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Introduction

Introduction

Introduction

The aim of this track is initiating the students to the multidisciplinary field of biomedical engineering. First, this requires an introduction to the different disciplines of life sciences (biology, anatomy, biochemistry, etc.). Next, a familiarization with fundamental challenges from the different pillars of biomedical engineering will be provided (bioinstrumentation, biomaterials, biomechanics, artificial organs, medical imaging, biological systems modeling, etc.). The students will then be able to deploy these skills in order to solve basic problems in biomedical engineering.

Teaching profile

Learning outcomes

Detailed programme

PROGRAMME BY SUBJECT

- Mandatory ⊗ Optional
△ Courses not taught during 2019-2020 ⊙ Periodic courses not taught during 2019-2020
⊕ Periodic courses taught during 2019-2020 ■ Activity with requisites

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

Year

2 3

o Contenu:

○ LGBIO1111	Biologie et physiologie cellulaire	Charles De Smet Christophe De Vleeschouwer Pascal Kienlen-Campard	30h+15h	5 Credits	2q	x	
○ LGBIO1112	Introduction to biomedical engineering	Philippe Lefèvre	45h	5 Credits	2q	x	
○ LGBIO1113	Anatomie et physiologie des systèmes	Catherine Behets Wydemans Olivier Cornu Greet Kerckhofs	30h+15h	5 Credits	1q		x
○ LGBIO1114	Artificial organs and rehabilitation	Luc-Marie Jacquet Philippe Lefèvre Renaud Ronsse	30h+30h	5 Credits	2q		x
○ LGBIO1115	Introduction aux neurosciences	Julie Duque (coord.) Aleksandar Jankovski Marcus Missal Sylvie Nozaradan	30h+30h	5 Credits	2q		x
○ LBIR1250	Biochemistry I	Michel Ghislain Yvan Larondelle (coord.)	30h+15h	5 Credits	1q		x

COURSE PREREQUISITES

A document entitled (nb: not available for this programme lfsa134i) specifies the activities (course units - CU) with one or more pre-requisite(s) within the study programme, that is the CU whose learning outcomes must have been certified and for which the credits must have been granted by the jury before the student is authorised to sign up for that activity.

These activities are identified in the study programme: their title is followed by a yellow square.

As the prerequisites are a requirement of enrolment, there are none within a year of a course.

The prerequisites are defined for the CUs for different years and therefore influence the order in which the student can enrol in the programme's CUs.

In addition, when the panel validates a student's individual programme at the beginning of the year, it ensures the consistency of the individual programme:

- It can change a prerequisite into a corequisite within a single year (to allow studies to be continued with an adequate annual load);
- It can require the student to combine enrolment in two separate CUs it considers necessary for educational purposes.

For more information, please consult [regulation of studies and exams](https://uclouvain.be/fr/decouvrir/rgee.html) (https://uclouvain.be/fr/decouvrir/rgee.html).

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?*"

Information

Liste des bacheliers proposant cette mineure

- > Bachelor in Mathematics [en-prog-2019-math1ba]
- > Bachelor in Physics [en-prog-2019-phys1ba]

Admission

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".

