

# EUROPASS DIPLOMA SUPPLEMENT

## TITLE OF THE DIPLOMA (ES)

*Técnico Superior en Prótesis Dentales*

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

*Higher Technician in Dental Prostheses*

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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:**

Designing, manufacturing and repairing dentofacial prostheses, orthodontic appliances and occlusal splints according to prescription and optional indications, as well as performing the necessary readjustment to finish them and managing a dental prostheses laboratory performing the operations for product commercialization, and respecting the existing regulations on safety and environmental protection as well as quality specifications.

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

### “Laboratory of Dental Prostheses”

The holder:

- Organizes the dental prostheses laboratory, relating the different areas of work to the professional activity and to the production process.
- Controls the storage of materials and equipment, applying management computer techniques.
- Preparing prosthetic products, describing the stages of the process.
- Manages the documentation detailing the file protocols and selecting computer applications.
- Prepares standard operating procedures for the manufacture of dental prostheses, interpreting health regulations.

### “Design of Functional Prostheses”

The holder:

- Recognizes the stomatognathic apparatus structure, describing the characteristics of its components and operation.
- Plans the work according to the product characteristics, relating the medical prescription to the development process.
- Obtains the model by producing a positive image from the print, describing processing techniques.
- Prepares individual trays, base plates and hinge impellers, selecting materials and techniques.
- Supervises the occlusion, analyzing models assembled in the articulator.
- Manages software tools for the design of dental prostheses, using computer-aided design technology.

### “Complete Prostheses”

The holder:

- Performs test assemblies in total edentulous prostheses, identifying the position of the dental pieces.
- Processes full prostheses by interpreting resin packaging techniques.
- Reassembles and carves full prostheses, selecting the selective grinding techniques.
- Reviews and polishes complete prostheses, interpreting technical procedures of finishing.
- Repairs removable resin dentures, identifying the types of composure.
- Makes rebases in resin removable prostheses, describing the technical procedures.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks and the measures and the equipment to prevent them.

### “Orthodontic Appliances and Occlusal Splints”

The holder:

- Identifies dentofacial anomalies, relating the characteristics of the braces and splints to the medical prescriptions.
- Simulates in the model the prospects predicted in the proposed treatment, identifying parameters and obtaining measurements and adjustments.
- Selects equipment and materials, relating them to their manufacturing process and recognizing their characteristics.
- Prepares braces and removable occlusal splints, selecting polymerization and finishing techniques.
- Prepares removable orthodontic appliances, selecting additions according to medical prescription.
- Prepares and headgears fixtures, selecting fixtures according to medical prescription.
- Prepares occlusal splints interpreting prescription.

- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks and the measures and the equipment to prevent them.

#### **“Restorations and Metal Structures in Fixed Prostheses”**

The holder:

- Obtains individualized stumps, interpreting processing procedures.
- Obtains the wax structure, identifying waxing techniques.
- Prepares waxed structures for casting, selecting the phases of the process.
- Obtains the negative structure, identifying the lost wax technique.
- Obtains the restoration or patterned metal structure, interpreting casting techniques.
- Obtains the mechanized structure, using computer aided design programs CAD-CAM and manual machining systems.
- Obtains metal structures by interpreting systems of forming by galvanization.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks and the measures and the equipment to prevent them.

#### **“Removable Partial Metal, Resin and Mixed Prostheses”**

The holder:

- Performs wax modeling, interpreting working techniques.
- Prepares the base metal by lost-wax casting, relating the specific technique with the alloy used.
- Welds metal elements, selecting welding techniques.
- Incorporates mixed prostheses components or retainers forged in the structure, selecting the supporting means.
- Assembles dental pieces on metal bases, interpreting technical requirements.
- Polymerizes resin elements on the metal structures, interpreting technical procedures.

#### **“Restorations and Aesthetic Coatings”**

The holder:

- Prepares resin provisional restorations, interpreting the established techniques.
- Performs resin metal prostheses, describing the development process.
- Prepares metal ceramic prostheses, identifying procedures of ceramic firing process.
- Performs ceramic restorations on machined structures, interpreting scanning and milling.
- Manufactures ceramic prostheses without metal, analyzing the thermo-injection techniques.
- Carries out ceramic restorations without metal, identifying pottery technique on plaster stump.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks and the measures and the equipment to prevent them.

#### **“Prostheses on Implants”**

The holder:

- Defines the characteristics of dental implants, relating them to osseointegration and the materials used in their manufacture.
- Obtains the model, selecting the appropriate additions according to medical prescription.
- Prepares radiological and surgical splints, relating them to the medical prescription.
- Characterizes the structure of the components of the implants and abutments, relating them to prosthetic rehabilitation.
- Makes fixed implant prostheses, interpreting the medical prescription.
- Makes implant overdentures, relating them to the medical prescription.

#### **“Project on Dental Prostheses”**

The holder:

- Identifies the needs of the production sector, relating them with similar projects that may satisfy them.
- Designs projects related to the competences described in the diploma, including and developing their constituting stages.
- Plans the project implementation, determining the intervention plan and the associated documentation.
- Defines the procedures for the monitoring and control of the project implementation, justifying the selection of the variables and the instruments used.

#### **“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 the risks derived from his/her activity, analysing the job conditions and 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 the risk situations in the labour setting of the Higher Technician in Dental Prostheses.

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

The holder:

- Recognizes 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 type of service provided.
- Applies ethical and work habits in the development of their professional activities in accordance with the characteristics of the job and the procedures established by the company.
- Manages materials, instruments, apparatus and equipment, relating them to the development of each of prosthetic products.
- Designs dental prostheses products, on the basis of aesthetic-functional criteria.
- Develops and repairs removable prostheses using established protocols.
- Develops and repairs braces and occlusal splints, using established protocols.
- Develops and repairs fixed prostheses, according to functional and aesthetic requirements and applying the established protocols.

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

The Higher Technician in Dental Prostheses works in the health sector, in private or in institutional care companies, as a manufacturer of custom medical devices in dental prostheses laboratories, either as an employee or self-employed, and in dental industry companies such as factories supplying materials and machinery, or in dental deposits, participating in specific training activities of the company. They can also develop their activity in the field of technological research in dental companies and as instructors in the dental industry by providing basic and advanced courses on new materials and techniques. Their activity is subject to regulation by the state health administration.

The most relevant occupations or jobs are the following:

- Higher technician in dental prostheses.
- Technical specialist in dental prostheses.
- Technical manager of a dental prostheses laboratory.
- Sales rep. in the dental industry and dental deposits.
- Technical Manager in research departments and product development in the dental industry.

### **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 1687/2011, of 18 November, according to which the diploma of Higher Technician in Dental Prostheses 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

PROFESSIONAL MODULES IN THE DIPLOMA ROYAL DECREE	CREDITS ECTS
Laboratory of Dental Prostheses	4
Design of Functional Prostheses	8
Complete Prostheses	11
Orthodontic Appliances and Occlusal Splints	16
Restorations and Metal Structures In Fixed Prostheses	13
Removable Partial Metal, Resin and Mixed Prostheses	11
Restorations and Aesthetic Coatings	13
Prostheses on Implants	8
Project on Dental Prostheses	5
Professional Training and Guidance	5
Business and Entrepreneurial Initiative	4
On the Job Training	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

