DECAMP

Open Distributed European Virtual CAMPus on ICT Security

An exciting offer of online courses on ICT Security



What is DECAMP?

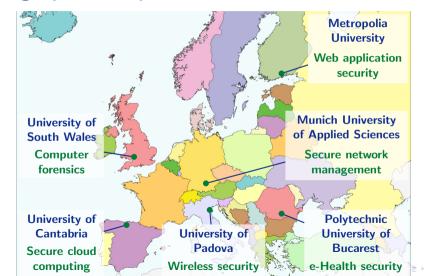
A strategic partnership of European universities, sharing a set of online classes on ICT security, each based on that institution' specific expertise.

- offers all students of the participating universities the chance to attend one or more classes on specific areas of ICT security that are not covered at their home university
- encourages collaborative work between students from different universities and countries
- allows students to access the classes from home or their local university, at convenient times, no conflicts with regular classes
- ▶ final written exams are held simultaneously in all universities for each class
- ECTS credits earned on each class are automatically accepted by the students' home university programs

Basic notions of information security and cryptography are a prerequisite for all classes.



A strategic partnership



All six courses feature...

Same course structure 6 ECTS credits,

Blended Learning Q&A sessions, demos, case studies by industry experts, interactive discussions

Virtual laboratory platform for on line lab experiences and reports

Weekly assignments short problems and questions, virtual laboratory tasks

Collaborative and cumulative project to be carried out by teams of 2-3 students and presented in a form of a wiki, a presentation or a portfolio.

Same evaluation procedure

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\begin{array}{c} \text{laboratory} & 30\% + \\ \text{project} & 20\% + \\ \text{discussion} & 10\% + \\ \text{written exam} & 40\% = \end{array}
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final grade 100%

skip class descriptions



Secure Network Management and Computer Networks (for Bachelor students)



Focuses on practically oriented concepts to secure local and remote management of network components

What you will study

Secure management protocols for the configuration of network devices. Types of attacks on network components. Concepts and tools for network and management protection.

What you will do

Monitor networks with SNMP, NetFlow, OpenFlow. Configure and analyze network protection, VPN and IPS with Firewall and NAT-Tools, OpenVPN, Snort-Tool.

What you need to know

Web programming (HTML, JavaScript), Java/Python programming, data structures.

held in Fall 2021

Applied Web Application Security: Attacks and Defense (for Bachelor students)



Focuses on threats to the WEB applications and their clients

What you will study

Attack vector and their combined impact on security. Practical security protection methods on multiple implementation platforms. Platform specific weaknesses.

What you will do

WEB application stress testing using penetration testing tools. Revealing application vulnerabilities and security misconfigurations.

What you need to know

Web programming (HTML, JavaScript), Java/Python programming, data structures.

held in Spring 2022



Secure Cloud Computing (for Bachelor students)



Presents the main concepts of Cloud Computing, risks, interoperability, standards and security

What you will study

Threats to Cloud computing such as abuse and nefarious use, data leakage, service and traffic hijacking. Current methods and tools used for protection of Cloud computing.

What you will do

Penetration testing of cloud services, exploiting, privilege escalation, DoS. Securization, private cloud environment, firewalling, intrusion detection.

What you need to know

Computer networks, Java programming, data structures held in Spring 2022

Security of e-Health Systems (for Master students)



Presents the architecture and interoperability of e-Health applications as well as the security of e-Health systems

What you will study

e-Health standards, interoperability and security issues. Medical data privacy, sensitive data access control policies and protection methods

What you will do

Attacks on WiFi connections between medical devices, securing a mobile medical network using biometric authentication.

What you need to know

Computer networks, network security, programming and databases.

held in Spring 2022



Wireless Network Security (for Master students)



Introduces security solutions that can be deployed at different layers in wireless and mobile networks

What you will study

Secure localization, location privacy, secure routing, sensor newtworks security, physical layer security. Security in WiFi, WiMax, LTE, UMTS

What you will do

Android security, mobile network exploits. Secure routing. Physical layer secrecy, jamming rejection, GNSS spoofing and detection

What you need to know

Wireless digital communications, computer and communication networks, probability and statistics

held in Fall 2021

Applied Computer Forensics and Crime Investigation (for Master students)



The course content mirrors a typical forensic investigation

What you will study

A wide range of concepts and applied techniques that will involve identifying, securing and conducting the forensic extraction of data from a suspect digital storage device. Standards, legal aspects and ethics

What you will do

Lab experiments using a virtual lab.

What you need to know

Computer architecture, operating system, programming, computer networking, data structures

held in Spring 2022



For further information...

contacts @ UniPD :

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visit the DECAMP website:

but remember

the registration deadlines will be:
early October 2021 for the Fall term
mid January 2022 for the Spring term