



Democritus University of Thrace, Kavala, Greece

School of Science
Department of Informatics

Department of European and International Programmes – Erasmus+

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Proposed Course for incoming Erasmus students¹

Responsible for the course (lecturer) (name, phone number, e-mail address)	Prof. Konstantinos Rantos 0030 2510 462 611 krantos@cs.duth.gr
Title of the Course	Cybersecurity
ECTS credits	5
Short contents of the course	<ol style="list-style-type: none"> 1. Applied Cryptography 2. Internet Security 3. TCP/IP Security, Mechanisms and Protocols 4. Security Firewalls 5. Intrusion Prevention and Detection Systems 6. Cyber security controls 7. Unified Threat Management Systems 8. Zero Trust Architectures 9. Cyber Threat Intelligence
Aim of the course and target audience	<p>Aim of the course: The course focuses on the protection of information systems and communications, exploring the architectures, mechanisms, and security protocols used to ensure confidentiality, integrity, and availability on the Internet. It aims to equip students with the knowledge to design secure systems, understand cryptographic methods, and analyze cyber threats and protection mechanisms.</p> <p>Target audience: Undergraduate students of Informatics/ Computer Science</p>
Teaching Methods duration and Evaluation	<p>Lectures: 39 hours Asynchronous online self-paced course Assignment</p> <p>Evaluation: 100% Project-based</p>
Offered Period	Spring semester
Indicative bibliography	<ol style="list-style-type: none"> 1. Stallings, William. Cryptography and Network Security: Principles and Practice. 8th ed., Pearson, 2020. ISBN: 9780135764213. 2. Stallings, William. Network Security Essentials: Applications and Standards. 6th ed., Pearson, 2017. ISBN: 9780134527338.

¹ Could be easily used and offered for TS movement to our Erasmus partners