



**IMT Atlantique**  
Bretagne-Pays de la Loire  
École Mines-Télécom

## CLEANUP AND DECOMMISSIONING

# Master of Science Nuclear Engineering

## Specialization: Nuclear Energy Production and Industrial Applications



### INSTITUTION(S)

**IMT Atlantique**

**DURATION OF STUDY** Two-year programme

**LANGUAGE** 

**TRAINING LOCATION** Nantes



**MODE OF STUDY** • Full time programme

**CONTACTS** [ne-apply@imt-atlantique.fr](mailto:ne-apply@imt-atlantique.fr)

**WEB** [www.imt-atlantique.fr](http://www.imt-atlantique.fr)

### PREREQUISITES

Students who wish to enrol must be fluent in English, or have a (scientific) education in English or provide a language certificate (TOEFL IBT 80, IELTS 6.0, TOEIC 750, Cambridge).

No prerequisite in French.

M1: Scientific degree.  
M2: 4-year university bachelor degree or first year master programme, generally in scientific disciplines such as nuclear, chemical and civil engineering, energy, environment, physics or chemistry.

### SUMMARY

The Master in Nuclear Engineering, with a specialization in **Nuclear Energy Production and Industrial Applications** (NEPIA), concentrates on nuclear sciences applications including energy generation (power reactors) and industrial applications (particles beams' technology, instrumentation, etc.). A focus is put on the safety and radiation protection to be considered in the management of a large project in this field.

Study tours, scientific and intercultural seminars are planned as well as professional coaching, during which an analysis focused on the student's skills and professional objectives is conducted in order to help him/her enter the workforce. The programme also maintains a network of experts who, with their experience, guide the students to a better understanding of the professional environment.

Following the same the first year, one other nuclear specialization is also offered:

- Advanced Nuclear Waste Management (**ANWM**).

The NEPIA master degree is accredited by the I2EN and awarded the I2EN Label.

### SKILLS

- Basics for reactors;
- Decommissioning and dismantling;
- Nuclear materials;
- Operation and maintenance;
- Management, safety and society;
- Professional coaching;
- Master thesis / internship;
- French language & culture.

### CAREERS

- Project engineer related to nuclear energy;
- Operation and maintenance engineer in power plant and other industrial applications;
- Safety engineer in nuclear power plant operation and industrial installations, and environmental controls;
- Research scientist and development engineer for industrial installations and power plants.

### TRAINING FACILITIES

Subatech/IMT Atlantique laboratories.