



ENGINEERING DEGREE - Semester 5

Teaching Unit	ECTS	Elective	Credits	Code	Module	Lecture	Lecture & Tutorial	Tutorial	Personnal work
MIF3BS1 MATHEMATICS AND COMPUTER SCIENCE	16.0		1.5	LAB3040	C project	.	.	12.00	18.00
			3.5	INF3050	Networks computing	.	12.00	24.00	34.00
			3.5	INF3132	Object-Oriented Programming en Java	.	12.00	24.00	34.00
			2.0	INF3039	Operating systems	.	12.00	15.00	13.00
			2.5	INF3031	Databases	.	12.00	15.00	23.00
			3.0	MAT3055	Probabilities	.	18.00	27.00	15.00
			0.0	INF3036	Computer Science pre-requisites Year 3 ^{Cond.}	.	21.00	.	0.00
			0.0	SYS3043	Electronics pre-requisite year 3 ^{Cond.}	.	15.00	.	0.00
ES-PRO3BS1 PROJECTS	4.0		2.0	PLU3031	Technical challenges	1.50	.	24.00	20.00
			2.0	PLU3033	Design sprint	3.00	.	21.00	20.00
SYS3BS1 PHYSICS, ELECTRONICS AND SYSTEMS	7.0		4.0	SYS3045	Digital signal processing & applications	.	15.00	30.00	35.00
			3.0	SYS3041	Processor architecture	.	12.00	15.00	33.00
HUM3BS1 ENGINEER PROFESSIONAL SKILLS	3.0		0.0	LANXX83XX	Second language - FLE ^{Opt.}	(15.00)	.	.	(0.00)
			2.0	LAN3081AN	English	21.00	.	.	19.00
			1.0	PLU3196	Asserting oneself	.	.	12.00	8.00
			0.0	ENT3115	Conferences & Seminars	9.00	.	.	0.00
			0.0	TEX3063	Remedial French ^{Cond.}	1.50	.	.	0.00
			0.0	LAN3083AN	Remedial English ^{Cond.}	15.00	.	.	0.00

LAB3040 C project

Information

Course name	C project	Professor (Paris Campus)	ERRA R.
French course name	Projet C	Professor (Laval Campus)	CLERGUE M.
Coefficient	1.5	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lab	12.00 hour(s)
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Evaluation

Grading	Group project,
Final exam	0.00 hour(s)

Course Syllabus

Learning outcomes	<p>Through the development of a C language application, this module aims to achieve the following learning objectives:</p> <ul style="list-style-type: none"> • Comprehend the various stages involved in creating a computer project based on specifications or a brief. • Learn to manage a project within a group setting. • Determine the prior programming knowledge necessary to implement in order to accomplish a tangible project.
Content and chapters	The course is structured to address methodological and technical queries that students encounter during the project's development process.
Prerequisites	Proficiency in C programming.

INF3050 Networks computing

Information

Course name	Networks computing	Professor (Paris Campus)	H Aidar B.
French course name	Réseaux Informatiques	Professor (Laval Campus)	REY R.
Coefficient	3.5	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lecture/Tutorial	12.00 hour(s)
Lab	24.00 hour(s)

Evaluation

Grading	Final Exam, Individual Project,
Final exam	1.50 hour(s)

Course Syllabus

Learning outcomes	<p>In terms of network standardization, students will be able to list the major organizations and their areas of expertise.</p> <p>Students will be able to describe how the Ethernet protocol and the TCP-IP protocol stack work.</p> <p>They will be able to characterize the electrical media used in local area networks (LAN).</p> <p>They will practically implement a local area network (LAN) and will be able to:</p> <ul style="list-style-type: none"> • Create and diagnose a wired LAN; • Administer physical or virtual network equipments; • Configure and diagnose network connectivity for multiple operating systems (Windows / Linux); • Manage simple network services (DHCP, ARP, DNS).
Content and chapters	<p>Course :</p> <ol style="list-style-type: none"> 1. Standardisation : The OSI model, IEEE 802, IETF 2. Classification of networks according to space, topology or use. 3. Electrical media 4. The local network: Media access methods, Ethernet, VLAN, equipment 5. TCP-IP: History, IPV4, ARP, ICMP, DHCP, static routing 6. Introduction to application protocols : DNS, HTTP <p>LAB :</p> <ul style="list-style-type: none"> • LAB 1: Reminder of the Linux system commands. • LAB 2: Handling of equipment (physical or simulated). • LAB 3 : Micro LAN (Ethernet and IP). • LAB 4 : Mini LAN (ICMP, ARP, DHCP). • LAB 5: Static routing. • LAB 6: VLAN and inter-VLAN routing. • LAB 7: Name resolution.
Prerequisites	Operating system (ESIEA course INF3039)

INF3132 Object-Oriented Programming en Java

Information

Course name	Object-Oriented Programming en Java	Professor (Paris Campus)	IONASCU F.
French course name	Programmation orientée objet en Java	Professor (Laval Campus)	VILELA MONTEIRO D.
Coefficient	3.5	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lecture/Tutorial(12.00 hour(s)
Lab	24.00 hour(s)

Evaluation

Grading	Midterm Exam, Lab/Tutorial, Final Exam,
Final exam	1.50 hour(s)

Course Syllabus

Learning outcomes	<ul style="list-style-type: none"> Identify the components of a simple or complex real-world object and model it in UML Use the fundamental concepts of the object oriented languages (abstraction, inheritance, polymorphism, encapsulation, and composition) Develop a program in Java, applying good coding rules and using the JDK libraries
Content and chapters	<ol style="list-style-type: none"> Introduction to the Programming Paradigm Java Basics and the Java Environment (JDK/JRE), Coding Rules, Memory Management, Javadoc Objects, Classes, Interfaces, Abstract and Concrete Types Key OOP concepts : Abstraction, Inheritance, Encapsulation, Polymorphism, Composition UML Class Diagram Exceptions, Input/Output Genericity and Collections
Prerequisites	<ul style="list-style-type: none"> Procedural programming Data types and structures

INF3039 Operating systems

Information

Course name	Operating systems	Professor (Paris Campus)	BRIERE A.
French course name	Systèmes d'exploitation	Professor (Laval Campus)	AUBIN J.
Coefficient	2.0	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lecture/Tutorial(12.00 hour(s)
Tutorial/Lab	15.00 hour(s)

Evaluation

Grading	Final Exam,
Final exam	0.90 hour(s)

Course Syllabus

Learning outcomes	<ul style="list-style-type: none"> • Install, configure and operate a Linux operating system on a multi-system (multi-boot) or virtualized architecture. • Use the basic functions of Linux. • Know basics of Linux administration.
Content and chapters	<ul style="list-style-type: none"> • Basics of operating systems (roles of an OS, history, licenses) with a focus on Linux systems. <ul style="list-style-type: none"> • Multi-system or virtualized platforms. • Boot sequence. • File Systems (partitions, file tree, etc.). • Getting started with a Linux operating system <ul style="list-style-type: none"> • Graphical environment, shell ... • Basic commands. • User management (principles, groups, sudo, etc.). • Introduction to administration <ul style="list-style-type: none"> • Software management (principles, dependencies, compilation of sources, rpm and dpkg systems, etc). • Management of services and processes (activity monitoring, start / stop, initV vs systemd ...). • Shell scripts (presentation, scripting) • Fundamental of cybersecurity and hardening for Linux operating system (logging, rights ...).
Prerequisites	None prerequisites

INF3031 Databases

Information

Course name	Databases	Professor (Paris Campus)	ZOGLAMI S.
French course name	Bases de Données	Professor (Laval Campus)	AUBIN J.
Coefficient	2.5	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lecture/Tutorial(12.00 hour(s)
Tutorial/Lab	15.00 hour(s)

Evaluation

Grading	Midterm Exam, Lab/Tutorial,
Final exam	2.00 hour(s)

Course Syllabus

Learning outcomes	Model a relational database schema and write sql queries
Content and chapters	<ul style="list-style-type: none"> • Introduction to BDDs and DBMSs • Introduction to SQL LMD language • Initiation to the modeling of a database • Deepening of SQL LMD queries • Introduction to SQL LCT language and transaction implementation • Introduction to non-relational databases
Prerequisites	None

MAT3055 Probabilities

Information

Course name	Probabilities	Professor (Paris Campus)	DA-RUGNA J.
French course name	Probabilités et statistiques	Professor (Laval Campus)	VALENCE A.
Coefficient	3.0	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lecture/Tutorial(18.00 hour(s)
Tutorial/Lab	27.00 hour(s)

Evaluation

Grading	Final Exam,
Final exam	1.50 hour(s)

Course Syllabus

Learning outcomes	<ul style="list-style-type: none"> • Understand the concepts of probability theory and statistics • Identify the conditions of application and use of the tools on concrete cases • Apply statistical techniques in different engineering fields (security, medical, decision support, industrial processes, finance...)
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Content and chapters

1. Real finite/infinite discrete random variables
 - Definitions
 - Probability law of a finite discrete real random variable
 - Distribution function of a discrete real random variable
 - Moments of a discrete real random variable; Mathematical expectation; Variance and standard deviation.
2. Real random variables with density
 - Definition
 - Density and distribution function
 - Examples of functions of a density real random variables
 - Mathematical expectation
 - Variance and standard deviation
3. Usual discrete laws
 - Finite discrete laws
 - Bernoulli's law
 - Binomial law
 - Uniform law on the integer interval $[1, n]$
 - Infinite discrete laws
 - Poisson's law
4. Usual continuous laws
 - Normal law
 - Exponential law
5. Convergences
 - Theorem of the centered limit
 - Approximation of the binomial distribution by the Poisson distribution
 - Approximation of the binomial distribution by the normal distribution
6. Estimation
 - Point estimate of a mean-proportion
 - Estimation by confidence interval of a mean-proportion
7. Statistical tests
 - Comparison of means or proportions of two independent populations
 - Comparison of means or proportions of two independent populations; use of Fisher's and Student's laws
 - Chi-square tests of adequacy and independence
 - Correlation test
 - Linear fitting: Simple linear regression by ordinary least squares (covariance; correlation coefficients)

Prerequisites

Probabilized spaces

- Random experiment
- Events
- Space of events
- Language of events
- Notion of probability
- Finite probability space
- Computation of a probability on a finite probability space
- Equiprobability

2. Conditional probability

- Conditional probabilities
- Formula of compound probabilities
- Total probability formula
- Bayes' formula

3. Independence in probability

- Independence of two events
- Independence of an event

4. Statistical elements

- Mean; median; mode; quantiles; moments; range; variance; standard deviation and mean absolute deviation
- Histogram, bar chart and cumulative frequency curve

INF3036 Computer Science pre-requisites Year 3

Information

Course name	Computer Science pre-requisites Year 3	Professor (Paris Campus)	DAOUDI A.
French course name	PASS informatique 3A	Professor (Laval Campus)	CLERGUE M.
Coefficient	0.0	Programs	Engineering Degree Engineering Degree, English Taught Program Engineering Degree by apprenticeship
Optional/Mandatory	Conditional	Semester	S5

Course Hours

Lecture/Tutorial(21.00 hour(s)
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Evaluation

Grading	
Final exam	0.00 hour(s)

Course Syllabus

Learning outcomes	<ul style="list-style-type: none"> Enhance computer literacy to meet training requirements. Acquire computer skills.
Content and chapters	<p>1. C Programming a. Variables and Constants b. Data types (and representation) c. Functions d. Conditional Instructions e. Itérations f. Arrays g. Recursivity</p> <p>2. Advance C Programming : a. Pointers b. Dynamic allocation c. Files d. Structures etc</p> <p>3. Algorithmics & Algorithms a. A famous First example : the Traveling Saleman Problem (with Concord) b. Méthods of conception i. Divide and Conquer ii. Greedy algorithms iii. Dynamic Programming iv. Exact Algorithms versus Approximation algorithms c. Algorithmes on numbers d. Algorithms on arrays i. Sequential Search ii. Dichotomic Search iii. An example : exchange of two part of an array iv. Partitionning, mediane etc</p> <p>4. Sorting Algorithms : a. Bubble Sort b. Selection Sort c. Insertion Sort d. QuickSort e. MergeSort</p> <p>5. Computational Complexity of an algorithms a. Definition b. Examples</p>
Prerequisites	None

SYS3043 Electronics pre-requisite year 3

Information

Course name	Electronics pre-requisite year 3	Professor (Paris Campus)	DAOUDI A.
French course name	PASS électronique 3A	Professor (Laval Campus)	LEFAS P.
Coefficient	0.0	Programs	Engineering Degree Engineering Degree, English Taught Program Engineering Degree by apprenticeship
Optional/Mandatory	Conditional	Semester	S5

Course Hours

Lecture/Tutorial(15.00 hour(s)
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Evaluation

Grading	
Final exam	0.00 hour(s)

Course Syllabus

Learning outcomes	<ul style="list-style-type: none"> • Increase the level of knowledge in electronics to meet the requirements of the training. • Acquire skills in electronics.
Content and chapters	<p>Analog Electronics:</p> <ul style="list-style-type: none"> • Kirchhoff's laws • Millman's theorem • Voltage divider • Operational amplifiers • Passive filters • Active filters <p>Digital electronics:</p> <ul style="list-style-type: none"> • Boolean logic • Combinatorial circuits • Sequential circuits <p>Basics of microcontrollers:</p> <ul style="list-style-type: none"> • Basic inputs/outputs to a microcontroller • Basics of serial communication protocols
Prerequisites	None

PLU3031 Technical challenges

Information

Course name	Technical challenges	Professor (Paris Campus)	FARCY V.
French course name	Challenges techniques 1	Professor (Laval Campus)	FARCY V.
Coefficient	2.0	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lecture	1.50 hour(s)
Tutorial/Lab	24.00 hour(s)

Evaluation

Grading	Group project, Group presentation,
Final exam	0.50 hour(s)

Course Syllabus

Learning outcomes	<p>Students carry out an IT development project in teams of 2 to 3 people by implementing best software development practices, acquire new experiences, knowledge and skills that complement the modules of the academic curriculum.</p> <p>At the end of the technical challenge the student will be able to:</p> <ul style="list-style-type: none"> - design, develop and test a intermediate complexity computer program - Apply good development practices - Argument implementation choices
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Content and chapters	<p>Day 01 - Monday</p> <p>Morning: Presentation of festival objectives and specific instructions (deadlines, evaluation, penalties, etc.) by the master of ceremonies. (20 minutes). Presentation of subjects by teachers (duration depends on number of subjects). Formation of teams and assignment of subjects (30 minutes).</p> <p>Afternoon: Exchange between teacher and groups: presentation of the additional notion, Q&A time (1 hour). Group work (reflection): Ownership of the project and definition of their objectives. Choice of 5 requirements. Definition of tasks to be carried out. Allocation of tasks and responsibilities between members. Non-technical responsibilities are not taken into account. Production of a deliverable to be uploaded to GitLab by 6pm.</p> <p>Day 02 - Tuesday</p> <p>Morning Technical analysis and design of the project: definition of classes, relationships, interface design. Definition and creation of unit tests. Production of a deliverable to be uploaded to GitLab by 12 noon.</p> <p>Afternoon development / implementation</p> <p>Day 03 - Wednesday</p> <p>development / implementation</p> <p>Day 04 - Thursday</p> <p>For groups: development.</p> <p>Afternoon Finalize development Preparation for presentation Last delivery on GitLab before 11:59 p.m.</p> <p>Day 05 - Friday</p> <p>Morning from 9am to 1pm, presentations: Afternoon: Communication of results and awards ceremony</p>
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Prerequisites	Basic level in software development
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PLU3033 Design sprint

Information

Course name	Design sprint	Professor (Paris Campus)	FOUCAULT A.
French course name	Design sprint 1	Professor (Laval Campus)	FOUCAULT A.
Coefficient	2.0	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lecture	3.00 hour(s)
Tutorial/Lab	21.00 hour(s)

Evaluation

Grading	
Final exam	0.00 hour(s)

Course Syllabus

Learning outcomes	<p>1. Be able to design a project using design sprint</p> <p>Understand the principles of design sprint and how to apply it to projects with a CSR impact.</p> <p>Identify community or social needs and opportunities for CSR initiatives.</p> <p>Be able to generate creative and innovative ideas to solve social and environmental problems.</p> <p>2. Be able to deploy a project with the design sprint</p> <p>Master the steps of the design sprint to plan and organize a project with CSR impact.</p> <p>Know how to manage resources, deadlines and constraints while integrating CSR values into the project.</p> <p>Develop the ability to work in an interdisciplinary team, fostering cooperation, communication and inclusion.</p> <p>3. Evaluate the impact of your project</p> <p>Learn to define relevant indicators to assess the social and environmental impact of projects.</p> <p>Know how to collect and analyze data to measure the effectiveness of CSR initiatives.</p> <p>Be able to reflect critically on the results obtained and identify areas for improvement for future projects.</p> <p>Synthesize your results, assess your actions (in relation to the objectives set when the project was launched) and capitalize on and pass on your experience (capitalizing on learning outcomes): recruit potential project successors, update your CV and ePortfolio, etc.</p>
Content and chapters	<p>Monday: Understanding</p> <p>Tuesday: Entertain</p> <p>Wednesday: Decide</p> <p>Thursday: Prototype</p> <p>Friday: Test</p>
Prerequisites	None

SYS3045 Digital signal processing & applications

Information

Course name	Digital signal processing & applications	Professor (Paris Campus)	KHODOR N.
French course name	Traitement numérique du signal et applications	Professor (Laval Campus)	GAGEOT S.
Coefficient	4.0	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lecture/Tutorial(15.00 hour(s)
Tutorial/Lab	12.00 hour(s)
Lab	18.00 hour(s)

Evaluation

Grading	Lab/Tutorial, Final Exam,
Final exam	1.50 hour(s)

Course Syllabus

Learning outcomes	<ul style="list-style-type: none"> Acquire a solid understanding of the fundamental concepts of digital signal processing. Develop expertise in digital filtering techniques for processing and analyzing signals in both the time and frequency domains. Develop digital signal processing algorithms.
Content and chapters	<ul style="list-style-type: none"> Signal representation Correlative analysis Linear filtering Sampling Discrete Fourier Transform and Fast Fourier Transform Z-transform Digital filter
Prerequisites	<ul style="list-style-type: none"> Mathématiques SYS3041: Architecture d'un système à microprocesseur

SYS3041 Processor architecture

Information

Course name	Processor architecture	Professor (Paris Campus)	BRIERE A.
French course name	Architecture d'un système à microprocesseur	Professor (Laval Campus)	CRISON F.
Coefficient	3.0	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lecture/Tutorial(12.00 hour(s)
Tutorial/Lab	15.00 hour(s)

Evaluation

Grading	Midterm Exam, Final Exam,
Final exam	1.50 hour(s)

Course Syllabus

Learning outcomes	<ul style="list-style-type: none"> Analyse and identify the different elements of the hardware architecture of a microprocessor or microcontroller system Implement the different mechanisms of programming with a processor-based system Develop a simple application using a peripheral device with interrupt
Content and chapters	Basics of a microprocessor system Internal structure and operating principles <ul style="list-style-type: none"> Architecture Bus ALU Control unit Registers / status registers Programming <ul style="list-style-type: none"> Introduction to assembly programming Programming in C with libraries (BSP) Introduction to DSP microprocessors
Prerequisites	Basics of digital electronics: combinational and sequential systems.

LANXX83XX Second language - FLE

Information

Course name	Second language - FLE	Professor (Paris Campus)	COCKS J.
French course name	LV2 opt, FLE	Professor (Laval Campus)	HESSION J.
Coefficient	0.0	Programs	Engineering Degree Engineering Degree Engineering Degree, English Taught Program Engineering Degree
Optional/Mandatory	Optional	Semester	S1

Course Hours

Lecture	15.00 hour(s)
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Evaluation

Grading	Final Exam,
Final exam	1.25 hour(s)

Course Syllabus

Learning outcomes	<p>Second languages : German, Spanish, Japanese, Chinese</p> <p>Understand the language</p> <p>Use the language</p>
Content and chapters	Content according to the group
Prerequisites	none

LAN3081AN English

Information

Course name	English	Professor (Paris Campus)	COCKS J.
French course name	Anglais	Professor (Laval Campus)	HESSION J.
Coefficient	2.0	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lecture	21.00 hour(s)
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Evaluation

Grading	Lab/Tutorial, Final Exam,
Final exam	1.50 hour(s)

Course Syllabus

Learning outcomes	<p>Explain and support their opinions in discussion by providing relevant explanations, arguments and comments on the impact of technology in society.</p> <p>Understand the main ideas of propositionally and linguistically complex discourse, including technical and scientific discussions and relay this information in summary form to an audience.</p>
Content and chapters	<p>The impact of technology on society</p> <p>Describe a process</p> <p>Discuss / debate positive and negative aspects of technology</p> <p>Summarize a source</p> <p>Extract information / take notes</p>
Prerequisites	No prerequisites

PLU3196 Asserting oneself

Information

Course name	Asserting oneself	Professor (Paris Campus)	DAOUDI A.
French course name	Être et s'affirmer en relation	Professor (Laval Campus)	FOUCAULT A.
Coefficient	1.0	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Tutorial/Lab	12.00 hour(s)
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Evaluation

Grading	Individual presentation ,
Final exam	0.00 hour(s)

Course Syllabus

Learning outcomes	<p>Develop a better understanding of the emotions and discourse that can arise during communication, particularly intercultural communication.</p> <p>Choose and use appropriate tools/find solutions to resolve conflicts and raise issues constructively.</p> <p>Adapt their behavior and communication to avoid misunderstandings and conflicts, and work harmoniously and constructively with people from different cultures.</p> <p>Organize and participate in meetings to help achieve team/project objectives.</p>
Content and chapters	<p>Atelier sur la reconnaissance et la gestion des émotions dans des contextes interculturels.</p> <p>Étude de cas sur les malentendus linguistiques et culturels dans les communications internationales.</p> <p>Analyse de vidéos ou de scénarios pour comprendre comment les émotions influencent les interactions interculturelles.</p> <p>Séquence sur les techniques de résolution de conflits, incluant la communication non violente et la négociation (ex : DESC, ...).</p> <p>Jeux de rôle pour pratiquer la résolution de conflits dans des situations interculturelles.</p> <p>Étude de cas mettant en avant des conflits interculturels et comment ils ont été gérés avec succès.</p> <p>Séquence sur la communication interculturelle, incluant la compréhension des normes culturelles et des styles de communication.</p> <p>Jeux de rôle pour pratiquer des situations de communication interculturelle et d'adaptation de comportement.</p> <p>Simulation de scénarios professionnels internationaux pour mettre en pratique les compétences acquises.</p> <p>Séquence sur la planification et la conduite de réunions efficaces, en mettant l'accent sur la gestion du temps et la participation active.</p> <p>Exercices de simulation de réunions interculturelles pour développer la capacité à collaborer et à contribuer.</p> <p>Étude de cas sur des défis rencontrés lors de réunions internationales et comment les surmonter.</p>
Prerequisites	None.

ENT3115 Conferences & Seminars

Information

Course name	Conferences & Seminars	Professor (Paris Campus)	KHODOR N.
French course name	Cycle de conférences	Professor (Laval Campus)	AUBIN J.
Coefficient	0.0	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Mandatory	Semester	S5

Course Hours

Lecture	9.00 hour(s)
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Evaluation

Grading	
Final exam	0.00 hour(s)

Course Syllabus

Learning outcomes	<p>The objectives are to introduce students to :</p> <ul style="list-style-type: none"> • engineering professions, • the majors offered at ESIEA, • the importance of the professional posture they will have to adopt, • engineering ethics.
Content and chapters	Three lectures will be offered during the semester. The topics of these lectures may change from year to year, depending on the needs identified and the quality of the speakers available.
Prerequisites	None.

TEX3063 Remedial French

Information

Course name	Remedial French	Professor (Paris Campus)	KASOMBO K.
French course name	Projet Voltaire renforcé	Professor (Laval Campus)	CHEVREUL TOURNIQUET S.
Coefficient	0.0	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Conditional	Semester	S5

Course Hours

Lecture	1.50 hour(s)
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Evaluation

Grading	Lab/Tutorial, Final Exam, Individual Project,
Final exam	1.50 hour(s)

Course Syllabus

Learning outcomes	The self-paced and face-to-face training sessions offered to the student aim to assist them in reaching the required level in higher education (a score of 70%), in order to overcome difficulties in the use of written French language.
Content and chapters	<p>The platform offers several modules allowing you to:</p> <ul style="list-style-type: none"> - Review the basics of spelling and grammar. - Write simple and casual texts. - Address the essential rules for written communication free of the most common mistakes in professional environments and everyday writing.
Prerequisites	<p>No prerequisites, but the diagnostic assessment is offered to:</p> <ul style="list-style-type: none"> - First-year students - Second-year students who did not achieve a score of 50% in the final assessment of the first year. - Third-year students

LAN3083AN Remedial English

Information

Course name	Remedial English	Professor (Paris Campus)	COCKS J.
French course name	Anglais renforcé	Professor (Laval Campus)	HESSION J.
Coefficient	0.0	Programs	Engineering Degree Engineering Degree, English Taught Program
Optional/Mandatory	Conditional	Semester	S5

Course Hours

Lecture	15.00 hour(s)
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Evaluation

Grading	Final Exam,
Final exam	1.25 hour(s)

Course Syllabus

Learning outcomes	A complement to the English module
Content and chapters	
Prerequisites	No prerequisites