

## Why studying this Master Degree?

This MSc meets a real academic, scientific, and professional demand for postgraduate education in the productive and environmental aspects of the agricultural areas. Current issues related to Agro-Environmental Technology, Plant Production and Protection, and Natural Resources Management are studied. This MSc focuses on sustainable production and its economic context, GIS and Remote Sensing tools usage, appropriate phytosanitary products application, techniques for reducing soil degradation, and diffuse contamination, among others.

Recent years have seen an increase in the demand for professionals and researchers specialised in this MSc routes:

1. Agro-Environmental Management, which aims at training professionals both in companies and environmental consultancies, and farms in the agrarian field.
2. Integrated Plant Health Management, which provides necessary training in plant protection for the accreditation of Advisor in Integrated Pest Management.



### Goals:

We are focused on training specialists in the sustainability of the agricultural activity through improved management and reduction of its environmental impact. There is a growing demand for this training profile in the professional world.

### Target group:

Engineers, BSc Graduates, or any Graduates trained in fields related to the environment or agriculture, with interest in specializing in sustainable agricultural production.

Branch: Engineering and Architecture

Area: Agroforestry Engineering and Environment

Orientation: Professional/Research

Credits: 60 ECTS

Duration: 2 Semesters (September- July)

Education: Attendance-based

Number of places: 30

Language: Spanish

### Contact details:

Departamento de Producción Agraria y Dpto. de Química y Tecnología de los Alimentos  
Escuela Técnica Superior de Ingeniería Agronómica, Alimentaria y de Biosistemas (ETSIAAB)  
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Tel. 910 670 766

Información y preinscripción:

[www.etsiaab.upm.es/docencia/masteres](http://www.etsiaab.upm.es/docencia/masteres)

*\* The subjects will be taught in Spanish if all the students are Spanish-speaking.*

Escuela Técnica Superior de Ingeniería  
Agronómica, Alimentaria y de Biosistemas

# MSc Degree in Agro-Environmental Technology for Sustainable Agriculture



UNIVERSIDAD  
POLITÉCNICA  
DE MADRID



ESCUELA TÉCNICA SUPERIOR  
DE INGENIERÍA AGRONÓMICA,  
ALIMENTARIA Y DE BIOSISTEMAS



# MSc Degree in Agro-Environmental Technology for Sustainable Agriculture

ETSIAAB

## Structure

MODULE I	COMPULSORY COURSES	24 ECTS
MODULE II	TWO BRANCHES (1): - AGRO-ENVIRONMENTAL MANAGEMENT - PLANT HEALTH INTEGRATED MANAGEMENT	Up to 20 ECTS
MODULE III	ELECTIVE COURSES AND INTERNSHIPS (2)	Up to 4 ECTS
MODULE V	FINAL MASTER DEGREE PROJECT	12 ECTS

(1) In this module, the student must take one of the two branches, compulsory completing 20 ECTS.

(2) The student may complete curricular internships or one of the two elective courses offered.

## Curriculum

COMPULSORY COURSES	ECTS	SEM
Soil Degradation	4	1
Environmental Economics and Policy	3	1
Characteristics and Mode of Action of Plant Protection Products	4	1
Technical Determinants of the Sustainability of Agricultural Systems	3	1
Remote Sensing and GIS Applied to the Environment	6	1
Diffuse Agricultural Pollution Management	4	2

ELECTIVE COURSES (Branch: Agro-Environmental Management)	ECTS	SEM
Soil Contamination and Rehabilitation	4	1
Technical Reports and Data Management	4	1
Agricultural Use of Organic Wastes	4	2
Crop Modelling for Agro-Environmental Management	4	2
Technology and Management of Bioenergy	4	2

ELECTIVE COURSES (Branch: Plant Health Integrated Management)	ECTS	SEM
Bases of the Integrated Management of Arthropod Pests and Diseases	4	1
Laboratory Diagnostic Techniques	4	1
Disease Control in Agricultural Crops	4	2
Control of Crop Arthropod Pests	4	2
Weeds Management	4	2

The goal of this Master is the academic excellence promoted by skilled university professors in different areas of environment, production and crop protection.

Partners

ceigram  
Centro de Estudios e Investigación para la Gestión del Riesgo Agrario y Medioambiental

acciona

Fertiberia

GrupoTragsa

endesa

ELECTIVE COURSES AND INTERNSHIPS	ECTS	SEM
Design of Experiments and Data Analysis	4	1
Agro-Environmental Analysis	4	2
External Training	4	Undefined

FINAL MASTER DEGREE PROJECT	ECTS	SEM
Final Master Degree Project	12	Undefined

