

## MODULE DESCRIPTOR

### Module Title

Interdisciplinary Team Project

|           |                |             |        |
|-----------|----------------|-------------|--------|
| Reference | CM3130         | Version     | 3      |
| Created   | September 2023 | SCQF Level  | SCQF 9 |
| Approved  | May 2020       | SCQF Points | 15     |
| Amended   | April 2024     | ECTS Points | 7.5    |

### Aims of Module

To introduce principles and techniques involved in working as part of an interdisciplinary team and to provide students with a knowledge of project management methodology, preparing them to critically manage and run a full development lifecycle.

### Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Assess appropriate project management techniques and methodologies for application to the management of projects.
- 2 Organise, prioritise and validate requirements per criteria, such as feasibility and clarity, in order to meet customer requirements.
- 3 Interpret the range of development resources required, allocate them to a project and demonstrate through involvement in a team project.
- 4 Assemble regular informative reports and make concise, engaging and well-structured verbal and written presentations, arguments and explanations about technical problems and their solutions.
- 5 Support a small interdisciplinary team, as a member or lead, showing understanding of the principles of leadership, and adopt best practices for developing software in teams recognising challenges and approaches taken to resolve them.

### Indicative Module Content

A review of different development lifecycles, contrasting the activities performed in each phase. An introduction to tools used in project management (e.g. activity diagrams, use case diagrams) as well as types of project plans (e.g. Gantt charts, sprint backlogs), within the context of industrially-specific activities (e.g. software engineering). Project Planning. Project Management. Communication and Presentation skills. Quality assurance, ethical and legal requirements. Requirements analysis. Agile development methodologies. Teamwork. Project Documentation.

### Module Delivery

Key concepts are introduced and illustrated through lectures and directed reading. The understanding of students is tested and further enhanced through interactive tutorials. In the laboratories, the student will work within teams in an agile manner to develop sufficient knowledge and skills in software engineering and project management.

### Indicative Student Workload

|  | Full Time | Part Time |
|--|-----------|-----------|
| Contact Hours  | 30        | N/A       |
| Non-Contact Hours  | 120       | N/A       |
| Placement/Work-Based Learning Experience [Notional] Hours                    | N/A       | N/A       |
| TOTAL  | 150       | N/A       |
| <i>Actual Placement hours for professional, statutory or regulatory body</i> |           |           |

### ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

#### Component 1

|              |                                     |            |      |                    |               |
|--------------|-------------------------------------|------------|------|--------------------|---------------|
| Type:        | Coursework                          | Weighting: | 100% | Outcomes Assessed: | 1, 2, 3, 4, 5 |
| Description: | A team-based coursework assignment. |            |      |                    |               |

### MODULE PERFORMANCE DESCRIPTOR

#### Explanatory Text

The calculation of the overall grade for this module is based on 100% weighing of C1. An overall minimum grade D is required to pass the module.

| Module Grade | Minimum Requirements to achieve Module Grade:                                  |
|--------------|--|
| <b>A</b>     | The student needs to achieve an A in C1  |
| <b>B</b>     | The student needs to achieve a B in C1   |
| <b>C</b>     | The student needs to achieve a C in C1   |
| <b>D</b>     | The student needs to achieve a D in C1   |
| <b>E</b>     | The student needs to achieve an E in C1  |
| <b>F</b>     | The student needs to achieve an F in C1  |
| <b>NS</b>    | Non-submission of work by published deadline or non-attendance for examination |

### Module Requirements

|                          |  |
|--------------------------|--|
| Prerequisites for Module | CM2112 Real World Projects, or equivalent. |
| Corequisites for module  | None.                                      |
| Precluded Modules        | None.                                      |

**INDICATIVE BIBLIOGRAPHY**

- 1 SOMMERVILLE, I., 2015. Software Engineering. 10th Ed. Pearson Education Ltd.
- 2 NOTE, M., 2015. Project Management for Information Professionals. Chandos Publishing.
- 3 McDONALD, K.J., 2015. Beyond Requirements: Analysis with an Agile Mindset. Addison-Wesley Professional.
- 4 REDDY, A., 2015. The Scrumban [r]evolution: Getting the Most out of Agile, Scrum and Lean Kanban. Addison-Wesley Professional.
- 5 KNAPP, J., ZERATSKY, J. and KOWITZ, B., 2016. Sprint: How to solve big problems and test new ideas in just five days. Simon and Schuster.