UNIVERSITY MASTER´S DEGREE IN RESEARCH IN ELECTRICAL, ELECTRONIC AND INDUSTRIAL CONTROL ENGINEERING

English Version

University Master´s Degree in Research in Electrical, Electronic and Industrial Control Engineering

INFORMATION IDENTIFYING THE QUALIFICATION

Name and status of awarding institution

Universidad Nacional de Educación a Distancia.

Public university.

Name of qualification and title conferred in original language

Máster Universitario en Investigación en Ingeniería Eléctrica, Electrónica y Control Industrial por la Universidad Nacional de Educación a Distancia.

Status

National validity.

Approved by Accord of the Council of Ministers on January 22nd, 2010.

Main field(s) of study for the qualification

The study is included in the field of Engineering and Architecture.

Language(s) of instruction/examination

The degree is taught in Spanish.

INFORMATION ON THE LEVEL OF THE QUALIFICATION

Level of qualification

Level 3 (Master) in the Spanish Framework of Higher Education (MECES) is equivalent to level 7 of European Qualification Framework (EQF).

Official length of programme

The official length of programme is 60 ECTS and 1 year full time.

Access requirements

Industrial Engineering, Bachelor's Degree in Electrical, Electronic, Automatic or Industrial Engineering. Other Engineering or Bachelor's Degree in Engineering with training supplements.

INFORMATION ON THE CONTENTS

Mode of study

e-learning full time.

Programme requirements

The programme of studies is composed of 30 compulsory ECTS, 20 selective ECTS and 10 Master's Dissertation ECTS

Subjects

- Industrial Processes Simulation
- Power System Analysis and Operation
- Systems And Methods in Power Electronics (Research Master On Electric And Industrial Control Engineering)
- Adaptative Control in Industrial Systems
- Research Methodology on Electric and Industrial Control Engineering
- Sustainability and Energy Efficiency in Engineering
- Academic and Professional English for Engineers
- Electronic Technology Applied to Powerc Quality
- Electromagnetic Compatibility (Emc)
- Advanced Control of Electric Machines
- Reliability and Maintenance in Electrical for Electric and Electronics Systems
- Educational Technologies in Engineering
- Renewable Energy Electrical Applications
- Low, Medium and High Temperature Solar Thermal Systems: Domestic and Industry Applications
- Wind Energy and Its Applications
- Hidrogen as Energetic Vector
- Artificial Intelligence Techniques in Engineering
- Applied Industrial Control
- Control Distributed Systems
- Neural Networks on Industrial Control
- Computer Security of Data, Systems and Communications
- Industrial Applications on Communication and Optical Systems
- Industrial Applications of Communications
- Industry Networks Security
- Master Thesis in Electric Engineering and Industrial Control

Grading scheme

In the Spanish university system, modules/courses are graded on a scale of 0 to 10 points with the following qualitative equivalence:

0-4.9: "suspenso"; 5-6.9: "aprobado"; 7-8.9: "notable"; 9-10: "sobresaliente". A special mention, "Matrícula de Honor" may be granted to up to 5% of the students in a group provided they have got a "sobresaliente". To pass a module/course it is necessary to get at least 5 points.

In cases of recognition of ECTS, professional experience, cultural or sports activities, or student representation no grading will be recorded but, where appropiate, the word "Apto".

INFORMATION ON THE FUNCTION OF THE QUALIFICATION

Access to further study

This qualification gives access to Doctoral studies, provided that the student has completed a minimum of 300 ECTS in the overall teachings of Bachelor and Master.

Stated objectives associated with the qualification and professional status (if applicable)

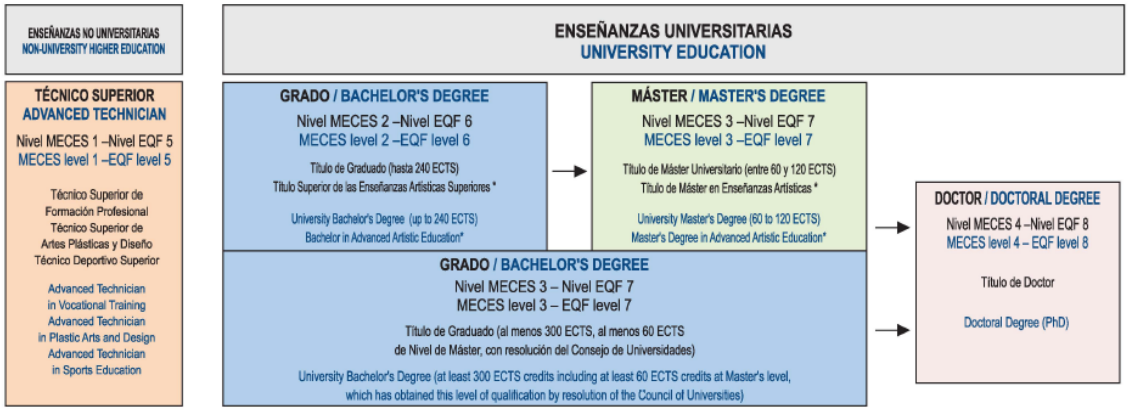
The main objective of the Master is providing the students with a complete and specialized training and knowledge in different research areas in Electrical and Electronics Engineering, Electronics Technology, Industrial Control and Telematics Engineering. The Master seeks to ensure the students get the skills and knowledge needed to develop a PHD thesis or for working in Research and Development areas in companies related with our engineering areas.

Specialized training and knowledge in the following Industrial Engineering fields of research: analysis and control of electric systems, design and integration of systems using renewable energies, simulation and design of electronic systems and advanced processors, electromagnetic compatibility (EMC), simulation of industrial processes, industrial communications, telematics and multimedia systems applied to industry, predictive adaptive control and its applications, optimization of industrial processes and advanced education technologies applied to engineering fields.

ADDITIONAL INFORMATION

https://www.uned.es

INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM



* Las enseñanzas Artísticas Superiores son Enseñanzas no Universitarias dentro del Sistema Educativo español de Enseñanza Superior

** Advanced Artistic Education is non-university education within the Spanish Higher Education System*