1. **Title of the module**

COMP8340 (CO834) - Security, Privacy and Trust Management

1. **School or partner institution which will be responsible for management of the module**

School of Computing

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 7

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Spring

1. **Prerequisite and co-requisite modules**

None

1. **The programmes of study to which the module contributes**

Portfolio of Taught Postgraduate Programmes in Computing, EDA, Kent Law School, SSPSSR, and Kent Business School

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**

8.1 An awareness of the importance of taking a systems-wide approach to maintaining cyber security, and the role of security and privacy risk management.

8.2 An increased understanding of the motivation, design, operation and management of modern systems for security, privacy, and trust management, including awareness of relevant human factors especially usability issues.

8.3 Being aware of legal issues on security, privacy and data protection, and relevant security (management) standards.

8.4 The ability to analyse the security and privacy/data protection requirements of an organisation.

8.5 The ability to apply modern security and privacy by design principles to develop solutions to real world secure systems problems.

8.6 Awareness of appropriate processes, techniques and tools for developing and managing security and privacy protection systems including those for trust and reputation management.

8.7 A basic understanding of business continuity planning and management, incident response and cyber resilience.

1. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**

9.1 The ability for critical thinking, reasoning and reflection.

9.2 The ability to produce a specification of the operation of a complex system based on an understanding of the component parts.

9.3 The ability to undertake critical appraisal of a candidate system design and reflect upon its merits.

9.4 The ability to generate, analyse, present and interpret data.

9.5 The use of Information and Communications Technology.

9.6 Personal and interpersonal skills, and working as a member of a team.

9.7 To communicate effectively (in writing and verbally).

9.8 Learn effectively for the purpose of continuing professional development.

9.9 The ability to manage time and resources within a potentially complex problem domain.

1. **A synopsis of the curriculum**

This module investigates the whole process of security management and associated activities such as privacy and trust management. A holistic view of security management is taken, including risk management, the formulation of security policies, business continuity and resilience.

Technical subjects include a description of the various security models, and showing how authorisation policies can be automatically enforced. There is also an emphasis on trust and reputation in systems. The legal and privacy issues associated with information management are also addressed, as are the usability issues of security technologies.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Anderson, R. (2008). *Security Engineering*. 2nd Edition. Wiley. Available free from http://www.cl.cam.ac.uk/~rja14/book.html.

Pfleeger, CP. (2015). *Security in Computing*. 5th edition. Prentice Hall.

Alexander, D., Finch, A., & Sutton, D. (2013). *Information Security Management Principles*. BCS.

Smith, S. (2005). *Trusted Computing Platforms*. Springer. ISBN 0-387-23916-2.

Various RFCs, standards and research papers associated with the syllabus.

Further readings are provided with each lecture.

1. **Learning and teaching methods**

Total contact hours: 42 (22 hours lectures, 20 hours seminars)

Private study hours: 108

Total study hours: 150

1. **Assessment methods**
   1. Main assessment methods

Group presentations (20%)

Final essay (30%)

Written examination, 2 hours (50%)

13.2 Reassessment methods

Like for like.

1. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | **8.1** | **8.2** | **8.3** | **8.4** | **8.5** | **8.6** | **8.7** | **9.1** | **9.2** | **9.3** | **9.4** | **9.5** | **9.6** | **9.7** | **9.8** | **9.9** |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lectures | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |  | **x** |  |  | **x** |  |  |
| Seminars | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |  | **x** |
| Private Study | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  | **x** | **x** |  |  |  | **x** | **x** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Written examination | **x** | **x** | **x** | **x** |  |  | **x** | **x** |  |  | **x** |  |  | **x** | **x** |  |
| Final essay | **x** | **x** | **x** | **x** | **x** | **x** |  | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Group presentations | **x** | **x** | **x** | **x** | **x** | **x** |  | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

1. **Inclusive module design**

The School recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Canterbury

1. **Internationalisation**

Most of the curriculum in this module is universal in its scope. The module focuses for the most part on technology and international standards which apply worldwide. Where the module does touch on legal aspects, care is taken to specify which issues apply solely to the UK or EU, and which apply more universally.

**FACULTIES SUPPORT OFFICE USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 03/12/19 | Major | Sep 2020 | 1, 6-8, 10-14 | No |
|  |  |  |  |  |