Computer Security II (COMP0055)

**Description**

**Aims:**
Providing an advanced understanding of network and computer security vulnerabilities and countermeasures in real-world systems.

**Learning outcomes:**
Students will learn how to think critically and creatively about advanced security topics. They will learn how, when and why to apply security technologies for the most benefit, vis-à-vis advanced network, software, and system issues. Students will be challenged with the study and the design of attacks and defenses to networks, systems, and software, both from a theoretical and a practical point of view.

**Content:**
- Network protocols and vulnerabilities;
- Network defenses;
- Network Security tools;
- Intrusion and Anomaly Detection;
- Advanced Software and System security: threats, vulnerabilities, and countermeasures via real-world examples;
- Malware and botnets;
- Denial of Service;
- Advanced Web Security;

**Requisites:**
In order to be eligible to select this module, a student must be registered on a programme for which it is a formally-approved option or elective choice AND must have taken COMP0054 (or an equivalent module) in Term 1.

**Key information**

- **Year:** 2019/20
- **Credit value:** 15 (150 study hours)
- **Delivery:** PGT L7, Campus-based
- **Reading List:** View on UCL website
- **Tutor:** Dr Emiliano De Cristofaro
- **Term:** Term 2
- **Timetable:** View on UCL website

**Assessment**

- Written examination (departmentally managed): 35%
- Written examination (departmentally managed): 35%
- Coursework: 30%

**Find out more**

For more information about the department, programmes, relevant open days and to browse other modules, visit ucl.ac.uk

Disclaimer: All information correct as of August 2019. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.
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Content:
- Network protocols and vulnerabilities;
- Network defenses;
- Network Security tools;
- Intrusion and Anomaly Detection;
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- Malware and botnets;
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- Advanced Web Security;

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Key information

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Reading List: View on UCL website
Tutor: Dr Emiliano De Cristofaro
Term: Term 2
Timetable: View on UCL website

Assessment

- Written examination (main exam period): 70%
- Coursework: 30%

Find out more

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