

MSc Project

Module Code:	ENG7002-E
Academic Year:	2018-19
Credit Rating:	60
School:	(OUT OF USE FROM 2018/9) School of Electrical Engineering
Subject Area:	Engineering
FHEQ Level:	FHEQ Level 7 (Masters)

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Tutorials	10
Directed Study	590

Availability Periods

Occurrence	Location/Period
BDA	University of Bradford / Full Year (Sept - Aug)

Module Aims

To further develop practical evaluation of professional engineering activity in a chosen specialisation. To extend the student's ability to plan, implement and review appropriate activities in a large and academically demanding project, so as to achieve an agreed set of objectives in a given time scale

Outline Syllabus

An advanced project study with a significant engineering content involving many, or all, of the elements following: problem specification; project planning; top-down design; design requirements analysis; implementation; design, implementation, and interpretation of engineering experimentation; sustainability; theoretical analysis and project reporting; audit of ethical, sustainability and safety issues.

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1 Critically evaluate the engineering, planning, scheduling, reporting and review of a major project at an advanced level, taking responsibility for the successful completion of many interdependent activities.
- 2 Undertake an audit of ethical, sustainability and/or safety issues; critically evaluate ethical dilemmas in engineering; critically reflect on the wider impact of engineering design decisions and sustainable practices in production, deployment and disposal.
- 3 Apply advanced scientific and engineering principles to the solution of practical engineering problems.
- 4 Enhance your skills in data management, data presentation, applying scientific methods, data interpretation, IT skills, systematic and creative problem solving, communication of technical information, teamwork & leadership, personal management by applying them to develop the solution of an engineering problem.

Learning, Teaching and Assessment Strategy

Lectures provide an overview of the module, definition of project aim and objectives, research methodology, structure of the project/dissertation, literature review, project scheduling, and oral/poster presentation. Direct study hours are dedicated to self-study and completion of the project. Research, experiment, development of theory, analysis, and/or simulation with verification and/or validation explored in formal tutorial/supervision sessions with project supervisor. Application and development of practical skills in laboratory session, where appropriate. Cognitive and personal skills developed as part of problem solving in engineering projects, supported by members of academic and technical staff. Oral formative feedback is provided during tutorial/supervision sessions with project supervisor. The oral presentation will examine the application of practical skills to the knowledge base of the module (LO4). The formal assessment will examine the wider learning outcomes expressed in the descriptor (LO1, LO2, LO3, LO4).

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Examination - oral/viva voce	Oral assessment 30 mins	30 minutes	10%	No
Summative	Coursework	MSc dissertation based on work carried out during semester 2 and	-10000 words	90%	Yes

summer period

Legacy Code (if applicable)

ENG4013Z

Reading List

To view Reading List, please go to [rebus:list](#).