

ALGORITHMS AND INTRODUCTION TO PROGRAM

1	Course Title:	ALGORITHMS AND INTRODUCTION TO PROGRAM	
2	Course Code:	ELNS201	
3	Type of Course:	Optional	
4	Level of Course:	Short Cycle	
5	Year of Study:	2	
6	Semester:	3	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Öğr. Gör. Dr. Yusuf Alptekin TÜRKKAN	
15	Course Lecturers:	Meslek Yüksekokulları Yönetim Kurullarının görevlendirdiği öğretim elemanları.	
16	Contact information of the Course Coordinator:	basrikul@uludag.edu.tr (224)2942380	
17	Website:		
18	Objective of the Course:	This course aims to equip student with the skills related to algorithms. Steps to be followed in the solution stages of a given problem, State diagrams, Transition diagrams and tables, Limitations of the program; System Design: The steps to be followed during the design of a desired system as hardware and software.	
19	Contribution of the Course to Professional Development:	The algorithmic approach that forms the basis for software technologies, which is the inevitable profession of today's world, is learned. In this way, the student will be able to learn other programming languages faster. Basic programming structures in languages such as C, C ++, python will be learned in this course.	
20	Learning Outcomes:		
		1	Being able to design algorithms.
		2	Being able to work with flow diagrams.
		3	Being able to use variables and constants
		4	Being able to carry out Input and Output Processes.
		5	Being able to use operators
		6	Being able to use decision management terminology.
		7	Being able to use loop management terminology.
		8	Being able to use single and multi dimensional arrays.
		9	Being able to use subprograms which do not return any values.
		10	Being able to use subprograms which return values.
21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	What is algorithms. After and before of programming techniques.		

2	The operators used in the algorithm.	
3	Terms used in algorithm.	
4	Descriptor, Variable, Transfer, Counter, Loop.	
5	Sequential addition and successive multiplication.	
6	Algorithm preparation.	
7	Flow charts and used shapes.	
8	Simple algorithm examples.	
9	Start / Stop, Information entry, Process, Loop	
10	Decision (comparison), Print / Output, Connection, Process flow directions	
11	Flow chart examples	
12	Pascal Programming language general structure	
13	Transition from flowchart to programming language and examples	
14	Transition from flowchart to programming language and examples	
22	Textbooks, References and/or Other Materials:	Course book, study book and other sources.
23	Assesment	
TERM LEARNING ACTIVITIES		NUMBER
		WEIGHT
Midterm Exam	1	50.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	50.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		50.00
Contribution of Final Exam to Success Grade		50.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		Measurement and evaluation is carried out according to the principles of Bursa uludag University Associate and Undergraduate Education Regulation.
24	ECTS / WORK LOAD TABLE	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	2.00	28.00
Homeworks	2	2.00	4.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	14.00	14.00
Total Work Load			84.00
Total work load/ 30 hr			2.80
ECTS Credit of the Course			3.00

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	3	3	4	4	4	3	4	5	5	3	3	3	0	0	0	0
ÖK2	4	4	4	5	5	4	3	5	5	5	5	3	0	0	0	0
ÖK3	2	3	3	4	4	4	3	4	4	3	4	4	0	0	0	0
ÖK4	4	3	2	4	4	4	4	5	3	4	2	5	0	0	0	0
ÖK5	3	4	3	3	3	4	3	2	4	4	3	4	0	0	0	0
ÖK6	3	3	3	4	5	4	3	2	4	4	4	3	0	0	0	0
ÖK7	3	3	3	3	4	4	4	4	3	4	3	3	0	0	0	0
ÖK8	4	3	4	3	4	4	4	3	5	3	3	4	0	0	0	0
ÖK9	4	4	4	3	3	3	3	3	3	5	4	4	0	0	0	0
ÖK10	4	3	4	3	3	3	3	4	4	3	3	4	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			