

Module Title **INDEPENDENT STUDIES****Date of Approval** February 2012**Module Code** 6CC995 **Pre-requisite:** None**Module Level** 6**Credit value** 40**Total Number
of Learning Hours** 400**Key Words** Research Methodology, Design**Module Delivery
Mode** Blended / Face to Face**Module Description**

This module enables students to demonstrate the ability to independently develop a substantial piece of work related to their specialism. It can be either a significant piece of research following a recognised research methodology, or it can be a significant “design and development” project to create, test and evaluate an innovative solution in computing.

Students will be supported and mentored by a member of academic staff, but the project will be defined and implemented by the student.

**Module Learning
Outcomes** On successful completion of the module, students will be able to:

1. Critically evaluate one's own and others' research.
2. Demonstrate the ability to conduct and document independent research, or conduct and document independent design and development work, in a computing based subject.

Module Content

Project management
Synthesising research questions; defining aims and objectives
Academic writing and forming an academic argument
Referencing
Literature review: search strategy, sources and methodology
Analysing and evaluating sources of information
Research methodologies
Design and development methodologies
Analysing and evaluating results

Module Learning and Teaching Methods

The first six weeks of the module will consist of a series of seminars on topics and skills particularly related to conducting independent research or engineering work, as noted in the *Module Content*, above.

Activity Type	Hours
Seminars	12
Guided independent study	388

Scheduled learning and teaching activities: 3%

Guided independent study: 97%

Module Assessment

Mode: Coursework 100%

You will either do a research project, or a design and development project.

For research projects, the dissertation will be an extensive (typically at least 15,000 word) account of the project consisting of an introduction (including aims and objectives), literature review, research methodology, results, conclusion (including, where appropriate, recommendations and/or suggested future work) and a critical evaluation of the findings. Other associated artefacts (e.g. questionnaires, etc.) may also be submitted for assessment purposes.

For design and development projects, the final report may be shorter than a research dissertation (i.e., less than 10,000 words), so that correspondingly more effort can be devoted to design and development. It will consist of a project introduction including aims and objectives, a literature and/or competing product review, an account of the design and development process, and a critical evaluation of the results. Other artefacts associated with the product (e.g. source code, test cases, evaluation results etc.) may be submitted for assessment purposes. A demonstration may also be required.

Reading list

Given the emphasis on independent work, it is expected that students will find and critically evaluate their own relevant reading materials.