

 *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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FILMECA - Introduction

Introduction

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 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 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 Fiset Benoît Raucent	FR [q2] [30h+30h] [5 Credits] 🌐	X	
● LMECA1901	Continuum mechanics.	Philippe Chatelain Issam Doghri	FR [q2] [30h+30h] [5 Credits] 🌐	X	
● LMECA1100	Deformable solid mechanics.	Issam Doghri	FR [q1] [30h+30h] [5 Credits] 🌐		X
● LMECA1321	Fluid mechanics and transfer phenomena.	Vincent Legat Grégoire Winckelmans	FR [q1] [30h+30h] [5 Credits] 🌐		X
● LMECA1451	Mechanical manufacturing.	Laurent Delannay Aude Simar	FR [q2] [30h+30h] [5 Credits] 🌐		X
● LMECA1855	Thermodynamics and energetics.	Yann Bartosiewicz Miltiadis Papalexandris	FR [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

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".

