In order to be enrolled in the MSc In Nuclear Engineering it is necessary possess a first level university degree obtained after at least three years of study in Italy or of another equivalent first level title obtained in other Countries that can be recognized as adequate, mainly in industrial Engineering. The Candidate must present the application attaching study documentation, as the former degree certification (or an equivalent document) and the programs of the successfully passed examinations. Both curricular (i.e., past study career) and personal preparation requirements will be checked by the degree course organisms, through an Evaluation Committee (CIV) having the tasks to examine the admission applications, to evaluate the curricula of candidates, to check the possession of the curricular and personal requirements and then making proposals for the admission or for compensation of possible educational lacks.

Per potersi iscrivere alla Laurea Magistrale in Ingegneria Nucleare, è necessario essere in possesso di una laurea di primo livello ottenuta dopo almeno tre anni di studio in Italia o di titolo equivalente conseguito all'estero, preferibilmente in una laurea in Ingegneria della classe industriale. Il candidato deve presentare la richiesta di ammissione e le certificazioni necessarie in relazione agli studi precedenti. Una specifica Commissione Interna di Valutazione (CIV) considererà sia i requisiti curriculari che di preparazione personale e farà proposte circa l'ammissione o la compensazione tramite corsi da seguire prima dell'ammissione stessa.

INTERNATIONAL IS NICE !!!

In recent years, foreign students started to enrol in our MSc Course. This represents a new experience for students and teachers that we are proud of. Nuclear Energy is the subject of a worldwide effort pursued by many Countries: joining efforts in our commitment for a better future reveals our willingness to share and receive by other cultures.

INFO

Send an e-mail to: younuclear@ing.unipi.it

Consult the website http://younuclear.ing.unipi.it/

SITI ISTITUZIONALI / INSTITUTIONAL WEBSITES:

https://www.unipi.it/index.php/lauree/corso/10621

https://www.unipi.it/index.php/ects/ects?ects_id=WSN-LM

Contact the President of the MSc Course:
walter.ambrosini@ing.unipi.it

DIPARTIMENTO DI
INGEGNERIA CIVILE E INDUSTRIALE

Laurea Magistrale in Ingegneria Nucleare

Master of Science in Nuclear Engineering

Studiare Ingegneria Nucleare a Pisa
Nuclear Engineering Studies in Pisa

http://younuclear.ing.unipi.it/

The Master of Science programme in Nuclear Engineering is based on the long tradition in teaching Nuclear Engineering at the University of Pisa, started in 1960.

The study matters cover all the important areas necessary for acquiring high-level competences in the field, including Reactor Physics, Nuclear Reactor Thermal-Hydraulics, Structural Mechanics, Radiation Measurement and Health Effects, Nuclear Reactor Power Plant Technology, Nuclear Materials, Nuclear Reactor Control and Operation, Nuclear Reactor Safety and Reliability.

Containing the basic matters required for a sound education in Nuclear Engineering, the MSc programme already granted to many of its past-students the possibility to obtain the certification of European Master of Science in Nuclear Engineering (EMSNE). This is the certification released by the European Nuclear Education Network (ENEN) to Nuclear Engineers with a good background, who also fulfilled minimum requirements of mobility for courses or thesis work at European organisations belonging to the Association (www.enen-assoc.org).

The course is presently taught in English in order to make Italian students ready to operate in the international environment in which nuclear engineers are called to act and to open the teaching offer to students from abroad.

The course is firmly involved in the actions of the European Nuclear Education Network and of FuseNet, the two networks for higher studies in the fields of nuclear fission and fusion.

La Laurea Magistrale in Ingegneria Nucleare si fonda sulla lunga tradizione dell'insegnamento in Ingegneria Nucleare all'Università di Pisa, iniziata nel 1960.

Le materie di studio coprono tutte le tematiche necessarie per acquisire competenze di alto livello nel settore, includendo la Fisica del Reattore, la Termoidraulica, la Meccanica Strutturale, le Misure delle Radiazioni nucleari e i loro effetti sulla salute, la Tecnologia degli Impianti Nucleari di potenza, i Materiali Nucleari, il Controllo e l'Esercizio dei Reattori Nucleari, l'Affidabilità e la Sicurezza dei Reattori Nucleari.

Coinvolgendo tutte le materie richieste per una solida formazione in Ingegneria Nucleare, il Corso ha permesso a molti studenti del recente passato di ottenere il titolo di European Master of Science in Nuclear Engineering (EMSNE). Si tratta della certificazione rilasciata dall'European Nuclear Education Network (ENEN) a Ingegneri Nucleari con una buona preparazione che abbiano anche soddisfatto a criteri di mobilità in Europa presso Istituzioni membri dell'Associazione (www.enen-assoc.org). I corsi sono attualmente tenuti in lingua Inglese per permettere agli studenti italiani di essere pronti per operare nell'ambiente internazionale in cui sono chiamati ad agire e per accogliere studenti stranieri. Il Corso di Laurea è coinvolto saldamente nelle azioni di ENEN e di FuseNet, le due reti per l'istruzione universitaria nei campi della fissione e della fusione nucleari.

FUSENET
The European Fusion Education Network

COURSE STRUCTURE

First Year	CFU
First Semester	
Physical Fundamentals of Nuclear Engineering	6
Thermal-Hydraulics and Core Engineering (1)	6
Physics and Numerical Models of Nuclear Reactors (1)	6
Structural Mechanics and Nuclear Constructions (1)	6
Nuclear Plants I	6
Second Semester	
Nuclear Measurements	6
Nuclear Materials	6
Structural Mechanics and Nuclear Constructions (2)	6
Thermal-Hydraulics and Core Engineering (2)	6
Physics and Numerical Models of Nuclear Reactors (2)	6
Second Year	**CFU**
First Semester	
Control of Nuclear Plants	6
Nuclear Safety	12
Elective	6
Second Semester	
Radiation Protection	6
Nuclear Plants II	6
Elective	6
Thesis Work	18
	120

Elective Courses	CFU/ ECTS
Engineering of fusion reactors	6
Design of Complex Plants	6
Scienza e Tecnica della Prevenzione Incendi	12
Codes for Nuclear Reactors	6
Medical Applications of Nuclear Technologies	6
Single and Two-Phase thermal-Hydraulics	6
Decommissioning of nuclear plants and radioactive waste management	6