

Liste d'éléments pédagogiques

Practical info

Location(s)

 Toulouse

Process Control



ECTS
4 crédits



Hourly volume
36h

Introducing

Objectives

Objectives & Learning outcomes :

At the end of this module, the student will have understood and be able to explain (main concepts):
Dynamic (unsteady-state) modelling of processes and its approximation by simple transfer functions such as 1st and 2nd order without or with time delay.
Implementation of feedback control loop.

The student will be able to:

Establish unsteady state mass or energy balances, obtain transfer functions from linearization of these balances or from analysis of step or impulse responses, implement a feed-back control loop with PID type controllers and study the response of the whole closed-loop system to changes (set-point variations or disturbances) as function of these controllers tuning parameters and analyse its stability.

Necessary prerequisites

Necessary knowledge :

Resolution of Ordinary Differential Equations, Laplace-transform.

Practical info

Location(s)

 Toulouse

Improving one's autonomy and building one's own professional project

 ECTS
5 crédits

 Hourly volume
48h

Practical info

Location(s)

 Toulouse

Companies in their environments and languages



ECTS
5 crédits



Hourly volume
63h

Introducing

Objectives

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

- An overall view of financial documents used by the company. Introduction to the calculation of costs in the industrial firm
- the interdependence of the functions of the company through decision making and results analysis
- Students will also be prepared for their careers by reviewing and further developing both oral and written transversal communication skills.

The student will be able to:

- understand companies, their structure and their environment
- use newly-acquired Business English vocabulary
- develop financial statements used and calculate business costs for a company
- organise a group project : create their own company, hold meetings
- give an oral presentation of a documentary synthesis and a business report (in English), using presentation skills
- create basic management tools
- optimise resources to make the company profitable
- take ethical concerns into account
- take into account cultural differences in business
- appreciate the impact of the major parameters of the socio-economic and financial environment on a

company

- write professional letters and emails

Second language course (optional & commitment for years 3 and 4)

The objectives are defined according to European specifications for the five language skills and specific to the various languages proposed - German, Spanish, and Chinese, Italian or Sign language & and to students' levels.

Whenever his/her level is sufficient, the student will be able to:

- & synthesise and present professional documents
- & give an oral presentation in front of a group
- & take into account the various dimensions of interculturality
- & analyse a job ad
- & simulate a job interview
- & write a CV and a cover letter

Remedial English (upon teachers' decision)

In some specific cases, a remedial English course is offered in replacement of the second language course with the objective of reinforcing the language skills useful for the TOEIC, i.e reading, listening, grammar and vocabulary

Necessary prerequisites

Management notions : non

Level : B2 in English (intermediate)

LV2 : A2 min. in the studied language German,

Spanish, Italian. A1 in Chinese and Sign language &
Course not open to exchange students

Practical info

Location(s)

 Toulouse

Engineering and ecological issues 2nd semester

 ECTS
3 crédits

 Hourly volume
26h

Practical info

Location(s)

 Toulouse