COURSE OUTLINE

(1) GENERAL

SCHOOL	SCHOOL OF ENGINEERING		
ACADEMIC UNIT	DEPARTMENT OF ELECTRONICS ENGINEERING		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	2605006	**SEMESTER**	5
COURSE TITLE	Foreign Language (ENGLISH) Technical Terminology		

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 (ECTS)**
Lectures	2	3
Laboratory	0	
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*	Special Background Course
PREREQUISITE COURSES:	None
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek and English
IS THE COURSE OFFERED TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	http://www.electronics.teipir.gr

(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*

Upon successful completion of this course module students possess advanced knowledge, skills and competences in the subject of English Language Technical Terminology that enable them to:

1. Understand scientific texts relative to the field of Electronics Engineering, either globally (global understanding) or thoroughly (scanning-through comprehension)
2. Acquire the terminology and syntax of scientific texts through various methods and techniques.
3. Analyze the structure and organization elements of scientific speech on multiple levels (sentence, paragraph, text)
4. Produce oral speech and construct written speech of multiple forms (instructions,

description of components, functions and processes, essay writing, reports, professional mail etc.)

In more detail, students will be able to:

1. Acquire and use technical vocabulary, terminology and structure connected to the field of Electronic Engineering.
2. Extract specific information from texts about components devices, structures, and processes.
3. Identify devices, components, structures, processes and explain their function.
4. Understand the features and technical specifications of different components and devices.
5. Identify and comment specific texts.
6. Draw and describe (block) diagrams.
7. Summarize the main points of a technical text.
8. Write technical instructions.
9. Write a report.
10. Describe and compare systems.

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, with the use of the necessary technology	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and sensitivity to gender issues*
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*
Production of new research ideas	*Others…*
	…….

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Working independently
- Team work
- Production of free, creative and inductive thinking

(3) COURSE CONTENT

Study by subject:

1. Signal processing (translating useful signals, Analogue and digital signals).
2. Logic concepts (Historical background, combinational versus sequential logic, Bistable devices, Logic device families)
3. Semiconductor devices (semiconductors, Diodes, Transistor, Light -emitting Diode)
4. Micro-technology (Integrated Circuits, Characteristics of integrated circuit components)
5. Amplifiers (Types of Amplifiers, Operational amplifiers)
6. Filters (Filter types Filter Transmission)
7. Transmission Media (Guided and unguided transmission media)

8. Communication Systems (Communication process, Modulation, Multiplexing
9. Sources of Information (Television, Telephony, Cellular telephone System)
10. Computers (Historical evolution, Microcomputers, Microprocessor, Memory, Binary system)
11. Computer networks (Basic connectivity, LAN technologies and network Topologies)
12. Instruments (Digital Multimeter, Oscilloscope, other general purpose instruments).

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face to face lectures
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	• Use of electronic presentation with multimedia content in class, • Student support through the course webpage and the departmental e-learning platform, • Electronic communication of instructors and students, through the course webpage and by e-mail. • Use of practice software in the lab.
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.* *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*	Lectures, assignments, study. ***Activity*** / ***Semester workload (hours)*** Lectures: 26 Study for lectures: 26 Laboratory practice: 13 Assignment – project: 25 **Course Total**: ***90***
STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended 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.*	Student evaluation is performed in the language of instruction. • Final written exam (80%) • Preparation and presentation of a project (20%)

(5) ATTACHED BIBLIOGRAPHY

Essential reading

1. Koutsogianni Evangelia, “ENGLISH FOR ELECTRONICS AND TELECOMMUNICATIONS,”

Synchroni Ekdotiki Eds., Athens, Greece.
2. Eric H. Glendinning, John Mc Ewan, “OXFORD ENGLISH FOR ELECTRONICS”, Oxford University Press, Oxford, U.K.
3. INTERNET SOURCES (various) provided by the instructor
4. AUTHENTIC TECHNICAL READING TEXTS (various) provided by the instructor.