

# SE4041 Major Project

**Module status in MSc Professional Engineering: Core    Module credits: 60**

## Aims

To provide experience with the systematic investigation, specification, realisation, evaluation and reporting of a substantial activity within the participant's engineering domain.

## Content

Selection of project topic within any constraints of the agreed learning contract. The topic may be entirely new, or build on previous work, eg the outcomes of optional module SE4027 Professional Literature Study. The project may, but need not necessarily, include delivery of a fully-evolved engineering end-product. However, multiple lifecycle stages should be undertaken, eg a literature survey alone would be insufficient.

Suitable investigation, specification, realisation, evaluation and reporting activities.

If the selection/implementation of other modules has left any programme learning outcomes covered insufficiently thoroughly, the project work should be designed so as to compensate appropriately.

## Teaching

The module will be undertaken through a work-based project supported by individual academic supervision and workplace mentoring.

## Assessment

Assessment will be based on a comprehensive project report, supported by a presentation or demonstration with a question-and-answer session. The participant will be supplied with further guidance on suitable content and organisation of the project report, but as a broad indication, an appropriate length for the main text of the report will be around 15,000 words, with 20,000 words as an upper limit. The main text may be supplemented with appendices as required.

## Module outcomes

*What the participant should gain from successful completion of the module*

*Teaching/Learning Methods*

*Assessment Methods*

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### *Knowledge and Understanding*

Enhanced understanding of current and emerging technologies and engineering practice and its limitations, as relevant to the project area

Work-based project, supplemented by individual learning, supported by supervision/mentoring

Written project report. Oral examination (presentation/demonstration with question/answer session).

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### *Intellectual Skills*

Select and apply suitable design processes and methodologies innovatively and/or in a challenging context  
Select and apply suitable engineering analysis techniques

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### *Professional/Subject-Specific Skills*

Apply management and business practices effectively, taking account of risk, and applicable constraints  
Provide leadership

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### *Transferable Skills*

Effective communication and interpersonal skills  
Initiative, self-direction, originality and decision making capability  
Independent learning capability

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## Learning resources

As appropriate to the selected project topic

## Other modules required in order to take this module

SE4001 Professional Development Audit