

Specialized Master in Nuclear Engineering

Unique year | MS-NUAP

Compulsory courses

- CHIM-Y600** **Nuclear materials**
 3 credits academic year English
 2 ECTS - KULeuven ; 1 ECTS ULg - Jacqueline LECOMTE-BECKERS, Walter BOGAERTS, Eric VAN WALLE
- ELEC-Y600** **Introduction to nuclear energy**
 3 credits academic year English
 KULeuven - William D'HAESELEER
- MECA-Y600** **Nuclear thermal hydraulics**
 5 credits academic year English
 UCL - Yann BARTOSIEWICZ
- PHYS-H602** **Introduction to nuclear physics and measurements**
 3 credits academic year French
 ULB - Nicolas PAULY, Alain DUBUS
- PHYS-Y601** **Nuclear reactor theory**
 6 credits academic year English
 2 ECTS - KULeuven ; 2 ECTS - UGent; 2 ECTS - VUB - William D'HAESELEER, Jean-Marie NOTERDAEME, Peter BAETEN
- PHYS-Y602** **Nuclear fuel cycle**
 3 credits academic year English
 ULg - Hubert DRUENNE, Pierre VAN ISEGHEM
- PHYS-Y603** **Radiation protection**
 3 credits academic year English
 UGent - Hubert THIERENS, Klaus BACHER
- PHYS-Y608** **Safety of nuclear power plants**
 5 credits academic year English
 3 ECTS - UGent; 2 ECTS - ULB; Hubert DRUENNE, Pierre-Etienne LABEAU, Greet HANSSENS-MAENHOUT

Elective modules

A total of nine credits chosen from the following

- PHYS-Y605** **Advanced nuclear materials**
 3 credits academic year English
 2 ECTS - KULeuven ; 1 ECTS - ULg; Walter BOGAERTS, Jacqueline LECOMTE-BECKERS, Eric VAN WALLE
- PHYS-Y607** **Nuclear and radiological risk governance**
 3 credits academic year English
 1 ECTS - UGent; 2 ECTS - UCL; Frank HARDEMAN, Greet JANSSENS-MAENHOUT
- PHYS-Y609** **Advanced radiation protection/radiation ecology**
 3 credits academic year English
 Ugent, Klaus BACHER

- PHYS-Y610 **Advanced courses of the nuclear fuel cycle**
🕒 3 credits 📅 academic year
VUB, Hubert DRUENNE, Pierre VAN ISEGHEM
- PHYS-Y611 **Advanced course elective topic**
🕒 3 credits 📅 academic year
VUB, Peter BAETEN
- PHYS-Y616 **Advanced nuclear reactor physics and technology**
🕒 3 credits 📅 academic year 🗨 English
UCL - Hamid Ait ABDERRHAHIM

Memory

- MEMO-H601 **Master thesis**
🕒 20 credits 📅 academic year 🗨 English

