



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Introduction To Coding With Arduino							
Course Code		ETO188		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		In this course, it is aimed to gain competencies to select microcontroller, to design algorithm and flow diagram, to write program for microcontroller, to install microcontroller program and to do basic applications							
Course Content		Basic electronics knowledge, Microcontroller Architecture and Hardware, Microcontroller selection, Algorithm creation, Flow diagrams, Microcontroller program introduction, Basic input and output coding, uploading and debugging process of written codes to microcontrollers, library concept in microcontrollers, open source code concept in microcontrollers, and basic microcontroller applications.							
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)		Ins. Mustafa Tayfun MAVİOĞLU							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Lecture Notes
2	Web Pages
3	Internet Education Environment.

Week	Weekly Detailed Course Contents	
1	Theoretical	Basic Electronics Knowledge
2	Theoretical	Microcontroller Architecture and Hardware
3	Theoretical	Designing Algorithms, Flowcharts
4	Theoretical	Choosing the microcontroller board to be used for the lesson (Arduino Uno)
5	Theoretical	The microcontroller contains the board (Arduino Uno) coding program is loaded into the computer. (Arduino IDE)
6	Theoretical	Introduction of Arduino IDE coding program. Basic coding knowledge
7	Theoretical & Practice	First application in Arduino IDE coding program
8	Theoretical	Midterm
9	Theoretical & Practice	Basic input / output codes, operation, application
10	Theoretical & Practice	Basic control codes, operation, application.
11	Theoretical & Practice	Button and led applications with Arduino Uno
12	Theoretical & Practice	Potentiometer applications with Arduino Uno
13	Theoretical & Practice	7 segment display applications with Arduino Uno
14	Theoretical & Practice	LCD applications with Arduino Uno
15	Theoretical & Practice	Keypad applications with Arduino Uno

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	10	0	1	10
Studio Work	10	0	1	10
Midterm Examination	1	0	1	1



Final Examination	1	0	1	1
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	The student taking the course should be able to use the knowledge gained.
2	The student taking the course should be able to use the knowledge gained.
3	The student taking the course should be able to use the necessary theoretical knowledge, manual and/or intellectual skills in practice.
4	The student taking the course should be able to use computer software, information-communication technologies, technical and modern professional tools for relevant applications.
5	Be aware of the necessity of lifelong learning and be able to realize it

Programme Outcomes (Fashion Design)

1	Be able to use the theoretical and practical knowledge related to fashion design
2	Fashion marketing and promotional activities should be carried out in matters related to fashion design
3	Must be able to collect data for research, prepare and present research report, prepare project
4	Designing personal clothing to meet the expectations of the sector and preparing the creations on the computer
5	Should be able to recognize the fabric surfaces, select auxiliary materials, control materials.
6	It should be able to carry out steps of mold preparation, spreading, laying plan preparation.
7	Must be able to use the necessary equipment, equipment and machines for the applications related to fashion design, and make adjustments and maintenance.
8	Must be able to use computerized mold and design programs in the field of fashion design.
9	Must have the ability to manage and organize business by creating the idea of establishing a business in the field.
10	Can create a model she designs in her mind by applying the technical drawings of the clothes and fashion formal training.
11	Basic sewing techniques should be able to realize the production stages of women's, men's and children's wear.

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

	L1	L2	L3	L4	L5
P1	3	3			3
P6			3		
P7		3		3	
P10	3				3

