

# Technological and Educational Institute of Central Macedonia

# School of Technological Applications Department of Engineering Informatics

| P.N.    |    |
|---------|----|
| Serres. | // |

# DIPLOMA SUPPLEMENT – MSc in Communication and Information Systems

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):
Μεταπτυχιακό Δίπλωμα Ειδίκευσης στα "Συστήματα Επικοινωνιών και Πληροφορικής"

# 2.2 Main field(s) of study for the qualification:

Communication and Information Systems

- 2.3 Specialization Semester (2<sup>nd</sup> Semester of Study):
  - Communication Systems
  - Information Systems

# 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):

### 2.6 Language(s) of instruction/examination:

Greek

# 3. INFORMATION ON THE LEVEL OF QUALIFICATION

### 3.1 Level of qualification:

MSc in Communication and Information Systems Level 7 (UNESCO ISCED ranking system)

#### 3.2 Official length of programme:

Duration in years: One year and three months (Fifteen months)

Weeks per year: 46

ECTS units: 90 (Taught Modules: 60 and Dissertation: 30)
Total workload: 2250 hours including the MSc dissertation

# 3.3 Admission requirement(s):

First degree at level 6 of the UNESCO ISCED ranking system in a discipline preferably related to Engineering Communications and/or Informatics, without however excluding graduates from related disciplines in Applied Sciences and/or Engineering.

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

#### 4.1 **Mode of study:**

On a full-time or part-time basis.

#### 4.2 **Programme requirements:**

Upon completion of the study programme MSc holders have:

- advanced significantly their knowledge and understanding of Communication and Information Systems,
- developed research skills in the areas of Engineering Communications and Informatics,
- professionals already working in the fields of Communications and Information Technology have updated and enhanced their knowledge and skills in order to face challenges in the ever evolving fields of Communications and Informatics.

### 4.3 **Programme details:**

#### (A) Compulsory-Foundation Modules

| Code | Module Title                  | Semester          | ECTS | Grade |
|------|-------------------------------|-------------------|------|-------|
| 101  | Advanced Data Base Systems –  | 1 st              | 6    |       |
|      | Data Mining                   |                   |      |       |
| 102  | Emdedded Systems: Programming | 1 <sup>st</sup> 6 |      |       |
|      | and Architectures             |                   |      |       |
| 103  | Mathematics for Information   | 1 <sup>st</sup> 6 |      |       |
|      | Technology and Communications |                   |      |       |
| 104  | Information Theory and Error  | 1 <sup>st</sup>   | 6    |       |
|      | Control Coding                |                   |      |       |

| 105 | Communication Systems      | 1 <sup>st</sup> | 6 |  |
|-----|----------------------------|-----------------|---|--|
| 201 | Project Management for     | $2^{nd}$        | 6 |  |
|     | Information Technology and |                 |   |  |
|     | Communications Engineering |                 |   |  |

# (B) Specialization Semester

| Code | ModuleTitle                     | Semester        | ECTS | Stream      | Grade |
|------|---------------------------------|-----------------|------|-------------|-------|
| 201α | Advanced Topics in Software     | 2 <sup>nd</sup> | 6    | Information |       |
|      | Engineering                     |                 |      | Systems     |       |
| 202α | Computer Graphics and           | 2 <sup>nd</sup> | 6    | Information |       |
|      | Multimedia Applications         |                 |      | Systems     |       |
| 203α | Computational Intelligence –    | 2 <sup>nd</sup> | 6    | Information |       |
|      | Machine Learning                |                 |      | Systems     |       |
| 204α | Parallel and Distributed        | 2 <sup>nd</sup> | 6    | Information |       |
|      | Systems                         |                 |      | Systems     |       |
| 205α | Programming for Mobile and      | 2 <sup>nd</sup> | 6    | Information |       |
|      | Internet Platforms              |                 |      | Systems     |       |
| 202β | Wireless and Satellite Networks | 2 <sup>nd</sup> | 6    | Communicati |       |
|      |                                 |                 |      | on Systems  |       |
| 203β | Optical Networks                | 2 <sup>nd</sup> | 6    | Communicati |       |
|      |                                 |                 |      | on Systems  |       |
| 204β | Telecommunications Policy and   | 2 <sup>nd</sup> | 6    | Communicati |       |
|      | the Regulatory Environment      |                 |      | on Systems  |       |
| 205β | Network Management and          | 2 <sup>nd</sup> | 6    | Communicati |       |
|      | Security                        |                 |      | on Systems  |       |
| 206β | Communication Protocols         | 2 <sup>nd</sup> | 6    | Communicati |       |
|      |                                 |                 |      | on Systems  |       |

In the Specialization Semester students opt for either the Communication Systems or the Information Systems Stream. They may choose four out of five of all Specialization modules made available in the Stream of their choice, or three out of the five offered modules by their native Stream and one from the other Stream.

The MSc Course typically starts in October each year and ends up in December next year.

The MSc Dissertation carries 30 ECTS units and lasts for a period of six (6) calendar months, e.g. from July to December.

| MISC | Dissertation | I itie:           | ••••••••••••             |
|------|--------------|-------------------|--------------------------|
| ۱    | MISC         | MISC Dissertation | MISC Dissertation Title: |

# 4.4 **Grading System:**

A the ten-degree scale is used for grading as follows:

8.5 – 10: 'Excellent'

6.5 – 8.4: 'Very Good'

5.0 – 6.4: 'Good' 0.0 – 4.9: 'Fail'

Student's performance is assessed through the average achieved over all Semester modules (e.g., Foundation and Specialization Modules) and should be greater than or at least equal to five (5).

#### 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 awarded Master's degree provides the necessary foundation for embarking into a Doctoral Programme of study in the fields of Communications and Informatics.

#### **5.2** Professional status:

The awarded Master's degree provides its holder with the necessary knowledge and skills to respond to the Communications and IT Industry's demand for highly specialized executives bearing a thorough understanding of contemporary technologies and state-of-the-art in the areas of Communications and Information Technology.

MSc holders may also work in the Public Sector and especially in Communications Regulatory Authorities and other State policy making Organizations.

#### 6. ADDITIONAL INFORMATION

#### 6.1 Additional information:

#### **6.2 Further information sources:**

- Website of the Ministry of Culture, Education and Religious Affairs www.ypepth.gr
- Website of the Department of Informatics and Communications: www.teicm.gr/icd
- Website of the T.E.I. of Serres: www.teicm.gr

TECHNOLOGICAL AND EDUCATIONAL INSTITUTE (T.E.I.) OF CENTRAL MACEDONIA SCHOOL OF TECHNOLOGY APPLICATIONS
DEPARTMENT OF INFORMATICS AND COMMUNICATIONS
TERMA MAGNESIAS, 62124, SERRES

# 7. CERTIFICATION OF THE SUPPLEMENT

|                        | Date://                          |
|------------------------|----------------------------------|
| Departmental Secretary | Director of Postgraduate Studies |
|                        | 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 specializations 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.

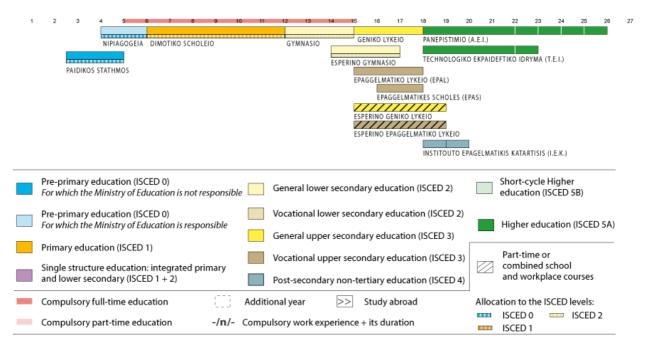
Formal education is characterised by a fixed length of study, repeatability and the award of an official qualification upon completion of study, which also ensures state legitimacy.

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 2011/12



source: Eurydice