

**Vocational School / Computer Programming**

**2024 - 2025 Academic Year**

**INTERNET TECHNOLOGIES**

**Syllabus**

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
INTERNET TECHNOLOGIES	BPR2160380	Fall Semester	1+2	2	5
<b>Prerequisites Courses</b>					
<b>Recommended Elective Courses</b>					
<b>Language of Instruction</b>	Turkish				
<b>Course Level</b>	Short Cycle (Associate's Degree)				
<b>Course Type</b>	Elective				
<b>Course Coordinator</b>	Lect. Beyza KOYULMUŞ				
<b>Name of Lecturer(s)</b>	Lect. Beyza KOYULMUŞ				
<b>Assistant(s)</b>					
<b>Aim</b>	We will cover the architecture of the Internet from the application layer down to ethernet connections. In the course of doing this, we will delve into network programming, TCP and UDP protocols, reliable message delivery, routing, access protocols, VLANs, and firewalls. Think of this course as "networking for computer scientists.				
<b>Course Content</b>	This course contains; Computer Networks and the Internet , Application Layer,Application Layer (cntd) ,Application Layer (cntd),Transport Layer ,Transport Layer (cntd),Transport Layer (cntd),Network Layer,Network Layer (cntd),Network Layer (cntd),Network Layer (cntd), Link Layer and Local Area Networks, Link Layer and Local Area Networks (cntd), Link Layer and Local Area Networks (cntd).				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
Apply knowledge of mathematics			14, 9	A, E, F	
Design a software system to meet desired needs			17, 9	A, E, F	
Participate in a team work			17, 9	A, E, F	
Identify requirements of systems and applications			14, 17, 9	A	
Formulate problems related to computer systems and applications			17, 9	A, E, F	
Use modern software systems and tools			17, 9	A, F	
<b>Teaching Methods</b>	14: Self Study Method, 17: Experimental Technique, 9: Lecture Method				
<b>Assessment Methods</b>	A: Traditional Written Exam, E: Homework, F: Project Task				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Computer Networks and the Internet				
2	Application Layer				
3	Application Layer (cntd)				
4	Application Layer (cntd)				
5	Transport Layer				
6	Transport Layer (cntd)				
7	Transport Layer (cntd)				
8	Network Layer				
9	Network Layer (cntd)				
10	Network Layer (cntd)				
11	Network Layer (cntd)				
12	Link Layer and Local Area Networks				
13	Link Layer and Local Area Networks (cntd)				
14	Link Layer and Local Area Networks (cntd)				
Evaluation Methods		Weight(%)			
Midterm Exam		40			
General Exam		60			

Resources
Slides and Lecture Notes, Java or C lecture notesTBA