

1. Title of the certificate ¹

**Δίπλωμα Επαγγελματικής Ειδικότητας Εκπαίδευσης και Κατάρτισης Επιπέδου 5 Ειδικότητα Ι.Ε.Κ.:
ΤΕΧΝΙΚΟΣ ΥΑΛΟΥΡΓΟΣ ΕΠΙΣΤΗΜΟΝΙΚΩΝ ΟΡΓΑΝΩΝ**

2. Translated title of the certificate ²

**Vocational Training Diploma Initial Vocational Training (I.E.K.) Level 5 Specialty of I.E.K.:
GLASSMAKER TECHNICIAN FOR SCIENTIFIC INSTRUMENTS**

3. Profile of skills and competences

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

KNOWLEDGE

- Recognise and describe the machinery and instruments intended for the manufacture and repair of glass scientific instruments.
- List the raw materials, the properties thereof, and the basic sources and stages for the production of glass of all qualities.
- Recognise and describe the structure, the composition, the physiology, the components, and the various physical, chemical, mechanical, electrical, magnetic, and thermal properties of glass.
- State the techniques for manufacturing and repairing all types of glass devices and instruments.
- Discern the major types of glass instruments and devices used in chemical, microbiology and research laboratories, while being knowledgeable about the quality and technical classes of each type.
- Describe the basic principles of a mechanical design and recognise the drawings of various devices and instruments.
- Describe the measures and the safety rules during processing, manufacture, assembly, and disassembly of glassware.
- List the types of cleaning and maintenance processes for glass instruments and devices.
- Recognise the basic processes for storing, packaging and transporting glassware.

SKILLS

- Operate effectively the tools and machines necessary for the manufacture of glass devices and instruments.
- Manufacture and repair glass structures intended for applications in the field of physics-chemistry, oenology, beverage making, etc. (for instance, pipettes - nozzles, condensers, retorts, distilling devices, hoppers, cartridges, ampoules, spheres, coils).
- Successfully apply the major techniques for forming glassware, such as blowing, pouring, rolling, etc.
- Verify the quality of the final glass products.
- Successfully manufacture and repair devices and instruments used in microbiology - toxicology, such as small parts of electronic laboratory devices.
- Organise the storing, packaging, and transport of glassware.

COMPETENCES

- Follow directions under the workshop manager, understand the method of application thereof and keep the time schedules set.
- Work independently and be responsible for the quality and delivery of the scientific instruments manufactured or repaired by him/her.
- Collaborate with other specialists, such as glassmakers, chemists, engineers, designers, etc. for the manufacture of glassware.

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

The holder of this certificate can work in Higher Education Institutes (Universities, Polytechnic Schools, Technological Institutes), research centers, various industries and chemical laboratories in general.

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).

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)
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

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

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 qualifications ¹

No

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:

Glassworks Laboratory, Glass Chemistry, Glass Technology, Design, English, Computing.

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.