

1. Title of the certificate ¹

**Δίπλωμα Επαγγελματικής Ειδικότητας Εκπαίδευσης και Κατάρτισης Επιπέδου 5 Ειδικότητα Ι.Ε.Κ.:
ΣΧΕΔΙΑΣΤΗΣ ΜΕΣΩ ΣΥΣΤΗΜΑΤΩΝ Η/Υ**

2. Translated title of the certificate ²

**Vocational Training Diploma Initial Vocational Training (I.E.K.) Level 5. Specialty of I.E.K.:
CAD DESIGNER**

3. Profile of skills and competences

LEARNING OUTCOMES (KNOWLEDGE, SKILLS, COMPETENCES). A typical holder of the certificate is able to:

KNOWLEDGE

- Specify the basic concepts, entities, methods of connection and operation, of computer architecture and design techniques for operating systems.
- Present the basic concepts, modules, and details of communication software.
- Fully describe the procedures and the methods referring to topographical applications and the concept of land registration.
- Interpret mathematical expressions related to various volumes in 2D and 3D space.
- Identify the basic concepts and details of construction, the properties of structural elements, of structural materials, and the methods for applying them.
- List the basic principles and means of technical drawing, by sufficiently interpreting the technical drawings and by analyzing the general characteristics, the possibilities, and the benefits of design software.
- Present the macros and the use thereof, the differences and the similarities with the "internal" commands of the design software, along with the various differences and similarities with the "commands" and symbolisms of AutoLISP language.
- Describe the occupational hazards, the protection means, and the first-aid techniques.
- Analyse issues related to the protection of the environment and the proper use of energy sources.
- Present the legal framework, the principles, and the organization and operation method of small businesses and projects, along with the concept of entrepreneurship and explains the regulations and procedures governing private and state projects.
- Properly understand the technical terminology established in the field of their work, conducting a professional communication both in Greek and in English.

SKILLS

- Easily operate the MS/PS-DOS, UNIX operating systems, the GUI (Graphical User Interface) and MS-Windows.
- Easily use any design programme for design in two or three dimensions, under any scale, printing in Raster or Pen Plotter, in axonometric or perspective form.
- Design a large scope of applications in two or three dimensions, with a structural or dynamic photorealistic representation.
- Organise the work environment in accordance with the needs of the user through suitable programmes, with the purpose of ensuring speed and efficiency of work.
- Properly use spreadsheets.
- Exchange designs - files with different programs, with different operating systems, and adjusts them to his/her needs.
- Program using AutoLISP and other accessories.
- Easily operate the Pointing Device, the volumes at space, by specifying the "location" of commands on screen, in order to design in the shortest possible time a specific design (OJT), by suggesting design solutions, applying design methods, and by classifying objects.
- Locate the risks inherent to each stage of works, promptly take the necessary safety measures, providing first aid in the event of minor accidents.
- Handle his/her electronic correspondence and uses an office suite for simple applications (preparation of offers, reports, clientele, etc.) and locate basic information related to the subject of his work in the internet.
- Imprint, measure the area of and design complete topographical drawings.

COMPETENCES

- Summarise his/her rights and obligations, both as waged personnel and as a freelancer, making special reference to the field of human relations and to the observance of professional obligations.
- Fully and successfully cover the support of the firm with regard to the design of works of Civil and Mechanical Engineer, Architect and Mechanical Topographer, using a computer
- Operate effectively as a liaison between the designers, and constructors, and the personnel participating in the implementation of the project.
- Apply good space perception, fantasy, and aesthetics, in order to achieve a proper result and coordinate the crews, by guiding manufacturers and giving them suitable instruction.
- Look for the latest information and data in his/her profession, by revising his/her initial knowledge.
- Develop constructive and unproblematic collaborations through proper communication both with the customers and with their colleagues and crews, whether receiving or executing instructions.
- Resolve, either autonomously or through collaboration with other industry professionals, any problems that may come up during works.
- Consider his/her personal learning deficiencies and needs and participate in continuing education programs related to the technological and organizational developments in his/her field.

¹ In the original language. | ² If applicable. This translation has no legal status. | ³ If applicable.

4. Range of occupations accessible to the holder of the certificate ³

The holder of this diploma can be occupied in private architectural firms, industrial units or state institutions, and in particular in computer-aided civil engineers', architects', mechanical engineers' and topographers' designs. The Vocational Training Diploma is recognised as a qualification for appointment in the public sector falling in the category S.E. (Secondary Education) according to the Presidential Decree no.50/2001 (Greek Official Gazette 39/Vol.A/5-3-2001).

5. Official basis of the certificate

Body awarding the certificate

E.O.P.P.E.P.
(National Organisation for the Certification of Qualifications and Vocational Guidance)
Ethnikis Antistaseos 41 Avenue, 142 34 N. Ionia
<https://www.eoppep.gr/>

Level of the certificate (national or European) ¹

Level 5 National and European Qualifications Framework

Access to next level of education / training ¹

Yes

Authority providing accreditation / recognition of the certificate

E.O.P.P.E.P.
(National Organisation for the Certification of Qualifications and Vocational Guidance)
Ethnikis Antistaseos 41 Avenue, 142 34 N. Ionia
<https://www.eoppep.gr/>

Grading scale / Pass requirements

a) acquisition of the Vocational Training Certificate (V.E.K.) after successful completion of study at the Vocational Training Institute (I.E.K.)
b) acquisition of the Vocational Training Diploma after:
1. success in the theoretical part of Initial Vocational Training certification examinations (Grading scale = 1-20, Pass = 10) and
2. success in the practical part of the Initial Vocational Training certification examinations (Pass/Fail)

International agreements on recognition of qualifications¹

No

Legal basis

Law 2009/1992 on the National System of Vocational Education and Training
Law 4186/2013 on the Restructure of Secondary Education
Law 4763/2020 on National System of Vocational Education, Training and Lifelong Learning

6. Officially recognised ways of acquiring the certificate

Total duration of the education / training leading to the certificate
Success in the the Initial Vocational Training certification examinations
4 semesters (until law 4186/2013) / 5 semesters (after law 4186/2013)

7. Additional information

Entry requirements ¹

Certificate of Upper Secondary School. Qualification of Level 4 (NQF/EQF) // Certificate Vocational Training School (SEK) – Qualification of Level 3 (NQF/EQF)
Following the voting of L. 4763/2020, only by an Upper Secondary Education certificate or an equivalent title of studies (Qualification of Level 4 NQF/EQF)

Indicative subjects taught:

Operating Systems DOS - Windows, Spreadsheets in Windows, Computer Architecture and Operating Systems, Data and Networks Communication, Operating Systems UNIX, Mathematics (Geometry - Trigonometry), Basic Principles of Design, Building Constructions - Building, Architectural Design, Civil Engineering Design, Electromechanical Design, Topographical Design, Introduction to Computer Design Programmes, Applied Design (Two Dimensions), Design Forms - Scales / Plotting, Surface and Volume Design / Photorealism, Work Environment Organisation, Planning with Macros (Script), Planning with LISP and other aids, English.

More information

National Qualifications Framework : <https://nqf.gov.gr/> and <https://proson.eoppep.gr/en>

National Europass Centre: **EL/NEC - E.O.P.P.E.P.** National Organisation for the Certification of Qualifications and Vocational Guidance, Ethnikis Antistaseos 41 Avenue, 142 34 N. Ionia, Greece. T.0030 2102709000 europass@eoppep.gr
<http://europass.eoppep.gr> www.eoppep.gr

¹ If applicable.