# PROGRAMME INFORMATION



UNIVERSITY MASTER'S DEGREE
IN RESEARCH ON SOFTWARE
ENGINEERING AND COMPUTER SYSTEM
ENGINEERING

**CÓDIGO 310501** 



# UNIVERSITY MASTER'S DEGREE IN RESEARCH ON SOFTWARE ENGINEERING AND COMPUTER SYSTEM ENGINEERING

**CÓDIGO 310501** 

## **INDEX**

**INFORMATION IDENTIFYING THE QUALIFICATION** 

INFORMATION ON THE LEVEL OF THE QUALIFICATION

**INFORMATION ON THE CONTENTS** 

INFORMATION ON THE FUNCTION OF THE QUALIFICATION

**ADDITIONAL INFORMATION** 

INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

### University Master's Degree in Research on Software Engineering and Computer System 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 de Software y Sistemas Informáticos por la Universidad Nacional de Educación a Distancia.

**Status** 

National validity.

Approved by Accord of the Council of Ministers on December 16th, 2011.

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

Engineering or Bachelor's Degree in Software Engineering, Computer Sciences or scientific-technological degrees related to Software Engineering, Computer Systems, Communications, Automation or Electronics. Doctorate on Software Engineering, Computer Sciences or Automatic.

#### **INFORMATION ON THE CONTENTS**

#### Mode of study

Distance learning full time.

#### Programme requirements

The programme of studies is composed 45 elective ECTS and 15 Master's Dissertation ECTS.

#### **Subjects**

- Automatic Code Generation
- Software Specification
- Software Development Architectures
- Software Product Line Development Through a Generative Scope
- Service Oriented Architectures
- Software Process Improvement and Management
- Secure Software Development
- Decision Support Systems
- Ubiquitous Computing
- Robotics Simulation and Modeling
- Visual Perception Systems
- Graphic Representation of Implicit Surfaces
- Final Dissertation on Computer Systems Engineering
- Final Dissertation on Software Engineering

#### **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 appropriate, 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)

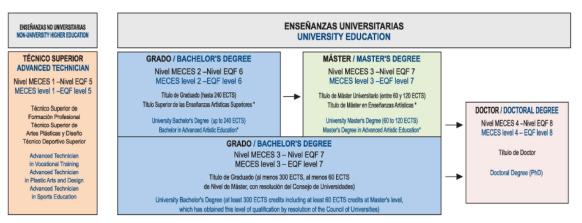
The main aim of this degree is know how to apply the acquired knowledge and problem-solving skills in new or unfamiliar environments within broader contexts and multidisciplinary related to Software Engineering and Computer Systems Engineering. Be able to integrate knowledge and deal with the complexity of making judgments on the basis of the information that, being incomplete or limited, include reflections on the social and ethical responsibilities related to the application of their knowledge and judgment, which allow for critical analysis, assessment and synthesis of new and complex ideas that contribute to expanding the frontiers of knowledge.

The main learning outcomes and competencies acquired are design, implement, deploy and overseeing new solutions to specific problems that may arise in the field of research, innovation and development of software or the automation. Incorporate substantial qualitative improvements, either in software development or in the development and implementation of robotic systems.

#### ADDITIONAL INFORMATION

https://www.uned.es

#### INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM



<sup>\*</sup> Las enseñanzas Artísticas Superiores son Enseñanzas no Universitarias dentro del Sistema Educativo español de Enseñanza Superior \*Advanced Artístic Education is non-university education within the Spanish Higher Education System