	Course name: CENG 115 Computer Programming I	Department: Electrical and Electronics Engineering					Semester
							1
		Methods of Education					Credit (ECTS)
	Lecture	Study Time	Quiz	Project	Exam (incl. Prep.)	Total	5
	42	78	0	0	60	180	

Language	English
Compulsory/Elective	Compulsory
Prerequisites	None
Course Contents	This course introduces the students to the fundamental concepts of structured programming.
Course Objective	This course will introduce the basic elements of a structural and imperative programming language. The C language will be used. Topics include the concept of type, main types, expressions, standard functions, input/output statements, type conversion, flow of control structures, if/else, loop structures, while/do, repeat until, for, case statements; procedures and functions, modularity in programming, global and local variables, pointers, dynamic variables, and arrays.
Learning Outcomes and Competences	– Explain computer based problem-solving and algorithm. – Define the basic concepts of structured programming – Express arithmetic and logical functions in C programming language. – Define the concepts of memory management and pointer
Textbook and /or References	**Main Textbooks:** 1. Kernighan, Brian W., and Dennis M. Ritchie. The C programming language. 2006. 2. Deitel&Deitel, (1991), "C How to Program",Prentice Hall. 3. Bjarne Stroustrup, (1997), "The C++ Programming Language",Addison-Wesley Pub.

Assessment Criteria		If any, mark as (X)	Percentage (%)
	Midterm Exams	X	30
	Quizzes		
	Homework		
	Projects		
	Laboratory work	X	20
	Other		
	Final Exam	X	50

Instructors	

Weekly Schedule	
Week	**Subject**
1	Problem solving and algorithm development
2	Computer hardware and software
3	Introduction to computer programming: machine, assembly and high-level programming languages
4	Programming with C programming language: arithmetic and logical expressions
5	Programming with C programming language: data types
6	Programming with C programming language: input/output
7	Basic control structures and Loops
8	Functions and Procedures
9	**Mid-term Exam**
10	Function definition and parameter parsing methods
11	Arrays and Matrices
12	Using of Struct and Strings
13	String operations

14	String functions
15	Revision for the final exam