

INTRODUCTION TO COMPUTER PROGRAMMING

1	Course Title:	INTRODUCTION TO COMPUTER PROGRAMMING	
2	Course Code:	TEK2021E	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	2	
6	Semester:	3	
7	ECTS Credits Allocated:	4.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	2	
11	Prerequisites:	NONE	
12	Language:	English	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Dr. Öğr. Üyesi Özge ÇELİK	
15	Course Lecturers:	YOK	
16	Contact information of the Course Coordinator:	Dr.Öğr.Üyesi Özge ÇELİK E-mail: celikozge@uludag.edu.tr Phone: 0224-2940651	
17	Website:		
18	Objective of the Course:	1-To provide basic knowledge on computer hardware and software 2-To teach computer programming in C programming language 3-To train students in applying computer programming methods to the solution of engineering problems	
19	Contribution of the Course to Professional Development:	The course contributes to the solution of textile engineering methods using design and analysis methods.	
20	Learning Outcomes:		
		1	Understand and evaluate computer hardware and different programming methods
		2	Develop algorithms to solve engineering problems by programming methods
		3	Manage to develop computer programs in C programming language for the developed solution algorithms
		4	Apply computer programming to the solution of textile engineering problems
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	General information about computers	Examination of hardware units on a computer	

2	Numbering systems and conversion	Problem solving about numbering systems and conversion	
3	Programming languages, introduction to C programming language	Practice with C compiler	
4	Introduction to C programming language and C program structure	Writing a basic program in C programming language	
5	Variables, Expressions and Operators, Input and Output Functions	Writing C program with input and output functions	
6	Program Looping, For loop, Do loop and Do-while Loop	Writing program with looping statements	
7	Program Looping, For loop, Do loop and Do-while Loop	Writing program with looping statements	
8	Decision Making Statements, if-else and switch-case statements	Writing program with if-else and switch case statements	
9	Decision Making Statements, if-else and switch-case statements	Writing program with if-else and switch case statements	
10	Array Variables and Pointers	Writing program with array variables and pointer	
11	Math Library Functions	Writing program with Math Library Functions	
12	Writing functions in C	Writing programs with functions	
13	Data File Input and Output	Writing program with data file input output	
14	Dynamic memory allocation, structures and unions	Writing programs dynamic memory allocation, structures and unions	
22	Textbooks, References and/or Other Materials:	<p>1-Introduction to the C programming language, OSC, Ohio Supercomputer Center, 1224 Kinnear Road,Columbus.</p> <p>2- Deitel P. & Deitel H.,C HOW TO PROGRAM, Pearson Education Inc., New Jersey, 2010.</p> <p>3-Kernighan B.W. & Ritchie D.M., The C programming Language, Prentice Hall, 1988.</p>	
23	Assesment		
TERM LEARNING ACTIVITIES		NUMBER	WEIGHT
Midterm Exam		1	40.00
Quiz		0	0.00
Home work-project		0	0.00
Final Exam		1	60.00
Total		2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00	
Contribution of Final Exam to Success Grade		60.00	
Total		100.00	
Measurement and Evaluation Techniques Used in the Course		Conducting a midterm exam and a final exam.	
24	ECTS / WORK LOAD TABLE		

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	14	2.00	28.00
Homeworks	14	2.00	28.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	1.00	1.00
Others	0	0.00	0.00
Final Exams	1	1.00	1.00
Total Work Load			115.00
Total work load/ 30 hr			3.80
ECTS Credit of the Course			4.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK2	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low		2 low			3 Medium			4 High			5 Very High				