

# Certificate supplement



#### 1. Title of the certificate 1

# Δίπλωμα Επαγγελματικής Ειδικότητας Εκπαίδευσης και Κατάρτισης Επιπέδου 5 Ειδικότητα Ι.Ε.Κ.: ΤΕΧΝΙΚΟΣ ΘΕΡΜΙΚΩΝ ΚΑΙ ΥΔΡΑΥΛΙΚΩΝ ΕΓΚΑΤΑΣΤΑΣΕΩΝ

2. Translated title of the certificate <sup>2</sup>

# Vocational Training Diploma Initial Vocational Training (I.E.K.) Level 5 Specialty of I.E.K: THERMAL AND HYDRAULIC FACILITIES TECHNICIAN

3. Profile of skills and competences

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

#### **KNOWLEDGE**

- Interpret a technical drawing, and draw an installation or an accessory in a sketch.
- · Identify the types and state the operation of thermohydraulic facilities, the accessories, and the operations thereof.
- List basic elements of engineering, of strength of materials, of mechanical drawing, of engine components, of electrical engineering, the basic principles of flow mechanics and burning, and the calculation of pressure drop in pipes.
- Clearly express and with the use of examples issues related to the operation of Facilities for Central Heating, Water Supply, Sewage, Fire-fighting Systems, using water in buildings.
- · State the safety regulations and the law on the protection of employees, the work site, and the environment.
- Understand the basic concepts of his/her profession in English.
- Present basic software for his/her work using a PC.
- List the measures for fire protection and the proper use of dry powder extinguishers.

#### **SKILLS**

- Manufacture thermohydraulic facilities (simple or complex), within the context of his/her specialties, or based on designs and suggestions of the project's technical supervisor.
- Use instruments for technical measurements and testing (callipers, micrometers, multimeters, manometers, automation and quality control instruments.
- Demonstrate the safe operation of tools (hand and power tools).
- Extract results from simple calculations (volume measurement, unit conversion, etc.).
- · Locate malfunctions in a thermohydraulic installation, as well as in its separate parts, and restore them.
- Perform maintenance works using suitable instruments, devices and equipment in general, in facilities of any kind.
- Select the suitable tools and operate them properly and with safety.
- Provide first aid in the event of minor accidents.
- Handle his/her electronic correspondence and use an office suite for simple applications (issuing of tenders, reports, clientele, etc.).
- Organise his/her work site, keeping it orderly and clean during work.
- Handle any wastes created, both in solid and liquid form.
- Cost the works and the materials referring to installations and prepare bills of quantities and the relevant tender files.

#### **COMPETENCES**

- Sufficiently assess the conditions during work and select the best possible solutions.
- Systematically apply the personal protection equipment and health equipment imposed by law.
- Work by combining the above knowledge and skills in different environments, through a dependent-employment or
  freelancing relation, as an employee of a small or large business or autonomously, taking the initiative and adjusting his/her
  behaviour to the various conditions.
- Responsibly undertake the issuing of certificates for thermohydraulic facilities provided by the relevant regulations.
- Act both under the instructions of an engineer / superior and autonomously, within the framework of responsibility that applies to him/her from the applicable law.
- Look for the latest information and technological 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, whether receiving or executing instructions.

The Certificate supplement provides additional information about the certificate and does not have any legal status in itself. Its format is based on the Decision (EU) 2018/646 of the European Parliament and of the Council of 18 April 2018 on a common framework for the provision of better services for skills and qualifications (Europass) and repealing Decision No 2241/2004/EC.

<sup>&</sup>lt;sup>1</sup> In the original language. | <sup>2</sup> If applicable. This translation has no legal status. | <sup>3</sup> If applicable.



## 4. Range of occupations accessible to the holder of the certificate <sup>3</sup>

The holder of the Diploma of this specialization can work as a plumber.

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) <sup>1</sup>

Level 5 National and European Qualifications Framework

# Access to next level of education / training <sup>1</sup>

#### Yes

# 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 <sup>1</sup>

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:

Technology of Materials, Engineering - Tolerance of Materials, Mechanical Drawing, Machining Technology, Work Security - Fire Fighting - Fire Protection, Communication Technique and Entrepreneurship, Elements of Machines, Basic Principles of Fluid Dynamics and Combustion, Environment Protection, Elements of Electrical Technology, Drawing-Construction-Function of Central Heating Installations, Thermal Hydraulic Installations Drawing, Drawing- Construction-Function of Water Supply and Sewerage Installations, Drawing-Construction-Function of Fire Systems with water in buildings, Maintenance and Repair of Water Supply and Sewerage Installations, Maintenance and Repair of Fire Systems with water in buildings, Cross-Disciplinary Assignment, Automations of Thermal Hydraulic Installations, PC Use, English Language-Terminology

#### More information

National Qualifications Framework: https://ngf.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 <a href="mailto:europass@eoppep.gr">europass@eoppep.gr</a> <a href="mailto:www.eoppep.gr">www.eoppep.gr</a> <a href="mailto:www.eoppep.gr">www.eoppep.gr</a>

### <sup>1</sup> If applicable.

# Authority providing accreditation / recognition of the certificate

#### E.O.P.P.E.P.

(National Organisation for the Certification of Qualifications and Vocational Guidance )

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### 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 qualifications<sup>1</sup>

No