PROGRAMME INFORMATION

UNIVERSITY MASTER'S DEGREE **IN**

ADVANCED MANUFACTURING ENGINEERING

CÓDIGO 280401

UNED

ETS de Ingenieros Industriales

UNIVERSITY MASTER'S DEGREE
IN IADVANCED MANUFACTURING
ENGINEERING

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University Master´s Degree in Advanced Manufacturing 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 Ingeniería Avanzada de Fabricación 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 Qualifications Framework (EQF).

Official length of programme

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

Access requirements

Industrial, Aerospace, Agricultural, Roads, Channels and Ports, Mines, Forestry, or Naval and Oceanic Engineering. Bachelor's Degree in Mechanical Engineering, Aerospace Engineering, Agricultural Engineering, Civil Engineering and Land Technology Mining, Forestry Engineering or Maritime Engineering. Other Engineering or Bachelor's Degree in the field of Experimental Sciences.

INFORMATION ON THE CONTENTS

Mode of study

e-learning full time.

Programme requirements

The programme of studies is composed of 35 compulsory ECTS, 10 elective ECTS and 15 Master's Dissertation ECTS

Subjects

- Analysis and simulation of forming processes
- Advanced machining processes
- Additive manufacturing technologies
- Industrial production systems
- Advanced industrial metrology
- Research methodology in manufacturing engineering
- Supply chain management in Industry 4.0
- Advanced engineering of industrial quality
- Advanced engineering of industrial maintenance
- Micro and nanomanufacturing
- Selection, inspection, and certification of materials in advanced industrial applications
- Advanced sustainability in manufacturing engineering
- Master's Degree Project

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)

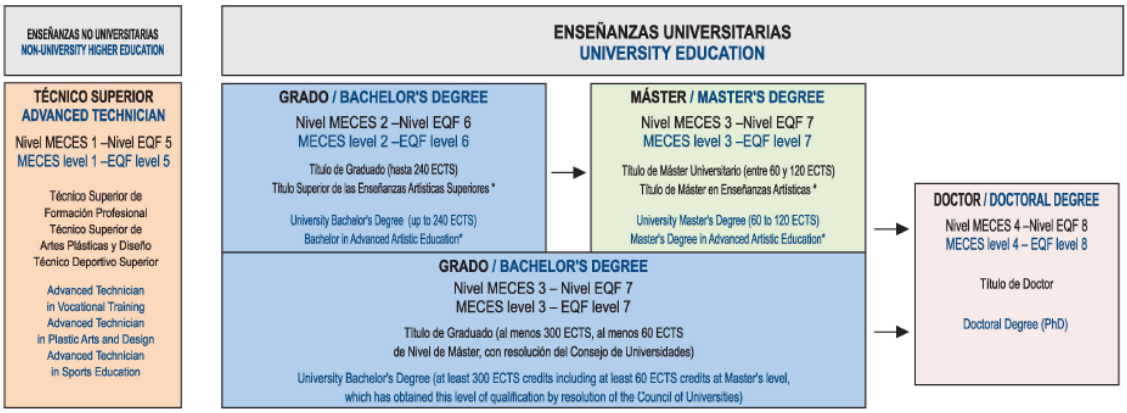
The main aim of this degree is to know the scientific and technologic bases, and methods of analysis of manufacturing processes, and methods of planning, control and maintenance of manufacturing systems based on efficiency, quality and safety. Skills: To be able to analyze, evaluate and solve problems of manufacturing processes and systems, and to manage and lead research and development or technological innovation in the field of Advanced Manufacturing Engineering.

The main learning outcomes and competencies acquired are the main aim of the degree is to achieve an adequate preparation to deal with the completion of a thesis or execution of a project in the field of Advanced Manufacturing Engineering; increasing knowledge in the field of industrial engineering as well as in the elaboration of written reports and oral presentations of their works. One of the main objectives is to acquire the ability to identify needs and demands of development and innovation in the field of manufacturing engineering. This ranges from knowing, understanding and applying the methods of planning and quality control systems of the manufacturing processes until maintenance and planning of an industrial plant with criteria of efficiency, quality and safety; taking into account, besides, the technical-economic aspects of manufacturing processes.

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*