CO4015 MComp Computer Science Project

Credits: *30* **Convenor:** *Dr. S. Kerrigan* **Semester:** *1 + 2*

Prerequisites:	*Essential: CO2006,CO2015, CO3015 or CO3016 or CO3120*	*Desirable: 45 other credits of Computer Science Modules*
Assessment:	*Coursework: 100%*	*Examination: 0%*
Lectures:	*0 hours*	
Surgeries:	*0 hours*	**Private Study:** *300 hours*
Laboratories:	*0 hours*	

Subject Knowledge

Aims Students will select a project topic chosen from a challenging area of Computer Science that interests them, and then conduct two semesters worth of individual study of that topic, resulting in a substantial written dissertation that aspires to research level quality. Projects should be of a problem solving nature incorporating Masters level material; sometimes they will provide a software solution to a practical computing problem, or may be more theoretical in nature.

It is intended that the project should also produce an end product, usually (but certainly not limited to) 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 significant 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 of near-research level quality at minimum.

Methods Individual research, meetings with supervisors.

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

Explanation of Prerequisites

All Computer Science students will have a common core of advanced knowledge on which to build in the fourth year.

Course Description

The purpose of the MComp Computer Science Project is for the student to combine knowledge and skills acquired in level one, two and three 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. 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.