

| Name of the course | Code | Term | T+P | Credit | ECTS |
|---------------------------|------|------|-----|--------|------|
| Network And Data Security | | | 3+0 | 3 | 4 |

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| Prerequisites and co-requisites | |
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| Language of the course | Turkish |
| Type of the course | Technical Elective |
| Course Coordinator | |
| Name of Lecturers | |
| Assistants | |
| Aim and goals of the course | To give information about data and network security systems; the process of security system design; security risk analysis; analysis and designing of data and network security. |
| Course Learning Outcomes | Upon successful completion of the course, the students will be able to : <ol style="list-style-type: none"> 1. Define concepts of Network and information security. 2. Define design process of security system and analyse security risk. 3. Define cryptosystems and their applications. |
| Contents of the course | Introduction / Security Requirements and Grades / Communication in Network Systems / Topology Security / Cryptosystems and Symmetric Encryption / Decryption / Open Keyed Cryptosystems and Digital Signature / Firewall / Penetration Recognition Systems / Biometric Security Systems / Virtual Private Networks / Network Usage Policie |

| Weeks | Subjects |
|-------|---|
| 1 | Introduction to Data and Network Security |
| 2 | Safety Requirements |
| 3 | Safety Ratings |
| 4 | Network Congestion |
| 5 | Topology Security |
| 6 | Cryptosystems and Symmetric Encryption / Decryption |
| 7 | Open Keyed Cryptosystems |
| 8 | MIDTERM |
| 9 | Digital Signature |
| 10 | The firewall |
| 11 | Infusion Recognition Systems |
| 12 | Biometric Security Systems |
| 13 | Virtual Private Networks |
| 14 | Network Usage Policies |
| 15 | FINAL EXAM |

| General Qualifications |
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| In evaluations, it is important that students can understand network and data security issues and apply them. |
| References |
| <ol style="list-style-type: none"> 1. W. Stallings, "Network Security Essentials" P.Hall 2000 ,ISBN0-13016-093-8 2. W. Stallings, "Cryptography and Network Security",P.Hall 1999 ,ISBN0-0-13-869017-0 3. Chris Brenton., "Mastering Network Security", ISBN: 0-7821-2343-0 |
| Evaluation |
| Midterm Exam: % 40, Final Exam: % 60. Project or homework evaluations can be made at the beginning of the semester. |