NUCLEAR ENGINEERING



International Master of Science (MSc)

TRACK NMA **Nuclear Medical Applications**

This track develops fundamental scientific, technical and industrial knowledge of the different nuclear technologies used in the medical field. It has a particular focus 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
- > French language & culture
- > Intercultural workshop
- > Master thesis/internship (last semester)

Internationally recognized degree

MSc in Basic physics and applications accredited by the Ministry of Higher Education, Research and Innovation. No. 20170870 - 1702923D

Associated tracks / programs

- > ANWM Advanced Nuclear Waste Management
- NEPIA Nuclear Energy Production & Industrial Applications
- > SARENA Erasmus Mundus label



Courses are subject to change without notice

M1 - YEAR 1 on Nantes campus

Taught in English

- > 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 Taught in French

- > Nuclear reactors and radiations
- > Mathematical tools & computer simulation
- > Radiation protection
- > Basics of medical physics and imaging
- > Dosimetry
- > Medical imaging techniques

First year taught in English

6-month paid internship in a company or lab

Free application!



IMT Atlantique

Bretagne-Pays de la Loire École Mines-Télécom



#NuclearTechnology
#NuclearMedicine
#Physics
#Radioprotection
#WasteManagement
#MedicalImaging

INTERNATIONAL EXPERIENCE

Alumni Testimony

Thongchai (South Africa)

"One of the thing I'm really grateful for is definitely the broadness of the courses offered and the flexibility in terms of what I could specialize in ."



OPPORTUNITIES Project engineer related to medical installations. Safety

CAREER

engineer in medical installations. Operation engineer of medical installations (radiology equipment, accelerators...),

Research scientist and development engineer for medical installations.

Possibility to continue in PhD.

Watch the video: youtu.be/2uOVejh5XgU

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



CampusFrance "Bienvenue en France" international students.

IMT ATLANTIQUE

Graduate Engineering Schools, and recognized internationally as a

> 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

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

International students FAQ:

www.imt-atlantique.fr/student-faq



















