EUROPASS SUPPLEMENT TO THE DIPLOMA OF TÉCNICO SUPERIOR DE ARTES PLÁSTICAS Y DISEÑO (HIGHER EDUCATION IN PLASTIC ARTS AND DESIGN)

TÉCNICO SUPERIOR DE ARTES PLÁSTICAS Y DISEÑO EN MODELISMO Y MATRICERÍA CERÁMICA ARTÍSTICA
(DIPLOMA OF HIGHER EDUCATION IN PLASTIC ARTS AND DESIGN IN MODELLING AND CERAMIC DIE MAKING)

PROFILE OF SKILLS AND COMPETENCES

The holder has acquired general skills relating to:

Creating models, moulds and dies for the mass-production manufacturing of utilitarian and ornamental ceramic products, whether it is a project of their own or a specific professional assignment. Ensuring the viability of the design and participating in the planning of the ceramic production process by defining the formal, functional and material aspects that determine how the product will materialise. Organising the various stages of the process, ensuring the safety of the operations and performing the corresponding quality control checks until the finished product is achieved.

Within this framework, each PROFESSIONAL MODULE includes objectives leading to the following LEARNING RESULTS that the holder acquires:

"Dibujo artístico" (Artistic Drawing)

The title holder:

- Graphically represents both forms found in the environment and images of his or her own creation.
- Uses the different materials and drawing techniques as the basic tools with which to search for and formally define images and for the graphic communication of ideas.
- Analyses the foundations and the theory of colour, its importance in artistic-plastic creative processes and its applications in the field of ceramics.
- Develops his or her capacity for personal aesthetic enjoyment, inventiveness and eloquence.
- Appreciates ceramic creation and works in the light of external criteria, the body of knowledge on the subject, and internal criteria, his or her own taste and sensitivity.

"Dibujo técnico" (Technical Drawing)

The title holder:

- Uses the methods, procedures, conventions and graphic techniques that are specific to technical drawing when searching for and when formally defining three-dimensional objects and in the graphic communication of ideas.
- Represents and delimits ceramic objects, both from their surroundings and of their own invention, using the appropriate system of representation.
- Understands the graphic information of designs and projects for three-dimensional ceramic objects and bas-reliefs for both utilitarian and ornamental purposes.

- Appreciates technical drawing as a basic tool for objectively representing forms, transmitting precise information as to the objects and for devising, designing and manufacturing such objects.

"Volumen" (Volume)

The title holder:

- Acquires an orderly and comprehensive vision of the different factors and stages inherent in analysing, devising and materialising three-dimensional forms, and of the creative methods, the constructive techniques and modelling.
- Analyses three-dimensional objects and bas-reliefs from a formal, structural and functional perspective, interprets them and represents them using the corresponding volumetric configuration procedures.
- Models three-dimensional artistic objects and bas-reliefs, whether their own original ideas or copies of models suggested to them.
- Creates models and prototypes related to practical situations of ceramic manufacturing.

"Historia de la Cerámica" (History of Ceramics)

The title holder:

- Analyses the technical and aesthetic dimension of the ceramic arts down through the ages, and interprets their historical development and their evolution.
- Develops his or her visual and conceptual understanding of the artistic language inherent in the ceramic arts.
- Understands the expressive language that characterizes ceramics from every era, style or tendency and its relationship to the art, architecture and the society of the time in which it was produced.
- Is familiar with the investigation and renewal processes that have taken place in the field of ceramic manufacturing throughout this century.

"Materiales y Tecnología: Cerámica" (Materials and Technology: Ceramics)

The title holder:

- Understands the scientific bases of the processes used to produce ceramic materials.
- Classifies ceramic materials and analyses their most significant characteristics, structures and properties.
- Analyses the different stages of the processing of ceramic materials and the physical and chemical changes that each material undergoes.
- Is aware of the influence that the process conditions have on the quality of the final product, classifies the different defects that may arise and differentiates between the most appropriate quality-control procedures at any given time.
- Identifies the machines and tools used in the different stages of the ceramic process and is able to

classify them, describe how they are used and how they work, and their basic maintenance procedures.

- Produces collections of ceramic samples according to the specific characteristics of the ceramic product.
- Appreciates the role of scientific methodology and technique in ceramic research, both in the field of new materials and in productive processes and quality control.

"Medios informáticos" (IT Media)

The title holder:

- Knows and uses computer material and equipment.
- Knows and uses the software that is most appropriate to the professional practice of the speciality.
- Analyses the presence of today's new technologies in planning and producing industrial ceramics.
- Uses IT resources as instruments for devising, managing and communicating his or her own work.

"Taller de modelos cerámicos" (Ceramic Models Workshop)

The title holder:

- Produces ceramic models of technical and artistic quality.
- Uses basic techniques and specifically ceramic techniques for creating models.
- Understands the characteristics and idiosyncrasies inherent in ceramic materials that condition the technical and artistic quality of the model.
- Identifies the specific tools and machinery for producing models; classifies them, describes how they are used, how they work and the basic maintenance and safety operations.
- Acquires an overall vision of moulding and die making techniques.
- Analyses the design and the material, structural, functional and plastic specifications of ornamental and utilitarian ceramic products, identifies the most common problems that arise in the project and productive process, particularly those related to the technical and artistic quality of the models.
- Explains the parameters that affect the configuration of the different types of ornamental and utilitarian ceramic product and puts forward coherent options for improvement.
- Organises the workshop in accordance with the ergonomic and functional requirements of the machinery, the facilities, the space and the user, not to mention the requirements of safety, hygiene and environmental protection as they apply to the speciality.

"Taller de moldes cerámicos y matricería" (Workshop of Ceramic Moulds and Die Making)

The title holder:

- Produces ceramic models of technical and artistic quality for the mass production

of ceramic products for utilitarian and ornamental purposes, based on a project of their own design or in compliance with the specifications of a given project.

- Has an overall and sequential understanding of the industrial manufacturing process behind utilitarian and ornamental ceramic products, identifies the raw materials and their behaviour throughout the process, together with the tools and the machinery involved, how to use them and how to maintain them.
- Analyses the material, structural, functional and plastic specifications of ornamental and utilitarian ceramic designs, identifies the most common problems that arise in the project and productive process, particularly those related to the technical and artistic quality of the moulds and dies.
- Knows and applies the different moulding techniques in all their phases and stages.
- Identifies the tools and machinery for producing moulds and dies; classifies them, describes how they are used, how they work and the basic maintenance and safety operations.
- Identifies and characterises the raw materials used in the production of moulds and dies, and their behaviour throughout the process.
- Organises, plans and carries out the different stages that make up the productive process of moulds and dies; identifies the problems that arise and resolves them, applying quality control checks at all times.
- Organises the workshop in accordance with the ergonomic and functional requirements of the tools, the facilities, the space and the user, not to mention the requirements of safety, hygiene and environmental protection as they apply to ceramic manufacturing.

"Proyectos de modelismo y matricería cerámica" (Modelling and Ceramic Die Making Projects)

The title holder:

- Analyses the relationship between design and project methodology and applies the most suitable methodology or methodologies to the design of ceramic products of a utilitarian and ornamental nature.
- Develops and exhibits projects involving the production of models, moulds and dies for the mass-produced or artisanal manufacture of ceramic pieces whose purpose is ornamental and/or utilitarian.
- Produces models, moulds and dies, carrying out every phase of the project.
- Appreciates the design of ceramic products as an opportunity for research and for personal artistic expression.

"Proyecto integrado" (Integrated Project)

- Develops and exhibits a project involving the devising and production of models, moulds and dies for the mass-produced or artisanal manufacture of ceramic pieces whose purpose is ornamental and/or utilitarian.
- Materialises every phase of the project until he or she obtains the final models, moulds and dies.

- Develops, through the design of models, moulds and dies, his or her own sense of aesthetics and creative capacity.

"Formación y Orientación Laboral" (Training and Career Guidance)

The title holder:

- Analyses the legal working framework and defines the rights and obligations that derive from labour relations.
- Identifies the different ways by which to enter the labour market and lifelong training, as well as the activities and initiatives of organisations and institutions that are dedicated to this end.
- Puts forward a plan for the organisation of a crafts workshop and for a small or medium-sized ceramic manufacturing enterprise, taking into account such factors as production, marketing, distribution, commercial relationships and the relevant legal and social-labour aspects.
- Evaluates the legal framework as far as working, health and the environment is concerned and its impact on the productive activity and on the quality of one's working and personal life.
- Analyses the specific regulations governing ceramic design and the industry.
- Appreciates cooperation, self-criticism and teamwork as attitudes which contribute to achieving better results in the productive activity.

"Prácticas en empresas, estudios o talleres" (Practical Training in Companies, Studios or Workshops)

The title holder:

- Knows the day-to-day working routines of a ceramic company or crafts workshop.
- Carries out the professional tasks that correspond to his or her level of training.
- He or she enters into contact with the working world and the company's social, working and technical systems.
- Contrasts the knowledge, training and skills acquired in the educational centre with the ceramic industry's corporate and working reality.
- Incorporates into their training knowledge relating to the work environment in the field of ceramic modelling and moulding, the market situation and market relationships, artistic and cultural tendencies, how work is organised and coordinated, corporate management, social - occupational relationships within the company, etc., all of which is needed when setting out on a career.
- Acquires technical knowledge of tools, instruments, materials and machinery which, due to their specialisation, cost or novelty, or not available to the educational centre.
- Actively participates in the ceramic production phases under the guidance of the corresponding tutor or coordinator.
- Applies the knowledge, skills and abilities acquired during the theoretical and practical training period provided by the educational centre.

RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE

The Holder of a Diploma of Higher Education on Plastic Arts and Design in Modelling and Ceramic Die Making carries out his or her activity as an independent professional creating models, moulds and dies designed for the manufacture of utilitarian and ornamental ceramic products and, as the case may be, organising and coordinating small working groups. He or she may also develop their professional career as an employee of professionals of a higher academic level than theirs, and in the production department that corresponds to their professional training.

The following are the most relevant occupations and jobs:

- Modeller.
- Artisan Die Maker.
- Modeller of porcelain.
- Creator and producer of models and moulds for ceramic products of a utilitarian and ornamental nature.

OFFICIAL BASIS OF THE CERTIFICATE

Name and status of the body awarding the certificate: The Ministerio de Educación, Cultura y Deporte (the Ministry of Education, Culture and Sport) or the Autonomous Communities in the area of their own administrative responsibility. The degree has academic and professional effects that are valid throughout the entire State.

Official duration of the Diploma: 2,000 hours.

Level of the certificate (national or international):

- NATIONAL: Non-university higher education.
- INTERNATIONAL:
  - Level 5b of the International Standard Classification of Education (ISCED 5b).
  - Level 5 of the European Qualifications Framework (EQF5).

Entry requirements: Bachelor's Degree or Certificate of having passed the corresponding access test and the specific access test.

Access to the next level of education or training: It is possible to move on to higher education in artistic teaching and to any university degree course.

Legal basis. Rules and regulations on which the Diploma is based:

- Royal Decree 37/2010, of 15 January, which establishes the Higher Diplomas of Education in Plastic Arts and Design in Artistic Pottery, in Ceramic Modelling and Die Tooling and in Ceramic Coatings and the Diplomas of Education in Plastic Arts and Design in Pottery and in Ceramic Decoration, belonging to the professional and artistic family of Artistic Ceramics and which approves the corresponding minimum education requirements.

Explanatory note: This document is intended as supplementary information to the Diploma in question, but on its own it does not have any legal validity. It may be accompanied by an Annex I which the corresponding Autonomous Community shall fill in.

COURSE STRUCTURE OF THE OFFICIALLY RECOGNISED DIPLOMA

PROFESSIONAL MODULES OF THE DIPLOMA ESTABLISHED IN THE ROYAL DECREE	**ECTS CREDITS**
Artistic Drawing	4
Technical Drawing	4
Volume	4
History of Ceramics	3
Materials and Technology: Ceramics	6
IT Media	3
Ceramic Models Workshop	8
Workshop of Ceramic Moulds and Die Making	10
Modelling and Ceramic Die Making Projects	9
Integrated Project	9
Training and Career Guidance	3
Practical Training in Companies, Studios or Workshops	3
	TOTAL CREDITS
TOTAL MINIMUM EDUCATION REQUIREMENTS	***66***
OFFICIAL DURATION OF THE DIPLOMA	***2,000***

* The minimum education requirements reflected in the above table constitute 55% of the total duration of the Diploma; they are of an official nature and are valid throughout the national territory. The remaining 45% is specific to each Autonomous Community and may be reflected in **Annex I** of this supplement.

INFORMATION ABOUT THE EDUCATION SYSTEM