# Cryptography and Network Security

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| **Name** | **Cryptography and Network Security** |
| Education | The course is offered as an elective for the students |
| Purpose | The aim of this course is to give the student insight in theory, principles, and practice of cryptography and Network security |
| Language | English |
| Exam | Oral exam with synopsis |
| Objectives knowledge | The student has knowledge about:   * Computer and network security concepts * Symmetric and Asymmetric Cryptography concepts * Confidentiality, integrity and availability * Block cyphers and the Data encryption * Classical encryption techniques * Advanced Encryption Standard * Public Key Cryptography * Message authentication * Hash and MAC algorithm * Digital Signatures * Electronic Mail Security * IP Security * Web Security |
| Skills | The student can:   1. Use Symmetric Encryption techniques 2. Use Asymmetric Encryption techniques 3. Can use IPSec 4. Can create Secure Virtual Private Network 5. Create, assign and manage digital certificates |
| Competences | The student can:   1. Participate as a security professional in designing a secure IT environment. 2. Act as a security consultant |