

**ANKARA YILDIRIM BEYAZIT UNIVERSITY – DEPARTMENT OF MANAGEMENT INFORMATION SYSTEMS  
COURSE SYLLABUS**

Course Code	Course Title	Course Type	ECTS Credits	Prerequisite Information	Date of Preparation
MIS217	FUNDAMENTALS OF INFORMATION TECHNOLOGIES	Compulsory	5	None	20.10.2025
<b>Instructor of the Course &amp; E-Mail Address</b>	Prof..Dr. Hüseyin Demirel huseyindemirel@aybu.edu.tr				
<b>Office Hours &amp; Office Room</b>	Thursday 12:00-13:00				
<b>Course Content and Objectives</b>	Teaching the fundamentals of Electrical, Electronic, and Computer technologies that constitute Information Technology. Teaching the concepts, symbols, units, elements, laws, and theorems that form the basis of Electrical, Electronic, and Computer technologies. Teaching passive and active circuit elements. Teaching circuit elements in basic electrical and electronic circuits. Teaching the fundamentals of basic practical circuit design to enable the design and implementation of simple circuits. Teaching the basic measurements, drawings, and safety precautions relevant to Information Technologies. Teaching the fundamentals of electronic circuit design with Arduino.				
<b>Textbook(s)</b>	Basic Electrical-Electronics, DEMİREL H., Birsen Yayinevi, 2017. Electronics Fundamentals Circuits, Devices, and Applications, FLOYD T. L, Pearson Prentice Hall, 2004. Temel Elektrik-Elektronik, DEMİREL H., Birsen Yayinevi, 2022.				
<b>Teaching Methods and Techniques</b>	Basic Electrical-Electronics, DEMİREL H., Birsen Yayinevi, 2017. Electronics Fundamentals Circuits, Devices, and Applications, FLOYD T. L, Pearson Prentice Hall, 2004. Temel Elektrik-Elektronik, DEMİREL H., Birsen Yayinevi, 2022.				
<b>Course Learning Outcomes</b>	<b>1</b>	Knows the fundamentals of electrical, electronic, and computer technologies.			
	<b>2</b>	Understands the basic concepts, symbols, units, components, laws, and theorems that form the foundation of Information Technologies.			
	<b>3</b>	Recognizes basic electrical and electronic circuit elements.			
	<b>4</b>	Learns the principles of basic practical circuit design and is able to design and implement simple circuits.			
	<b>5</b>	Knows the basic measurements and safety precautions related to Information Technologies.			
	<b>6</b>				
	<b>7</b>				
<b>Program Outcomes Contributed by the Course</b>	<b>Program Outcomes (PO)</b>				
	<b>1</b>	Understands the fundamental principles of computer, electrical, and electronic technologies forming the basis of Information Systems.			
	<b>2</b>	Demonstrates knowledge of the key concepts, components, and processes underlying Information and Communication Technologies (ICT).			
	<b>3</b>	Identifies and analyzes hardware and software elements used in information systems.			
	<b>4</b>	Applies basic problem-solving and analytical thinking skills to technological and system-related issues.			
	<b>5</b>	Follows technological developments and evaluates their potential impact on business and management processes.			
		Understands the fundamental principles of computer, electrical, and electronic technologies forming the basis of Information Systems.			

<b>Contribution of the Course to Field Instruction</b>	This course provides students with the fundamental technical knowledge required to understand and apply information technologies in the field of Management Information Systems. By introducing the essential principles of computer hardware, software, and electronic systems, it builds the technical foundation necessary for advanced courses such as programming, database management, and system analysis. The course helps students comprehend how information technologies support organizational processes, data management, and digital transformation. Additionally, it fosters analytical thinking, problem-solving, and a responsible approach to technology use, all of which are critical competencies in the modern digital business environment.		
<b>Topics Covered in the Course</b>	1. Week	The history of Information Technologies and the development of electrical, electronic, and computer sciences that form their foundation.	
	2. Week	Basic concepts, symbols, and units related to electricity, electronics, and computers that constitute the basis of Information Technologies.	
	3. Week	Fundamental electrical concepts of technology: current, voltage, and resistance.	
	4. Week	Basic laws and analyses related to electrical circuits.	
	5. Week	Fundamental units, components, and connections of electrical circuits.	
	6. Week	Passive circuit elements used in electrical systems and their characteristics.	
	7. Week	Midterm	
	8. Week	Construction and characteristics of basic electronic circuits.	
	9. Week	Design and implementation of practical electronic circuits.	
	10. Week	Fundamental concepts, units, and components of digital electronics.	
	11. Week	Design and implementation of basic digital circuits.	
	12. Week	Digital units forming the foundation of computers.	
	13. Week	Fundamentals of circuit design using the Arduino development platform.	
	14. Week	Basic measurements and technical drawings related to information technologies.	
	15. Week	General safety precautions to be considered in information technology applications.	
<b>Course Evaluation Criteria</b>	<b>In-Term Studies</b>	<b>Quantity</b>	<b>Percentage %</b>
	Mid-terms	1	%50
	Quizzes		%
	Assignments		%
	Attendance		%
	Practice		%
	Project		%
	Final examination	1	%50
	<b>Total</b>	<b>2</b>	<b>100%</b>
<b>Disability Policy</b>	If you have a documented disability (e.g., visual, hearing, or physical impairment, etc.) that may influence your performance in this course, it is recommended to meet with the Engelsiz AYBU ( <a href="https://aybu.edu.tr/engelsiz/content_list-327-yildirim-beyazit-universitesi-engelsiz-universite-birimi-yonergesi.html">https://aybu.edu.tr/engelsiz/content_list-327-yildirim-beyazit-universitesi-engelsiz-universite-birimi-yonergesi.html</a> ) to arrange for reasonable conditions (such as accommodation, etc.) to ensure an equitable opportunity to meet all the requirements of this course. You may also contact the local authority of the Faculty of Humanities and Social Sciences. You should communicate your needs to the course instructor as soon as possible to ensure that any course needs concerning exams, lecture materials, etc. are met.		