

Who should apply?

The Ph.D. program is designed for those who are interested in pursuing advanced studies in industrial engineering and management.

Prospective students should have a strong desire to succeed and be able of achieving high standards.

Applicants should hold a Master degree in Industrial Engineering and Management or in related fields. Candidates with a recognized scholar, scientific or professional curriculum can also apply to the program.

Graduates from the program can pursue careers in research, industry and academia.



Why study at FCT?

FCT, one of the nine academic units of Universidade Nova de Lisboa (Portugal), is located at the Caparica campus, on the south side of river Tagus and near the Atlantic coast. The campus provides modern teaching and research facilities, as well as other facilities such as library, students' residence, sports fields, nursery, bank agency, travel agency, convenience store, canteen, snack bars and restaurants. The access to the campus is facilitated by a complete transport network – boat, bus, train and metropolitan.

FCT is one of the most prestigious schools of science and engineering of the country, with approximately 6200 students, 500 academic staff and 200 technical and administrative staff. It is structured in 14 departments, 19 research units and 14 support services.

Information

More information: www.demi.fct.unl.pt.

Application:
http://www.fct.unl.pt/candidato/cursos/3_ciclos/demi/dei/

Ph.D. program in

INDUSTRIAL ENGINEERING



when knowledge is your goal

www.fct.unl.pt





Why to apply?

If you want to know the answer to the following questions

How
to develop lean, agile, resilient, and sustainable businesses and supply chains?

How
to develop businesses, products and services capable of meeting the increasing demands of quality, and guaranteeing less than 3.4 defects per million opportunities?

How
to improve project management performance in complex and unstable business environments?

How
to design products with innovative and attractive design, using sustainable and safety production environments?

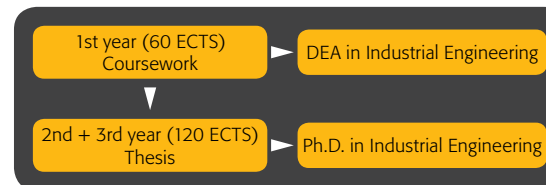
How
to develop interoperability between information systems, business processes, culture and values, and contractual issues in the relationship between business, government and individuals?

you are the **right applicant** to the Ph.D. Program in Industrial Engineering!

Teaching and Research

The doctoral program is structured in accordance with the Bologna process and aims at providing solid theoretical knowledge on methods, strategies, tools and techniques of industrial engineering, along with the development of practical skills suitable to real-world problems.

The duration of the program is 3 years at full time (180 ECTS): it includes a Diploma of Advanced Studies (DEA) in Industrial Engineering, at the end of the first year, and 2 years of research work and thesis development.



Universidade Nova de Lisboa has a long tradition in Industrial Engineering education and research (MSc and Ph.D.) and promotes partnerships with other universities in a trans-national context.

The doctoral program benefits from the strong research background, and specialized experience in teaching, of DEMI's academic staff. Research has been carried out in several cutting-edge areas of Industrial Engineering within qualified centers and, particularly, in the R&D Unit in Mechanical and Industrial Engineering (UNIDEMI). This R&D unit is classified as Very Good by the Portuguese Foundation for Science and Technology. The academic staff members have also developed strong links to other national and international centers of excellence.

Diploma of Advanced Studies in Industrial Engineering

Students are required to take 4 core courses and 5 elective courses during their first year. Students have the opportunity of choosing the electives from a vast array of available courses. Teaching methods include lectures, seminars and group projects.

		ECTS
1 st Semester - 30 ECTS	Design of the Research Project	c 6
	Research Methodologies	c 6
	Ergonomic Systems Design	e 6
	Energy and Environment	e 6
	Ergonomics	e 6
	Reliability and Maintenance Management	e 6
	Inventory Management	e 6
	Marketing and Innovation	e 6
	Decision Models	e 6
	Facilities Planning and Design	e 6
	Computer Integrated Manufacturing	e 6
	Occupational Safety and Health	e 6
	Advanced Quality Techniques	e 6
Forecasting Techniques	e 6	
+ any other course from FCT	e 6	
2 nd Semester - 30 ECTS	Design of the Research Project	c 12
	Quantitative and Qualitative methods for Research	c 6
	Engineering Economy	e 6
	Industrial Management and Strategy	e 6
	Metrology and Measurement Systems	e 6
	Quality Planning and Control	e 6
	Simulation	e 6
	Information Systems for Industry	e 6
	+ any other course from FCT	e 6

(c) – core course; (e) – elective course
ECTS - European Credit Transfer System

