UCLouvain - Université catholique de Louvain

MINPHYS: Minor in Physics

# **MINPHYS - Introduction**

## Introduction

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The minor in physics offers additional training in physics that facilitates access to the Master [120] in Physics and the Master [60] in Physics

MINPHYS: Minor in Physics

1.52Apply phyic tools of model simple physical systems, to state a pwlednoblems usitrn fundamental conarure gensics.

## **MINPHYS - Teaching profile**

## **Learning outcomes**

At the end of this programme, the student will have acquired a basic knowledge of the fundamental laws of physics and the basic concepts of mathematics necessary for the study of physics. He.she will be able to solve physics problems using mathematical and numerical tools, to analyze physical phenomena using experimental techniques, to model simple physical systems, to apply a scientific approach and to argument with rigor. He.she will have developed skills in self-reliance, communication and teamwork.

On successful completion of this programme, each student is able to :

- 1. Demonstrate a thorough knowledge of the fundamental laws of physics and master and use the basic concepts of mathematics.
- 1.1 Explain the basic concepts of general physics, microscopic physics, statistical physics, macroscopic physics, theoretical and mathematical physics, experimental physics, and numerical simulation in physics.
- 1.2 Use the basic tools of mathematical analysis, algebra, geometry and statistics.
- 1.3 Recognize the fundamental concepts of scientific theories.
- 1.4 Apply physical and mathematical theories to solve a problem.
- 1.5 Adequately employ the basic principles of experimental physics: measurements and their uncertainties, measuring instruments, basic data processing by computer tools.

Year

MINPHYS: Minor in Physics

### **MINPHYS - Information**

## **Access Requirements**

The minor in physics is offered to Bachelor's students in mathematics, geography, general orientation, and engineering, civil engineering orientation. It is also accessible, on the advice of the study advisor, to students who have received sufficient training in physics and mathematics.

### **Evaluation**

The evaluation methods comply with the <u>regulations concerning studies and exams</u> (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".

## Possible trainings at the end of the programme

Bachelor's students in mathematics, geography, general orientation, and engineering, civil engineering orientation, who have followed this minor will be admitted to the Master [120] in physics and the Master [60] in physics. Their programme will usually include some of the teaching units of the Bachelor in physics that they have not followed. The same rule applies to other students who have followed this minor, with possible restrictions depending on their training. However, the student wishing to make such a change is invited to contact as soon as possible the study advisors of his school and the School of Physics.

#### **Contacts**

### **Curriculum Management**

Entity

Structure entity SST/SC/PHYS

Denomination (PHYS)

Faculty Faculty of Science (SC)
Sector Sciences and Technology (SST)

Acronym PHY

Postal address Chemin du Cyclotron 2 - bte L7.01.04

1348 Louvain-la-Neuve

Tel: +32 (0) 10 47 32 94 - Fax: +32 (0) 10 47 30 68

Website https://uclouvain.be/fr/facultes/sc/phys

Academic supervisor: Vincent Lemaitre (https://uclouvain.be/repertoires/vincent.lemaitre)

Useful Contact(s)

- Study advisor for physics: Clément Lauzin (https://uclouvain.be/repertoires/clement.lauzin)
- Administrative manager for the annual program of the student registred in the Faculty of sciences: <u>Nathalie Micha</u> (https://uclouvain.be/repertoires/nathalie.micha)
- Secretary of the School of physics: Catherine De Roy (https://uclouvain.be/repertoires/catherine.deroy)

### **Practical informations**

### Registration for the minor

A registration for the 2nd annual unit via the web allows you to register for a minor (the student who wishes to change his.her choice of additional module or minor must contact the secretariat of his.her faculty). The student may defer his.her registration to a minor and proceed with this operation when he.she registers on line for the teaching units of his.her major.

When the student re-enrolls via the web the following year, he.she is automatically re-enrolled in the same minor as the previous year. At this stage, any request for change is subject to the approval of the study advisor.

#### Registration for the teaching units of the minor