

### 1. Title of the certificate <sup>1</sup>

**Δίπλωμα Επαγγελματικής Ειδικότητας Εκπαίδευσης και Κατάρτισης Επιπέδου 5 Ειδικότητα Ι.Ε.Κ.: ΤΕΧΝΙΚΟΣ ΠΡΟΓΡΑΜΜΑΤΙΣΜΟΥ ΠΑΙΧΝΙΔΙΩΝ ΚΑΙ ΨΥΧΑΓΩΓΙΚΩΝ ΕΦΑΡΜΟΓΩΝ (VIDEO GAMES)**

### 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.: VIDEO GAME DEVELOPER**

### 3. Profile of skills and competences

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

#### KNOWLEDGE

- Identify the basic terminology in the field of IT in Greek and in English.
- Describe the operation of computer systems and local networks, discern and analyse the hardware, the software, and the services.
- Name the individual key parts of a computer system and analyse its functions, identifying each specific component contributing to an interactive application.
- Specify the key features and capabilities of the major operating systems.
- Formulate the key principles for transmitting data.
- Discern the various database organization models and key functions of a database.
- Decode the procedure for running a program by implementing the necessary algorithmic knowledge, along with knowledge for analysing and synthesizing a problem using different programming languages (Pascal, C, C++, Java, OpenGL).
- Examine the various components of Multimedia Technology for digital video and audio applications with interaction.
- Recognize modern design, development and programming techniques of video games and interactive applications.
- Specify clearly the health and safety rules and state the protective measures for any corrective rectification action for malfunctions in computer hardware and software.

#### SKILLS

- Install and manage appropriate system software and application software in computer systems in accordance with the instructions of the manufacturers.
- Manage and evaluate hardware and software of a computer, along with the resources of a local network.
- Keep the computer software updated using the corresponding updating functions and online resources.
- Maintain computers and their software based on the manufacturer's manuals, unattended.
- Take the necessary measures to protect IT systems and independent computers from potential threats.
- Programmatically manipulate the hardware and software of interactive applications and his/her tools for developing video games.
- Perform electronic image processing based on modern digital image processing techniques using appropriate specialized software (Photoshop).
- Operate multimedia tools for developing games (Flash) and specialized, integrated tools for developing games (UnReal Editor, Half Life, Doom Editor).
- Create and process 3D graphics using specialized tools to create 3D graphics (3DS Max).
- Manage and process digitized video to create video games and entertainment applications.
- Program and develop interactive games in a micro-device and computer application, following specifications.
- Maintain software applications related to interactive games and entertainment applications, following specifications.

#### COMPETENCES

- Receive and properly execute the manufacturer maintenance instructions at hardware, software and computer level.
- Effectively collaborate with computer users and administrators of IT systems to support and adequately maintain the installed software applications and the respective hardware.
- Effectively collaborate within a software development team to design and develop interactive games and entertainment applications in micro-device and computer environment, under the supervision of a software engineer.
- Operate in accordance with the security policy of the organizations and businesses employing him/her and observes the relevant rules.
- Develop trust with users, inspire a sense of responsibility and safety, as regards the handling of digital data stored on the PC supported.
- Operate under the legislative framework regarding the protection of sensitive personal data and the protection of software rights, and apply the rules of ethics.
- Seek learning, information and training in regard to the exercise of his/her profession and the new trends in the field of IT applications.

<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 be employed or work free-lance in the public or private sector in businesses dealing with contemporary techniques for programming games and other interactive applications.

Holders of this Diploma do not need to present the ECDL certificate for their appointment as administrative employees in the public sector under the category of S.E. (Secondary Education).

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:

Introduction to Information Technology, Algorithms and Data Structures I - Programming Language I (Pascal), Operational Systems, Data Communications and Internet Technology, Algorithms and Data Structures II, Databases, Programming Language II (C), Computer Networks, Communication Technique - Entrepreneurship, Multimedia Technology for Interactive Digital Image/Sound Applications, Programming Language III - Object-oriented Programming (C++), Programming Language IV (OpenGL), Multimedia Tools for the creation of games I & II (Flash), Image Processing (PhotoShop), Tools for Games Creation I & II (UnReal Editor, Half Life Editor, Doom Editor), Tools for the Creation of Three-dimensional Graphics I & II (3DS Max), Development of Interactive Games in Gadgets and PC (Java, XML) Environment, Programming Language V (C++), Programming Language VI (OpenGL), Video Processing Tools, Interdisciplinary Assignment, English I, II & III.

##### 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](mailto:europass@eoppep.gr)  
<http://europass.eoppep.gr> [www.eoppep.gr](http://www.eoppep.gr)

<sup>1</sup> If applicable.