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## LMINOMAP - Introduction

### Introduction

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#### **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.

## LMINOMAP - Teaching profile

### Learning outcomes

### Detailed programme

#### PROGRAMME BY SUBJECT

- Mandatory
- △ Courses not taught during 2020-2021
- ⊕ Periodic courses taught during 2020-2021
- ⊗ Optional
- ⊖ Periodic courses not taught during 2020-2021
- Activity with requisites

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

Year

2 3

#### Content:

● LINMA1315	Mathematical analysis : complements	Pierre-Antoine Absil Jean Van Schaftingen	30h +22.5h	5 Credits	q2	x	x
● LINMA1702	Optimization models and methods I	François Glineur	30h +22.5h	5 Credits	q2	x	x
● LINMA1170	Numerical analysis	François Henrotte (compensates Jean-François Remacle)	30h +22.5h	5 Credits	q1	x	x
● LINMA1691	Discrete mathematics - Graph theory and algorithms	Vincent Blondel Jean-Charles Delvenne	30h +22.5h	5 Credits	q1	x	x
● LINMA1510	Linear Control	Denis Dochain	30h+30h	5 Credits	q2	x	x
● LINMA1731	Stochastic processes : Estimation and prediction	Pierre-Antoine Absil Luc Vandendorpe (coord.)	30h+30h	5 Credits	q2	x	x

### COURSE PREREQUISITES

There are no prerequisites between course units (CUs) for this programme, i.e. the programme activity (course unit, CU) whose learning outcomes are to be certified and the corresponding credits awarded by the jury before registration in another CU.

### 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?*"

## LMINOMAP - Information

### Access Requirements

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### Evaluation

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***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".***

