NUCLEAR ENGINEERING

International Master of Science (MSc)

TRACK NEPIA

Nuclear Energy Production and Industrial Applications

This program focuses on nuclear sciences applications including energy production (power reactors) and industrial applications (particles beams technology, instrumentation,…). A particular focus is put on the safety and radioprotection, to be considered in the management of a large project in this field.

ACADEMIC DETAILS

2-year full time program
> September intake – 4 semesters

Comprehensive curriculum
> Projects, company visits, seminars
> Professional coaching
> Intercultural workshop
> French language & culture
> Master thesis/internship (last semester)

Internationally recognized degree
> MSc in Nuclear Engineering (NE) accredited by the Ministry of Higher Education, Research and Innovation. *No. 20170877*

Associated tracks / programs
> ANWM – Advanced Nuclear Waste Management
> NMA - Nuclear Medical Applications
> SARENA - Erasmus Mundus label

M1 - YEAR 1 on Nantes campus

> Physics of ionizing radiations
> Detection of ionizing radiations
> Introduction to nuclear modeling
> Introduction to neutron physics
> Radioprotection
> Physico-chemistry of environment
> Introduction to nuclear technology
> Detection and industrial applications
> Project management & entrepreneurship
> Measurement and data analysis

M2 - YEAR 2 on Nantes campus

> Basics for reactors
> Dismantlement and decommissioning
> Nuclear materials
> Operation and maintenance
> Sustainability and safety management

Courses are subject to change without notice

100 % taught in English

6-month internship in a company or lab

Erasmus Mundus full scholarships

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

#NuclearTechnology
#Energy #Physics
#Reactors #NuclearSafety
#Cyclotrons
#RadiationProtection
#NuclearSecurity
#Accelerators

Alumni Testimony

Dong Yemin (China)

"France has been a leading country in terms of nuclear technology for years. The Master program really reflects this advanced-level, you can experience it everyday of your studies."

CAREER OPPORTUNITIES

Project engineer related to nuclear energy, Safety engineer in nuclear power plant and industrial installations, Operation and maintenance engineer in nuclear power plant, Research scientist and development engineer for industrial installations and power plants, etc.

Possibility to continue in PhD.

RESEARCH EXPOSURE

The MSc is managed by Subatech, a joint research unit in Subatomic physics and associated technologies between the CNRS-IN2P3, IMT Atlantique and the University of Nantes. Fully integrated in major worldwide scientific collaborations, Subatech's research activities revolve around the fields of nuclear, hadronic, particle and astroparticle physics and radiochemistry.

TUITION FEES AND SCHOLARSHIPS

12,000 Euros / year

Scholarships opportunities for: Excellent profiles, Alumni from our partner universities, European citizens, etc.

> CampusFrance "*Bienvenue en France*" guarantees the quality of the experience for international students.

IMT ATLANTIQUE

IMT Atlantique is a *"Grande Ecole"* ranked among the best French Graduate Engineering Schools, and recognized internationally as a leading Technological University (Shanghai, QS and THE rankings). It is a member of IMT, the largest group of public Engineering and Management Graduate Schools in France.

> On-campus accommodation, restaurants, sports facilities
> Orientation Days & French Summer School
> A variety of student clubs

Find out more:
www.imt-atlantique.fr/ne

Contact us:
ne-apply@imt-atlantique.fr

Apply:
https://www.imt-atlantique.fr/apply

International students FAQ:
www.imt-atlantique.fr/student-faq

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MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR, DE LA RECHERCHE ET DE L'INNOVATION