

# Advanced Master in Nuclear Engineering

#### **GNUC2MC - Introduction**

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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**

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**

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

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.

#### **Teaching method**

Access to the resources (researchers and laboratories with their major infrastructure) of the Centre d'Etudes 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**

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

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 - <a href="http://www.enen-assoc.org/">http://www.enen-assoc.org/</a>). 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

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