## **COURSE OUTLINE**

# (1) GENERAL

SCHOOL	SCHOOL OF ENGINEERING			
ACADEMIC UNIT	DEPARTMENT OF ELECTRICAL AND ELECTRONICS			
	ENGINEERING			
LEVEL OF STUDIES	UNDERGRADUATE			
COURSE CODE	EEE.3.7 SEMESTER 3			
COURSE TITLE	Administration & Management of Technical Works			
INDEPENDENT TEACHING ACTIVITIES  if credits are awarded for separate components of the course, e.g.  lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits			WEEKLY TEACHING HOURS	CREDITS
			2	3
Total			2	3
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).				
COURSE TYPE  general background,  special background, specialised general  knowledge, skills development	General Ba	ackground		
PREREQUISITE COURSES:	NO			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	GREEK			
IS THE COURSE OFFERED TO ERASMUS STUDENTS	NO			
COURSE WEBSITE (URL)				

## (2) LEARNING OUTCOMES

# Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area
- Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
- Guidelines for writing Learning Outcomes

The aim of the course is to present topics related to programming, the control, and evaluation of technical projects and works. In the context of course, to present the basic principles of project management, selection methods and project evaluation, techniques and methods of time planning, analysis cost-duration, optimal allocation and smoothing of a project, and methods for controlling a project.

In detail, students upon completion of the course should be able to

to:

- Have proven knowledge and understanding of issues related to planning, controlling, and evaluating technical projects; and programs.
- Recognize the activities of a technical project and calculate

critical activities and thus the critical path of the project.

- Have the ability to draw the basic diagrams of a project.
- Have proven judgment ability, be able to compare and evaluate different situations in relation to direct, indirect and total cost of a project
- Will be able to easily make use of time-related methods planning for technical projects.
- Propose solutions for the optimal implementation of the project
- Be able to work with their classmates to create and to present, both individually and as a group, a case study from its initial stages to its final evaluation and proposal for solutions.

#### **General Competences**

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, Project planning and management

with the use of the necessary technology Adapting to new situations

Decision-making

Working independently

Team work

Working in an international environment

Working in an interdisciplinary environment

Production of new research ideas

Respect for difference and multiculturalism Respect for the natural environment

Showing social, professional and ethical responsibility and

sensitivity to gender issues Criticism and self-criticism

Production of free, creative and inductive thinking

# The course aims to cultivate the following skills:

- 1. Research, analysis and synthesis of data and information, using the necessary technologies
- 2. Decision making
- 3. Critical thinking
- 4. Autonomous work
- 5. Promoting free, creative and inductive thinking
- 6. Writing and speaking skills
- 7. Communication skills Autonomous work and Promotion of free, creative and inductive thinking

## (3) SYLLABUS

Introduction to project management

Project manager, incentives, communication and collaboration rules and his agenda project.

2. Project definition and specifications

Project definition, feasibility report, project start and project specifications.

3. Project work and team formation

Task analysis structure (WBS), identification of skills and its composition project team.

3. Opening session

The agenda of the inaugural meeting, presentation of specifications, members, explanation of cooperation rules and how to plan.

4. List of project tasks

Preparation for the project to-do list, relevance diagram, finalization of the project to-do list

5. Create a GANTT diagram

The basics of the diagram, use of relevant software.

6. Project scheduling

Introduction to project scheduling, charts, grids diagrams, total project duration and critical project path.

7. Project quality management

Quality project planning, tools and techniques, quality assurance, quality control tools and techniques.

- 8. Human resources management of the project Organizational planning, staffing and team development.
- 9. Project communication management

Communications scheduling, information sharing, performance reporting and administrative termination.

10. Project risk management

Risk management planning, risk identification, quality and quantitative risk analysis, risk response planning, monitoring and risk control.

11. Project change

The change committee, structure and procedures, change control

12. Project closure and evaluation

Project closure features, closure contract, administrative closure and administrative results of project closure, project evaluation.

## (4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY Face-to-face, Distance learning, etc.	Physical presence of students - In classroom			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, laboratory education, communication with students	<ul> <li>Use of Audio-visual material and multimedia applications</li> <li>Update and ancillary training material through the course web site and via e-mail</li> </ul>			
TEACHING METHODS  The manner and methods of teaching are described in detail.  Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.	Activity	Semester workload		
	Lectures	26		
	Preparation of coursework (individual work)	52		
The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS	Study	12		
	Course total	90		
STUDENT PERFORMANCE EVALUATION Description of the evaluation procedure	Assessment Language: Greek  Written examination: 80%  Written examination involves solving a series of exercises related to the entire course subject.			
Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, openended questions, problem solving, written work,				

essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

Compulsory coursework preparation at 20% of the overall grade.

## (5) ATTACHED BIBLIOGRAPHY

- 1. Απόστολος Ι. Κοκκόσης. "Διαχείριση Έργων", 3η Έκδοση, 2016, Σύγχρονη Εκδοτική
- 2. Απόστολος Ι. Κοκκόσης, Διαχείριση Έργων και Σχεδίαση CAD, Σύγχρονη Εκδοτική, 2013.
- 3. Πολύζος Σεραφείμ. " Προγραμματισμός & Οργάνωση των Έργων", 2006, Εκδόσεις

Τζιόλα

- 4. Πολύζος Σεραφείμ. " Διοίκηση και διαχείριση των έργων" , 2011, Εκδόσεις ΚΡΙΤΙΚΗ
  - 5. Eric Verzuh. " Εισαγωγή στην Διαχείριση Εργου", 2002, Εκδόσεις ΣΤΑΜΟΥΛΗ
  - 6. Burke, Rory. "Διαχείριση έργου", 2002, Εκδόσεις ΚΡΙΤΙΚΗ
  - 7. Σημειώσεις Διδάσκοντα