

# EUROPASS DIPLOMA SUPPLEMENT

## TITLE OF THE DIPLOMA (ES)

*Técnico Superior en Gestión Forestal y del Medio Natural*

## TRANSLATED TITLE OF THE DIPLOMA (EN)<sup>(1)</sup>

*Higher Technician in Forest and Natural Environment Management*

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(1) This translation has no legal status.

## DIPLOMA DESCRIPTION

**The holder of this diploma will have acquired the General Competence with regard to:**

Scheduling, organizing, supervising and carrying out, where appropriate, forest and nursery work, controlling and protecting the environment and training personnel for environmental conservation and improvement, applying quality plans, measures for the prevention of occupational risks and environmental protection, according to the current legislation.

**Within this framework, the PROFESSIONAL MODULES and their respective LEARNING OUTCOMES acquired by the holder are listed below:**

### “Agronomic Botanic”

The holder:

- Identifies plants by using techniques and taxonomical methods
- Geographically locates the different plant species, interpreting biogeographical distribution documents.
- Characterizes cultivated plants, analysing their morphology, utilization and varieties.
- Characterizes garden plants, analysing biometric parameters and their ornamental value
- Identifies the cultural characteristics of the forest species, analysing the ecological and morphological factors.

### “Plant Pathology”

The holder:

- Organizes the monitoring of the plants health state, describing plagues and diseases and following the protocols established.
- Schedules the plant health monitoring, analysing the methods, techniques and protocols for action, as well as the characteristics of the environment.
- Monitors the storage and handling of plant protection products, interpreting the regulations and the protocols established.
- Puts in place protective measures when preparing and applying plant protection products, identifying the risks and the dangers for the health.
- Organizes and carries out the preparation and application of the plant protection product, selecting the techniques and the means.
- Coordinates the management of waste from dangerous plant protection chemicals, following the established procedures.
- Organizes and carries out the health management of the agrosystem, relating the techniques and the procedures to the organic rules.

### “Agrarian Topography”

The holder:

- Reads plans, aerial photographs or maps, analysing contour lines, scales and topographical symbols.
- Organizes the data collection in the countryside, describing the operations to be carried out, the method and the resources.
- Operates devices and topographic means, explaining their features and operation and analysing the established procedure.
- Produces maps and plans, describing the techniques of representation and the land surveying measurements.
- Rethinks the points and the figures interpreting the plan's information

### “Agroforestry Plants and Machinery”

The holder:

- Organizes the installation and the management of the agricultural workshop, analysing the maintenance needs and the reparations in the cultivation.
- Monitors and carries out basic machining and welding operations, analysing techniques and checking the final product quality.
- Controls the functioning of the agroforestry and gardening machinery and plants, analysing the manuals and use plans.
- Schedules and supervises the maintenance of machinery and equipment, analysing their features and interpreting instruction manuals and plans
- Assesses the breakdowns and supervises the repairs and the setting up of plants, machinery and equipment, analysing their scope, the cost of the intervention and of the tasks fulfilled.
- Schedules and monitors the maintenance of machinery and equipment, analysing their technical specifications and the cultivation's productive goals.
- Develops plans for machinery, equipment and plants acquisition, substitution or throw away, analysing the technical and economic criteria and the cultivation's production plan.
- Applies measures of risk prevention, personal security and environmental protection, assessing the work conditions and the risk factors.

#### **“Environmental Education Techniques”**

The holder:

- Characterizes environmental education techniques, relating their application to an acquisition of values
- Compiles environmental documentation, selecting information supports and resources.
- Develops resources and materials for environmental spreading and information, analysing the purposes
- Informs about the environment, boosting the use of natural resources in a sustainable way, selecting appropriate techniques and materials.
- Characterizes the procedures of environmental interpretation, using resources and infrastructures from the environment visited.

#### **“Management of the Forest-Environment Utilization”**

The holder:

- Organizes the forest-environment utilization, analysing the operations and technical factors.
- Manages the wood forest-environment utilization, relating the techniques and the procedures to the plan for optimal use.
- Manages the cork extraction, defining the techniques, processes and factors implied.
- Plans the forest product collection, relating the techniques and the processes to the factors involved.
- Monitors the utilization of natural pasture and biomass extraction, relating the procedures to the environment characteristics.
- Applies labour risk prevention, personal security and environmental protection measures, assessing the work conditions and the risk factors.

#### **“Management and Organization of the Tree Nursery”**

The holder:

- Plans the production of tree nurseries, analysing the plant production systems and the surface to replant.
- Organizes the procurement process and fruits, seeds and plant material preparation, relating the techniques to the ecological and bioclimatic parameters.
- Coordinates the implementation process for plant material in tree nurseries, analysing the preparation techniques for the culture and sowing medium and for the placing of propagules.
- Schedules cultivation operations, describing the cultivation techniques.
- Coordinates the acclimation operation, describing the cultivation techniques.

#### **“Hunting Management”**

The holder:

- Carries out fauna census operations, relating the techniques, the means and the methods to the environment and species features.
- Organizes and monitors the works aimed at maintaining and improving the environment of hunting and other associated species, analysing the techniques and the procedures.
- Supervises monitors and controls species populations in a hunting space, analysing the methods and techniques.
- Organizes and monitors the production of species with hunting purposes, analysing the management plan and relating the methods of hunting to the environment and species features.
- Schedules and organizes the sustainable use of a hunting space, analysing the management plan and relating the hunting methods to the features of the species and environment.

#### **“Inland Fishing Management”**

The holder:

- Organizes and monitors the management tasks of the communities and inland aquatic habitats, analysing the procedures and applying the established techniques.
- Plans the channel management tasks, describing the techniques and analysing the bioclimatic parameters
- Organizes and monitors the work execution for the management of aquatic environments and their facilities, analysing the techniques and procedures.
- Carries out management works to protect the river and lake environment, relating the procedures and the action protocol to the planned tasks.
- Controls the fish utilization in inland waters, describing the actions to be carried out.
- Monitors the functioning of a fish and crab farm, relating the needs of the species to the productive goals of the exploitation.

#### **“Wildland Management”**

The holder:

- Coordinates and carries out the tasks related to forest inventory and trees and forest areas measuring, relating them to dasometry techniques and to wildland management.
- Supervises silvicultural systems in forest areas, characterizing the implementation procedures.
- Coordinates and controls reforestation and afforestation works, analysing the methods and the techniques of each of the processes.
- Establishes and monitors water forestry restoration labours, analysing the methods and the techniques of each of the processes.
- On the basis of a project, schedules forest, repopulation and water forestry restoration, analysing technical considerations and the actions that shape these works.
- Coordinates and controls the opening and maintenance works in forest roads, analysing basic building techniques.

#### **“Management of Rural Environment Conservation”**

The holder:

- Controls the public use of the natural environment, analysing planning and management instruments.
- Monitors the public domain, interpreting control methods and techniques.
- Monitors flora and fauna species, relating the techniques to the species.
- Monitors the equipment and the execution of works in the natural environment, describing the work’s management techniques.
- Controls waste and discharges in the natural environment, analysing the protocols and action procedures.

#### **“Forest Fire Protection”**

The holder:

- Monitors and organizes forest fire control and extinguishing, relating the technical considerations and the means to the initiatives to be carried out.
- Supervises, monitors and detects forest fires, analysing the methods and the techniques.
- Reports the detection of forest fires, characterizing the techniques, the communication equipment and the action protocols.
- Supervises and organizes forest fire control and extinguishing operations, interpreting the instructions received and describing the methods used.
- Collaborates in the research activities of into the causes of forest fires, relating the methods and the techniques to the action protocols.
- Applies measures of risk prevention, labour security and environmental protection, assessing the work conditions and the risk factors.

#### **“Project for Forest Management and Environment Conservation”**

The holder:

- Identifies the needs of the productive sector, relating them to similar projects that may satisfy them.
- Designs projects related to the competences described in the diploma, including and developing the constituting stages of the project.
- Plans the project’s implementation or execution, determining the intervention plan and the documents associated.
- Defines the procedures to monitor and control the project’s execution, justifying the selection of variables and instruments.

#### **“Professional Training and Guidance”**

The holder:

- Selects job opportunities, identifying the different possibilities of labour integration, and the alternatives of lifelong learning.
- Applies teamwork strategies, assessing their effectiveness and efficiency on the achievement of the company’s goals.

- Exercises rights and complies with the duties derived from labour relationships, recognising them in the different job contracts.
- Determines the protective action of the Spanish Health Service in view of the different covered eventualities, identifying the different types of assistance.
- Assesses risks derived from his/her activity, analysing the job conditions and the risk factors present in his/her labour setting.
- Participates in the development of a risk prevention plan for a small enterprise, identifying the responsibilities of all the agents involved.
- Applies protection and prevention measures, analysing risk situations in the labour setting of the Higher Technician in Forest and Natural Environment Management.

#### **“Business and Entrepreneurial Initiative”**

The holder:

- Recognises the skills related to entrepreneurial initiative, analysing the requirements derived from job positions and business activities.
- Defines the opportunity of creating a small enterprise, assessing the impact on the sphere of action and incorporating ethic values.
- Carries out the activities for the setting-up and implementation of a company, choosing its legal structure and identifying the associated legal obligations.
- Carries out basic administrative and financial management activities of an SME, identifying the main accounting and tax obligations and filling in documentation.

#### **“On the Job Training”**

The holder:

- Identifies the structure and the organization of the company, relating both to the production and sale of the products obtained.
- Applies labour and ethic habits in his/her professional activity according to the characteristics of the job position and the procedures established by the company.
- Organizes and carries out production activities in a forest plant, relating the techniques and the methods to the exploitation plan.
- Carries out topographic operations, describing the methods and the working facilities
- Coordinates and supervises the management activities in forest areas, analysing the technical considerations and the proceedings.
- Controls and supervises the natural environment and the public domain, interpreting the methods and the techniques
- Organizes and manages the forest use, relating the techniques and the methods to the plan for optimal use.
- Plans hunting and fish farming management works, analysing the techniques, the means and the procedures.
- Organizes and carries out health protection activities aimed at forest areas, applying the established methods and techniques.
- Organizes and supervises the work to prevent, to monitor, to detect and to extinguish forest fires, following methods and techniques.

### **RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE DIPLOMA**

The Higher Technician in Forest and Natural Environment Management works in the management area of large, medium and small companies, both public and private, either as self-employed or for others. These companies are devoted to forest, hunting, fish and tree-nursery management, to the development of environment education programmes, to information, communication, training, interpreting and accompaniment activities and guide in the natural and social environment and also to the monitoring and control of the natural environment and its resources.

The most relevant occupations or jobs are the following:

1. Person in Charge of Reforestation Companies
2. Person in Charge of Companies Devoted to Water and Forestry Correction and Forest Inventory
3. Person in Charge of Companies Devoted to Forestry Treatments
4. Coordinator for Forest Fire Prevention and Fighting Units
5. Head of Forest Fire Prevention and Fighting Unit
6. Fire Wardens Coordinator
7. Person in Charge of Companies Carrying out Pest and Forest Diseases Control
8. Person in Charge of Companies Carrying out Construction and Maintenance Works in Forest Roads
9. Freelance Skilled Worker in Reforestation Work as well as Silviculture, against Pests and Forest Diseases Treatments
10. Operator in Topography Works
11. Forest Overseer or Person in Charge
12. Person in Charge of Forest Use Companies
13. Person in Charge of Nurseries
14. Person in Charge of Spreads of Nursery Plants

15. Responsible for High-Rise Seeds and Fruits Collection
16. Person in Charge of Technical Support aimed at inventing, planning and monitoring inland, water and hunting species environment
17. Person in Charge of Game, Fish and Oyster-Farm Restocking.
18. Person in Charge of Conditioning Works for water inland and hunting species environments
19. Person in Charge of Nature Park, Administration's Game Reserve and Public Reserve, amongst others, belonging to both the Government and the universities/centres for scientific research
20. Skilled worker in legal control activities over predators or invasive species
21. Hunting Advisor
22. Coordinator for Rural Vigilance
23. Person in Charge of Hunting and Fish Farming tourism
24. Wildlife Officer or similar
25. Guard of Natural Spaces
26. Environmental Educator
27. Nature Supervisor

### **AWARD, ACCREDITATION AND LEVEL OF THE DIPLOMA**

**Name of the body awarding the diploma on behalf of the King of Spain:** Spanish Ministry of Education or the different Autonomous Communities according to their areas of competence. The title has academic and professional validity throughout Spain.

**Official duration of the education/ training leading to the diploma:** 2000 hours.

**Level of the diploma (national or international)**

- NATIONAL: Non-University Higher Education
- INTERNATIONAL:
  - Level 5 of the International Standard Classification of Education (ISCED5).
  - Level 5 of the European Qualifications Framework (EQF5).

**Entry requirements:** Holding the Certificate in Post-Compulsory Secondary Education (Bachillerato) or holding the corresponding access test.

**Access to next level of education/training:** This diploma provides access to University studies.

**Legal basis:** Basic regulation according to which the diploma is established:

- Minimum teaching requirements established by the State: Royal Decree 260/2011, of 28 February, according to which the diploma of Higher Technician in Forest and Natural Environment Management and its corresponding minimum teaching requirements are established.

**Explanatory note:** This document is designed to provide additional information about the specified diploma and does not have any legal status in itself.

### **COURSE STRUCTURE OF THE OFFICIALLY RECOGNISED DIPLOMA**

<b>PROFESSIONAL MODULES IN THE DIPLOMA ROYAL DECREE</b>	<b>CREDITS ECTS</b>
<b>Agronomic Botany</b>	6
<b>Plant Pathology</b>	7
<b>Agrarian Topography</b>	6
<b>Farming and Forestry Machinery and Plants</b>	12
<b>Environment Education Techniques</b>	6
<b>Management of the Forest Environment Utilization</b>	8
<b>Management and Organization of the Forest Nursery</b>	7
<b>Hunting Management</b>	5
<b>Management of Inland Fishing</b>	5
<b>Forest Management</b>	10
<b>Management of Natural Environment Conservation</b>	7
<b>Forest Fire Defence</b>	5
<b>Project on Forest Management and Environment Conservation</b>	5

<b>Vocational Training and Guidance</b>	5
<b>Business and Entrepreneurial Initiative</b>	4
<b>On the Job Training</b>	22
	TOTAL CREDITS
	<b>120</b>
OFFICIAL DURATION (HOURS)	<b>2000</b>

\* The minimum teaching requirements shown in the table above comprise 55% official credit points valid throughout Spain. The remaining 45% corresponds to each Autonomous Community and can be described in the **Annex I** of this supplement.

# INFORMATION ON THE EDUCATION SYSTEM

