

**BNEN – the Belgian Nuclear higher Education Network**

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BNEN, the Belgian Nuclear Higher Education Network has been created in 2001 by five Belgian universities and the Belgian Nuclear Research Centre (SCK•CEN) as a joint effort to maintain and further develop a high quality programme in nuclear engineering in Belgium. In a country where a substantial part of electricity generation will remain of nuclear origin for a number of years, there is a need for well educated and well trained engineers in this area.

Public authorities, regulators and industry brought their support to this initiative. In the framework of the new architecture of higher education in Europe, the English name for this 60 ECTS programme is "Master of Science in Nuclear Engineering". To be admitted to this programme, students must already hold a university degree in engineering or equivalent.

Linked with university research, benefiting from the human resources and infrastructure of SCK•CEN, encouraged and supported by the partners of the nuclear sector, this programme should be offered not only to Belgian students, but also more widely throughout Europe and the world.

The master programme is a demanding programme where students with different high level backgrounds in engineering have to go through highly theoretical subjects like neutron physics, fluid flow and heat transfer modelling, and apply them to reactor design, nuclear safety and plant operation & control. At a more interdisciplinary level, the programme includes some important chapters of material science, with a particular interest for the fuel cycle. Radiation protection belongs also to the backbone of the programme. All the subjects are taught by academics appointed by the partner universities, whereas the practical exercises and laboratory sessions are supervised by researchers of SCK•CEN. The final thesis offers an opportunity for internship in industry or in a research laboratory.

More information: <http://www.sckcen.be/BNEN>