



The version you're consulting is not definitive. This programme still may change. The final version will be published on 1th June.

**Autre site - 60 credits - 1 year - Day schedule - In English**

Dissertation/Graduation Project : **YES** - Internship : **YES**

Activities in English: **YES** - Activities in other languages : **NO**

Activities on other sites : **YES**

Main study domain : **Sciences de l'ingénieur et technologie**

Organized by: **Louvain School of Engineering (EPL)**

Programme acronym: **GNUC2MC** - Francophone Certification Framework: 7

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## GNUC2MC - Introduction

### Introduction

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#### Introduction

This specialization Master's degree is organized by the BNEN consortium (Belgian Nuclear higher Education Network) at the Nuclear Study Center (SCK.CEN) in Mol.

The information is available on the [BNEN](#) website.

**ATTENTION:** Register for this programme through the institution responsible for its administrative management, i.e. [ULB](#), not through the UCLouvain Enrolment Office.

#### Your profile

The admission criteria for the specialized master's degree in nuclear engineering can be seen on the page <https://bnen.sckcen.be/en/how-apply#anchor-admission-criteria>.

#### Your programme

The course program for the master's degree in nuclear engineering is visible on the page <https://bnen.sckcen.be/programme#anchor-programme>

## GNUC2MC - Teaching profile

### Learning outcomes

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The objective of the Complementary Master's course in Nuclear Engineering is to enable students to acquire the high level skills needed to design and run electro-nuclear power stations, taking into account the legal prescriptions and regulations relating to the safety of these plants. In a wider perspective, to enable students to acquire a university-level specialisation in nuclear science and technology which is recognised at the European level

### Programme structure

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This program consists of a common core of 31 credits, a master thesis of 20 credits and 9 additional credits to choose from among the optional courses.

This program is set out in detail on the [website of SCK.CEN à Mol](#)

Core curriculum of the Complementary Master in Nuclear Engineering

Electives of the Complementary Master in Nuclear Engineering

## GNUC2MC Programme

### The programme's courses and learning outcomes

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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.

## GNUC2MC - Information

### Access Requirements

*In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.*

*Decree of 7 November 2013 defining the landscape of higher education and the academic organization of studies.*

*The admission requirements must be met prior to enrolment in the University.*

*Unless explicitly mentioned, the bachelor's, master's and licentiate degrees listed on this page are to be understood as those issued by an institution of the French, Flemish or German-speaking Community, or by the Royal Military Academy.*

***In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.***

#### SUMMARY

- [General access requirements](#)
- [Specific access requirements](#)

### General access requirements

Translated from [https://www.galilex.cfwb.be/fr/leg\\_res\\_01.php?ncda=39681&referant=l02](https://www.galilex.cfwb.be/fr/leg_res_01.php?ncda=39681&referant=l02)

Art. 112. of the "Décret définissant le paysage de l'enseignement supérieur et l'organisation académique des études" :

§ 1. In accordance with the general requirements established by the academic authorities, students who have:

1. a master's degree;
2. an academic degree similar to the one mentioned in the preceding paragraph awarded by a higher education institution in the Flemish Community or the German-speaking Community, or by the Royal Military Academy, by virtue of a decision of the academic authorities and in accordance with any additional requirements they may establish;
3. a foreign academic degree deemed equivalent to the one mentioned in paragraph 1, in accordance with this Decree, a European directive, an international convention or other legislation, in accordance with the same requirements.

The additional admission requirements referred to in paragraph 2 are intended to ensure that the student has acquired the knowledge and skills required for the studies in question. When the additional admission requirements consist of one or more additional course units, these may not represent more than 60 additional credits for the student, taking into account all the credits that he or she may otherwise use for admission. These course units are part of the student's study programme.

§ 2. In accordance with the general requirements established by the academic authorities, a student who holds a title, diploma, degree or certificate of higher education, in the French Community or outside it, which does not grant him or her eligibility for admission to a specialised master's course by virtue of the preceding paragraph, may nevertheless be admitted by the jury of the course in question, in accordance with the additional requirements that it establishes, if the totality of the higher education that he or she has completed or the expertise that he or she has acquired is valued by the jury to be at least 240 credits.

§ 3. By way of derogation from these general requirements, the academic authorities may also admit to a specialised master's course holders of a title, diploma, degree or certificate awarded outside the French Community which, in that system of origin, grants direct eligibility for postgraduate studies, even if the studies sanctioned by these credentials are not organised into distinct degree courses or within a time period of at least five years.

### Specific access requirements

**ATTENTION:** Register for this programme through the institution responsible for its administrative management, i.e. [ULB](#), not through the UCLouvain Enrolment Office.

As this program is taught in English, it does not require prior proof of mastery of the French language.

Specific admission requirements can be consulted at the following address: <https://bnen.sckcen.be/how-apply#anchor-admission-criteria>.

## Teaching method

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Access to the resources (researchers and laboratories with their major infrastructure) of the Centre d'Études Nucléaires (SCK•CEN) is indispensable to ensure the pedagogical quality of this program. The interuniversity partnership guarantees the availability of the diversity of expertises necessary, as well as the quality of the teaching staff.

The modular system of each course concentrated over a limited period from several days to three weeks facilitates the participation of students engaged in professional life as well as foreign students.

## Evaluation

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**The evaluation methods comply with the [regulations concerning studies and exams](#). More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".**

The learning activities are evaluated according to the rules in force at the University (see examination regulations), viz. written and oral examinations, laboratory examinations, individual and group work, public presentations of projects, and thesis defence.

## Mobility and/or Internationalisation outlook

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The courses and practical work are given in English.

Since the foundation of the BNEN consortium (Belgian Nuclear higher Education Network), which has been in charge of the organisation of this program, the international dimension has been provided by student exchanges, as well as by the offer of three courses especially adapted to exchanges within the European Interuniversity Association ENEN (European Nuclear Education Network - <http://www.enen-assoc.org/>). Students have the possibility of following part of their course in another university of this association. If they have acquired 20 credits in this context, the ENEN association will award the certificate "European Master of Science in Nuclear Engineering". Some of these mobility exchanges can be financed within the Erasmus program.

## Possible trainings at the end of the programme

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The program is organised conjointly by six universities: UCL, ULg, ULB, KULeuven, UGent, VUB. The courses are given in rooms made available to the universities by the Study Centre for Nuclear Energy at Mol (SCK.CEN). The practical work relies on the substantial infrastructure and laboratories of the Centre. The researchers of the Centre also assist with the practical work.

## Contacts

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### Curriculum Management

Entity

Structure entity

Denomination

Sector

Acronym

Postal address

SST/IMMC

(IMMC)

Sciences and Technology (SST)

IMMC

Place du Levant 2 - bte L5.04.01

1348 Louvain-la-Neuve

Tel: +32 (0) 10 47 22 00

<https://uclouvain.be/en/research-institutes/immc>

Website

Mandate(s)

- Présidente : Aude Simar

Commission(s) of programme

- Civil and environmental engineering (GCE)
- Materials and process engineering (IMAP)
- Mechatronic, Electrical Energy, and Dynamic Systems (MEED)
- Applied mechanics and mathematics (MEMA)

- Thermodynamics and fluid mechanics (TFL)
- Plateforme Laboratoire d'Analyse, Caractérisation et Mise en oeuvre (ACAM)
- Plateforme Conception, Réalisation et Essais de Dispositifs ElectroMécaniques (CRDM)
- Plateforme Laboratoire Essais mécaniques, Structures et génie civil (EMSC)

Academic supervisor: [Yann Bartosiewicz](#)

Jury

- Président du Jury: [Jean-Didier Legat](#)
- Secrétaire du Jury: [Yann Bartosiewicz](#)

Useful Contact(s)

- Secrétariat: [Isabelle Hennau](#)

