UCLouvain

UCLouvain Study programme 2019 - 2020

Minor in Applied Mathematics

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Introduction

Introduction

Introduction

The aim of this track is to enable the students to increase and improve their knowledge and skills in various fields of applied mathematics and to understand their basic concepts. More precisely this specialization trains the students in the design, analysis and implementation of mathematical models for engineering sciences in the industry, and in the elaboration of effective strategies to optimise their performance.

Teaching profile

Learning outcomes

Detailled programme

PROGRAMME BY SUBJECT

O Mandatory	⊠ Optional
△ Courses not taught during 2019-2020	⊘ Periodic courses not taught during 2019-2020
⊕ Periodic courses taught during 2019-2020	Activity with requisites

Click on the course title to see detailed informations (objectives, methods, evaluation...)

Contenu:

					Year 2	Year 3
O LINMA1315	Mathematical analysis : complements	Pierre-Antoine Absil Jean Van Schaftingen	30h +22.5h	5 Credits	2q	x	
O LINMA1702	Optimization models and methods I	François Glineur	30h +22.5h	5 Credits	2q	x	
O LINMA1170	Numerical analysis	François Henrotte (compensates Jean-François Remacle)	30h +22.5h	5 Credits	1q		x
O LINMA1691	Discrete mathematics - Graph theory and algorithms	Vincent Blondel Jean-Charles Delvenne	30h +22.5h	5 Credits	1q		x
O LINMA1510	Linear Control	Denis Dochain	30h+30h	5 Credits	2q		x
O LINMA1731	Stochastic processes : Estimation and prediction	Pierre-Antoine Absil Luc Vandendorpe (coord.)	30h+30h	5 Credits	2q		x

COURSE PREREQUISITES

A document entitled (nb: not available for this programme lfsa136i) specifies the activities (course units - CU) with one or more pre-requisite(s) within the study programme, that is the CU whose learning outcomes must have been certified and for which the credits must have been granted by the jury before the student is authorised to sign up for that activity.

These activities are identified in the study programme: their title is followed by a yellow square.

As the prerequisites are a requirement of enrolment, there are none within a year of a course.

The prerequisites are defined for the CUs for different years and therefore influence the order in which the student can enrol in the programme's CUs.

In addition, when the panel validates a student's individual programme at the beginning of the year, it ensures the consistency of the individual programme:

- It can change a prerequisite into a corequisite within a single year (to allow studies to be continued with an adequate annual load);
- It can require the student to combine enrolment in two separate CUs it considers necessary for educational purposes.

For more information, please consult regulation of studies and exams (https://uclouvain.be/fr/decouvrir/rgee.html).

THE PROGRAMME'S COURSES AND LEARNING OUTCOMES

For each UCLouvain training programme, a reference framework of learning outcomes specifies the competences expected of every graduate on completion of the programme. You can see the contribution of each teaching unit to the programme's reference framework of learning outcomes in the document *"In which teaching units are the competences and learning outcomes in the programme's reference framework developed and mastered by the student?"*

Information

Liste des bacheliers proposant cette mineure

> Bachelor in Mathematics *[en-prog-2019-math1ba]*
> Bachelor in Physics *[en-prog-2019-phys1ba]*

Admission

Evaluation

The evaluation methods comply with the regulations concerning studies and exams (https://uclouvain.be/fr/decouvrir/rgee.html). More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".