2024 / 25

School of Science and Computing
+353 (0)51 302037
Eleanor.Reade@setu.ie
www.wit.ie/schools/science_computing

Ollscoil Teicneolaíochta an Oirdheiscirt

South East Technological University

Module Descriptor

Project 1 (Development) (Computing and Mathematics)

Project 1 (Development) (A14881)

Short Title: Project 1 (Development)
Department: Computing and Mathematics
Credits: 5 **Level:** Advanced

Description of Module / Aims

This module extends the student?s knowledge of software engineering with a view to equipping them for their project work in this current year (year IV) of the programme. In addition it requires the student to prepare a consolidated report on the first stage of their fourth year project in conjunction with a learning contract established between student and supervisor.

Programmes

		stage/semester/status
PROJ-0166	BSc (Hons) in Applied Computing (International) (WD_KACCM_BI)	4 / 7 / E
PROJ-0166	BSc (Hons) in Applied Computing (WD_KACCM_B)	4 / 7 / E
PROJ-0166	BSc (Hons) in Applied Computing (WD_KCOMP_B)	4 / 7 / E
PROJ-0166	BSc (Hons) in Computer Forensics and Security (WD_KCOFO_B)	4 / 7 / E
PROJ-0166	BSc (Hons) in Computer Science (WD_KCMSC_B)	4 / 7 / E
PROJ-0166	BSc (Hons) in Creative Computing (WD_KCRCO_B)	4 / 7 / E
PROJ-0166	BSc (Hons) in Information Technology Management (WD_KITMA_B)	1 / 7 / E
PROJ-0166	BSc (Hons) in Information Technology (WD_KINTE_B)	4 / 1 / E
PROJ-0166	BSc (Hons) in Multimedia Applications Development (WD_KMULM_B)	4 / 1 / E
PROJ-0166	BSc (Hons) in Software Engineering (WD_KDEVP_BI)	4 / 7 / E
PROJ-0111	BSc (Hons) in Software Systems Development (WD_KCSDV_B)	4 / 1 / E
PROJ-0166	BSc (Hons) in Software Systems Development (WD_KDEVP_B)	4 / 7 / E
PROJ-0166	BSc (Hons) in Software Systems Practice (WD_KSOFP_B)	1 / 1 / M
PROJ-0166	BSc (Hons) in the Internet of Things (International) (WD_KINTT_BI)	4 / 7 / E

Indicative Content

- Consolidate knowledge of software development processes, particularly those that are based on an iterative strategy and early risk mitigation
- To enhance the student's ability to analyse a problem through scenarios that will subsequently provide a plan for construction and testing
- Where appropriate to define the user requirements of an intended system through use case descriptions
- Use of UML and other textual/diagramming techniques essential for discussing final year projects at a conceptual level
- To revise and consolidate the students' abilities to write referenced reports
- Using appropriate techniques, tentatively plan a project in detail breaking it into sub-tasks; rigorously identify deliverables and critical dependencies

Learning Outcomes

On successful completion of this module, a student will be able to:

1. Explain, in words and diagrammatically, to their peers, the work of their project.
2. Interact with their supervisor in discussing how their project might proceed and the risks and interact options associated with their work.
3. Complete a technological prototype of their project showing that all their hardware and software components work together.
4. Prepare a test strategy for their project and have a detailed tentative plan for building a draft design.

Learning and Teaching Methods

- Weekly meetings with project supervisors.
- Self-directed learning using library and Internet sources.
- In the case of Product Development Mode, trying out carefully considered ideas to test if they are workable.

Learning Modes

Learning Type	F/T Hours	P/T Hours
Lecture	12	
Tutorial	6	
Independent Learning	117	

Assessment Methods

	Weighting	Outcomes Assessed
Final Project	100%	1,2,3,4

Assessment Criteria

<40%: Failure to demonstrate ability to understand, scope or document a problem. Level of problem chosen for project considered too trivial. Failure to meet the objectives of the learning contract appropriate to this stage of project.

40%–49%: Demonstrates ability to understand scope and document problem. Generally meets objectives of learning contract. Ability to justify the choice of problem. Ability to present material in a clear manner.

50%–59%: As above and ability to break down problem into appropriate packages. Comprehensive knowledge of area of problem. Ability to evaluate risks in mature and reflective manner. Planning is reasonable. Scoping shows an ability to abstract and get a clear overview of project.

60%–69%: As above and ability to critique works in area of project. Document is of professional standard. Planning shows a degree of reflection and maturity.. Excellent presentation skills with demonstrable ability to explain complex problems in a clear manner.

70%–100%: As above and produces an excellent document which clearly and precisely describes what needs to be done as part of the project. Demonstrates ability to abstract ideas and reflect on the process.

Supplementary Material(s)

- Lacey, M. *The Scrum Field Guide: Practical advice for the first year*. New York: Addison Wesley, 2012.

Requested Resources

- Room Type: Computer Lab