



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Algorithms and Programming							
Course Code		BPR181		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		This course is designed to teach algorithm and coding concepts.							
Course Content		Algorithms, Flowchart, Coding tools, Variables and constants, Input/output operations, Operators, decision algorithms, loop controls,unidimensional arrays, multi-dimensional arrays, Void sub-programmes, Non-void sub-programmes							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion, Case Study, Individual Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Visual Studio 2011, M.Mastar, Kodlab Yayınevi.
2	C#.net ile Nesne Tem. Prog. Giriş, Ö.Sebetci, Gazi Yayınevi.
3	Introduction to programming and algorithms Soner Çelikkol Murathan Yayın

Week	Weekly Detailed Course Contents	
1	Theoretical	.Algorithms
2	Theoretical	Flowchart
3	Theoretical	Coding tools
4	Theoretical	Variables and constants
5	Theoretical	Input/output operations
6	Theoretical	Operators
7	Theoretical	Decision algorithms
8	Theoretical	Loop control
9	Intermediate Exam	Midterm exam
10	Theoretical	Loop control
11	Theoretical	One-dimensional arrays
12	Theoretical	Multi-dimensional arrays
13	Theoretical	Void sub-programmes
14	Theoretical	Non-void sub-programmes
15	Theoretical	Non-void sub-programmes
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Term Project	1	0	4	4
Laboratory	5	0	1	5
Reading	3	0	1	3
Midterm Examination	1	4	1	5



Final Examination	1	4	1	5
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Introduction to coding and designing program flowchart
2	Control statements, array operations and working with sub-programmes
3	Learns the concept of everyday life like algorithms, with examples from everyday life.
4	Understands the components and their uses.
5	Learns the basic properties of Visual Basic.

Programme Outcomes (Automotive Technology)

1	To be able to interpret and evaluate data, identify problems, analyze them, and develop evidence-based solutions by using basic knowledge and skills in the field.
2	Must be able to choose and effectively use the modern techniques, tools and information technologies necessary for field related applications.
3	Must be able to gain practical skills by examining relevant processes in industry and service sector on site.
4	They must be able to produce solutions, take responsibility for teams or do individual work when they encounter situations unforeseen in the field related applications.
5	Awareness of the need for lifelong learning; it must be able to follow the developments in science and technology and to constantly renew itself.
6	Must be able to use computer software and hardware at the basic level required by the field
7	Must have job security, worker health, environmental protection knowledge and quality awareness.
8	He must possess a level of foreign language knowledge that is capable of following the innovations in his area of expertise and communication techniques.
9	Must be able to acquire basic theoretical and practical knowledge about the field in mathematics, science and basic engineering.
10	It should have the ability to plan the processes / processes of the Automotive Program to meet the expectations of the sector.
11	To be able to design the systems and components related to the field by using technical drawing, computer aided drawing, designing using simulation programs and using various softwares, to be able to make basic sizing calculations, to be able to master professional plans and projects.

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2
P4	2	2
P5	2	2
P6	2	2

