deontology, Professional ethics and professionalism
- Relationship between morality, law and ethics
- Codes of ethics

The Minister of Higher Education
Pr. Jacques FAME NDONGO
**TECHNICAL COMMITTEE**

**President**: Pr Jacques FAME NDONGO, Minister of Higher Education

**Supervisor**: Pr NYONGBET GABSA Wilfried, General Secretary of Ministry of Higher Education

**General Coordinator**: Pr Richard Laurent OMGBA, Head of Department of Higher Education Development (DDES)

**Technical Coordonnateur**: Mme NDJEBAKAL née ESSAMA ETOUNDI Marthe Florentine, Head of unit for the Diversification of Training and Higher Education Programmes (CDOFPE)

**Members**
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- Mme BOUGA Odette, CEA2/ CDOFPE
- Mme NDJOU Adeline, cadre/CDOFPE
- Mme TSOUNGUI Françoise, cadre/CDOFPE
- Mme NJAPNDOUNKE NJOYA Hortense, cadre/CDOFPE
- Mme MBALLA MBATSOGO C, Cadre/CDOFPE
- M. NGASSAM Blaise, cadre/CDOFPE
- M. NAMA Benoît, cadre/CDOFPE

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