



STUDIES IN DIGITAL SYSTEMS

INVESTMENT ON KNOWLEDGE OF DIGITAL SYSTEMS

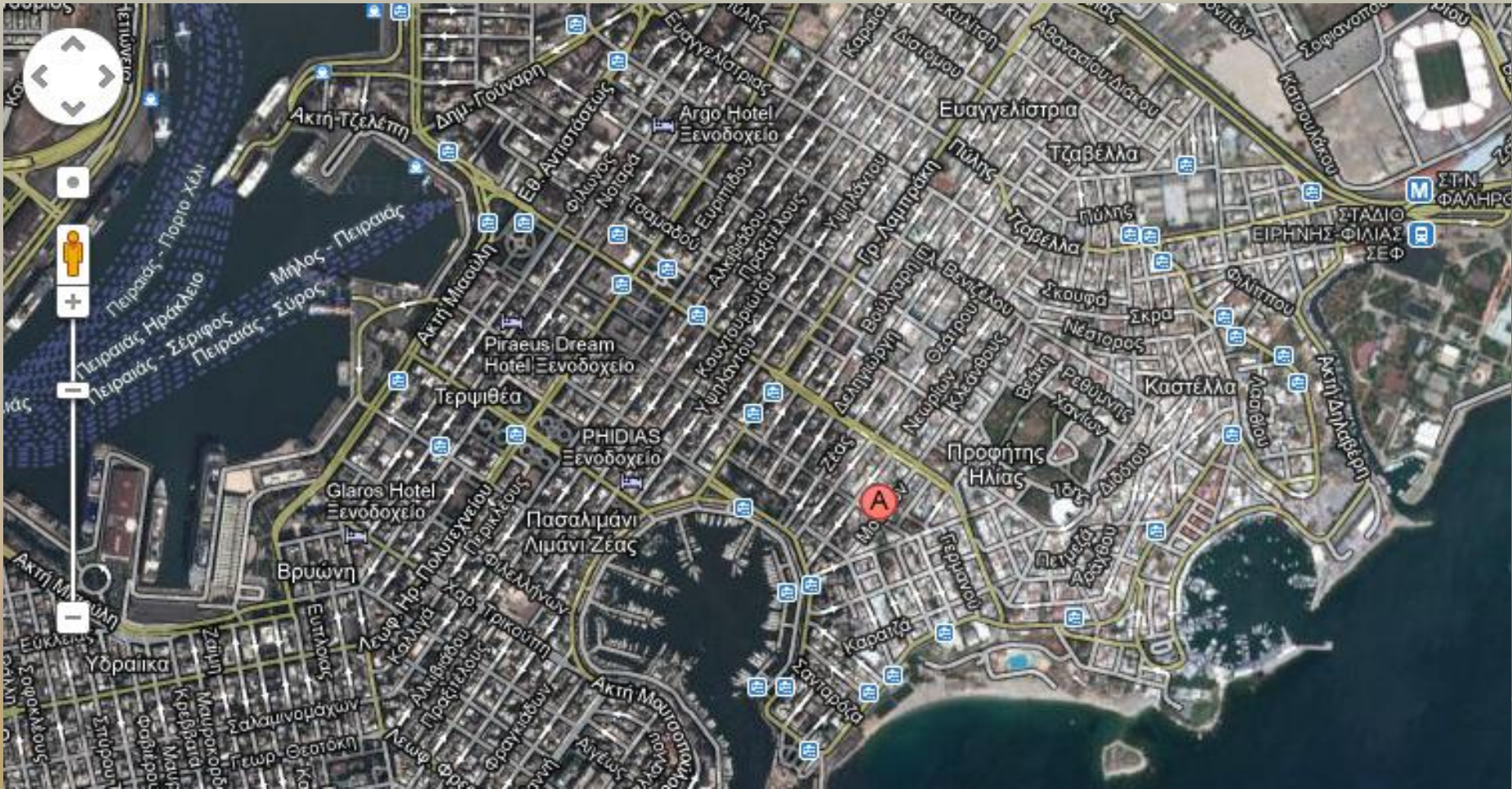


Presentation Overview

- ❖ Location of the Department's premises
- ❖ The Department in a Nutshell
- ❖ Studies and Education: Offered in the context of the Department
 - Curricula
 - Undergraduate Studies
 - Professional Rights
 - Postgraduate studies and research
 - PhD Studies
 - Postdoctoral Studies
- ❖ Administration and Human Resources

Location of the premises

University of Piraeus
Department of Digital Systems
80, Karaoli & Dimitriou Str.,
P.O. 18534, Piraeus



Location of the premises



The Department in a Nutshell



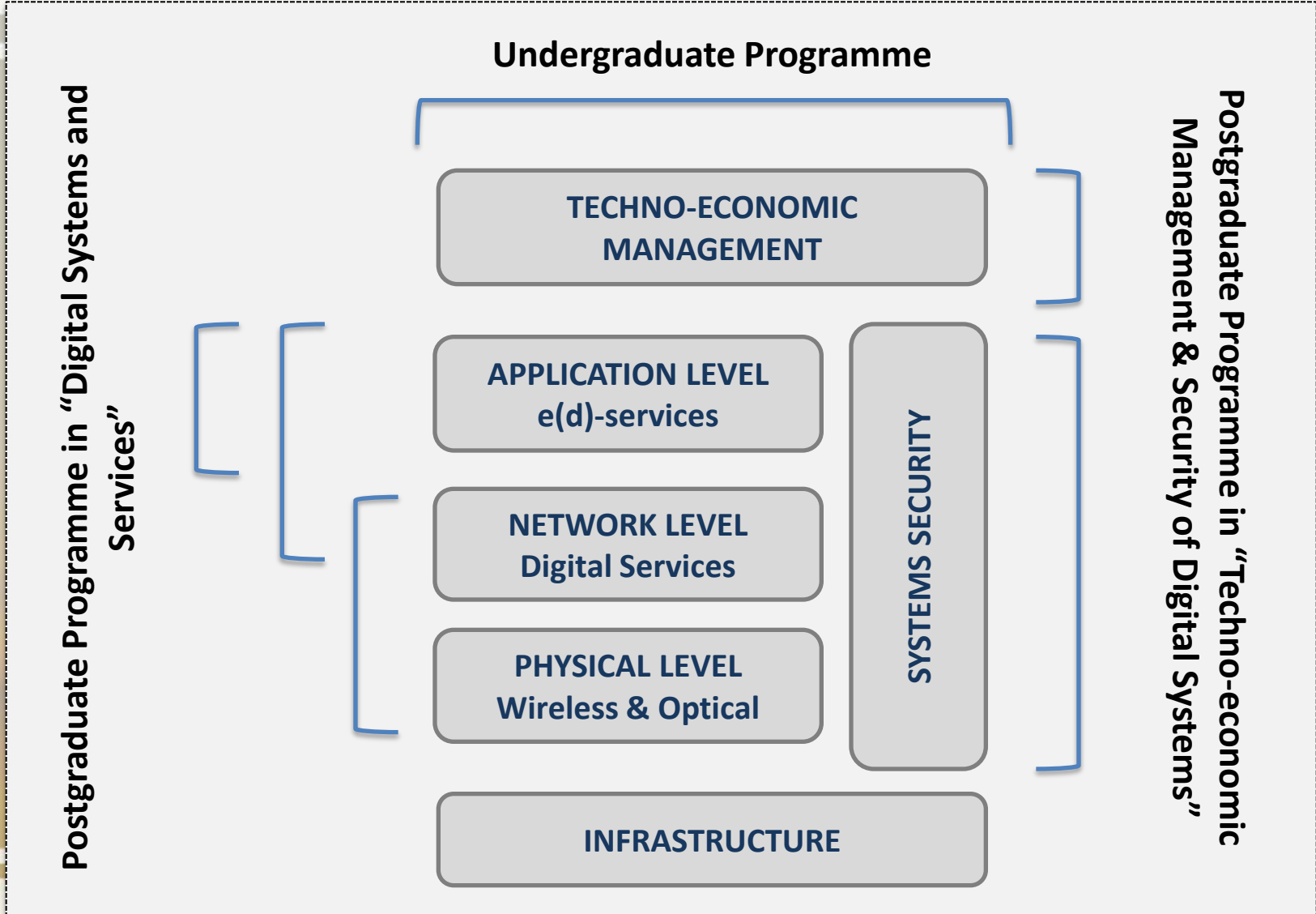
The **Department of Digital Systems** of the [University of Piraeus](https://www.unipi.gr/) was established in 1999. It covers important areas of the Digital Science and Technology field and is divided in two areas of study:

1. e-Services
2. Communication Systems and Networks

The Department housed in its very own building and situated at 150 Androutsou Str., provides (6) fully equipped Computer Labs with a capacity of one hundred and sixty (160) people for its undergraduate and postgraduate students. In the Labs, state-of-the-art, steadily enriched and upgraded, equipment (both physical equipment and software) is provided.



What we offer: Curricula

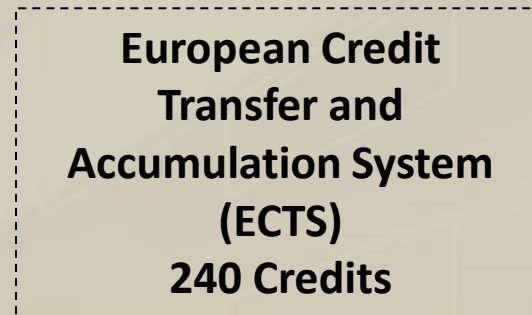


What we offer: Undergraduate Programme

Studies



Credits



The department of Digital Systems offers a four-year undergraduate programme in “Digital Systems” of 240 credits of the European Credit Transfer and Accumulation System (ECTS).

What we offer: Undergraduate Studies

Undergraduate Programme in “Digital Systems”

Areas of study

Communication Systems and Networks

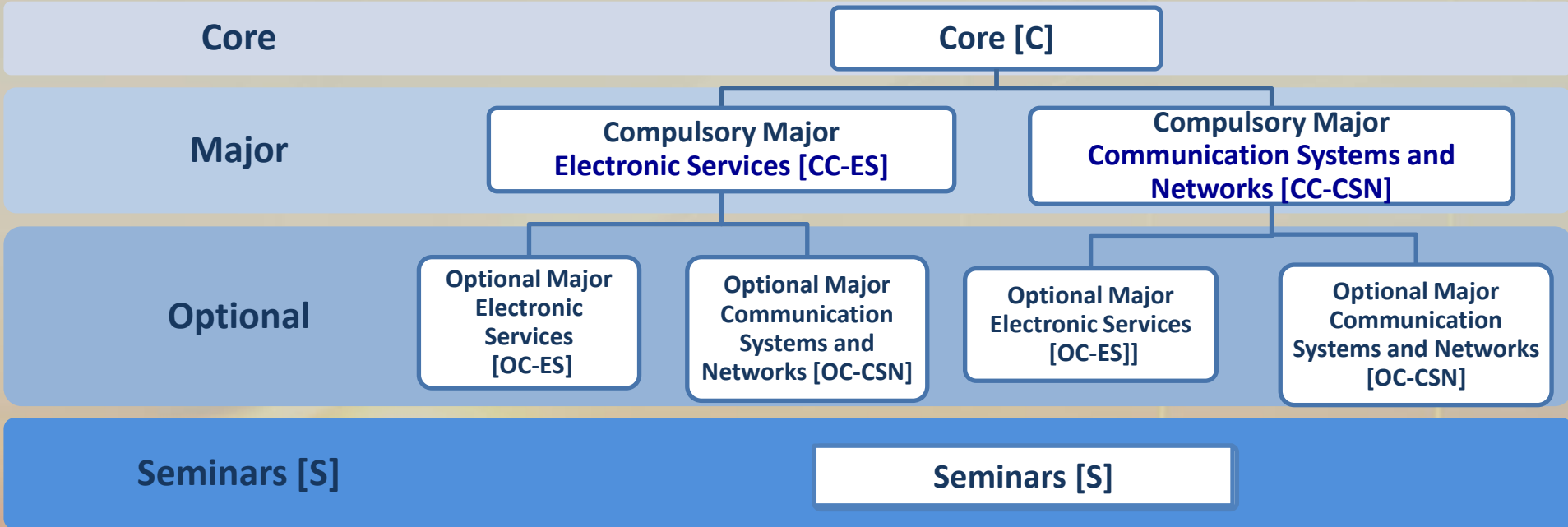
Emphasizing on cutting-edge and upcoming wired and wireless broadband technologies, Internet and other telecommunications infrastructure.

e-Services

Emphasizing on Digital Services, such as:
e-learning,
e-health,
e-business,
e-government.

What we offer: Undergraduate Studies

The individual courses offered by the Undergraduate Programme are divided into the following types:



What we offer: Undergraduate Studies

Courses



1st Year

2nd Year

3rd Year

4th Year

Core Courses

Core Courses

1st Semester

Mathematical Analysis I
 Linear Algebra
 Mathematical Logic
 Probability Theory
 Computer Architecture
 C Programming
 Instructional Methods

2nd Semester

Mathematical Analysis II
 Discrete Mathematics
 Statistics
 Stochastic Processes
 Operating Systems I
 Object-Oriented Programming
 Systems Analysis and Design

3rd Semester

Operating Systems II – UNIX
 Introduction to Telecommunications
 Data Structures
 Software Engineering
 Human – Computer Interaction
 Information Theory

4th Semester

Algorithms and Complexity
 Distributed Systems
 Computer Networks I
 Multimedia Technology
 Database Systems Design
 Web Programming

Majors

Communication Systems and Networks [CC-CSN]

Compulsory Major Course

Optional Major Course

Electronic Services

Student Placement

Final Year Project

Benefits for the graduates of the Department of Digital Systems

The graduates enjoy fully registered
“Professional Rights of Engineers
and Graduates of University
Education in the fields of
Informatics and
Telecommunications”
(registered in the Greek Law Π.Δ.
44/2009 (ΦΕΚ 58/A'/8-4-2009))

The Department falls under the
“professorial” schools category
(according to the article **39 of the
Greek Law v. 3794/2009 (ΦΕΚ
156/A'/4-9-2009)**). Therefore,
graduates can be appointed as
teaching staff of the ΠΕ19 teaching
branch without needing to obtain
any additional degree or
pedagogical training certificate.

Graduates' Professional Rights

The Undergraduate Programme has been designed to prepare scientists capable of:

Dealing with complex systems design problems

Developing cutting-edge digital technology systems

Applying state-of-the-art digital technology systems

Staffing IT and telecommunication companies

Research (Greece and abroad)

What we offer: Postgraduate Studies and Research

Postgraduate Programmes in “Digital Systems”

“Digital Systems and Services”

Running from the academic
year 2004-2005.
Leading to a Master’s Degree
(M.Sc.) of 90 ECTSs

“Techno-economic Management and Digital Systems Security”

Running from the academic
year 2009-2010.
Leading to a Master’s Degree
(M.Sc.) of 90 ECTSs

What we offer: Postgraduate Studies and Research

Postgraduate Programmes in “Digital Systems”

**“Digital Systems and
Services”**

(YA 159873/B7-ΦΕΚ
2773/B' /16-10-2014)

**“Techno-economic
Management and Digital
Systems Security”**

(YA 159888/B7-ΦΕΚ
2730/B' /13-10-2014)

What we offer: Postgraduate Studies and Research

Postgraduate Programmes in “Digital Systems”

Areas of Study

“Digital Systems and Services”

- e-Learning
- Network-Oriented Information Systems
- Digital Communications and Networks

“Techno-economic Management and Digital Systems Security”

- Techno-economic Management of Digital Systems
- Digital Systems Security

What we offer: Postgraduate Studies

Postgraduate Programme in “Digital Systems and Services”

Studies

1st Semester

2nd Semester

3rd Semester

Master Thesis

Master Thesis

Potential to complete Thesis:

- in collaboration **with Universities or Research Institutes abroad**, through the LLP Erasmus Programme
- in collaboration **with Greek enterprises**, through the University of Piraeus Postgraduate Practice Programme

What we offer: Postgraduate Studies

Postgraduate Programme in “Digital Systems and Services”

Area of Study “e-Learning”

1 st Semester		2 nd Semester	
Course Title	ECTS	Course Title	ECTS
Human – Computer Interaction	7,5	Learning Management System	7,5
Educational Design	7,5	e-Trainers Training	7,5
Web Applications	7,5	Learning Processes Management	7,5
Learning Theories and Teaching Models	7,5	Life Long Learning	7,5
3 rd Semester			
MSc Dissertation			30

What we offer: Postgraduate Studies

Postgraduate Programme in “Digital Systems and Services”

Area of Study “Network-Oriented Information Systems”

1 st Semester		2 nd Semester	
Course Title	ECTS	Course Title	ECTS
Business Process Management	7,5	Cloud Computing	7,5
Information Systems and Services	7,5	Mobile Computing and Applications	7,5
Service-Oriented Architectures	7,5	Big Data and Analytics	7,5
Data Management and Business Intelligence	7,5	Information Systems Governance	7,5
3 rd Semester			
MSc Dissertation			30

What we offer: Postgraduate Studies

Postgraduate Programme in “Digital Systems and Services”

Area of Study “Digital Communications and Networks”

1 st Semester		2 nd Semester	
Course Title	ECTS	Course Title	ECTS
Future Internet Infrastructures	7,5	Broadband Communications	7,5
Wireless and Satellite Communications	7,5	Wireless Networks Design	7,5
Mobile Computing and Applications	7,5	Internet of Things and Embedded Systems	7,5
Computer Networks Design and Management	7,5	Future Internet and Cloud Computing	7,5
3 rd Semester			
MSc Dissertation			30

What we offer: Postgraduate Studies

Postgraduate Programme in “Techno-economic Management and Digital Systems Security”

Studies

1st Semester

2nd Semester

3rd Semester

Master Thesis

Master Thesis

Potential to complete Thesis:

- in collaboration **with Universities or Research Institutes abroad**, through the LLP Erasmus Programme
- in collaboration **with Greek enterprises**, through the University of Piraeus Postgraduate Practice Programme

What we offer: Postgraduate Studies

Postgraduate Programme in “Techno-economic Management and Digital Systems Security”

Area of Study “Techno-economic Management of Digital Systems”

1st Semester

2nd Semester

1 st Semester		2 nd Semester	
Course Title	ECTS	Course Title	ECTS
Business, Regulatory and Legal Framework of Telecommunication Networks and Services	6	Strategic Management of Digital Companies	6
Managerial Accounting	6	Advanced Information Systems	6
Advanced Telecommunication Technologies	6	Network-Oriented Informational Systems’ Governance	6
Network-Centric Systems and Services	6	Managerial Finance	6
Technoeconomic Analysis	6	Marketing of Digital Products and Services	6

3rd Semester

MSc Dissertation			30
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What we offer: Postgraduate Studies

Postgraduate Programme in “Techno-economic Management and Digital Systems Security”

Area of Study “Digital Systems Security”

1 st Semester		2 nd Semester	
Course Title	ECTS	Course Title	ECTS
Network Security	6	Mobile Internet Security	6
Security Management	6	Digital Forensics and Web Security	6
Security Assessment and Vulnerability Exploitation	6	Legal Aspects of Security	6
Applied Cryptography	6	Privacy Enhancing Technologies	6
Information Systems Security	6	Advanced Security Technologies	6
3 rd Semester			
MSc Dissertation			30

What we offer: PhD Studies

- ✓ The holders of a Master (M.Sc.) degree are eligible for applying to conduct a doctoral thesis.

Requirements

A Degree or Certificate obtained from the Highest Educational Institutions (A.E.I.), or an equivalent qualification obtained abroad, and recognized by DOATAP.

Certificate verifying sufficient knowledge of the English language.

What we offer: PhD Studies



Areas of research

- Network-Oriented Systems and Services
- Digital Health Services
- Telecommunication Networks and Integrated Services
- Security Systems
- Intelligent Systems and Multimedia Technologies
- Telecommunication Systems
- Technology – Enhanced Learning

What we offer: Postdoctoral Research

- The Department of Digital Systems of the University of Piraeus offers to PhD graduates (of Greek or foreign Universities) the opportunity to conduct their post-doctoral research in collaboration with the members of the Department.
- Through postdoctoral research the Department achieves collective excellence, as well as high level scientific collaboration, while international distinction both for the Department and the University in general is promoted.
- Therefore, postdoctoral research contributes to the quantitative and qualitative upgrade of research in the Department and the transfer of knowledge to cutting-edge and dynamic research areas for the benefit of society and national economy.



Laboratories



Laboratories

- **Network-Oriented Systems and Services**
- **Digital Health Services**
- **Telecommunication Networks and Integrated Services**
- **Systems Security**
- **Telecommunication Systems**
- **Technology-Enhanced Learning**

Administration

General Assembly

The General Assembly (G.A.) of the Department consists of all the Teaching and Research Staff members, as well as representatives of undergraduate and postgraduate students of the Department. The representatives of the Special Teaching Staff (S.T.S.) and the Special Administrative Technical Staff (S.A.T.S) of the Department also participate in the General Assembly (G.A.).

General Assembly-Special Composition

The General Assembly of Special Composition (G.A.S.C.) of the Department consists of all of the Teaching and Research Staff members as well as representatives of the graduate students of the Department.

Chairman and Deputy Chairman

The Chairman and Deputy Chairman get elected by a special body of electors every two years in compliance with current legislation.

The Department's Chairman is Professor Panagiotis Demestichas, since September 2011.

Department Workforce

26 Academic Staff members (Professors, Associate Professors, Assistant Professors and Lecturers) specializing in a wide array of specific digital technologies and services areas.

Indicative Areas of the Department's Academic Staff Specialization include:

Information Systems, Databases, Software Engineering, Network-Oriented Systems, Distributed Systems, Information & Network Systems Security, Web Services Systems, Intelligent Multimedia Systems, High Speed & Intelligent Networks, Digital Communications Systems, Satellite & Wireless Communication Systems, Broadband Communication Systems, Mobile Networks, Virtual Learning & eLearning Environments, eHealth Systems.

For more information
please visit:

<http://www.ds.unipi.gr/en/>