

1. Title of the certificate¹

**Δίπλωμα Επαγγελματικής Ειδικότητας Εκπαίδευσης και Κατάρτισης Επιπέδου 5. Ειδικότητα Ι.Ε.Κ.:
ΤΕΧΝΙΚΟΣ ΕΓΚΑΤΑΣΤΑΣΕΩΝ ΑΝΑΝΕΩΣΙΜΩΝ ΠΗΓΩΝ ΕΝΕΡΓΕΙΑΣ**

2. Title of the certificate ²

**Vocational Training Diploma Initial Vocational Training (I.E.K.) Level 5. Specialty of I.E.K.:
RENEWABLE ENERGY SOURCES INSTALLATION TECHNICIAN**

3. Profile of skills and competences

Learning outcomes: Knowledge, skills and competences. A typical holder of the certificate is able to:

KNOWLEDGE

- Interpret an electrical or/and mechanical engineering RES system installation design.
- Identify the parts and operation of electrical circuits and devices (electrical machines, converters, devices for power control, lighting, signalling, safety, control, handling and readings),
- Identify the power electronics conversion configurations (DC/AC Inverters, DC/DC converters/terminals, battery charge controllers etc) of Renewable Energy Sources.
- Identify the electrical circuits' components and their operation and the Building Management Systems/Building Energy Management Systems (B.M.S./B.E.M.S.)
- Correlate the basic electricity laws, the technical characteristics/specifications of materials with circuit configurations of direct and alternating current (single-phase and three-phase current).
- Clearly describe the parts, the operating and manufacturing characteristics as well as the basic types of RES systems; describe the concepts of zero energy consumption buildings, energy saving, sound energy management and energy autonomous buildings.

SKILLS

- Use technical measurement instruments (multimeters, clamp meters, power meters, energy analysers, calipers, micrometers etc) and special digital technology devices for RES installation systems control, operation and repair.
- Assemble circuit configuration of direct and alternating current (single-phase and three-phase).
- Carry out RES systems equipment installation (PV systems, wind turbines etc) and perform their necessary connections (panel connections with the remaining electrical installation or the network etc).
- Follow a preventive maintenance program carrying out the necessary works; detect any damage and proceed to remedy.
- Identify a damage in a RES plant and in its components restoring and resolving any technical problems arising.
- Install the necessary equipment for RES-derived electricity storage (PV systems, wind turbines etc) in local battery packs or in central Battery Energy Storage System, BESS or ESS) for future use.
- Install the necessary equipment on the ground for geothermal energy conversion into cooling or solar thermal energy conversion into heating.

COMPETENCES

- Compile technical studies for RES systems plant (PV systems, wind turbines etc)
- Manage the energy equipment technically, economically and commercially.
- Work responsibly in a team

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

The VET graduate of this specialty may be employed at enterprises involved in manufacturing engineering, electrical-electronic equipment for elevators of any type, in their supply, installation or maintenance.

The Diploma is recognized as a formal qualification for recruitment in the public sector in the Secondary Education graduate category by virtue of the PD 50/2001 (Government Gazette. 39/A/5-3-2001), as in effect.

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

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)
41 Ethnikis Antistaseos Avenue, 14234 N. Ionia
<https://www.eoppep.gr/>

Authority providing accreditation / recognition of the certificate

E.O.P.P.E.P.
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and Vocational Guidance)
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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
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 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

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

7. Additional information

Entry requirements¹

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 for the specialty:

Automated installations, Electrotechnology, Analogue electronics, Digital electronics, Industrial electronics, Industrial Information Technology, Mechanical engineering, Electrical engineering, Measurements-Sensors, Design, Renewable Energy Sources (R.E.S), Electric motion, Green facility, Energy economy, Professional practice.

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 EOPPEP Ethnikis Antistaseos 41 Avenue, 142 34 N. Ionia. T.0030 2102709000 europass@eoppep.gr
<http://europass.eoppep.gr> www.eoppep.gr

¹ If applicable.