## APPLICATIONS AND REQUIREMENTS

International candidates must have a Bachelor's degree and have already taken the following courses:

- Mathematics (MATH, at least 4 semesters)
- Physics (PHYS, at least 2 semesters)
- Chemistry (CHEM, at least 1 semester)
- Thermodynamics, Heat Transfer, Energy Systems (THE, at least 1 semester)
- Strength of materials, mechanical drawing, mechanical design and production (MECH, at least 2 semesters)

Adequate knowledge of English is mandatory (level B2 or equivalent).

Candidates must apply online at applymscenglish.unipi.it. Successful applicants must follow the University of Pisa's standard enrolment procedure.

More details at: https://www.unipi.it/index.php/enrolment.

nucleare.ing.unipi.it/it/

## **Study Programme** Director

Prof. Nicola Forgione nicola.forgione@unipi.it

## **Programme Coordinator** and Welcome Officer

Francesca Nannelli francesca.nannelli@unipi.it

**General Information** younuclear@ing.unipi.it





## CONTACT INFO: younuclear@ing.unipi.it +39 050 2218057















# MSc Programme in





## **ENROLMENT AND FEES**

Enrolment instructions are available at

Fees depend on the student's country of origin and vary from € 356 to € 2,556 for each academic year. Information on fee waivers and scholarships can be found at www.unipi.it/tuition-fees.

## UNIVERSITÀ DI PISA

The University of Pisa (UNIPI) is a public institution composed of twenty departments, with high level research centres in the fields of agriculture, astrophysics, computer science, engineering, medicine and veterinary medicine.

Established in 1343, UNIPI is one of the most prestigious Italian higher education institutions and a modern centre for teaching and advanced research. One of the University's main strategies is that of internationalisation as it aims to engage with students and researchers and establish long-term partnerships with universities and public and private institutions from all over the world. With a current student population surpassing 54,000, UNIPI offers a large number of degree programmes taught in English and a variety of exchange programmes.





Study at the Department of Civil and Industrial Engineering

The Department of Civil and Industrial Engineering was established in 2012 following the Italian Universities reform which saw the merging of the former departments of Mechanical. Nuclear and Production Engineering, Aerospace Engineering, Chemical Engineering and Materials with that of Civil Engineering. As a result, the current department teaches most of the well-established degree programmes and leads research activities in traditional disciplines within engineering.



 Develop knowledge in advanced nuclear technology

COME AND THRIVE

- Gain an internationally renowned qualification
- Have the chance to do internships abroad
- Get involved with international cooperations

## PROGRAMME OVERVIEW

The programme is taught completely in English and lasts 2 years, with 60 ECTS credits earned in each. It is closely involved with the European Nuclear Education Network (www.enen-assoc.org/) and with the European Fusion Education Network (www.fusenet.eu/) with broad possibilities of student exchanges.

# PROFESSIONAL PROSPECTS

Students will be taught specific skills in Nuclear Engineering that can be transferred to and utilised in several fields including nuclear energy applications and various other major industrial endeavours. Nuclear Engineering graduates can also pursue career opportunities in the fields of research and development. Students can otherwise continue their studies in Nuclear Engineering at the University of Pisa in the PhD Programme

	FIRST SEMESTER	
	Physical Fundamentals of Nuclear Engineering	6
	Nuclear Thermal Hydraulics (1)	6
,	Physic and Numerical Models of Nuclear Reactors (1)	6
i	Nuclear Plants I	6
	Control of Nuclear Plants	6
	SECOND SEMESTER	
	Nuclear Measurements	6
	Nuclear Materials	6
	Nuclear Thermal Hydraulics (2)	6
	Physics and Numerical Models of Nuclear Reactors (2)	6
	Nuclear Plants II	6
	SECOND YEAR	
	SECOND TEAR	CFU
	FIRST SEMESTER	CFU
		<b>CFU</b> 12
	FIRST SEMESTER	
	FIRST SEMESTER Nuclear Safety	12
	FIRST SEMESTER  Nuclear Safety  Radiation Protection	12
	FIRST SEMESTER  Nuclear Safety  Radiation Protection  Structural Mechanics and Nuclear Constructions (1)	12 6 6
	FIRST SEMESTER  Nuclear Safety  Radiation Protection  Structural Mechanics and Nuclear Constructions (1)  Elective	12 6 6
	FIRST SEMESTER  Nuclear Safety  Radiation Protection  Structural Mechanics and Nuclear Constructions (1)  Elective  SECOND SEMESTER	12 6 6 6
	FIRST SEMESTER  Nuclear Safety Radiation Protection Structural Mechanics and Nuclear Constructions (1) Elective SECOND SEMESTER Structural Mechanics and Nuclear Constructions (2)	12 6 6 6
	FIRST SEMESTER  Nuclear Safety Radiation Protection Structural Mechanics and Nuclear Constructions (1) Elective SECOND SEMESTER Structural Mechanics and Nuclear Constructions (2) Elective	12 6 6 6

CFU

in Industrial Engineering with a specific curriculum in Nuclear Engineering and Industrial Safety, allowing them to enter into a career with a higher qualification. Many of our alumni have gone on to pursue careers and hold important positions in the field of nuclear engineering. More details can be found at: http://younuclear.ing.unipi.it/Testimonials.html http://younuclear.ing.unipi.it/Testimonials-Post-Fukushima.html