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FILFYKI - Introduction

Introduction

Introduction

The aim of this track is to enable the students to build a broad knowledge skills base in applied chemistry and physics (including thermodynamics and kinetics) opening avenues to the main fields of chemical and environmental engineering, advanced materials engineering, as well as physical engineering. The acquired skills cover a wide range of physical scales, from atomic to macroscopic and industrial dimensions, and prepare to the professions of the engineering master in chemistry and materials science as well as the master in physical engineering (chemical and environmental engineering, sustainable chemistry and energy, nanotechnology, (nano)electronics, optics, advanced materials including biomaterials, sensors and transducers, etc.).

FILFYKI - Teaching profile

Learning outcomes

Programme

DETAILED PROGRAMME BY SUBJECT

- Mandatory
- ⊗ Optional
- △ Not offered in 2022-2023
- ⊖ Not offered in 2022-2023 but offered the following year
- ⊕ Offered in 2022-2023 but not the following year
- △ ⊕ Not offered in 2022-2023 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...)

Year

2 3

o Content:

| | | | | | |
|-------------|---|---|-------------------------------------|---|---|
| ○ LMAPR1805 | Introduction to materials science | Jean-Christophe Charlier Pascal Jacques Bernard Nysten Thomas Pardoën (coord.) | FR [q2] [30h+30h] [5 Credits] 🌐 | X | |
| ○ LMECA1901 | Continuum mechanics. | Philippe Chatelain Issam Doghri | FR [q2] [30h+30h] [5 Credits] 🌐 | X | |
| ○ LMAPR1491 | Statistical & quantum physics | Jean-Christophe Charlier Xavier Gonze Luc Piraux Gian-Marco Rignanese | FR [q1] [30h+30h] [5 Credits] 🌐 | | X |
| ○ LMAPR1230 | Organic chemistry | Sophie Demoustier Charles-André Fustin | FR [q1] [30h+30h] [5 Credits] 🌐 | | X |
| ○ LMAPR1400 | Kinetics and thermodynamics | Juray De Wilde Denis Mignon | FR [q2] [30h+30h] [5 Credits] 🌐 | | X |
| ○ LMAPR1492 | Materials physics | Jean-Christophe Charlier Xavier Gonze Luc Piraux Gian-Marco Rignanese | FR [q2] [37.5h+22.5h] [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.

FILFYKI - Information

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".

