

SYLLABUS
Faculty of Economics and Administrative Sciences

Course Code	Course Title	Credits	ECTS Value	
IFN 423	Blockchain Technology	3 (3-0-3)	6	
Prerequisite Courses:	None			
Course Language:	English	Course Delivery Mode:	Online (Zoom)	
Course Type and Level:	Elective/4.Year/Fall Semester			
Instructor's Title, Name, and Surname		Course Hours	Office Hours	
Dr. Gülay GÜLER		Monday 10.15-12.35	Friday 10.15-12.35	
Course Coordinator:		gulayguler@cag.edu.tr		
Course Objectives				
Course Learning Outcomes	Upon successful completion of this course, the student will be able to;		Relations	
			Program Outcomes	Net Contribution
	1	Explains the fundamental concepts and working principles of blockchain technology.	2, 3, 9	5, 5, 4
	2	Identifies the application areas of blockchain across different sectors and analyzes them with examples.	3, 7, 9	5, 4, 4
	3	Evaluates the relationship between financial technologies, the crypto economy, and blockchain.	2, 3, 4	5, 4, 5
	4	Examines global blockchain ventures and discusses innovative business models.	3, 5, 9	4, 5, 5
	5	Selects blockchain platforms suitable for specific use cases and conducts comparative analyses.	2, 5, 9	5, 5, 5
	6	Applies problem-solving, critical thinking, and decision-making skills through case studies.	4, 5, 9	5, 5, 5
7	Develops projects collaboratively, prepares reports, and delivers presentations.	1, 5, 6	5, 5, 5	
Course Content:	<p>The course aims to introduce blockchain technology by teaching its fundamental concepts and application areas. While examining the role of financial technologies and the crypto economy, practical applications are illustrated with examples of global ventures. The usage areas and selection criteria of different blockchain platforms are discussed, and students' knowledge is reinforced through exams and Socratic activities. Through case studies and project preparations, students develop their analytical, problem-solving, and practical skills. Thus, the course equips students with both theoretical knowledge and practical competencies in the field of blockchain technology.</p>			
Course Schedule (Weekly Plan)				
Week	Topic	Preparation	Teaching Methods and Techniques	
1	Introduction and Sharing of Course Expectations	Students should understand the course objectives and learning	Expectation Mapping, In-Class Discussion	

		outcomes and be prepared to formulate and share their own academic expectations.	
2	Introduction to Blockchain	Preliminary reading should be done on the fundamental concepts of blockchain technology (block, chain, distributed ledger, mining), and key terms should be noted.	Concept Mapping, Question-and-Answer Technique
3	Application Areas of Blockchain Technology	Students should research blockchain applications across finance, healthcare, supply chain, and other sectors, reviewing case study examples.	Case Analysis, Case Study Review
4	Financial Technologies and the Crypto Economy	Basic concepts of cryptocurrencies, digital wallets, and decentralized finance (DeFi) should be studied in advance, and current market examples should be followed.	Flipped Classroom
5	Global Blockchain Ventures	International blockchain ventures and projects should be examined, with success stories and practical examples analyzed.	Flipped Classroom
6	Blockchains in Use and Blockchain Selection	Preliminary reading should be done on different blockchain platforms (Ethereum, Binance Smart Chain, Solana, etc.) and their application areas, considering which blockchain is suitable for specific scenarios.	Brainstorming and Discussion Technique
7	Pre-Exam Review and Socratic Activities	Notes from previous weeks should be reviewed, with concepts and practical examples revised.	Brainstorming and Discussion Technique
8	Midterm Exam		
9	Midterm Exam		
10	Case Study	For weekly case studies, students should review the relevant blockchain applications or projects using academic sources and current examples in advance.	Small Group Case Solving and Comparative Poster Presentation
11	Case Study	Students should be prepared to develop	Small Group Case Solving and Role-Playing

		solutions through role-playing in assigned blockchain scenarios, having reviewed the relevant sources and examples; discussion and analysis strategies should be planned according to role assignments.	
12	Case Study	Data collection, problem identification, and preparation of solution proposals should be done for case study analysis, with notes and questions prepared in advance to ensure active participation in discussions.	Brainstorming and Small Group Experimental Activity
13	Case Study	Students should analyze the selected blockchain case and prepare solutions based on academic sources.	Small Group Experimental Activity
14	Case Study	Students should select project topics, design research questions and methodologies, and complete preliminary drafts.	Role-Playing and Discussion Technique
15	Project Preparation	Students should conduct academic literature review and prepare preliminary drafts for their projects.	SWOT and PESTEL Analyses
16	General Evaluation	Throughout the course, theoretical knowledge and practical applications should be reviewed, with critical evaluation of projects and case studies.	Reflective Discussion and Brainstorming
17	Final Exam		
18	Final Exam		

Course Resources

Textbook:	Laurence, T. (2017). Blockchain. John Wiley & Sons, Inc.
Recommended References:	Nofer, M., Gomber, P., Hinz, O. et al. Blockchain. Bus Inf Syst Eng 59, 183–187 (2017). https://doi.org/10.1007/s12599-017-0467-3

Course Assessment and Evaluation

Activities	Number	Percentile	Notes
Midterm Exam	1	%40	
Final Project	1	%60	In your project reports, the use of artificial intelligence (AI) must not exceed 20%, and the similarity/plagiarism rate must not exceed 30%.

ECTS Table			
Content	Number	Hours	Total
Course Duration	14	3	42
Out-of-Class Study	14	6	84
Midterm Exam (Midterm Exam Duration + Midterm Exam Preparation)	1	30	30
Final Project	1	30	30
Total:			186
Total / 30:			6,2
ECTS Credit:			6

Past Term Achievements

2024-2025 Fall Semester
IFN 423 Blockchain Technology



2023-2024 Fall Semester
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