
ENGINEERING PROGRAMME

2021-2022

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]
IAM40	Theatre	[Being committed] [Convincing]
IAM51	The posture of the responsible manager	[Being committed] [Convincing]
INOV12	The 5 essential financial dimensions	[Appreciating the complexity] [Imagining]
INOV21	Producing responsibility	[Appreciating the complexity] [Imagining]
INOV23	Innovation of the transition with biomimicry	[Appreciating the complexity] [Imagining]
INOV25	Innovation project : imagine, test, get started	[Appreciating the complexity] [Imagining]
INOV26	Undertake a QSE approach	[Appreciating the complexity] [Imagining]
INOV27	Lowtech and Innovation	[Appreciating the complexity] [Imagining]
OSO11	Energy transition, urban planning and globalization	[Communicating] [Developping my networks]
OSO13	Low carbon trajectories	[Communicating] [Developping my networks]
OSO15	Observatory of citizen training: tools and experimentation in the social sciences	[Communicating] [Developping my networks]
OSO21	Quality of work life	[Communicating] [Developping my networks]
OSO22	Stakeholders : what dialogue	[Communicating] [Developping my networks]
OSO32	Environnemental law	[Communicating] [Developping my networks]
OSO33	Environnemental ethics for organizations	[Communicating] [Developping my networks]
PRO30	HR Policy and management	[Deciding] [Leading]
PRO31	Good managerial practices	[Deciding] [Leading]
PRO33	Project : driving change	[Deciding] [Leading]
PRO34	Intercultural Management	[Deciding] [Leading]
PRO40	Sales and Marketing Management	[Deciding] [Leading]
PRO41	Industrial strategy for the engineer	[Deciding] [Leading]

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 enable you to prepare for recruitment interviews by discovering the practices of recruiters, 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	-	0 hrs	16 hrs	0 hrs	0 hrs	0 hrs

ENGINEER - SOFT SKILLS

Year 2 - Autumn Semester

Theatre [IAM40_S7]

LEAD PROFESSOR(S): *Catrina CHAMBERS*

Objectives

Improve student fluency and fluidity of spoken English through the enjoyable medium of theatre (with added film and radio skills), taught by a qualified Speech & Drama teacher

Encourage students to explore the English language in a relaxed and fun environment

Build confidence and enjoyment in working together through English

Realise personal and interpersonal development and communication skills

Develop performative and vocal techniques for stage, microphone and camera

Améliorer la fluidité de l'anglais parlé par les étudiants grâce au théâtre (avec des compétences supplémentaires en matière de cinéma et de radio), enseigné par un professeur de théâtre qualifié.

Encourager les élèves à explorer la langue anglaise dans un environnement détendu et amusant

Renforcer la confiance et le plaisir des étudiants à travailler ensemble grâce à l'anglais

Réaliser des compétences de développement et communication personnelle et interpersonnelle

Développer des techniques performatives et vocales pour la scène, le microphone et la caméra

Course contents

The course includes improvisation, speech, pronunciation, articulation, body language, gestures and facial expression, and the exploration of various texts

Students will also have the opportunity to build skills in the areas developed by respected international theatre practitioners such as Konstantin Stanislavsky and Augusto Boal during the workshop process

With online workshops at this time, students will also investigate and develop the vocal and performative skills required for effective on-camera appearances, as well as microphone vocal technique

Le cours comprend l'improvisation, la parole, la prononciation, l'articulation, le langage corporel, les gestes et l'expression du visage, et l'exploration de différents textes

Les étudiants auront également l'occasion d'acquérir des compétences dans les domaines développés par des praticiens du théâtre internationaux respectés tels que Konstantin Stanislavsky et Augusto Boal au cours du processus d'atelier

Grâce à des ateliers en ligne, les étudiants pourront également étudier et développer les compétences vocales et performatives requises pour des apparitions efficaces à la caméra, ainsi que la technique vocale au microphone

Course material

Boal, Augusto: Games for Actors and Non-Actors (Jeux Pour Acteurs et Non-Acteurs)

Lecoq, Jacques: The Moving Body (Le Corps Poetique)

Linklater, Kristin: Freeing the Natural Voice (Libérer la Voix Naturelle)

Stanislavski, Konstantin: An Actor Prepares (La Formation de l'Acteur)

* All four titles are available in PDF form, downloadable from the internet

* Students are encouraged to investigate these works during the course to broaden their knowledge

* Les quatre titres sont disponibles en format PDF, téléchargeable sur Internet

* Les étudiants sont encouragés à étudier ces travaux pendant le cours afin d'élargir leurs connaissances

Assessment

Soft skills: Being committed
 Convincing

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

The posture of the responsible manager [IAM51_S7]

LEAD PROFESSOR(S): Hugues MOREL

Objectives

The manager's mission is not just about achieving quantitative objectives.

This lecture is aimed at getting aware of the manager's real mission and understanding what it requires to achieve it successfully, what each stakeholder expects from him : his boss, his subordinate, his colleagues, his internal and external customers, etc.

We will study the fundamental principles of management and we will see how the manager may rely on them to govern people more than manage issues

Course contents

- S1 Management and speaking the truth
- S2 Trust and moral dilemma : business case
- S3 Management and speaking the truth
- S4 Management and vision : business case
- S5 Management and vision
 - Management and accountability
- S6 Management and people development
 - Management and authority
- S7 Exam : questions and business case
- S8 Correction and conclusion

Course material

<https://www.cee-management.com/>

Porter, E.H. (1973, 1996) Relationship Awareness Theory, Manual of Administration and Interpretation, Ninth Edition. Carlsbad, CA: Personal Strengths Publishing, Inc.

<https://www.profil4.com/index>

Paul Hersey, Le leader situationnel, Les Éditions d'Organisation, 1989

Abraham Maslow, Devenir le meilleur de soi : Besoins fondamentaux, motivation et personnalité, Eyrolles, 2013

Assessment

Soft skills: Being committed
 Convincing

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

The 5 essential financial dimensions [INOV12_S7]

LEAD PROFESSOR(S): Pascal GILQUIN

Objectives

Acquire and master most of the financial vocabulary of a professional situation

Quickly read a balance sheet and an income statement

Set up cost prices

Demonstrate the ROI of an investment

Lead and unite your team through financial communication

Course contents

Key financial words to understand

Do not confuse result and cash

Quick methodologies for reading SME accounts

Margin calculations, cost price by product

Principles of investment profitability

Course material

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

Producing responsibility [INOV21_S7]

LEAD PROFESSOR(S): Benoit HILLOULIN

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

Objectives

Shape the framework of constraints of frugal innovation
Link Circular Economy and Low Carbon Approach
Low Tech and biomimicry helping frugal innovation

Course contents

Framework of methodology for sustainable innovation inspired by the living eco-systems and organisms:
- 4 hours on resilience/ regenerative and low carbon framework. Application with collective circular game Ciorculab on a common challenge
- 4 hours on observation skills: outdoor workshop with biologist and ecologist, Lac de Grandlieu.
- 4 hours of biomimicry methodology and drills
- 4 hours: frugal innovation challenge in teams

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

Innovation project : imagine, test, get started [INOV25_S7]

LEAD PROFESSOR(S): Mickael NELSON

Objectives

- Explain how social dimensions of innovation
- Explore innovation starting methodology
- Experiment first steps of innovation projects

Course contents

- Innovation and creativity
- Lean startup
- Test, learn and go (market, user & customer experience)

Course material

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

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

Lowtech and Innovation [INOV27_S7]

LEAD PROFESSOR(S): Jean-Marc BEN GUIGUI

Objectives

Course contents

Course material

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

Energy transition, urban planning and globalization [OSO11_S7]

LEAD PROFESSOR(S): Benoit HILLOULIN

Objectives

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

By virtue of his knowledge and his abilities, the engineer of tomorrow has the possibility of being a major player in the various evolutions associated with the 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 course
- Biogas and methanization course
- Energy transition in industry
- Biomass course
- Example study project of energy transition

Course material

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

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

Low carbon trajectories [OS013_S7]

LEAD PROFESSOR(S): 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

Observatory of citizen training: tools and experimentation in the social sciences [OSO15_S7]

LEAD PROFESSOR(S): Emmanuel ROZIERE

Objectives

Train engineering students in several social science tools and support them in the production and analysis of study data
Discover and implement the tools of the Observatoire des Formations Citoyennes

Course contents

Introduction to sociology (history and object of research)
Presentation of the study
Tool training: interview and scenario
Implementation of tools
Data analysis and reporting of results

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

Quality of work life [OS021_S7]

LEAD PROFESSOR(S): Benoit HILLOULIN

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 in the concrete issues of work and organization management through their human and social components.

Through the meeting of various actors, the future engineer will develop human and transversal skills beneficial to his activity.

Course contents

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

Course material

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

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

Stakeholders : what dialogue [OS022_S7]

LEAD PROFESSOR(S): 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

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

Environnemental ethics for organizations [OS033_S7]

LEAD PROFESSOR(S): *Géraldine MOLINA*

Objectives

Contemporary societies are currently confronted with an environmental crisis of unprecedented magnitude with multiple manifestations (scarcity of resources, climate change, increase in the cost of energy, degradation of ecosystems, air quality and environmental quality, reduction of biodiversity, etc.). This environmental crisis is combined with a global social and economic crisis. A way out of the crisis involves radical rethinking of models of action, production, management and lifestyles to preserve and improve the quality of the environment on which the survival and well-being of societies intrinsically depends. Engineers joining the workforce in the coming years will have to deal with these issues and find ways to respond to them.

This course is designed to think about this transition to new models in a realistic, critical, constructive and pragmatic way to meet contemporary environmental, social and technical challenges.

To think about the role of engineers and enable them to build robust skills and effectively consider their capacities for reflection and action in relation to these issues, this course is part of an interdisciplinary perspective. An opening of engineering sciences will be proposed towards environmental sciences, sciences of the universe, social sciences (history, sociology, environmental psychology, etc.). Interdisciplinarity will allow engineers to consider their future action in a systemic way by analyzing the interactions between physical phenomena, technical considerations, social dynamics such as adaptation to the uses of inhabitants and citizens) and environmental repercussions. A cultural openness will also make it possible to enrich this knowledge and know-how. The arts such as comics, cinema and literature will therefore also be mobilized to think in a plural way about the major contemporary issues of environmental ethics and ecological transition.

Course contents

Three main orientations will guide the course of the lessons:

1/ We will come back together to the great thinkers and precursors of ecological transition, the history and sociology of techniques and environmental ethics to know.

2/ The course sessions will also aim to make known and analyze the key concepts and notions of environmental ethics and ecological transition.

3/ Beyond the acquisition of this knowledge, it will be a question of analyzing and building know-how in a pragmatic perspective by relying on feedback from actors involved in the process. What brakes, what levers and what resources allow us to think about the observation of these concrete work situations to build projects and solutions to respond to the challenges of ecological transition?

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

HR Policy and management [PRO30_S7]

LEAD PROFESSOR(S): Eva VAN DEN KERCHOVE

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

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

Project : driving change [PRO33_S7]

LEAD PROFESSOR(S): Thomas LECHEVALLIER

Objectives

A project is a collective and individual adventure. All the actors participating will be confronted with changes, and the acceptance or not of these will strongly influence the success of the project. The objective of the course is to give simple and reliable methods allowing to lead the change with respect when one is in the position of project leader. The learning will begin by questioning the certainties on the expected benefits of the change, then give step-by-step analysis tools to lead and carry the change.

Course contents

Presentation of change management methods, TD in writing a change management deliverable on a chosen project (by group of students), TP of presentation of the deliverable (by group of students) to all students of the course with a shared analysis time

Course material

Kanter
Cotter
The Change Toolbox

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): Anne-Françoise WEBSTER

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): Julie LE GUEN

Objectives

This course has for objective 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-up to multinational, 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 alleged 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

Industrial strategy for the engineer [PRO41_S7]

LEAD PROFESSOR(S): Blandine HETET

Objectives

Offer an introduction to company strategy adapted to engineers. This will enable 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 the vocabulary, master the concepts (strategic and operational approaches)
- Understand the different types of markets: supply / demand and other stakeholders
- Analyse the environment (macro and micro) of an organisation, understand its position in its sector and within its industry and identify its 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 stakes and consumer needs into a technical reflection.

Course contents

Part 1: Responding to a complex problem

Part 2: Marketing approach

Part 3: Understanding markets

Part 4: Segmentation / Targeting / Positioning

Part 5: Product and price policies

The concepts will be addressed and explained in the context of C/TD and the realisation of a project chosen by the students.

Course material

Lendrevie J. et Lévy, J. (2014), Mercator, Paris : Dunod.

Ferrandi, J. M. et Litchtle, M. C. (2014), Marketing, Paris : Dunod. Lindon, D. et Jallat, F. (2010), le marketing, Paris : Dunod.

Kotler, P., Keller, K. et Manceau, D. (2013) Marketing Management, Paris : Pearson

VANLAETHEM Nathalie, DURAND-MEGRET Beatrice, 2017, La boite a outils du responsable marketing omnicanal, Dunod

VAN LAETHEM Nathalie, MORAN Stephanie, 2014, La boite a outils du chef de produit, Dunod BAYNAST, LENDREVIE, LEVY, 2017, Mercator, Dunod

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