

Vocational School / Computer Programming

2024 - 2025 Academic Year

ADVANCED ANDROID PROGRAMMING

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
ADVANCED ANDROID PROGRAMMING	BPR2260520	Spring Semester	1+2	2	5
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	Short Cycle (Associate's Degree)				
Course Type	Elective				
Course Coordinator	Lect. Beyza KOYULMUŞ				
Name of Lecturer(s)	Lect. Beyza KOYULMUŞ				
Assistant(s)					
Aim	To make students knowledgeable about the fast developing mobile technologies and provide future entrepreneurs to the market				
Course Content	This course contains; What is Kotlin, what's new with Kotlin language,Variables and Data types,Series and Lists,Operators, Decision Structures, Enum,Loops, break, continue,Functions, Extension Functions and infix,Inheritance, Polymorphism, Access determinants,Encapsulation, Abstraction,View Binding,Fragments, Tab Layout,Google Maps,LiveData, Retrofit2,MVVM Arch.,Repository.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
Learn about mobile technologies.			10, 12, 13, 14, 16, 2, 4, 9	A, F	
Knows mobile application development processes			10, 12, 13, 14, 16, 17, 2, 4, 5, 6, 9	A, E, F	
Knows the procedures for sharing mobile technologies on the internet			10, 11, 12, 13, 14, 16, 17, 2, 4, 5, 8	A, D, E, F	
Explains the innovations that come with Kotlin.			12, 14, 17, 2, 6, 8, 9	A, E, F	
Develops projects using MVVM Architecture.			12, 14, 2, 6, 8, 9	A, E, F	
Google Maps, LiveData, Retrofit2, Repository uses.			12, 14, 16, 17, 2, 6, 8, 9	A, E, F	
Teaching Methods	10: Discussion Method, 11: Demonstration Method, 12: Problem Solving Method, 13: Case Study Method, 14: Self Study Method, 16: Question - Answer Technique, 17: Experimental Technique, 2: Project Based Learning Model, 4: Inquiry-Based Learning, 5: Cooperative Learning, 6: Experiential Learning, 8: Flipped Classroom Learning, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, D: Oral Exam, E: Homework, F: Project Task				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	What is Kotlin, what's new with Kotlin language				
2	Variables and Data types				
3	Series and Lists				
4	Operators, Decision Structures, Enum				
5	Loops, break, continue				
6	Functions, Extension Functions and infix				
7	Inheritance, Polymorphism, Access determinants				
8	Encapsulation, Abstraction				
9	View Binding				
10	Fragments, Tab Layout				
11	Google Maps				
12	LiveData, Retrofit2				
13	MVVM Arch.				
14	Repository				
Evaluation Methods		Weight(%)			
Midterm Exam		40			
General Exam		60			

Resources
TBATBA