ESOGÜ Electrical-Electronics Engineering Department

COURSE CODE: 151221203 - 151241203 **COURSE TITLE:** Introduction to Programming

Semester	**Weekly Hours**		**COURSE**			
	Theoretical	**Practical**	**Credits**	**ECTS**	**Type**	**Language**
1	2	2	3	5	Compulsory (x) Elective ( )	Turkish ( ) English (x)

Write the credit (for non-credit courses weekly hours) below (If necessary distribute the credits.).

Math and Basic Science	**Electrical Engineering** [mark (√) if there is high design content]	**General Education**	**Humanities**
0	3 ( )	0	0

Assessment	**THEORETICAL-PRACTICAL COURSES**			**LABORATORY COURSES**		
Midterm	**Type**	**Number**	**%**	**Activity Type**	**Number**	**%**
	Midterm	1	35	Quiz		
	Quiz			Lab performance	10	20
	Homework			Report		
	Project			Oral exam		
	Other (……)			Other (……)		
Final		1	45			
Makeup exam (Oral/Written)	Written					

Prerequisites	None
Brief content of the course	Introduction to c programming; flow diagram, data types/conversion, operators, expressions and statements, compilers, conditionals, loops, functions, basic structure of a program, arrays
Objectives of the course	Learn to write simple programs in C
Contribution of the course towards professional education	Students aiming to be a future programmer get familiar with introductory details of the programming in C.
Outcomes of the course	1. Students will know how to write simple programs in C 2. Understand and follow code written in these languages 3. Gain ability to create simple algorithms and methods to solve simple problems
Textbook of the course	Al Kelley, Ira Pohl, A Book on C, Programming in C, Addison-Wesley
Other reference books	Lecture notes, previous exams and homeworks, resources on the internet
Required material for the course	Accessible computers for each student, MS Visual C/C++ or any C development tool installed.

WEEKLY PLAN OF THE COURSE	
Week	**Topics**
1	Number systems and conversion
2	Data types in C and declaration
3	C Compiler, functions and expressions, basic programming structure
4	Operators, conditionals if and switch
5	Data conversion, declarations with initializers
6	Loop statements for, do-while, while and goto labels, break, continue
7	Some library functions and examples using them
8,9	Midterm
10	Examples using loops and library functions
11	Static arrays
12	Static arrays
13	Character arrays and related library functions
14	Parallel arrays and closing examples
15,16	Final

NO	OUTCOMES OF THE PROGRAMME	4	3	2	1
1	Adequate knowledge of mathematics, science and Electrical and Electronic Engineering; ability to practice theoretical and practical knowledge of these areas into modeling and solving complex problems of Electrical and Electronic Engineering				**x**
2	Ability to identify complex engineering problems in Electrical and Electronic Engineering and related fields, for this purpose having skills to formulate, select and apply appropriate methods.			**x**	
3	Having skills to apply modern design methods to design a complex system, process, equipment or product that should work under realistic conditions and constraints and satisfy specific requirements concerning the Electrical and Electronic Engineering.				**x**
4	Having skills to develop, select and apply modern techniques and tools needed to analyze and solve complex applications in Electrical and Electronic Engineering, skills to use information technology effectively.			**x**	
5	Skills to design and conduct tests, collect data, analyze results, and interpret data for the experimental investigation of complex problems in Electrical and Electronic Engineering			**x**	
6	Ability to function effectively as an individual and as a member of teams within the discipline and in multidiscipline areas.		**x**		
7	Communicating effectively in oral and written form both in Turkish and English. Effective report writing and understanding written reports, preparing design and manufacturing reports, making effective presentations, skills to give and receive clear and concise instructions.				**x**
8	Awareness of the necessity of lifelong learning, access to information, monitoring developments in science and technology and the ability to self-renewing				**x**
9	Understanding of professional and ethical responsibility				**x**
10	Information on project management, change management and risk management practices, awareness on entrepreneurship and innovation, knowledge on sustainable development.				**x**
11	Information about universal and societal effects of engineering applications on health, safety and environment; awareness of the legal consequences of engineering solutions.				**x**

Scale for assessing the contribution of the course to the program outcomes:

4: High **3: Medium** **2: Low** **1:None**

Name of Instructor(s): Assist. Prof. Erol Seke

Signature(s):

Date: