

MODULE TITLE	MSci Project		CREDIT VALUE	45
MODULE CODE	ECMM740		MODULE CONVENER	Dr F Hugo Lambert (Coordinator)
DURATION: TERM	1	2	3	
DURATION: WEEKS	11 weeks	11 weeks	0	
Number of Students Taking Module (anticipated)	7			

DESCRIPTION - summary of the module content

In this module, you will write an independent project with a substantial research element that will give you the chance to apply the mathematical and computational skills you have developed throughout your degree. Using your independent learning skills, you will undertake the project individually, under the supervision of an expert from the discipline specific to your MSci programme. There will be a range of potential projects to choose from, spanning the spectrum from theoretical problems to others more focused on the development of specialist computer programmes and packages.

AIMS - intentions of the module

The aim of the module is put into practice the knowledge you have acquired so far in your degree programme, and to engage you with modern scientific developments in a specialist field of study. You will gain experience of many aspects of research work. These will include: literature review; planning; experimentation and analysis; interpretation of results; technical report writing; and oral presentation. You will be able to exercise more autonomy on this research project than in more formal modules.

INTENDED LEARNING OUTCOMES (ILOs) (see assessment section below for how ILOs will be assessed)

On successful completion of this module, **you should be able to:**

Module Specific Skills and Knowledge:

- 1 demonstrate a critical appreciation of a research topic of relevance to your MSci programme, and a mastery of the requisite analytical and computational skills;
- 2 work independently and creatively on a substantial piece of work with application to modern, topical and high-impact science;
- 3 design and follow systematically the phases of research project development;

Discipline Specific Skills and Knowledge:

- 4 show familiarity with the background and context of a new application area;
- 5 appreciate the inter-relationships between the chosen area of study and other fields of the mathematical sciences, and evaluate the project within that wider context;
- 6 engage in interdisciplinary work.

Personal and Key Transferable/ Employment Skills and Knowledge:

- 7 conduct independent study, including library and web-based research;
- 8 plan an extended project, and use your time effectively;
- 9 show enhanced skills in problem formulation, data interpretation, technical report writing, and oral presentation;
- 10 communicate your work to a non-specialist audience.

SYLLABUS PLAN - summary of the structure and academic content of the module

This is specific to the project topic concerned.

LEARNING AND TEACHING

LEARNING ACTIVITIES AND TEACHING METHODS (given in hours of study time)

Scheduled Learning & Teaching Activities	25.00	Guided Independent Study	425.00	Placement / Study Abroad	0.00
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DETAILS OF LEARNING ACTIVITIES AND TEACHING METHODS

Category	Hours of study time	Description
Scheduled learning and teaching activities	25	Individual supervision
Guided independent study	425	Guided independent study

ASSESSMENT

FORMATIVE ASSESSMENT - for feedback and development purposes; does not count towards module grade

Form of Assessment	Size of Assessment (e.g. duration/length)	ILOs Assessed	Feedback Method
Not applicable			

SUMMATIVE ASSESSMENT (% of credit)

Coursework	90	Written Exams	0	Practical Exams	10
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DETAILS OF SUMMATIVE ASSESSMENT

Form of Assessment	% of Credit	Size of Assessment (e.g. duration/length)	ILOs Assessed	Feedback Method
Coursework – written project report	65	25-30 pages	All	Written
Practical presentation	10	20 minutes and questions	1,4,7,10	Written
Literature Review	25	12-16 pages	1,4,5,7,9,10	Written

DETAILS OF RE-ASSESSMENT (where required by referral or deferral)

Original Form of Assessment	Form of Re-assessment	ILOs Re-assessed	Time Scale for Re-reassessment
All above	Coursework (100%)	All	Completed over summer with a deadline in August

RE-ASSESSMENT NOTES

All referred/deferred assessments will normally be by assignment.

RESOURCES

INDICATIVE LEARNING RESOURCES - The following list is offered as an indication of the type & level of information that you are expected to consult. Further guidance will be provided by the Module Convener

To be made available by project supervisors.

Reading list for this module:

There are currently no reading list entries found for this module.

CREDIT VALUE	45	ECTS VALUE	22.5
PRE-REQUISITE MODULES	None		
CO-REQUISITE MODULES	None		
NQF LEVEL (FHEQ)	7	AVAILABLE AS DISTANCE LEARNING	No
ORIGIN DATE	Friday 09 January 2015	LAST REVISION DATE	Wednesday 11 February 2015
KEY WORDS SEARCH	Project; research; mathematical biology; climate science; geophysical and astrophysical fluid dynamics.		