

Content

| Course Code | Course Name | Semester | Theory | Practice | Lab | Credit | ECTS |
|-------------|-----------------------------------|----------|--------|----------|-----|--------|------|
| EC 563 | Blockchain and Virtual Currencies | 1 | 3 | 0 | 0 | 3 | 6 |

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| Prerequisites | |
| Admission Requirements | |

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| Language of Instruction | Turkish |
| Course Type | Elective |
| Course Level | Masters Degree |
| Objective | In this course we'll address the important questions about Bitcoin. How does Bitcoin work? What makes it different? How secure are your bitcoins? How anonymous are Bitcoin users? What applications can we build using Bitcoin as a platform? Can cryptocurrencies be regulated? If we were designing a new cryptocurrency today, what would we change? What might the future hold? |
| Content | Underlying technologies of cryptocurrencies |
| References | https://bitcoinbook.cs.princeton.edu |

Theory Topics

| Week | Weekly Contents |
|------|----------------------------------|
| 1 | Introduction to cryptocurrencies |
| 2 | Decentralization |
| 3 | Mechanism of bitcoin |
| 4 | Storage and usage |
| 5 | Mining |
| 6 | Anonymity |
| 7 | Alternative mining puzzles |
| 8 | MT exam |
| 9 | Altcoins as Platforms |
| 10 | Altcoins |
| 11 | The future of bitcoin |
| 12 | DAOs |
| 13 | History of digital currencies |
| 14 | Applications |