

**Table of contents**

Introduction .....	2
Teaching profile .....	3
- Learning outcomes .....	3
- Detailed programme .....	3
- Programme by subject .....	3
- Course prerequisites .....	4
- 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 .....	6

## Introduction

## Teaching profile

### Learning outcomes

The aim of the minor in computer science is to equip the student with the basic concepts in computer science. To be more specific, s/he should:

- Master the basic foundations of computer science (programming, algorithms and data structures, computer languages, information systems,...)
- Analyze and solve medium-sized computing and IT problems by applying the acquired knowledge from different computer science domains.

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

- **Programmer**

**de maîtriser les fondements des matières de base de l'informatique**

- programmation,
- algorithmique
- structures de données,
- langages informatiques,
- systèmes informatiques

**de contribuer au développement d'applications de taille réduite en appliquant les connaissances acquises des domaines de l'informatique**

- percevoir les contraintes techniques associées au développement de systèmes informatiques
- partager un langage commun avec les informaticiens

### 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





#### o Mandatory Courses (20 credits)

<input type="radio"/> LSINF1101	<a href="#">Introduction to programming</a>	Olivier.Bonaventure Charles.Pecheur	30h+30h	5 Credits	1q	x	
<input type="radio"/> LSINF1103	<a href="#">Algorithmics</a>	Pierre.Dupont	30h+30h	5 Credits	2q	x	
<input type="radio"/> LSINF1121	<a href="#">Algorithmics and data structures</a>	Pierre.Schaus	30h+30h	5 Credits	1q		x
<input type="radio"/> LSINF1225	<a href="#">Object-oriented design and data management</a>	Kim.Mens	30h+30h	5 Credits	2q	x	

#### o Choice Courses of the minor in computer sciences (10 credits)

The student complete his minor programme with 2 courses to be choosen among

<input type="radio"/> LSINF1252	<a href="#">Computer Systems 1</a>	Olivier.Bonaventure	30h+30h	5 Credits	2q		x
<input type="radio"/> LINGI1101	<a href="#">Discrete mathematics: logical foundations of computing science</a>	Peter.Vanroy	30h+30h	5 Credits	1q		x
<input type="radio"/> LINGI1122	<a href="#">Program conception methods</a>	Charles.Pecheur	30h+30h	5 Credits	2q		x

						Year	
						2	3
⌘ LINGI1123	Computability and complexity 	Yves.Deville	30h+30h	5 Credits	2q		x
⌘ LINGI1131	Computer language concepts 	Peter.Vanroy	30h+30h	5 Credits	2q		x
⌘ LINGI1341	Computer networks 	Olivier.Bonaventure	30h+30h	5 Credits	1q		x
⌘ LFSAB1402	Informatics 2 	Peter.Vanroy	30h+30h	5 Credits	1q		x

## COURSE PREREQUISITES

A document entitled [en-prerequis-2016-min-linfo100i.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 Mathematics [en-prog-2016-math1ba]
- > Bachelor in Economics and Management [en-prog-2016-ecge1ba]
- > Bachelor in Law [en-prog-2016-droi1ba]

### Admission

The minor in computer science is accessible to any student with sufficient bases in mathematics, especially logic. Students, for whom this minor is not listed as available in the table <https://uclouvain.be/programme-mineures>, can send an email to the contact person to submit individual application.

This is a opening minor what offers the opportunity to access to the master in computer science.

### Possible trainings at the end of the programme

Students who have passed the minor in computer science have access to the master in computer science.

Students who have taken a minor in computer science and who are continuing their studies with a master in computer science must include as part of their master programme 4 basic computer science courses (20 credits) which were not already taken as part of their bachelor studies among :

LINGI1122, LINGI1123, LINGI1101, LINGI1113, LINGI1131

This addition to the student's master programme will be made without adding more than 5 credits to the total volume of the student's master programme, by replacing some of the optional courses in this student's master programme by these courses.

### Contacts

### Curriculum Managment

Entite de la structure INFO

Acronyme	<b>INFO</b>
Dénomination	Commission de programme - Sciences informatiques et ingénieur civil en informatique
Adresse	Place Sainte Barbe, 2 bte L5.02.01 1348 Louvain-la-Neuve Tél 010 47 31 50 - Fax 010 45 03 45
Secteur	Secteur des sciences et technologies (SST)
Faculté	Ecole Polytechnique de Louvain (EPL)
Commission de programme	Commission de programme - Sciences informatiques et ingénieur civil en informatique (INFO)

Academic Supervisor : [Kim MENS](#)

### Jury

### Usefull Contacts

Conseillère aux études : [Chantal PONCIN](#)

## Infos

---

