



T.C.

ESKİŞEHİR OSMANGAZİ ÜNİVERSİTESİ

FACULTY OF SCIENCES

MATHEMATICS AND COMPUTER SCIENCES DEPARTMENT

COURSE INFORMATION FORM

Course Name	Course Code
Android Programming	821618011

Semester	Number of Course Hours per Week		Credit	ECTS
	Theory	Practice		
8	3	0		5

Course Category (Credit)				
Basic Sciences	Engineering Sciences	Design	General Education	Social
	X			

Course Language	Course Level	Course Type
Turkish	Undergraduate	Elective

<b>Prerequisite(s) if any</b>	Java
<b>Objectives of the Course</b>	The course will teach a variety of neural networks and introduce the theory of some neural networks.
<b>Short Course Content</b>	Gives an introduction to basic (artificial) neural network architectures and learning rules. Emphasis is placed on mathematical analysis of these networks, on methods of training them, and on their application to practical problems

Learning Outcomes of the Course		Contributed PO(s)	Teaching Methods *	Measuring Methods **
1	Students will learn the general concepts of mobile programming.	1, 2, 4	1, 2, 6	A
2	Students will understand the structure of mobile programming on different platforms.	1, 2, 3	1, 2, 6	A
3	Students will create examples using C# and Java on different platforms, thereby enhancing their programming knowledge.	1, 2, 4	1, 2, 6	A
4	Students will be able to design user-friendly applications for mobile devices.	1, 2, 5	1, 2, 14	A
5	Students will gain the ability to solve problems encountered during the mobile application development process.	1, 2, 6	1, 10, 14	A

\*Teaching Methods 1:Expression, 2:Discussion, 3:Experiment, 4:Simulation, 5:Question-Answer, 6:Tutorial, 7:Observation, 8:Case Study, 9:Technical Visit, 10:Trouble/Problem Solving, 11:Individual Work, 12:Team/Group Work, 13:Brain Storm, 14:Project Design / Management, 15:Report Preparation and/or Presentation

\*\*Measuring Methods A:Exam, B:Quiz, C:Oral Exam, D:Homework, E:Report, F:Article Examination, G:Presentation, I:Experimental Skill, J:Project Observation, K:Class Attendance; L:Jury Exam

<b>Main Textbook</b>	Bill Phillips, Brian Hardy, “Android Programming: The Big Nerd Ranch Guide (Big Nerd Ranch Guides)”, 2013
<b>Supporting References</b>	Jeff McWherter, Scott Gowell,” Professional Mobile Application Development, John Wiley & Sons, Inc.”, 2012
<b>Necessary Course Material</b>	

<b>Course Schedule</b>	
<b>1</b>	Introduction to mobile programming
<b>2</b>	Mobile Programming platforms and market dominance of these platforms
<b>3</b>	Android operating systems installation
<b>4</b>	Introduction to programming mobile with Android platform
<b>5</b>	Android platform application development tools and the use of these tools
<b>6</b>	Screen design on the Android platform
<b>7</b>	Internet connection and data handling between pages on the Android platform
<b>8</b>	Midterm Exam
<b>9</b>	Using XML data capture, recording transactions on the Android platform
<b>10</b>	To use the camera on the Android platform
<b>11</b>	Database concepts and database transactions on the Android platform
<b>12</b>	The use of maps on the Android platform
<b>13</b>	To export improved Project and create apk
<b>14</b>	Current Android programming examples
<b>15,16</b>	Final Exam

<b>Calculation of Course Workload</b>			
<b>Activities</b>	<b>Number</b>	<b>Time (Hour)</b>	<b>Total Workload (Hour)</b>
Course Time (number of course hours per week)	14	3	42
Classroom Studying Time (review, reinforcing, prestudy,...)	14	3	42
Homework	5	3	15
Quiz Exam			
Studying for Quiz Exam			
Oral exam			
Studying for Oral Exam			
Report (Preparation and presentation time included)			
Project (Preparation and presentation time included)			
Presentation (Preparation time included)			
Mid-Term Exam	1	2	2
Studying for Mid-Term Exam	1	20	20
Final Exam	1	2	2
Studying for Final Exam	1	30	30
<b>Total workload</b>			<b>138</b>
<b>Total workload / 30</b>			<b>4,6</b>
<b>Course ECTS Credit</b>			<b>5</b>

Evaluation	
Activity Type	%
Mid-term	50
Quiz	
Homework	
Bir öge seçin.	
Bir öge seçin.	
<b>Final Exam</b>	50
<b>Total</b>	100

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO) (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low)		
NO	PROGRAM OUTCOME	Contribution
1	Adequate knowledge of mathematics, science, and Computer Engineering; ability to practice theoretical and practical knowledge of these areas into modeling and solving problems of Computer Engineering.	3
2	Ability to identify complex engineering problems in Computer Engineering and related fields; skills to formulate, select, and apply appropriate methods.	4
3	Having skills to apply modern design methods to design a complex system, equipment, or product that should work under realistic conditions and constraints and satisfy specific requirements concerning Computer Engineering.	2
4	Having skills to develop, select, and apply modern techniques and tools needed for Engineering applications; skills to use information technology effectively.	3
5	Skills to design and conduct tests, collect data, analyze results, and interpret data for the experimental investigation of Computer Engineering problems.	3
6	Ability to function effectively as an individual and as a member of teams within the discipline and in multidiscipline areas.	3
7	Communicating effectively in oral and written form in Turkish and one foreign language.	3
8	Awareness of the necessity of lifelong learning; access to information, monitoring developments in science and technology, and the ability to self-renew.	3
9	Understanding of professional and ethical responsibility.	3
10	Information on project management, change management, and risk management practices; awareness of entrepreneurship, innovation, and sustainable development.	3
11	Information about universal and societal effects of engineering applications on health, safety, and environment; awareness of the legal consequences of engineering solutions.	3

LECTUTER(S)				
Prepared by	Doç. Dr. Özer Çelik			
Signature(s)				

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