

Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
IT 520	Cybernetics and Block Chain	1	4	0	0	3	8
Prerequisites							
Admission Requirements							
Language of Instruction	English						
Course Type							
Course Level	Masters Degree						
Objective	Cybernetics and blockchain computing are the content of this course.						
Content	Week 1 Introduction to the Cyber World						
	Week 2 What is Cryptology?						
	Week 3 Hash Functions						
	Week 4 Cryptography with Open Keying I						
	Week 5 Cryptography with Open Keying II						
	Week 6 Midterm Exam						
	Week 7 Distributed Application Architecture and P2P Networks						
	Week 8 The Concept of Cryptocurrency						
	Week 9 Data Storage and Distribution						
	Week 10 Blockchain Development Platforms and APIs						
	Week 11 Blockchain Ecosystem						
References	1. An Introduction to Mathematical Cryptography, Jeffrey Hoffstein, Jill Pipher, Joseph H. Silverman, Springer, 2014.						
	2. Bitcoin, E. Emre Aksoy, Abaküs, 2018.						
	3. Blokzincir - Kripto Paralar - Bitcoin, Satoshi Dünyayı Değiştiriyor, Vedat Güven , Erkin Şahinöz, KRONİK KİTAP, 2018.						

Theory Topics

Week	Weekly Contents
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