

Name of the course	Code	Term	T+P	Credit	ECTS
Advanced Computer Networks			3+0	3	6

Prerequisites and co-requisites	
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Language of the course	Turkish
Type of the course	Tecnical Elective
Course Coordinator	
Name of Lecturers	
Assistants	
Aim and goals of the course	To teach the fundamental concepts of computer network; the protocols and the algorithms used in computer networks by following the recent publications.
Course Learning Outcomes	Upon successful completion of the course, the students will be able to : <ol style="list-style-type: none"> 1. Assess how wired and wireless computer networks operate. 2. Analyze wired and wireless computer network protocol and algorithms. 3. Read and evaluate the recent publications in computer networks.
Contents of the course	Introduction to Computer Networks, Basic Concepts of Computer Networks, Application Layer, Application Development Methods, Transport Layer, Analysis of Transport Layer Protocols, Network Layer, Analysis and Evaluation of Network Layer Methods, Link Layer and Algorithm / Protocol Analysis, Wireless Networks, Wireless Access Methods and Analysis

Weeks	Subjects
1	Introduction to TCP/IP networks
2	Introduction to TCP/IP networks
3	Application Layer
4	Application development techniques
5	Transport Layer
6	Analyze the transport layer protokols and algorithms
7	Network layer
8	MIDTERM EXAM
9	Network layer protocol and algoritm analysis
10	Data Link Layer and channel access protocols
11	Wireless Networks
12	Analyze the wireless access protocols
13	Term project presentation
14	Term project presentation
15	FINAL EXAM

General Qualifications
In evaluations, it is important that students' computer networks and network communication concepts are conceptualized.
References
1. James F. Kurose and Keith W. Ross , Computer Networking - A Top-Down Approach Featuring the Internet, 4th Edition , 2007 Addison Wesley
Evaluation
Midterm Exam: % 40, Final Exam: % 60. Project or homework evaluations can be made at the beginning of the semester.