

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
VISUAL PROGRAMMING	MIS3212181	Spring Semester	3+0	3	4
Prerequisites Courses	PROGRAMLAMA DİLLERİ I				
Recommended Elective Courses					
Language of Instruction	English				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Required				
Course Coordinator	Assist.Prof. Kevser ŞAHİNBAŞ				
Name of Lecturer(s)	Assist.Prof. Kevser ŞAHİNBAŞ				
Assistant(s)					
Aim	The objective of this course is to enable students get complete knowledge of MS.NET Framework and its internals, use .NET - Integrated Development Environment and develop deep understanding of a visual programming language features.				
Course Content	This course contains; Introduction: History of comp interfaces Intro to .NET Framework,Installing and setting visual programming editor,Introduction to C# GUI Development environment in Visual Studio,C# details: Dialog boxes,TreeView and ListView Threading Project 1: Photo Editor,Common dialog boxes,WPF and XAML Laying out controls Event handling,LINQ ADO.NET and DataGridView Testing GUI apps,Project ,Custom controls Misc GUI controls,Class application,Connection to DB,ADO.Net database operation,Entity Framework dbfirst database operation,Entity Framework codefirst database operation.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
			6	F	
1. Able to demonstrate how to use specific features of ta visual programming language to write programs and handle run□time errors.			6	F	
1.1. Creates form designs with toolbox elements.			6	F	
1.2. Performs calculations using variables.			6	A, F	
2. Designs and develops desktop applications.			6	F	
2.1. Form design with WPF.			6	F	
2.2. Creates a simple automation interface with WPF.			6	F	
3. Uses certain features of visual programming language.			6	F	
3.1. Executes simple queries.			6	F	
3.2. Creates visual design with form application and WPF.			6	F	
4. Creates user interface design.			6	F	
4.1. Creates form designs using the form application.			6	F	
4.2. Creates simple automation design using form application.			6	F	
5.1. Connect to local database and list data			6	F	
5.2. Processing data in the local database reaches the desired record(s) in the local database.			6	F	
6. Able to database operation with ADO.Net			6	A, F	
6.1. Able to insert and delete data by ADO.Net			6	F	
6.2. Performs selecting and updating operations with ADO.Net.			6	F	
7. Performs database operations using Entity Framework and DbFirst Structure.			6	F	
7.1. Enable to insert, delete and update.			6	F	
7.2. Performs deletion from the database.			6	F	
Teaching Methods	6: Experiential Learning				
Assessment Methods	A: Traditional Written Exam, F: Project Task				
Lecture Schedule					
Sequenc e	Topics	Preliminary Preparation			
1	Introduction: History of comp interfaces Intro to .NET Framework				
1	Installing and setting visual programming editor				
2	Introduction to C# GUI Development environment in Visual Studio				
3	C# details: Dialog boxes				
4	TreeView and ListView Threading Project 1: Photo Editor				
5	Common dialog boxes				
6	WPF and XAML Laying out controls Event handling				
7	LINQ ADO.NET and DataGridView Testing GUI apps				
8	Project				
9	Custom controls Misc GUI controls				
10	Class application				
11	Connection to DB				
12	ADO.Net database operation				
13	Entity Framework dbfirst database operation				
14	Entity Framework codefirst database operation				
Evaluation Methods		Weight(%)			
(Midterm Exam) Project for Midterm		40			
Midterm Exam		40			
(General Exam) Question from projects (%20) in the General Exam		20%			
General Exam		60			

Resources

Hands-On Visual Studio 2022: A developer's guide to exploring new features and best practices in VS2022 for maximum productivity
by Miguel Angel Teheran Garcia , Hector Uriel Perez Rojas.