
ENGINEERING PROGRAMME

2023-2024

Year 2

SOFT SKILLS

PROGRAMME SUPERVISOR

Julie BERGER



ENGINEERING PROGRAMME - SOFT SKILLS

Autumn Semester

Course code	Title	Soft skills
Business Sciences (4 elective courses)		
IAM11	Develop employability	[Being committed] [Convincing]
INOV21	Producing responsibility	[Appreciating the complexity] [Imagining]
INOV23	Innovation of the transition with biomimicry	[Appreciating the complexity] [Imagining]
INOV26	Undertake a QSE approach	[Appreciating the complexity] [Imagining]
INOV32	Undertaking the Great Transition	[Appreciating the complexity] [Imagining]
OS011	Energy transition, urban planning and globalization	[Communicating] [Developping my networks]
OS013	Low carbon trajectories	[Communicating] [Developping my networks]
OS021	Quality of work life	[Communicating] [Developping my networks]
OS022	Stakeholders : what dialogue	[Communicating] [Developping my networks]
OS032	Environnemental law	[Communicating] [Developping my networks]
OS033	Environmental ethics for organizations	[Communicating] [Developping my networks]
OS042	Corporate governance	[Communicating] [Developping my networks]
PRO30	HR Policy and management	[Deciding] [Leading]
PRO31	Good managerial practices	[Deciding] [Leading]
PRO34	Intercultural Management	[Deciding] [Leading]
PRO40	Sales and Marketing Management	[Deciding] [Leading]
PRO41	null	[Deciding] [Leading]
PRO50	Finance for the uninitiated	[Deciding] [Leading]
PRO52	The 5 essential financial dimensions	[Deciding] [Leading]
Social Sciences (4 elective courses)		
PROJET	null	[Being committed] [Developping my networks] [Imagining] [Leading] [Understanding]

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Develop employability [IAM11_S7]

LEAD PROFESSOR(S): Julie BERGER

Objectives

Develop your employability, with the aim of optimizing your job search and your business success. The workshop will help you to prepare for recruitment interviews by discovering recruiter practices, through theoretical contributions, preparation for standard and difficult interview questions, by role-playing candidates/recruiters, and by learning to pitch in 2 minutes to an audience.

Course contents

Job search techniques,
Understand the different types of recruitment interview,
Standard recruitment interview questions,
Good business practices,
How to pitch effectively

Course material

Assessment

Soft skills: Being committed
Convincing

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	16 hrs	0 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Producing responsibility [INOV21_S7]

LEAD PROFESSOR(S): Benoit HILLOULIN / Jean-Marc BEN GUIGUI

Objectives

To meet environmental, societal and economic challenges of tomorrow, the engineer, in addition to being imaginative, has a growing interest to master eco-design techniques.

This module proposes to study the foundations of eco-design as the Bilan Carbone approach (GHG quantification) and the Life Cycle Analysis (LCA) by the concrete implementation of the concepts studied.

Course contents

- 1) Carbon footprint course, Eco-design + software handling of carbon footprint evaluation
- 2) LCA course + getting started with LCA software
- 3) Projects + defenses

Course material

www.bilans-ges.ademe.fr

Assessment

Soft skills: Appreciating the complexity
 Imagining

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Innovation of the transition with biomimicry [INOV23_S7]

LEAD PROFESSOR(S): Catherine TOUZARD / Jean-Marc BEN GUIGUI

Objectives

- How to respond to the challenges of new consumption patterns and uses, which make sober use of resources and energy; and with limited impacts.
- Consolidating the circular vision required for transition (limiting negative social and environmental impacts) through a circular economy game.
- Discover the resources of living organisms in the search for solutions and appropriate the biomimicry approach.

Course contents

- The circular approach to framing transition (practical case with Circulab tool): how to validate the eco-system benefits of an innovation?
- The constraints of sustainable innovation: carbon intensity of the system in use.
- Low tech and biomimicry: finding the right tools
- Discovery of living organism strategies, both plant and animal, in the open air with biologists: half a day at the Lac de Grandlieu with an ecologist and a biologist.
- A concrete example of sustainable innovation.

Course material

Le vivant comme modèle: La voie du biomimétisme
Albin Michel, 2015 - ISBN 9-782226-320186

Industry of Nature : Another approach to ecology,
Frame Publishers Materio ISBN 9789077174487

L'art d'imiter la nature, A. Mathieu et M. Lebel –Ed. MultiMondes -ISBN 9782895-444923

Ingénieuse Nature: Quand la vie fait preuve d'invention
Emmanuelle Grundman & Marie-Odile Monchicourt
François Bourin Editeur - ISBN: 978-2-84941-265-7

On growth and form, Arcy Thompson (scientific theory and also good sourcebook of images)

The way nature work, Robin Rees (nature picture book, good source of inspiration)

Structural Biomaterials, Julian Vincent (a science analysis of natural materials)

Biomimicry in architecture, 2d ed., Michael Pawlyn - Rita Publishing - ISBN 0-781859-466285

Biomimetic Design Method for Innovation and Sustainability
Helfman, Cohen, Yael, Reich, Ed. Springer, ISBN 9783319339962

Biologically Inspired Design: Computational Methods and Tools
Goel, Ashok K, McAdams, Daniel A, Stone, Robert B., Ed. Springer - ISBN 9781447152477

Biomimetics for Architecture & Design: Nature - Analogies - Technology
Pohl, Göran, Nachtigall and Werner , Ed. Springer - ISBN 9783319191195

Potentials and Trends in Biomimetics

von Gleich, A., Pade, C., Petschow, U., Pissarskoi, E. - ISBN 9783642052453

Biomimetics in Materials Science: Self-Healing, Self-Lubricating, and Self-Cleaning Materials

Nosonovsky, Michael, Rohatgi, Pradeep K., Springer – ISBN 9781461409250

Bionic Optimization in Structural Design

Stochastically Based Methods to Improve the Performance of Parts and Assemblies

Steinbuch, Rolf, Gekeler, Simon (Eds.) - ISBN 9783662465950

Bionics by Examples, 2015: 250 Scenarios from Classical to Modern Times

Nachtigall, Werner, Wisser, Alfred - ISBN 9783319058573

Assessment

Soft skills: Appreciating the complexity
 Imagining

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Undertake a QSE approach [INOV26_S7]

LEAD PROFESSOR(S): Jean-Marc BEN GUIGUI / Julie BERGER

Objectives

- Identify the Quality, Safety and Environment requirements specific to organizations.
- Know the concepts of QSE: history, issues, specificities
- Presentation of associated standards: ISO 9001: Quality management; ISO 14001: Environmental organization of the company; ISO 45001: Health and Safety at work, ...
- Integrated management system of QSE in the company: Systemic approach, Process management, QSE risk analysis, legal and regulatory requirements, PDCA approach, communication, roles, missions and functions of the QSE manager, audits, ...

Course contents

- Introduction to standardization
- Management system: From final control to sustainable development
- Quality management (ISO 9001)
- Environmental management (ISO 14001)
- Management of Occupational Health and Safety (ISO 45001)
- Integrated management system and risk control
- Social responsibility guidelines: The ISO26000 standard
- Audit awareness

Course material

Friderich, G. (2020). Mise en place d'un système de management intégré. Techniques de l'ingénieur.

Assessment

Soft skills: Appreciating the complexity
Imagining

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	16 hrs	0 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Undertaking the Great Transition [INOV32_S7]

LEAD PROFESSOR(S): Jean-Marc BEN GUIGUI / Julie BERGER

Objectives

Faced with a world where uncertainty prevails, we must not hold back or shy away from this complexity. Companies need competent and bold engineers, ready to create and dare. They have the drive and determination to initiate, to get involved and to innovate, in the framework of company or personal projects.

Through lectures and workshops, the objective of this course is to enable engineers to imagine the great transition.

Course contents

- Reindustrialisation: regaining autonomy?
- City and sobriety
- Perma-enterprise
- Innovation and entrepreneurship (France Active)
- Alternative economies and sustainable finance
- Mission-driven companies
- Innovation and sobriety

Course material

Anaïs Voy-Gillis, Olivier Lluansi (2020). Vers la renaissance industrielle.

Sylvain Breuzard (2021). La permaentreprise. Un modèle viable pour un futur viable, inspiré de la permaculture.

Assessment

Soft skills: Appreciating the complexity
 Imagining

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	16 hrs	0 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Energy transition, urban planning and globalization [OSO11_S7]

LEAD PROFESSOR(S): Benoit HILLOULIN / Julie BERGER

Objectives

From the individual to the organizations, energy transition which is just beginning in the OECD countries appears to be a necessity.

By virtue of their knowledge and abilities, the engineers of tomorrow can be major players in the various evolutions associated with energy transition.

This module aims to present some key figures and realities on the ground associated with energy transition by varying the points of view, from urban planning to the globalized context.

Course contents

- Photovoltaic, Biogas and methanization and Biomass courses
- Sustainable Construction course
- Example study project of energy transition

Course material

<https://www.ecologie.gouv.fr/politiques/lutte-contre-changement-climatique>

Assessment

Soft skills: Communicating
 Developing my networks

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Low carbon trajectories [OS013_S7]

LEAD PROFESSOR(S): *Benoit HILLOULIN / Nicolas DESMOITIER*

Objectives

- Share global and national definitions and challenges of climate science
- Prepare for the different phases of a low-carbon strategy for an organization (measure, reduce, avoid, contribute)
- Introduce and use the most advanced tools to support organizations in a low-carbon path

Course contents

- 1) Introduction to climate issues (RCP scenarios of the IPCC, SNBC, Sectoral trajectories)
- 2) Presentation of the tools available for organizations
 - a) Measure greenhouse gas (GHG) emissions: Carbon Balance (ABC)
 - b) Define relevant objectives: Science Based Targets (SBT)
 - c) Quantify the emission reductions linked to an action plan: QuantiGES (ADEME)
 - d) Define and evaluate a low-carbon strategy Assessing Low Carbon Transition (ACT, ADEME)
 - e) Introduction to carbon neutrality : Net Zero Initiative (Carbone4)
- 3) Application project

Course material

Association Bilan Carbone (ABC). (2017). Guide méthodologique : Bilan Carbone®.

SBTi. (2019). Science-based Target Setting Manual – Version 4.0 (Issue April). from <https://sciencebasedtargets.org/wp-content/uploads/2018/10/C2A-guidelines.pdf>

ADEME - Site Bilans GES. (2020). from <https://www.bilans-ges.ademe.fr/fr/accueil/contenu/index/page/QuantiGES/siGras/0>

ADEME. (2018). EXPERIMENTATION FRANÇAISE DE LA METHODE «ASSESSING LOW-CARBON TRANSITION» (ACT).

Net Zero Initiative. (2020). from <http://www.netzero-initiative.com/fr>

IPCC, 2007: Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change

IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change

Assessment

Soft skills: Communicating
Developping my networks

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Quality of work life [OS021_S7]

LEAD PROFESSOR(S): Benoit HILLOULIN / Julie BERGER

Objectives

In an ultra-connected world, engineers must be able to evolve and undertake by taking into account their well-being and that of their employees as well as respecting the various stakeholders in order to get the best out of them.

This course offers an immersion into the concrete issues of work and organization management through their human and social components.

Through the meeting of various actors, future engineers will develop human and multidisciplinary skills beneficial for their activities.

Course contents

- 1) Tutorial - intro stakeholders
- 2) Organizational visit / testimony: best practices, management of customer / supplier relationships, ...
- 3) Quality of Life at Work Course
- 4) Tutorial - Game and project around stakeholders
- 5) Tutorial - QWL issues

Course material

<https://www.dirigeantsresponsablesdelouest.fr/>

Assessment

Soft skills: Communicating
 Developing my networks

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Stakeholders : what dialogue [OS022_S7]

LEAD PROFESSOR(S): Benoit HILLOULIN / Sébastien BOLLE

Objectives

The engineer is a link in a large chain guaranteeing the production of goods and services. It interacts with all internal and external stakeholders in order to obtain the performance and satisfaction of these same actors.

Pyramidal or matrix system, agile or flexible mode, it is a catalyst for synergies and must take into account new societal issues (CSR) and the 17 sustainable development goals of the UN

However, communication is an art and it is essential to master the contexts and expectations of all stakeholders in order to obtain a quality social dialogue.

This course will introduce you to concrete situations in the life of companies through the obligations of compliance with company agreements, ethical rules and benevolence.

Course contents

This course will introduce you to concrete situations in the life of companies through the obligations of compliance with company agreements, ethical rules and benevolence.

- Identification of stakeholders
- Climate of dialogue
- Collaboration tools
- HR experiences and consultants

Course material

Vision of social dialogue S.BOLLE 2014

Performance of CSR Rapport de France stratégie 2016

Assessment

Soft skills: Communicating
Developping my networks

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Environnemental law [OS032_S7]

LEAD PROFESSOR(S): Benoit HILLOULIN / Violaine DU PONTAVICE

Objectives

Understand the legal vocabulary and the organisation of the French legal system;
 Learn about industrial environmental law and understand the obligations for operating a site that generates pollution and nuisances (called "installation classée pour la protection de l'environnement", or "ICPE")
 Learn about waste law (know the different types of waste and their regulatory framework; know the main obligations imposed on waste producers and holders and the risks in case of non-compliance, etc.)

Course contents

Introduction to law through the prism of environmental law
 ICPE law (authorisation, operation and transfer of activities of an ICPE)
 Waste law (concept of waste, regulatory obligations to manage waste, risks incurred in case of infringement)

Course material

- Site du Ministère de la Justice : <https://www.justice.fr/?rubrique=11760#>
- Site du Conseil d'Etat : <https://www.conseil-etat.fr/>
- Site de la Cour de cassation : <https://www.courdecassation.fr/>
- Introduction au droit, collection « Que sais-je », Muriel Fabre-Magnan

Assessment

Soft skills: Communicating
 Developping my networks

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Environmental ethics for organizations [OS033_S7]

LEAD PROFESSOR(S): Benoit HILLOULIN / Géraldine MOLINA

Objectives

Understand the challenges of ecological engineering by combining environmental ethics, a theoretical, pragmatic and strategic approach in order to promote ecological approaches for organisations.

Acquire a core knowledge base to design and implement environmentalist approaches for organisations.

Course contents

- the role of engineers in the ecological transition process (why and how to position oneself on environmental issues)
- individual and collective responsibility
- social and environmental roles of the engineer in the contemporary context
- co-benefits of an ecological approach to engineering, obstacles, barriers and resources for implementing ecological engineering strategies.

Course material

Will be provided during the course.

Assessment

Soft skills: Communicating
Developping my networks

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Corporate governance [OS042_S7]

LEAD PROFESSOR(S): Benoit HILLOULIN / Elie MACE DE GASTINES

Objectives

Course contents

Course material

Assessment

Soft skills: Communicating
 Developping my networks

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

HR Policy and management [PRO30_S7]

LEAD PROFESSOR(S): Eva VAN DEN KERCHOVE / Julie BERGER

Objectives

Identify the main HR processes and experiment: recruiting an employee, defining a recruitment policy or a skills development policy, writing a training plan, conducting professional interviews. Alternating workshops in sub-groups and theoretical contributions.

Course contents

4 courses of 4 hours, including practical case studies in sub-groups. Writing of a training plan for managers on different real-life topics. Topics: harassment at work, teleworking, psycho-social risks, recruitment methods, conducting interviews with an employee (reframing, evaluation, professional, etc.)

Course material

Ressources humaines 3.0, Virgile LUNGU

Management de la performance et ressources humaines, Marie-Hélène MILLIE-TIMBAL

Guide des risques psychosociaux en entreprise, Caroline MOYAT-AYÇOBERRY

Assessment

Soft skills: Deciding
Leading

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Good managerial practices [PRO31_S7]

LEAD PROFESSOR(S): Eva VAN DEN KERCHOVE / Julie BERGER

Objectives

To place students in a managerial problem-solving situation.
 Take charge of a team, understand it and find solutions to boost motivation, involvement and resolve conflict.
 Implement a management strategy.

Course contents

S1: Define key aspects of a managerial culture
 S2 & S3: Case studies in small groups: to re-energise a team and prepare it to implement a development strategy.
 S4: Case study presentations
 S5: Individual work: draw up practical information sheets on management practices.
 S6 & S7: Presentations
 S8: Shared experience and questions.

Course material

"Management de l'innovation" Sandrine Fernez-Walch
 "La MEGA boîte à outils du manager leader" chez Dunod
 "Le management bienveillant" du Docteur Philippe Rodet and Yves Desjacques

Assessment

Soft skills: Deciding
 Leading

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Intercultural Management [PRO34_S7]

LEAD PROFESSOR(S): Julie BERGER

Objectives

Course description

This course covers the core issues that professionals face when working in a multicultural environment. The key areas of culture, communication; immigration; intercultural conflicts in the workplace; and language will be the focus of the course.

Learning objectives

1. Learn the essentials of intercultural management
2. Understand the challenges of a multicultural group
3. Be able to apply intercultural concepts in professional activities.
4. Develop as a student and business professional.

Course contents

- 1 Nov 16th Introduction
- 2 Nov 23rd Culture (s)?
- 3 Nov 30th Conflicts –Personal and cultural conflicts
- 4 Dec 7th Conflicts – (2)
- 5 Jan 4th Communication - Tools; how to communicate
- 6 Jan 11th Building an efficient and effective intercultural team
- 7 Jan 18th Immigration -Expatriation
- 8 Jan 25th Examples of cross-cultural conflicts – Presentation(s)– Paper due

Course material

- Introducing intercultural communication – Third edition by Shuang Liu, Zala Volcic and Cindy Gallois Sage Publications LTD
- International Marketing – Second Edition by Daniel Baack; Barbara Czarnecka and Donald Baack Sage Publications LTD
- Cultures nationales et pratiques managériales – Geert Hofstede – EMS Editions
- Clearlycultural.com

Assessment

Soft skills: Deciding
 Leading

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Sales and Marketing Management [PRO40_S7]

LEAD PROFESSOR(S): Céline EVEN / Julie BERGER

Objectives

This course aims to initiate future engineers to the commercialization of a product. Having a product is a good but will achieve success only with great sales & marketing management.

Based on case studies and on-the-job examples from start-ups to multinationals, this course will focus on the fundamentals of sales & marketing management within a globalized and digitalized context. It will tackle the recent evolution of the sales position within a company in 2021 combining pure sales with business development.

Course contents

- Marketing Strategy and Marketing Plan

- The Commercial Action Plan: make lucid and hierarchical choices in the focus of commercial action and describe who does what, for when, in what mobilization of resources, for what objective, with what management means. This module addresses aspects of commercial organization and commissioning.

- The Commercial Validity Study: procedure prior to a commercial launch to adapt the design of the offer being developed to the capacities of the first potential customers to achieve a robust Minimum Viable Product: which segments, which value proposition, which technical characteristics, which argument, which objections, which distribution channel, which price? It is about delivering an offer aligned with what the targeted customers are actually capable of buying.

- The commercial interview: presentation and application of good practices for an effective conduct of the physical interview with a prospect. This session promotes the implementation of recommendations through several short simulations of interview phases, in which the students will be the actors.

- Complex sales: sales to "Key accounts" (plural decision-making team, multifunctional and influenced by power games) of solutions (fine adaptation to a context, unlike a sale of packaged products) with high impact strategic (demonstration of a competitive advantage to decision-makers) requires an elaborate sales management model, combining specific tools and methods.

Course material

- La boîte à outils du commercial (S. Mercier & P. Belorgey/ Dunod) => action commerciale
 - Toute la fonction commerciale (M-A. Blanc & M-P. Le Gall/ Dunod) => management commercial
 - Le Grand Livre de la Vente (N. Caron & F.Vendeuvre/ Dunod) => Vente complexe dans des Grands Comptes
- incidentally completed by:
- MERCATOR (J. Lendrevie & J. Lévy/ Dunod)
 - STRATEGOR (Lehmann. Ortega. Leroy. Garette. Dussauge/ DURAND / Dunod)
 - Petit traité de manipulation à l'attention des honnêtes gens (R-V Joule et J-L Beauvois/ Presses Universitaires de Grenoble)
 - La vente complexe (L. Dugas & B. Jourdain/ Dunod)

Assessment

Soft skills: Deciding
 Leading

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
English	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

null [PRO41_S7]

LEAD PROFESSOR(S): Blandine HETET / Julie BERGER

Objectives

The objective of this course is to offer an introduction to business strategy adapted to engineers. This will allow them to understand the approach and tools used in marketing, but above all the interest of the latter. Indeed, understanding customer needs and promoting the offer contributes to the success of a company, in the same way as the technical or technological performance of products.

- Discover and understand the marketing approach and approach in the company, acquire vocabulary, master concepts (Strategic and Operational Approaches)
- Understand the different types of markets: supply/demand and other stakeholders
- Analyze the environment (macro and micro) of an organization, understand its position in its sector and within its sector and Identify your strengths and weaknesses
- Know the main stages of strategic marketing: segmentation, targeting, positioning and the main elements (product, price, distribution and communication).
- Integrate the understanding of market issues and consumer needs into technical thinking

Course contents

Part 1: Responding to a complex problem

Part 2: Marketing approach

Part 3: Understanding the markets

Part 4: Segmentation / Targeting / Positioning

Part 5: Product and pricing policies / The concepts will be addressed and explained in the context of lectures and tutorials and the carrying-out of a project chosen by the students.

Course material

Assessment

Soft skills: Deciding
Leading

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Finance for the uninitiated [PRO50_S7]

LEAD PROFESSOR(S): Julie BERGER / Pascal GILQUIN

Objectives

Communicating effectively with financial managers
 Measure the impact of your decisions on the financial health of your company
 Read an income statement and a balance sheet

Course contents

2 Documents? Analysis and examples
 Mechanism and test
 How to read an income statement
 How to read a balance sheet
 'A Vous 2' methodologies
 The big words at the end!

Course material

LES 5 CLES POUR PARLER FINANCE DUNOD

Assessment

Soft skills: Deciding
 Leading

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	16 hrs	0 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

The 5 essential financial dimensions [PR052_S7]

LEAD PROFESSOR(S): Julie BERGER / Pascal GILQUIN

Objectives

Acquire and apply the essential financial vocabulary in a professional context

Quickly read a balance sheet and an income statement

Set up cost prices

Demonstrate ROI of an investment

Lead and unite your team through financial communication

Course contents

Recognition of 44 financial terms

The difference between profit and cash

Reading an income statement

Reading a balance sheet

Cost price and margin

Demonstrate the profitability of an investment

Course material

VERNIMEN Finance d'entreprise

Assessment

Soft skills: Deciding
Leading

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

null [PROJET_SK]

LEAD PROFESSOR(S):

Objectives

Course contents

Course material

Assessment

Soft skills: Being committed
 Developping my networks
 Imagining
 Leading
 Understanding

LANGUAGE OF INSTRUCTION	ECTS CREDITS	LECTURES	TUTORIALS	LAB	PROJECT	EXAM
French	-	null hrs	null hrs	null hrs	null hrs	null hrs