
CO3016 Computing Project

Credits: 40 **Convenor:** Dr. S. Kerrigan **Semester:** 1 + 2

Prerequisites: *Essential: 240 credits of Computing Modules*

Assessment: *Coursework: 100%*

Examination: 0%

Lectures: 5 hours

Surgeries: 10 hours

Laboratories: 2 hours

Private Study: 283 hours

Subject Knowledge

Aims Students will select a project topic chosen from an area of Computing that interests them, and then conduct thirty credits worth of individual study of that topic, resulting in a substantial written dissertation. Projects should be of a problem solving nature; typically they will provide a software solution to a practical computing problem.

It is intended that the project should also produce an end product, usually a software system, for users other than the author. Further, a theoretical essay, a literature search, or a descriptive evaluation, by themselves, would not be suitable.

Learning Outcomes Students will be able to demonstrate that they can carry out background research which underpins project work; work out the nature of the deliverables to be produced; identify the specification and design issues involved; undertake appropriate specification and design work; and implement the end (software) product according to their design work. They will be able to test and evaluate the end product. They will also be able to produce a substantial written dissertation.

Methods Individual research, meetings with supervisors.

Assessment Assessed by a project plan; oral presentation; two interviews; viva; effort, participation and organization; and final report (dissertation).

Skills

Aims To teach students planning, scientific writing and problem solving skills.

Learning Outcomes Students will be able to produce a plan of timescales for project work. Students will also be able to prepare and deliver a lecture style oral presentation, and be able to produce a short interim report on progress made to date and any revisions made to their original plan. They will be able to demonstrate general problem solving skills, and will be able to write substantial written reports.

Methods Individual research, meetings with supervisors.

Assessment Assessed by oral presentation; two interview; viva; effort, participation and organization; and final report (dissertation).

Explanation of Prerequisites All Computing students will have a common core of knowledge on which to build in the third year.

Course Description The purpose of the Computing Project is for the student to combine knowledge and skills acquired in level one and two Computer Science modules in the production of a suitable project. Project work consists of independent private study, guided by regular short meetings with a member of staff who will advise the student on how to proceed with the year's work. Ten credits of work will take place in semester one, and the remaining twenty credits in semester two. Students may choose a project title and subject area from a large list of project descriptions, or they may suggest a project of their own for possible approval. The project has a number of goals which the student must achieve, but the key ones are the writing of a dissertation summarising the year's work, and the development of a practical computer system.

