

Programme Specification and Curriculum Map for Map for Project Management



1. Programme title	Project Management
2. Awarding institution	Middlesex University
3. Teaching institution	Middlesex University
4. Programme accredited by	
5. Final qualification	MSc
6. Academic year	2014/2015
7. Language of study	English
8. Mode of study	FT/PT

9. Criteria for admission to the programme

Applicants will be expected to have a good honours degree or equivalent in an engineering based discipline. Graduates from other related disciplines may also be admitted to the programme after interview. Preference will be given to graduates with industrial experience.

In addition candidates will have such qualities as being creative, proactive and having a desire to engage with the curriculum, and be able to think as an individual but able to work in a team. Candidates should be able to show a keen interest in engineering in all its aspects. It is strongly advised that the applicants address these in their personal statement in their application.

Candidates will need a high level of competence in the use of English, equivalent to at least 6.5 in the IELTS test or TOEFL 575 (paper based), 237 (computer based)

10. Aims of the programme

The aim of this programme is to take graduates of an engineering discipline and equip them with specialist knowledge and skills in

Engineering Project Management to allow them to control effectively engineering projects for global markets.

11. Programme outcomes

A. Knowledge and understanding

On completion of this programme the successful student will have knowledge and understanding of:

1. The theory relating current Project Management techniques and their interaction with business practices
2. Project management methods such as evolutionary techniques and scheduling tools.
3. Techniques for management of human and financial resources.
4. Professional responsibilities including the global, social, ethical, legal and environmental context of engineering.
5. Methods for achieving and maintaining innovation
6. Engineering simulation methods such as the use of System Dynamics to model the research and development process.
7. Process planning and improvement of product development

Teaching/learning methods

Students gain knowledge and understanding through task-based learning, participating in management games, working with industrial partners, observing processes, writing, presenting and critical analysis. Students will be allocated tasks directly relevant to their chosen programme.

Assessment Methods

Students' knowledge and understanding is assessed by project work, hands-on-tasks, coursework, presentations and the group project report. Formative threshold tests will be used to assess competence in stage techniques on a pass/fail basis with opportunity to retake at any time before the end of the module.

B. Cognitive (thinking) skills

On completion of this programme the successful student will be able to:

1. Creatively solve engineering project management problems.

2. Demonstrate critical thinking in order to solve real industrial problems posed to a project manager
3. Make a financial and human resource case for a particular course of action to solve a real project management problem.
4. Work on a number of project management tasks concurrently and show how they can be controlled effectively.
5. Visualise the consequences of particular actions in a project management situation and plan effective solutions that can be used to cope with these consequences.

Teaching/learning methods

Students develop their cognitive skills through completing mini-projects, problem solving activities, oral presentations and through report writing.

Assessment Method

Students' cognitive skills are assessed by processes and procedures that they create, with particular reference to their engagement with the human consequences, in particular how their competence can be demonstrated by coursework comprising of self-critical written reports and oral presentations.

C. Practical skills

On completion of the programme the successful student will be able to:

1. Select appropriate project management solutions.
2. Plan ahead and prioritise actions in open ended tasks that require leadership.
3. Research, communicate and justify ideas for decisions that would enable a company to avoid technical failure.
4. Validate and optimise project plans with full consideration of human and financial consequences.
5. Use simulation to analyse and make process improvements.

Additionally to MSc

6. Design and implement project systems to guarantee product success.

Teaching/learning methods

Students learn practical skills through Mini projects, experimenting with a variety of solutions.

Assessment Method

Students' practical skills are assessed by coursework comprising of individual mini-projects strictly related to their chosen programme, assignments, group and individual presentations.

D. Graduate Skills

On completion of this programme the successful student will be able to:

1. Communicate orally via professional presentations.
2. Communicate via professional written reports.
3. Demonstrate project solutions to problems that require numerate skills, which would cause technical failure if not solved correctly.
4. Work independently and autonomously at a level appropriate for a project manager.
5. Demonstrate competence and responsibility by mastering problems typically faced by a project manager

Additionally to MSc

6. Work successfully within a team, demonstrating an ability to deal with personal differences and supporting other colleagues.

Teaching/learning methods

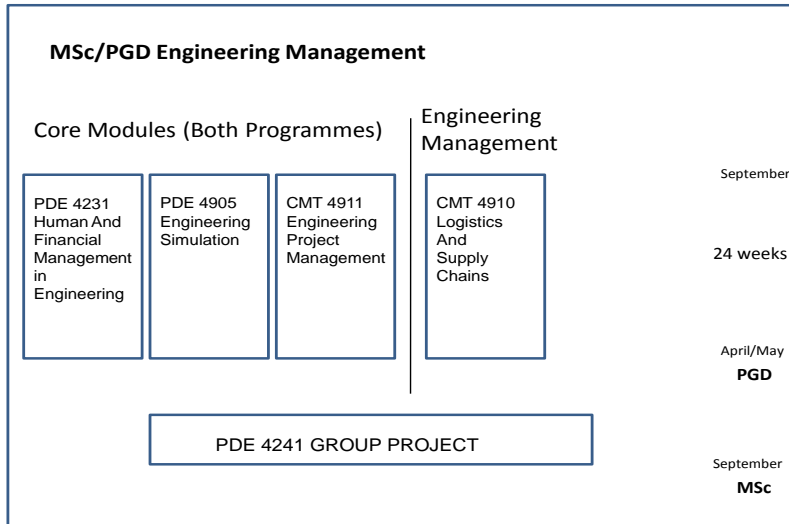
Students acquire graduate skills throughout the programme. With the completion of the group module, they will have become autonomous and effective collaborative learners.

Assessment method

Students' graduate skills are assessed by Reports, essays, presentations, team projects.

12. Programme structure (levels, modules, credits and progression requirements)

12. 1 Overall structure of the programme



12.2 Levels and modules

Level 4

COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
<p>Students must take all of the following:</p> <p>PDE 4231 Human and Financial Management in Engineering (30 credits)</p>	<p>No options are allowed</p>	<p>For PgCert award the candidates must complete any combination of 60 credits from the modules: PDE4231, PDE4905, PDE4230 and</p>

<p>PDE 4905 Engineering Simulation (30 credits)</p> <p>PDE 4230 Engineering Innovation (30 credits)</p> <p>CMT 4911 Engineering Project Management (30 credits)</p> <p>PDE 4241 Engineering Group Project (60 credits)</p>		<p>CMT4911</p> <p>For PgDip award, the candidate must complete 120 credits and must successfully pass modules: PDE4231, PDE4905, PDE4230 and CMT4911</p> <p>Must obtain 120 credits at level 4 in order to progress onto the Group Project module.</p> <p>MSc (180 credits)</p>
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12.3 Non-compensatable modules (note statement in 12.2 regarding FHEQ levels)

Module level	Module code
4	CMT4911

13. Curriculum map

See Curriculum Map attached

14. Information about assessment regulations

Please refer to the University Regulations for generic guidance, and the Programme Handbook, under the Assessment section, for additional information.

15. Placement opportunities, requirements and support (if applicable)

There will be no placement requirement for this programme. However, the programme will arrange industrial visits and seek relevant industrial

partnerships. There will be strong involvement from industrial partners in terms of sponsored projects and specialist lectures

16. Future careers (if applicable)

Graduates from the programme will be expected to enter into engineering management with highly specialised operational skills that are much sought after qualities worldwide. The programme content will be enriched by keeping industrial partner's engagement active and offering sponsored projects. This will also help to support the students about the current opportunities and future trends in their relevant employment sector.

17. Particular support for learning (if applicable)

Meeting the learning outcomes of this programme requires active participation in the subject and the development of autonomous practice in meeting objectives. Supporting this level of active participation and autonomous practice is achieved via regular weekly tutorial contact with academic staff, productive and informed support from technical staff and the use of online, resource-based learning materials where appropriate.

The subject provides extensive facilities where students can engage with their coursework assignments in a supported and productive environment.

18. JACS code (or other relevant coding system)

H100

19. Relevant QAA subject benchmark group(s)

Engineering (2006)
Business and Management (2007)

20. Reference points

- QAA Engineering subject benchmark statement (2006)
- QAA Business and Management benchmark statement (2007)
- QAA Framework for Higher Education Qualifications in England, Wales and Northern Ireland

- QAA/CLQE guidelines for programme specifications
- QAA Code of Practice for the assurance of academic quality and standards in HE
- University's Regulations
- EAB Guidelines for Exemption and Accreditation
- Middlesex University and School of Engineering and Information Sciences Teaching Learning and Assessment policies and strategies
- University policy on equal opportunities.
- Manufacturing :New Challenges, New Opportunities, BERR September 2008
- Professional Engineers' Needs for Managerial Skills and Expertise, UMIST 2003
- Innovation Nation, White Paper Dept for Innovation Universities and Skills, March 2008.
- The Engineer of 2020 Visions of Engineering in the New Century, National Academy of Science 2004.

21. Other information

N/A

Please note programme specifications provide a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve if s/he takes full advantage of the learning opportunities that are provided. More detailed information about the programme can be found in the programme handbook and the University Regulations.

Curriculum map for MSc /PgD Project Management

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

Programme learning outcomes

Knowledge and understanding		Practical skills	
A1	The theory relating current Project Management techniques and their interaction with business practices	C1	Select appropriate project management solutions.
A2	Project management methods such as evolutionary techniques and scheduling tools.	C2	Plan ahead and prioritise actions in open ended tasks that require leadership.
A3	Techniques for management of human and financial resources.	C3	Research, communicate and justify ideas for decisions that would enable a company to avoid technical failure.
A4	Professional responsibilities including the global, social, ethical, legal and environmental context of engineering.	C4	Validate and optimise project plans with full consideration of human and financial consequences.
A5	Methods for achieving and maintaining innovation	C5	Use simulation to analyse and make process improvements.
A6	Engineering simulation methods such as the use of System Dynamics to model the research and development process.	C6	Design and implement project systems to guarantee product success.
A7	Process planning and improvement of product development	C7	
Cognitive skills		Graduate Skills	
B1	Creatively solve engineering project management problems.	D1	Communicate orally via professional presentations.
B2	Demonstrate critical thinking in order to solve real industrial problems posed to a project manager	D2	Communicate via professional written reports.
B3	Make a financial and human resource case for a particular course of action to solve a real project management problem.	D3	Demonstrate project solutions to problems that require numerate skills, which would cause technical failure if not solved correctly.
B4	Work on a number of project management tasks	D4	Work independently and autonomously at

