Computer Science

Philosophy, Politics and Economics of Security and Privacy (COMP0063)

**Description**

**Aims:**
Upon completion of the course the students are expected to be: aware of the conceptual foundations of security policy and technology and their role in delivering robust, reliable systems; specialists in understanding the political context within which security policy and its implementation is situated; specialists in understanding the design and implementation of security policy from the perspective of economics, including ideas and tools from areas such as utility theory, game theory, and portfolio theory.

**Learning outcomes:**
On successful completion of the module, a student will be able to:
1. Understand concepts and philosophy of security and privacy, including:
   - declarative and operational concepts;
   - the relationships between security and privacy;
   - the relationships between people, policy, and systems;

2. Understand politics of security and privacy, including:
   - the perspectives of individuals, companies, and governments;
   - international relations, strategy, cyber-conflict;
   - understanding tensions in policy and legislation;

3. Understand economics of security and privacy, including:
   - utility, incentives, public goods, externalities and internalities, and trade-offs;
   - games in security and privacy;
   - using models to understand policy, technology, and decision-making;

4. Develop conceptual analyses of systems and policies in socio-economic contexts;

5. Assess the consequences and value of models of security and privacy;

**Key information**

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<thead>
<tr>
<th><strong>Year</strong></th>
<th>2019/20</th>
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<tr>
<td><strong>Credit value</strong></td>
<td>15 (150 study hours)</td>
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<tr>
<td><strong>Delivery</strong></td>
<td>PGT L7, Campus-based</td>
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<tr>
<td><strong>Reading List</strong></td>
<td>[View on UCL website]</td>
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<tr>
<td><strong>Tutor</strong></td>
<td>Dr Tristan Caulfield</td>
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<td><strong>Term</strong></td>
<td>Term 1</td>
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<tr>
<td><strong>Timetable</strong></td>
<td>[View on UCL website]</td>
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**Assessment**

A coursework component contributes to the final grade as follows:
- Coursework: 25%
- Coursework: 35%
- Coursework: 40%

**Find out more**

For more information about the department, programmes, relevant open days and to browse other modules, visit [ucl.ac.uk](http://ucl.ac.uk)
6. Organize and communicate complex ideas and arguments in precise, accessible written form;

Content:
The module covers in depth major issues in computer, information, and general security related to the following perspectives:
- Conceptual and philosophical foundations of security policy and its implementation in systems’ contexts;
- The political context within which security policies and their implementations are situated, including national and international security issues and the relationships between individuals, companies, and governments;
- The design and implementation of security policy from the perspective of economics, including ideas and tools from areas such as utility theory, game theory, and portfolio theory;

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 also select COMPO054.