1. **Title of the module**

COMP5480 (CO548) - Software Engineering Process

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

Division of Computing, Engineering, Mathematical Sciences (CEMS)

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

Level 5

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)**

Autumn

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

None

1. **The course(s) of study to which the module contributes**

BSc Business Information Technology

BSc Software Engineering

plus Year-in-Industry variants of these courses.

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

8.1 Describe, explain and carry out the processes used in the production of quality software [B1, B2, B3, B5, C2]

8.2 Describe the processes, techniques and deliverables associated with requirements engineering [B1, B3, D2]

8.3 Describe a variety of approaches employed in software development and indicate the circumstances where such approaches may be appropriate [A2, A4, C4]

8.4 Appreciate a range of software architectures and design processes. [A2, B5]

8.5 Understand the role of verification and validation, and the importance of testing. [A4, B4, B7, B9]

8.6 Identify the roles and responsibilities of members of a software development team and the methods of intercommunication. [A3, A11, D2, D5]

8.7 Understand project management including project scheduling, staffing, cost estimation and budgeting, configuration management, quality assurance and process improvement. [A2, C2, C4]

8.8 Discuss the professional and legal duties software engineers owe to their employers, employees, customers and the wider public [B6];

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

9.1 Make effective use of IT facilities for scholarship and research. [D3]

9.2 Be able to manage their own time, learning and development. [D5]

9.3 Present and discuss a topic of study [B2, D2]

9.4 Recognise and be guided by social, professional and ethical issues and guidelines.[B6]

1. **A synopsis of the curriculum**

The module studies in detail the activities and artefacts associated with software development process as performed by a development team (i.e. programming in the large).

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

Sommerville,I, Software Engineering, 10e Addison Wesley, 2015

Pressman, R, Software Engineering: A Practitioner's Approach, 8e McGraw-Hill Higher Education, 2014

Pfleeger, S L; Atlee, J M, Software Engineering: International Version: Theory and Practice, 4e Pearson, 2009

Van Vliet, H Software Engineering: Principles and Practice, 3e John Wiley & Sons, 2008

1. **Learning and teaching methods**

Total contact hours: 30

Private study hours: 120

Total study hours: 150

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

An unseen written examination (50%)

Coursework (50%) with the following indicative weighting;

Group presentation (30%)

Group report (40%)

Individual reflection report (30%)

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* | *8.8* | *9.1* | *9.2* | *9.3* | *9.4* |  |  |
| **Lectures** | 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** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Exam* | X | X | X | X | X | X | **X** |  |  | X |  | X |  |  |
| *Coursework* | X | X | X | X | X | X | X | X | X | X | X | X |  |  |

1. **Inclusive module design**

The Division 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**

The topics addressed by this module relate to a field which is of international importance, given the global role of computers in today's technological innovation.  The topics are international in nature, being similar worldwide and independent of traditional spoken language. Examples are given from international perspective, and wherever possible the lecturers will include a diversity of international viewpoints and case studies.

**DIVISIONAL 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 delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 23/11/2020 | Minor | September 2021 | 7, 16 | No |
| 16/11/2021 | Minor | September 2022 | 5, 6, 7, 11, 13 | No |