**BIS 2100 Information Systems Security (4 CU)**

**Indicative Content:** This course introduces the basic principles of computer security, focusing on system **Course Description:** At the conclusion of the course, the student should have an understanding of: Computer, databases & network-related security threats and solutions; Principles of authentication and encryption; Internet Protocol security architecture (IPSEC).

elements. Among the topics covered are: access control and integrity; Network security; database security; cryptography (Symmetric and public key systems; PKI Strengths-complexity, secrecy, Encryption Key management); programming language security (problems like buffer overflow, pointers and arrays; java security).

**Reference Books:**

i. A. R. Warman, *Computer Security within Organizations*, The Macmillan Press Ltd, 1993.

ii. P. E. Fites, M. P. Kratz, *Information Systems Security:* A Practitioners Reference 2nd edition,

2003.