UCL Study programme 2025 - 2026	Specialization track in Applied Mathematics

⚠️ *The version you're consulting is not definitive. This programme still may change. The final version will be published on 1th June.*

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UCLouvain	Specialization track in Applied Mathematics

FILMAP - **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.

FILMAP - Teaching profile

Learning outcomes

Programme

DETAILED PROGRAMME BY SUBJECT

◎ Mandatory
☥ Optional
△ Not offered in 2025-2026
⊘ Not offered in 2025-2026 but offered the following year
⊕ Offered in 2025-2026 but not the following year
△ ⊕ Not offered in 2025-2026 or the following year
🟨 Activity with requisites
🌐 Open to incoming exchange students
🌐 Not open to incoming exchange students
[FR] Teaching language (FR, EN, ES, NL, DE, ...)

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

30 crédits

				Year 2	Year 3
◎ *Content:*					
◎ LINMA1315	Mathematical analysis : complements	Pierre-Antoine Absil Jean Van Schaftingen	[FR] [q2] [30h+22.5h] [5 Credits] 🌐	x	
◎ LINMA1702	Optimization models and methods I		[FR] [q2] [30h+22.5h] [5 Credits] 🌐	x	
◎ LINMA1170	Numerical analysis	Jean-François Remacle	[FR] [q2] [30h+22.5h] [5 Credits] 🌐		x
◎ LINMA1691	Discrete mathematics - Graph theory and algorithms	Vincent Blondel Jean-Charles Delvenne	[FR] [q1] [30h+22.5h] [5 Credits] 🌐		x
◎ LINMA1510	Linear Control	Gianluca Bianchin	[ES] [q1] [30h+30h] [5 Credits] 🌐 *> French-friendly*		x
◎ LINMA1731	Stochastic processes : Estimation and prediction	Gianluca Bianchin Luc Vandendorpe	[ES] [q2] [30h+30h] [5 Credits] 🌐 *> French-friendly*		x

THE PROGRAMME'S COURSES AND LEARNING OUTCOMES

For each UCLouvain training programme, a reference framework of learning outcomes specifies the the skills expected of every graduate on completion of the programme. Course unit descriptions specify targeted learning outcomes, as well as the unit's contribution to reference framework of learning outcomes.

FILMAP - Information

Evaluation

The evaluation methods comply with the regulations concerning studies and exams. More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".