

UA 519 Cryptography

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| Course Code: | UA 519 |
| UTAA Credit (Theoretical-Laboratory hours/week): | 3(3-0) |
| ECTS Credit: | 6.0 |
| Department: | Unmanned and Autonomous System Engineering |
| Language of Instruction: | English |
| Level of Study: | Graduate |
| Offered Semester: | Fall and Spring Semesters. |

Course Objectives

This course will introduce cryptography theories, algorithms, and systems

Course Content

Mathematical Background, Symmetric Ciphers, Block Ciphers, DES, AES, Public Key Cryptography, RSA, Message authentication and hash functions, Digital Signature and Authentication

Course Learning Outcomes

- 1-Will learn the theory of basic cryptography, algorithms for encryption and decryption.
- 2-Will learn to apply encryption algorithms
- 3-Can create cryptosystems using encryption applications
- 4- encryption algorithms to create information and network security mechanisms.
- 5-Can use authentication and message authentication techniques to improve identity management