

UNDER-GRADUATE CURRICULUM DETAILS

Course Title: Arduino				Code :		Name of the Programme: Computer Education and Instructional Tech.		
Education and Teaching Methods							Credits	
Lecture	Application	Laboratory	Project/ Field Study	Hw.	Other	Total	Credit	ECTS
28	32	0	30			90	2	3
Semester				Language		Turkish/English		
Course Type	Basic Scientific ☐		Scientific ☐		Technical Elective ☒		Social Elective ☐	
Course Contents	Electronic circuit components and Arduino							
Course Objectives	The aim of the course is to design and code systems developed with arduino, sensors and electronic circuit components and use them in education							
Learning Outcomes and Competences	Those who take this course will learn how to use electronic circuit components, design Arduino systems and code Arduino systems							
Textbook and /or References	Arduino Eğitim Seti (4 Kitap), Kodlab Yayın.							
ASSESSMENT CRITERIA								
Theoretical Courses				Project Course and Graduation Study				
	If any, mark as (X)	Percent (%)		If any, mark as (X)	Percent (%)			
Midterm Exams	X	40	Midterm Exams					
Quizzes			Midterm Controls					
Homeworks			Term Paper					
Term Paper (Projects, reports,)			Oral Examination					
Laboratory Work			Final Exam					
Final Exam	X	60	Other					
Other								
Week	Subjects							
1	Introduction to electronic circuit components							
2	Electronic circuit components							
3	Introduction to Arduino							
4	Arduino I/O							
5	System design with Arduino							
6	Use of sensors with Arduino							
7	Arduino programming language							
8	Arduino programming language							
9	User interaction in Arduino							
10	LCD use in Arduino							
11	Internet connection in Arduino							
12	Sample applications with Arduino							
13	Sample applications with Arduino							
14	Arduino in Education							
Instructors	Serkan Çankaya							
e-mail	serkancankaya@balikesir.edu.tr							
Website	serkancankaya.com							