

1. Title of the certificate ¹

**Δίπλωμα Επαγγελματικής Ειδικότητας Εκπαίδευσης και Κατάρτισης Επιπέδου 5 Ειδικότητα Ι.Ε.Κ.:
ΤΕΧΝΙΚΟΣ ΔΟΜΙΚΩΝ ΕΡΓΩΝ**

2. Translated title of the certificate ²

**Vocational Training Diploma Initial Vocational Training (I.E.K.) Level 5 Specialty of I.E.K.:
STRUCTURAL WORKS TECHNICIAN**

3. Profile of skills and competences

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

KNOWLEDGE

- Identify the traditional and new basic construction materials, instruments, and machinery, the properties and the method of application thereof, selecting the suitable ones for different site works, topography works, construction, and decoration.
- Analyse concepts, basic principles and the various elements of statics and material strength, dynamics and kinematics, relating them to the various construction materials and building elements.
- Explain the basic details, concepts, and applications of soil mechanics, of foundations, of the use of buttresses, of embankments, and of compacting.
- Explain the types and the characteristics of hydraulic projects, along with the fundamental principles of fluid mechanics.
- Describe the procedures and the basic principles of design, study and construction of roads and road projects, and present the principles and procedures governing transport systems.
- Analyse the basic principles of civil construction and development.
- List the basic principles of technical design, the means, the instruments, and its materials, and sufficiently interprets the technical drawings.
- Describe the occupational hazards, the protection means, and the first-aid techniques.
- Analyse issues related to the protection of the environment, the proper use of energy sources, while listing products that are environmentally-friendly and can be used to replace other non-environmentally friendly products in various works.
- Present the regulations and procedures governing the private and public projects, the principles of organization and operation of sites, of small businesses and projects, and the concept of entrepreneurship.
- Analyse the software used for performing work.
- Properly understand the technical terminology established in the field of their work, conducting a professional communication both in Greek and in English.

SKILLS

- Use a computer for the design of manufacture, architectural, construction, and topographical drawings for the preparation of electronic structural designs.
- Perform analytical calculations about the balance, the structural integrity, the intensive volumes, M, N, Q diagrams, in various types of beams and under various loads, resolving simple or composite structural problems, and problems related to material strength and structure dynamics.
- Apply with technical sufficiency all kinds of works for the superstructure or the infrastructure, using numerous structural materials, methods, and construction knowledge and regulations.
- Apply anti-seismic testing to load-bearing structures.
- Properly apply the fundamental subjects of topography, by performing all necessary actions to properly perform all necessary topographical application.
- Properly apply basic knowledge on transport projects.
- Properly operate and maintain machinery and devices, means, materials, and programmes, considering general instructions, technical specifications, technical manuals, regulations and specifications regarding work safety.
- 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, use 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, by properly using a UNIX operating system.

COMPETENCES

- Operate as a liaison between the designers, and constructors, and the personnel participating in the implementation of the project.
- Look for the latest information and technological data in his/her profession, by revising his/her initial knowledge.
- Organise his/her work space, while keeping it orderly and clean during and after the works under his/her responsibility.
- Develop constructive and unproblematic collaborations through proper communication both with the customers and with colleagues and crews, whether receiving or executing instructions.
- Resolve, either autonomously or through collaboration with other industry professionals, any problems come up during works performed.
- Supervise and coordinate crews.
- Work by combining the above knowledge and skills in different environments, take initiatives and adapt his/her behaviour to the circumstances.
- Effectively organize the work site and the personnel for the benefit of work.
- 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 Institute of Vocational Training specialisation certificate may work in the industry of constructions, staying between the designers, the manufacturers and the labourers participating in the construction of the project.

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/>

Authority providing accreditation / recognition of the certificate

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Level of the certificate (national or European) ¹

Level 5 National and European Qualifications Framework

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)

Access to next level of education / training ¹

Yes

International agreements on recognition of qualifications ¹

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:

Topography, Technology of Construction Materials, Engineering, Material Strength, General structures, Constructions, Transport Projects, Worksite organisation and structure cost, Urban Construction, Hydraulics - Hydraulic Projects, Topographical drawing, Drawings for Building Projects, Practical exercises for general structures - construction, English, Computer use.

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.