

Vocational School / Computer Programming

2024 - 2025 Academic Year

FUNDAMENTAL of PROGRAMMING

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
FUNDAMENTAL of PROGRAMMING	BPR1113183	Fall Semester	4+0	4	7
Prerequisites Courses					
Recommended Elective Courses	Programming courses				
Language of Instruction	Turkish				
Course Level	Short Cycle (Associate's Degree)				
Course Type	Required				
Course Coordinator	Lect. Beyza KOYULMUŞ				
Name of Lecturer(s)	Lect. Mustafa KOÇAL				
Assistant(s)	Microsoft Visual Studio				
Aim	With this course, it is aimed to understand the logic of programming basics, algorithm structures and general features.				
Course Content	This course contains; Course objective, introduction, general information about programming, Introduction to Programming, Microsoft Visual Studio Installation and Introduction, Variable, Operator and Type Conversions, Decision Structures, If - else , Switch Case, Loop Structures , for , while, Decision Structures and Loop Structures Application Examples , Lists, Series, Multidimensional Arrays, Methods, Function Types , Class Structure, Introduction to Object Oriented Programming, Application Examples.				
Course Learning Outcomes		Teaching Methods	Assessment Methods		
Understands the basics of programming.		12, 13, 14, 2, 3, 6, 8, 9	A, E, F, G		
Understands the logic of algorithm construction.		12, 14, 2, 3, 6, 8, 9	A, E, F, G		
Solves basic programming problems.		10, 11, 12, 14, 16, 2, 3, 9	A, E, F, G		
Uses control statements and loop structures.		10, 14, 3, 6, 9	A, E, F, G		
Improves problem solving skills		10, 14, 6, 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, 2: Project Based Learning Model, 3: Problem Baded Learning Model, 6: Experiential Learning, 8: Flipped Classroom Learning, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, E: Homework, F: Project Task, G: Quiz				
Lecture Schedule					
Sequenc e	Topics	Preliminary Preparation			
1	Course objective, introduction, general information about programming				
2	Introduction to Programming				
3	Microsoft Visual Studio Installation and Introduction				
4	Variable, Operator and Type Conversions				
5	Decision Structures, If - else , Switch Case				
6	Loop Structures , for , while				
7	Decision Structures and Loop Structures Application Examples				
8	Lists, Series				
9	Multidimensional Arrays				
10	Methods				
11	Function Types				
12	Class Structure				
13	Introduction to Object Oriented Programming				
14	Application Examples				
Evaluation Methods		Weight(%)			
Midterm Exam		40			
General Exam		60			

Resources
Introduction to Algorithms, Cormen, Leiserson, Rivest ve Stein.