



Technological and Educational Institute  
of Central Macedonia  
School of Technological Applications  
Department of Engineering Informatics

P.N.  
Serres,

DIPLOMA SUPPLEMENT  
BEng in Engineering Informatics

This diploma supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of this supplement is to provide sufficient independent data to improve the international “transparency” and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgments, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

**1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION**

- 1.1 **Family name(s):**
- 1.2 **Given name(s):**
- 1.3 **Date of birth (day/month/year):**
- 1.4 **Student identification number:**

**2. INFORMATION IDENTIFYING THE QUALIFICATION**

- 2.1 **Name of qualification and title conferred (in original language):**  
Πτυχίο
- 2.2 **Main field(s) of study for the qualification:**  
Engineering Informatics
- 2.3 **Specialisation stream (6<sup>th</sup>-7<sup>th</sup> semester):**
  1. Network Engineering
  2. Computer Engineering
  3. Software Engineering
- 2.4 **Name and status of awarding institute (in original language):**  
Τεχνολογικό Εκπαιδευτικό Ίδρυμα (Τ.Ε.Ι.) Κεντρικής Μακεδονίας Ανώτατο Εκπαιδευτικό Ίδρυμα, Νομικό Πρόσωπο Δημοσίου Δικαίου (Ν.Π.Δ.Δ.)
- 2.5 **Name and status of institute (if different from 2.4) administering studies (in original language):**  
Τεχνολογικό Εκπαιδευτικό Ίδρυμα (Τ.Ε.Ι.) Κεντρικής Μακεδονίας Ανώτατο Εκπαιδευτικό Ίδρυμα, Νομικό Πρόσωπο Δημοσίου Δικαίου (Ν.Π.Δ.Δ.)
- 2.6 **Language(s) of instruction/examination:**  
Greek

**3. INFORMATION ON THE LEVEL OF QUALIFICATION**

- 3.1 **Level of qualification:**

Basic qualification in higher education (Bachelor of Engineering)  
Level 6 (UNESCO International Standard Classification of Education/ISCED system ranking)

**3.2 Official length of programme:**

Duration in years: 4  
Weeks per year: 34  
ECTS units: 240  
Total workload: 6000 hours including internship

**Internship:** Six-month internship during the study

**3.3 Admission requirement(s):**

Either lyceum diploma and examination or technical vocational school diploma (10% admission percentage) and examination. For EU citizens, the following admission requirements apply:

1. Successful examination in four courses (Composition, Ancient Greek, History, Religion) at an examination center determined by the Ministry of Education and Religious Affairs, to obtain the lyceum diploma, followed by Panhellenic Examinations.
2. Panhellenic Examinations in 6 courses in the Greek language (February 1st to 22nd, every year). The courses, as well as the examination center are determined by the Ministry of Education and Religious Affairs.
3. At a 1% rate, on the basis of the lyceum grade, regardless of the country of origin, combined with successful examination in Composition (in Greek).

**4. INFORMATION ON THE CONTENTS AND RESULTS GAINED**

**4.1 Mode of study:**

Full-time

**4.2 Programme requirements:**

Upon completion of their studies, the Department graduates acquire the necessary scientific and technological knowledge that allows them to operate professionally, by successfully supporting the utilization of information and communication technologies in all areas of economic and social activity. The Department's graduates are employed in the private as well as in the public sector, either autonomously or in collaboration with other professionals and scientists in all fields of utilization of Information and Communication Systems, on issues related to the design, development, management, applied research, education and training.

### 4.3 Programme details:

#### (A) General Infrastructure Courses (GIC)

| Course Title                              | Semester | ECTS units | Grade |
|---|----------|------------|-------|
| Fundamental Principles in Science         | 1        | 5          |       |
| Computer Programming I                    | 1        | 6          |       |
| Calculus I- Linear Algebra                | 1        | 8          |       |
| Foreign Language (Technical English)      | 1        | 3          |       |
| Introduction to Informatics               | 1        | 5          |       |
| Computer Programming II                   | 2        | 6          |       |
| Calculus II                               | 2        | 4          |       |
| Probability Theory and Statistics         | 2        | 4          |       |
| Physics                                   | 2        | 5          |       |
| Electric Circuits                         | 2        | 6          |       |
| Operating Systems I                       | 2        | 5          |       |
| Information Theory                        | 3        | 4          |       |
| Data Base Systems                         | 3        | 5          |       |
| Communication Systems I                   | 4        | 6          |       |
| Numerical Methods in Computer Programming | 5        | 5          |       |

#### (B) Special Infrastructure Courses (SIC)

| Course Title                        | Semester | ECTS units | Grade |
|-------------------------------------|----------|------------|-------|
| Operating Systems II                | 3        | 5          |       |
| Digital Circuits                    | 3        | 6          |       |
| Object-oriented Programming         | 3        | 5          |       |
| Signals and Systems                 | 3        | 4          |       |
| Computer Networks                   | 4        | 5          |       |
| Computer Architectures              | 4        | 6          |       |
| Data Structures                     | 4        | 5          |       |
| Digital Signal Processing           | 4        | 4          |       |
| Internet Technologies               | 5        | 5          |       |
| Visual Programming                  | 5        | 6          |       |
| Pattern Recognition-Neural Networks | 5        | 5          |       |

**(C) Specialisation Courses (SC)**

| Course Title  | Semester | ECTS units | Grade |
|---|----------|------------|-------|
| Analogue Electronics  | 4        | 4          |       |
| Communication and Transmission Networks                     | 5        | 6          |       |
| Special Topics in Data Bases                                | 6        | 7          |       |
| Linear Programming and Optimisation                         | 6        | 6          |       |
| Fuzzy Systems   | 6        | 6          |       |
| Communication Systems II                                    | 6        | 7          |       |
| Wireless Communications                                     | 6        | 7          |       |
| High Frequency Communication Networks                       | 6        | 6          |       |
| Satellite Communication Networks                            | 6        | 6          |       |
| Automatic and Intelligent Control Systems                   | 6        | 7          |       |
| Advanced Digital Systems                                    | 6        | 7          |       |
| Data Acquisition and Measurement Systems                    | 6        | 6          |       |
| Industrial Informatics                                      | 6        | 6          |       |
| Internet Programming Applications                           | 7        | 7          |       |
| Software Engineering  | 7        | 7          |       |
| Compilers   | 7        | 6          |       |
| System Simulation and Recognition                           | 7        | 6          |       |
| Geographic Information Systems                              | 7        | 6          |       |
| Mobile Communication Networks                               | 7        | 7          |       |
| Network Security and Management                             | 7        | 7          |       |
| Wideband Networks   | 7        | 6          |       |
| Antennas- Radio Propagation and Digital Television Networks | 7        | 6          |       |
| Digital Image Processing                                    | 7        | 7          |       |
| Real Time Systems Programming                               | 7        | 7          |       |
| Evolutionary Computing                                      | 7        | 6          |       |
| Multimedia Systems  | 7        | 6          |       |

**(D) Administration, Economy, Legislation and Humanities Courses (AELHC)**

| Course Title                           | Semester | ECTS units | Grade |
|--|----------|------------|-------|
| Business Administration                | 1        | 3          |       |
| Technical Legislation and Cyber-ethics | 5        | 3          |       |
| Didactics and Presentation Techniques  | 6        | 3          |       |
| Pedagogy                               | 7        | 3          |       |

*For each student, only the specialization courses which he has successfully attended will be retained and taken into account for the degree (not the optional ones).*

**(\*) Title of Final Year Project:**

**(\*\*) Internship (6 months) was accomplished at:**

**4.4 Grading scheme:**

According to the regulation of studies, the ten-degree scale is used for grading and more specifically:

8.5 – 10: ‘Excellent’

6.5 – 8.4: ‘Very Good’

5.0 – 6.4: ‘Good’

0.0 – 4.9: ‘Fail’

For the successful completion of a course, the grade should be greater than or equal to 5.0. More information can be found at the following website: <http://www.teicm.gr/icd>

**4.5 Overall classification of the qualification (*in original language*):**

*It concerns each student individually (e.g. 6.32 Καλώς)*

**5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION**

**5.1 Access to further study:**

The Department diploma provides the possibility of access to postgraduate studies for the acquirement of a Master's degree or a PhD.

**5.2 Professional status:**

The Department graduates, from the date of acquisition of their degree and based on their specific scientific and technological knowledge, are employed in the private and public sector, either autonomously or in collaboration with other scientists in the fields of development and maintenance of hardware systems, development and maintenance of software systems and design and management of electronic communications systems and services.

Specifically, the object of graduates covers the following described indicative areas:

a) NETWORKING AND COMMUNICATION:

Design and management of electronic communication systems and services, installation of communication software, management of communication resources, installation of mobile computer systems, management of mobile computer resources. Design, implementation, installation, maintenance and management of telecommunication installations and systems.

b) COMPUTER PROGRAMMING AND SOFTWARE SYSTEM DEVELOPMENT:

Small and large scale programming, system programming, software system development, user-software interface creation, ergonomic system design, image analysis and synthesis software production, intelligent system design and installation. Design of real-time systems and controlled availability and security systems.

c) HARDWARE AND DEVICES:

Design, development, installation and maintenance of computer peripherals, embedded systems and complex sensor systems. Design and programming of integrated circuits, computer systems design. Design, implementation, installation and maintenance of industrial systems supported by computers and of production system software.

Further information: Presidential Decree 183, Official Gazette of the Hellenic Republic 246/3-12-2008 and in the following website: <http://www.teicm.gr/icd>

## 6. ADDITIONAL INFORMATION

### 6.1 Additional information:

Further information sources:

- Website of the **Ministry of Education and Religious Affairs**: [www.minedu.gov.gr/](http://www.minedu.gov.gr/)
- **Website of the Department of Engineering Informatics**: <http://www.teicm.gr/icd>
- Website of the T.E.I. of Central Macedonia: [www.teicm.gr](http://www.teicm.gr)
- TECHNOLOGICAL AND EDUCATIONAL INSTITUTE (T.E.I.) OF CENTRAL MACEDONIA  
SCHOOL OF TECHNOLOGICAL APPLICATIONS  
DEPARTMENT OF ENGINEERING INFORMATICS  
MAGNESIAS END, 62124, SERRES

## 7. CERTIFICATION OF THE SUPPLEMENT

|                        |                    |
|------------------------|--------------------|
| Date:                  |                    |
| Departmental Secretary | Head of Department |
| Official seal          |                    |
| Signature              | Signature          |

## **8. INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM**

Education in Greece is compulsory for all children between the ages of 6-15, which includes Primary (Elementary) School and Lower Secondary (High) School. School life for pupils, however, may start from the age of 2.5 (pre-school education) in institutions (private and public) called nurseries. Some nurseries also have an infants' department operating along with kindergartens.

Attendance at Primary Education (Primary School) is six years, with entry age of 6. Along with the regular kindergartens and primary schools, also day schools operate, with an extended timetable and an enriched curriculum.

Post-compulsory Secondary Education, according to the reform of 1997, includes two types of schools: Lyceums and Technical Vocational Schools. The duration of studies is three years in Lyceums and two years (A' course level) or three years (B' course level) in the Technical Vocational Schools, while mutual transfers from one school type to the other are also possible.

Along with mainstream primary and secondary schools, special kindergartens, primary, high schools, lyceums and lyceum classes also operate for pupils with special educational needs. There are also Musical, Ecclesiastical and Physical Education high schools and lyceums.

Post-compulsory Secondary Education also includes the Vocational Training Institutes, which provide formal but unrated level of education. These institutions are described as being of unrated educational level, because they accept both high school graduates and lyceum graduates, depending on the specialisations they offer.

Public higher education is divided into Universities and Technological and Educational Institutes (T.E.I.). Students' admission in these institutions depends on their performance in national examinations that take place at the second and third grade of lyceum. Additionally, at the Greek Open University, students are accepted from the age of 22 years after a draw.

The following diagram outlines the structure of the Greek educational system, as established by institutions of formal rated or unrated education.

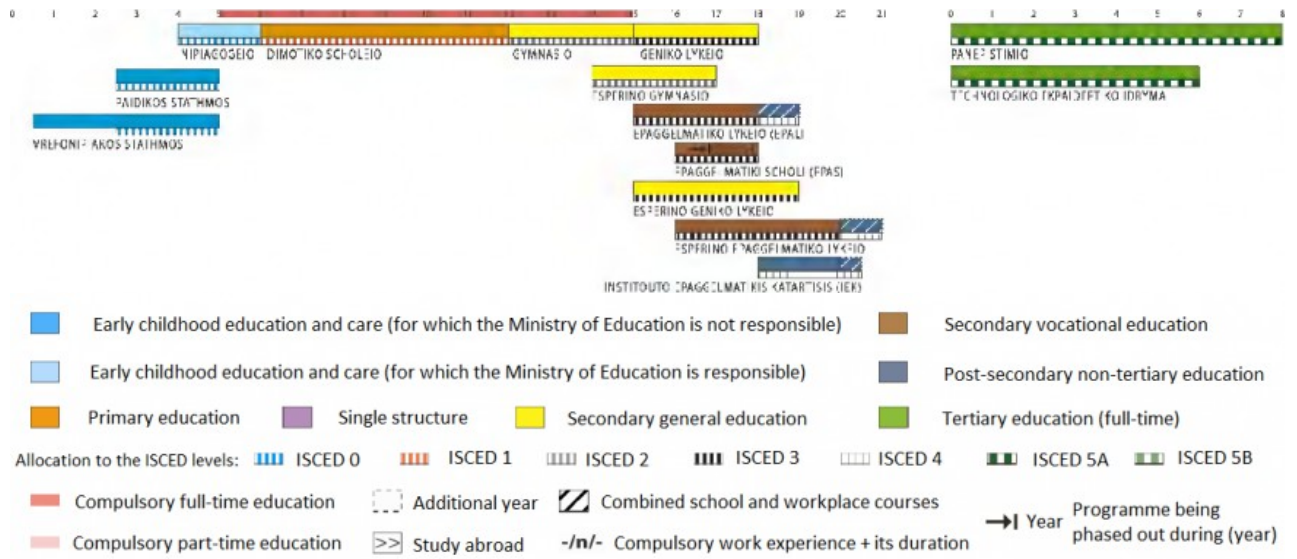
Formal education is characterised by a fixed length of study, repeatability and the award of an official qualification upon completion of study, which also ensures state legitimacy.

Rating of educational institutions implies the obligation of possession of a documentary title (baccalaureate, diploma, etc.) of the previous level of study to continue to the next.

It is noted that the diagram gives an overview of the educational system in those of its aspects that are mainly supervised by the Ministry of Education, Lifelong Learning and Religious Affairs. However, a broader analysis shows that the educational services offered in Greece may be much more complex, multilevel and diverse. Many other educational services, rated or unrated, are offered within the formal educational system and in cooperation with it or completely independent from those included in its main core.

\* A detailed description of the Greek education system exists in the National Documentation compiled by the Greek Service of the European Network for Education "EURIDICE".

## STRUCTURE OF THE NATIONAL EDUCATION SYSTEM 2013/14



source: Eurydice <https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Greece:Overview>