Doctoral Program in Industrial and Systems Engineering (DPISE)

The course DPISE was designed and structured in order to provide advanced higher education by promoting high quality research in the areas of Industrial and Systems Engineering.

In this context, the general aim of the DPISE is to produce highly qualified professionals who are able to contribute to the competitiveness and sustainability of industrial products and services. The objective is for these professionals to acquire and develop advanced scientific skills in order to design, model and manage complex systems.

The targeted scientific domain of this doctoral program is the study of complex engineering systems. It aims at producing a new generation of specialists and researchers who are able, in a systematic way, to design innovative solutions of/to integrated product systems with higher added value and/or that allow them to climb their international value chain.

The DPISE was thus designed to bring PhD researchers to the cutting edge of knowledge in several areas of Industrial and Systems Engineering, helping industries and services to become competitive and sustainable. The pertinence of the doctoral program is therefore very high, since the PhD graduated students are highly requested in academia, research, industry, and services.

Research areas

The research areas connected with the Production and Systems are: Industrial and Systems Management / Economics Engineering / Optimization and Operational Research / Human Engineering / Numerical and Statistics Methods.

Admission

Applicants are requested to hold a master degree in Engineering or any legal equivalent degree (national or international). A graduation (in Portuguese “Licenciatura”) in Engineering may be allowed as long as the applicant curriculum proves to have enough professional or scientific capacity to complete the doctoral program. A graduation in other scientific areas is also allowed, provided that the applicants’ curriculum shows enough and appropriate scientific background.

Duration

The DPISE is expected to run for 6 semesters (3 years) and involve a total of 180 ECTS (30 ECTS/semester), organized in a two-step procedure. The first step is an academic part, called doctoral degree, which involves 11 courses and a total of 60 ECTS. The second step is the PhD thesis running for 4 semesters, which corresponds to 120 ECTS.

Contacts

Directory board
Prof. Pedro Arezes, parezes@dps.uminho.pt
Profª Maria do Sameiro Carvalho, sameiro@dps.uminho.pt
Profª Paula Varandas Ferreira, paulaf@dps.uminho.pt
Prof. A. Ismael F. Vaz (Director), aivaz@dps.uminho.pt

Office
Alexandra Fernandes, +351 253 510341, alexf@dps.uminho.pt
Departamento de Produção e Sistemas, Campus de Azurém, 4800-058 Guimarães

Additional information
www.dps.uminho.pt (follow the link “Ensino” and then “PDEIS”)