AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Network Equipment and Peripherals						
Course Code	BPR190		Couse Level	Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The aim of this course is to enable students to explain computer network design, computer network management concepts and network management components.						
Course Content	At the end of this course, the student will be able to install a computer laboratory, maintain an existing laboratory, new terminal, printer and so on. will be able to solve the problems that may occur, to configure the server in the laboratory, to create new users, to edit the rights and properties of the user. Part-I. Computer Network Design 1. Analysis of Business Targets and Constraints 2. Analysis of Technical Targets and Constraints 3. Determination of Characteristics of Current Internetwork 4. Design of Network Traffic 5. Designing a Network Topology 6. Designing Model for Verification and Naming 7. Bridge, Switching and Selecting Routing Protocols 8. Developing Network Security and Network Management Strategies 9. Selecting Technologies and Network Devices for Campus Networks 10. Selecting Technology and Network Devices for Corporate Networks Section-II. Computer Network Management 1. Introduction to Computer Network Management 2. Network Directives 3. Error Control 4. Configuration Management 5. Security Management 6.Performance Management 7.Using Level Management 8.Network Management Protocols						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods		Explanation (Presentation), Discussion, Individual Study, Problem Solving					
Name of Lecturer(s)							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Introduction to the network systems Hulusi Turgut Pusula Yayınları
2	Computer Networks and Communication Abdullah Kuzu Edt. Nobel Y.

Week	Weekly Detailed Course Contents	
1	Theoretical	Computer Networks General Introduction and Definitions
2	Theoretical	Use of Design Methodology from Top to Bottom, Analysis of Business Objectives, Analysis of Business Constraints, Analysis of Technical Objectives and Constraints
3	Theoretical	Describing the Infrastructure Character of the Computer Network, Checking the Health of the Existing Network, Tools Used to Extract the Characteristics of the Existing Network, Defining the Traffic Flow, Defining the Traffic Load
4	Theoretical	Identifying Traffic Behavior, Characterizing Service Quality Requirements, Designing a Hierarchical Network, Designing Campus Network Topology
5	Theoretical	Company Network Topology Designing, Physical Security Planning, Network Layer Addressing Recommendations, Designing a Model for Naming
6	Theoretical	Selecting Decision Making, Bridging and Switching Methods in Top-Down Network Design Process, Choosing Between Routing Protocols
7	Theoretical	Yukarıdan Aşağıya Ağ Tasarım Sürecinde Karar Verme, Köprüleme ve Anahtarlama Metodlarının Seçimi, Yönlendirme Protokolleri Arasında Seçim Yapma
8	Theoretical	Selecting Decision Making, Bridging and Switching Methods in Top-Down Network Design Process, Choosing Between Routing Protocols
9	Intermediate Exam	midterm
10	Theoretical	Selection of Technologies and Devices for Campus Networks, LAN Cabling Design, LAN Technologies, Selection of Devices for Campus Network Design
11	Theoretical	Technology and Devices Selection for Company Networks, Remote Access Technologies, Wide Area Network Technologies
12	Theoretical	Introduction to Network Management, Creating a Data Network, Network Management System Definition, Network Management System Architecture, Present Status of Network Management Systems, Network

13	Theoretical	Network Orientations, Services Provided by Carriers, Bandwidth Management, Factors Stiffening Standardization, Benefits of Error Control Management Application, Success of Error Control Management,
14	Theoretical	Ağ Yönelimleri, Taşıyıcılar Tarafından Sunulan Hizmetler, Bant Genişliği Yönetimi, Standardizasyonu Zorlaştıran Etkenler, Hata Kontrol Yönetim Uygulamasının Yararları, Hata Kontrol Yönetiminin Başarımı,
15	Theoretical	Network Management Protocols, History of Network Management Protocols, Standard Protocol Development, SNMP, CMIS / CMIP, CMOT
16	Final Exam	Final Examination

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	1	0	5	5
Term Project	1	0	5	5
Midterm Examination	1	5	1	6
Final Examination	1	5	1	6
			Total Workload (Hours)	50
			[Total Workload (Hours) / 25*] = **ECTS**	2

25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Explain network management hardware.
2	Explaining Network Management System Architecture.
3	Expressing the Infrastructure Character of Computer Network.
4	Explain the problems encountered in the implementation of network management system.
5	Solving the problems encountered in the network management system.

Programme Outcomes *(Machinery)*

1	To be able to know general properties and usage areas of industrial materials and make selection.
2	Design of machine elements.
3	To be able to make production using machining and welding machines without machining.
4	To be able to make measurement and quality control processes with machine tools for measuring and control equipment.
5	To be able to make necessary corrections in order to determine the mistakes by using the necessary non-destructive test methods in welded parts and to eliminate these mistakes.
6	Preventive measures to prevent the occurrence of these faults by preliminarily determining the faults that will occur in the machines as statistical data and to make necessary interventions in case of breakdown.
7	They can make drawings of work pieces on CAD station and apply them on CNC looms. Ability to operate and use CAD / CAM and AUTOCAD package programs.
8	To be able to transfer engineering science and technology to practice by making calculations in the direction of scientific principles.
9	It can repair the elements in pneumatic and hydraulic systems which are indispensable elements of automatic control systems and can regulate their work.
10	The student who is trained as a machine technician during the whole program knows that industrial task definition in the field of work is error finding, problem solving, decision making, planning of functions and activities and they can be achieved by aiming to acquire these characteristics.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P10	1	1	1	1	1