

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

## Table of contents

Introduction .....	2
Teaching profile .....	3
Learning outcomes .....	3
Programme .....	3
Detailed programme by subject .....	3
The programme's courses and learning outcomes .....	3
Information .....	4
Evaluation .....	4

## FILMECA - Introduction

### Introduction

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#### Introduction

The aim of this track is to enable the students to increase and broaden their knowledge and skills in different areas of Mechanical Engineering. More specifically, this programme offers the students the opportunity to build a solid background knowledge of continuum mechanics (fluid and solid mechanics) and thermodynamics, both from the theoretical and the applied standpoints. Further, it offers applied but rigorous training in machine design, analysis of machine components and manufacturing. Finally, this programme allows the students to develop a strong expertise in mathematical modelling and methods for numerical simulation.

## FILMECA - Teaching profile

### Learning outcomes

### Programme

#### DETAILED PROGRAMME BY SUBJECT

- Mandatory
- ✘ Optional
- △ Not offered in 2026-2027
- Not offered in 2026-2027 but offered the following year
- ⊕ Offered in 2026-2027 but not the following year
- △ ⊕ Not offered in 2026-2027 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 3

#### Content:

Le cours LMECA1901 étant commun aux filières FYKI et MECA, l'étudiant-e choisissant cette combinaison doit compléter son programme du deuxième quadrimestre du deuxième bloc annuel par un cours de 5 crédits figurant dans la liste des cours des filières EPL mais ne figurant pas autrement à son programme FYKI-MECA (la compatibilité horaire n'est pas garantie).

● LMECA1210	Description and analysis of mechanisms	Francesco Contino Paul Fisette	5 [q2] [30h+30h] [5 Credits] 🌐	X	
● LMECA1901	Continuum mechanics.	Philippe Chatelain Issam Doghri	5 [q2] [30h+30h] [5 Credits] 🌐	X	
● LMECA1100	Deformable solid mechanics.	Issam Doghri	5 [q1] [30h+30h] [5 Credits] 🌐		X
● LMECA1321	Fluid mechanics and transfer phenomena.		5 [q1] [30h+30h] [5 Credits] 🌐		X
● LMECA1451	Mechanical manufacturing.	Laurent Delannay Aude Simar	5 [q2] [30h+30h] [5 Credits] 🌐		X
● LMECA1855	Thermodynamics and energetics.	Yann Bartosiewicz Miltiadis Papalexandris	5 [q2] [30h+30h] [5 Credits] 🌐		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.

## FILMECA - Information

### Evaluation

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*The evaluation methods comply with the [Academic regulations and procedures](#). More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".*

