

APPRENTICESHIP 4th YEAR MECHANICAL ENGINEERING

Practical info

Location(s)





Engineering 1





Practical info

Location(s)





[FRANCAIS] Transmission mécanique

Hourly volume

140h

Introducing

6 crédits

ECTS

A

Objectives

At the end of this module, the student will have understood and be able to explain (main concepts): Electrical power transfer and transformation.

The student will be able to:

Calculate electrical powers (DC/AC), induction in magnetic network, Laplace force in electrical machines.

Necessary prerequisites

Practical info

Location(s)

Toulouse





Innovation and Mechatronics

4 crédits

ECTS

0



Introducing



Objectives

At the end of this module, the student will have understood and be able to explain (main concepts): -the basic and the key benchmarks regarding industrial property

-the role of the industrial property in the research and development approach and the process of innovation -the terminology, the basic notions of the patents law

The student will be able to:

-Identify the information contained in a patent

-Get acquainted in the searches for anteriority and in the use of databases patent (Espacenet)

-Build basic requests to verify the state of the technique

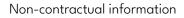
-Put into practice the use of the property industrial as strategic tool for an innovative company

-Make decisions concerning industrial property : legal elements, diversity of the strategic choices, financial stakes, partnership agreements, damages of the counterfeiting

-Develop a strategy of protection of an innovation

Practical info

Location(s)







Conduct a meeting





Introducing

Objectives

At the end of this module, the student will have understood and be able to explain (main concepts):

ENGLISH (25 teaching hours) The main characteristics of business English, and specialised English The skills required to pass the TOEIC test

CONDUCT A MEETING (15 hours teaching hours) At the end of this module, the student will have understood and be able to explain (main concepts):

- Different types of meetings.
- The role of the chairperson
- The different stages of a meeting
- How to put it all together
- -The principles of the interpersonal communication.
- The golden rules of group participation
- Managing stress and emotions
- Written summaries, briefs and reports

The student will be able to: ENGLISH

- Communicate with English speakers (written and spoken English) in a professional context

- Deal with professional issues in relations with their specialization (written and spoken English)

- Understand written and spoken documents in relation with business life (TOEIC)

CONDUCT A MEETING

- Chairing a meeting efficiently from a management position

- Defining objectives and adapting the approach

- Applying his/her knowledge and personal approach to highlight his/her savoir faire and savoir être.

- Adopting the role of chairperson whilst insuring group dynamics.

- Creating varied visual documents

Necessary prerequisites

ENGLISH: B1 level minimum

CONDUCT A MEETING: none

Practical info

Location(s)









Hourly volume

Introducing

Objectives

The apprentice should be able to:

- integrate and adapt to the company's project
- get involved in the work (initiatives, deepening)
- solve open industrial problems
- learn on their own.

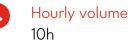
Practical info

Location(s)









Introducing

Objectives

The apprentice should be able to

- define an innovative project for the company

Beyond the technical achievement, the apprentice must also be able to:

- define the characteristics of a project and the challenges of project management, deal with the management of deadlines, costs, quality, human resources, communication, risks and purchases, present the techniques for conducting meeting.

- Put into practice the use of industrial property as a strategic tool for an innovative company

Practical info

Location(s)





Fluids Mechanics and Heat transfert 2





Practical info

Location(s)





Mechanical Vibrations





Introducing

Objectives

At the end of this module, the student will have understood and be able to explain (main concepts): - fundamentals of control engineering for linear systems in time and frequency domains

The student will be able to:

- by means of computer tools, design a controller that ensures a set of performance requirements for a given process

Practical info

Location(s)





Hydraulic machines and Combustion Engineering





Practical info

Location(s)





Improve your management abilities

Introducing

ECTS 4 crédits

LAW: None

Hourly volume

44h

FINANCIAL MANAGEMENT: Studied the « accountancy and financial analysis course »

Objectives

ENGLISH

At the end of this module, the student will be able to:

* Understand and summarise technical documents in English (written and oral) linked to mechanical engineering

* Learn and apply technical vocabulary linked to mechanical engineering

* Present a technical subject in mechanical engineering

MARKETING, LAW, FINANCE

¿ Know the legal environment and responsibilities of a business activity

 ¿ Be able to objectively assess the financial health of a company and evaluate the rentability of an investment
¿ Conduct a market diagnosis (benchmarking) and a business diagnosis in order to make decisions and set goals and strategies

¿ Collect market data and put into action a business plan adapted to the means and goals of the company

Necessary prerequisites

ENGLISH: B1 level minimum

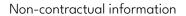
WORKING RELATIONS WITH ANGLO/AMERICANS: None

Practical info

Location(s)

Toulouse













Introducing

Objectives

The apprentice should be able to

- get involved in the company's project
- solve open industrial problems
- plan and manage your work
- team working
- open up to other technological fields.

Practical info

Location(s)







Hourly volume

Introducing

Objectives

- Active skills ¿ Students work on a case study prepared by the teacher. (main aspects: service provider with a growing market, requiring a larger network of agencies to develop capital)

- work groups (teams of 2 or 3 members)

- Elaboration of an economical report to be shown and commented on in front of a share holders commitee

- Discussions with trainer during course

- Use of a business plan software

Practical info

Location(s)