

Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
IT 520	Cybernetics and Block Chain	2	4	0	0	3	8

Prerequisites	
Admission Requirements	

Language of Instruction	English
Course Type	Elective
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
------	-----------------