

Table of contents

| | |
|--|---|
| Introduction | 2 |
| Teaching profile | 3 |
| - Learning outcomes | 3 |
| - Detailed programme | 3 |
| - Programme by subject | 3 |
| - Course prerequisites | 3 |
| - The programme's courses and learning outcomes | 4 |
| Information | 5 |
| - Liste des bacheliers proposant cette mineure | 5 |
| - Admission | 5 |
| - Possible trainings at the end of the programme | 5 |
| - Contacts | 5 |
| - Infos | 5 |

Introduction

Teaching profile

Learning outcomes

The aim of the minor is to provide students whose core program (major) includes a substantial introduction to this field and who could envisage studying for a master's in physical science with additional training in physics.

Detailed programme

PROGRAMME BY SUBJECT

- Mandatory
- △ Courses not taught during 2016-2017
- ⊕ Periodic courses taught during 2016-2017
- ⊗ Optional
- ⊖ Periodic courses not taught during 2016-2017
- Activity with requisites

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

| | | | | | | Year | |
|------------|--|--|-----------------|-----------|----|------|---|
| | | | | | | 2 | 3 |
| ⊗ LPHY1211 | General Physics 3 | Jan.Govaerts Vincent.Lemaitre | 30h+30h | 4 Credits | 1q | x | |
| ⊗ LPHY1221 | Group theory | Philippe.Ruelle | 22.5h +15h | 5 Credits | 2q | x | |
| ⊗ LPHY1222 | Quantum Physics | Fabio.Maltoni | 30h+30h | 4 Credits | 2q | x | |
| ⊗ LPHY1223 | Special Relativity | Jean-Marc.Gerard | 22.5h +15h | 4 Credits | 1q | x | |
| ⊗ LPHY1251 | Statistical physics and Thermodynamics I | Hugues.Goose Christian.Hagendorf | 30h +22.5h | 4 Credits | 2q | x | |
| ⊗ LPHY1261 | Astronomy and geophysics | Veronique.Dehant (coord.) Patricia.Lampens | 15h+7.5h | 2 Credits | 2q | x | |
| ⊗ LPHY1311 | Classical electromagnetism | Jan.Govaerts | 37.5h +15h | 5 Credits | 1q | | x |
| ⊗ LPHY1322 | Quantum Physics 2 | Christophe.Ringeval | 45h +22.5h | 6 Credits | 1q | | x |
| ⊗ LPHY1331 | Elementary nuclei and particules | Vincent.Lemaitre | 30h +22.5h | 5 Credits | 2q | | x |
| ⊗ LPHY1341 | Atoms and molecules | Clement.Lauzin Xavier.Urbain | 30h +22.5h | 5 Credits | 2q | | x |
| ⊗ LPHY1342 | Etat solide | Giacomo.Bruno Christophe.Delaere | 30h +22.5h | 5 Credits | 2q | | x |
| ⊗ LPHY1351 | Statistical and thermodynamic physics 2 | Christian.Hagendorf | 30h+30h | 5 Credits | 2q | | x |
| ⊗ LPHY1352 | Physics of fluids | Eric.Deleersnijder Vincent.Legat | 45h +22.5h | 5 Credits | 1q | | x |
| ⊗ LPHY2371 | Numerical Simulation in Physics | Michel.Crucifix Bernard.Piroux | 22.5h +37.5h | 5 Credits | 1q | | x |
| ⊗ LPHY2372 | Experimental methods | Krzysztof.Piotrkowski Xavier.Urbain | 30h+15h | 4 Credits | 1q | | x |

COURSE PREREQUISITES

A document entitled [en-prerequis-2016-min-lphys100i.pdf](#) 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](#).

THE PROGRAMME'S COURSES AND LEARNING OUTCOMES

For each UCL 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?"

The document is available by clicking [this link](#) after being authenticated with UCL account.

Information

Liste des bacheliers proposant cette mineure

- > Bachelor in Engineering [en-prog-2016-fsa1ba]
- > Bachelor in Mathematics [en-prog-2016-math1ba]
- > Bachelor in Economics and Management [en-prog-2016-ecge1ba]
- > Bachelor in Geography : General [en-prog-2016-geog1ba]

Admission

The minor in physics is intended for all students who hold baccalaureates in mathematical science, geographical science or engineering science. It is also open, on the advice of the conseiller aux études (course adviser), to students who have obtained sufficient training in basic mathematics and physics.

Possible trainings at the end of the programme

MATH, FSA or GEOG bachelors who have taken this minor will be admitted on to the master's in physical science, possibly with a program adapted to suit their needs. The same rule applies to other students who have taken this minor, with possible restrictions depending on their course background. Nevertheless, any student who wishes to make this change to his/her study path is invited to make contact with the conseiller aux études (course adviser) from his/her own faculty as well as that of the department of physics.

Contacts

Curriculum Management

Entite de la structure PHYS

| | |
|-------------------------|---|
| Acronyme | PHYS |
| Dénomination | Ecole de physique |
| Adresse | Chemin du Cyclotron, 2 bte L7.01.04 1348 Louvain-la-Neuve Tél 010 47 32 94 - Fax 010 47 30 68 |
| Site web | http://www.uclouvain.be/phys |
| Secteur | Secteur des sciences et technologies (SST) |
| Faculté | Faculté des sciences (SC) |
| Commission de programme | Ecole de physique (PHYS) |

Academic Supervisor : [Thierry Fichet](#)

Jury

Usefull Contacts

Secrétaire de l'Ecole de physique : [Julie Genbrugge](#)

Infos

