

Programme Aim and Title	BEng (Hons) Engineering Management
Intermediate Awards Available	BEng, Dip HE, Cert HE
Teaching Institution(s)	UEL on campus
Alternative Teaching Institutions (for local arrangements see final section of this specification)	
UEL Academic School	Architecture, Computing and Engineering
UCAS Code	
Professional Body Accreditation	
Relevant QAA Benchmark Statements	Engineering 2010
Additional Versions of this Programme	
Date Specification Last Updated	June 2017

Programme Aims and Learning Outcomes

This programme is designed to give you the opportunity to:

- Gain the knowledge and skills relevant to a career as a professional engineering manager who can work effectively with current and future industrial technologies, methods and standards
- Acquire understanding of the innovative and pioneering approaches in engineering management field and to be able to apply them to the solution of real-world problems to develop new industrially-relevant solutions.
- Be able to apply and integrate knowledge and understanding of other engineering and non-engineering disciplines to support engineering activities.
- play a useful role as an individual engineering designer, or as part of a design team.
- Prepare for progression in career and educational development to pursue postgraduate studies.

What you will learn:

Knowledge

- The principles of mechanical engineering; application of appropriate mathematical, computational techniques and methods to model and analyse real-world engineering problems.
- Design process, design methodologies, manufacturing and operational practice.
- Management and business practices and engineers' roles in society.

Thinking skills

- Management and business practices and engineers' roles in society.

- Evaluate commercial risks and technical risks in unfamiliar circumstances.
- Interpret and analyse results, data and other information to present them in suitable forms.

Subject-Based Practical skills

- The knowledge and skills to function effectively in industry to be able to progress in career and educational development.

Skills for life and work (general skills)

- Personal development techniques and confidence in your abilities to enable you to become a valued professional in the shaping of the community and society.

Learning and Teaching

Knowledge is developed through

- Lecturers and tutorial sessions
- Problem-solving classes
- Knowledge-based activities with feedback
- Online discussions and activities

Thinking skills are developed through

- Design tasks
- Individual and group projects
- Online discussions and activities

Practical skills are developed through

- Laboratory practicals
- Computer simulation exercises
- Design tasks

Skills for life and work (general skills) are developed through

- Planning activities with feedback
- Project work

Assessment

Assessment is undertaken in various modes, in general assessment takes the following forms.

Knowledge is assessed by

- Written assignments
- Laboratory reports
- Project reports
- Examinations

Thinking skills are assessed by

- Problem-based exercises
- Design tasks
- Simulation exercises
- Individual and group projects
- Examinations

Practical skills are assessed by

- Practical reports
- Practical demonstrations
- Portfolio completion

Skills for life and work (general skills) are assessed by

- Logbooks, learning portfolios
- Poster displays
- Exhibitions
- Oral presentations

Students with disabilities and/or particular learning needs should discuss assessments with the Programme Leader to ensure they are able to fully engage with all assessment within the programme.

Work or Study Placements

We encourage students to consider seeking industrial experience during their academic studies, either through work experience during summer vacations or through the optional sandwich placement between Level 5 and Level 6. Those students who opt for a year out placement will be enrolled on a 120-credit EG5100 Industrial Sandwich Placement module, which will appear in the final transcript as evidence of the 'sandwich' placement year. An employment liaison officer oversees the administration of the year out placement and assists in helping students secure a placement.

Programme Structure

All programmes are credit-rated to help you to understand the amount and level of study that is needed.

One credit is equal to 10 hours of directed study time (this includes everything you do e.g. lecture, seminar and private study).

Credits are assigned to one of 5 levels:

- 3 Equivalent in standard to GCE 'A' level and is intended to prepare students for year one of an undergraduate degree programme.

- 4 Equivalent in standard to the first year of a full-time undergraduate degree programme.
- 5 Equivalent in standard to the second year of a full-time undergraduate degree programme.
- 6 Equivalent in standard to the third year of a full-time undergraduate degree programme.
- 7 Equivalent in standard to a Masters degree.

Programmes are made up of modules that are each credit weighted.

The module structure of this programme:

Level	Module Code	Module Title	Credit Weighting	Core/Option	Available by Distance Learning? Y/N
4	EG4160	Mechanical and Electrical Engineering Principles	30	Core	N
4	EG4161	Engineering Materials and Manufacturing Technology	30	Core	N
4	EG4162	Engineering Mathematics and Fluid Mechanics	30	Core	N
4	EG4163	Engineering Design and Practice	30	Core	N
5	EG5160	Mechanical Systems and Design	30	Core	N
5	EG5165	Design for Manufacture	30	Core	N
5	EG5162	Mathematics and Solid Mechanics	30	Core	N
5	EG5163	Project and Quality Management	30	Core	N

Students who take an optional sandwich placement would normally do so after completion of Level 5 modules. They are required to register for:

P	EG5100	Industrial Sandwich Placement	120	Option	N
6	EG6160	Computer Modelling and Techniques	30	Core	N
6	EG6183	Product Development Management	30	Core	N
6	EG6184	Systems Integration	30	Core	N
6	EG6163	Individual Research Project	30	Core	N

Please note: Optional modules might not run every year, the programme team will decide on an annual basis which options will be running, based on student demand and academic factors, in order to create the best learning experience.

Additional detail about the programme module structure:

A core module for a programme is a module which a student must have passed (i.e. been awarded credit) in order to achieve the relevant named award. An optional module for a programme is a module selected from a range of modules available on the programme.

The overall credit-rating of this programme is 360 credits. If for some reason you are unable to achieve this credit you may be entitled to an intermediate award, the level of the award will depend on the amount of credit you have accumulated. You can read the University Student Policies and Regulations on the UEL website.

Programme Specific Regulations

BEng (Hons) Design Engineering students who have completed Levels 4 and 5, and have met all the progression requirements for the MEng, may apply for transfer into Level 6 of MEng. This application will be considered by the programme leader.

Typical Duration

Due to the nature of the programme, the majority of the modules require specialise software and tools that may not be readily available off campus, thus part-time mode of delivery is not available currently.

The expected duration of this programme is 3 years full-time. A student cannot normally continue study on a programme after 4 years of study in full time mode unless exceptional circumstances apply and extenuation has been granted.

Further Information

More information about this programme is available from:

- The UEL web site (www.uel.ac.uk)
- The programme handbook
- Module study guides
- UEL Manual of General Regulations (available on the UEL website)
- UEL Quality Manual (available on the UEL website)
- School web pages

All UEL programmes are subject to thorough programme approval procedures before we allow them to commence. We also constantly monitor, review and enhance our programmes by listening to student and employer views and the views of external examiners and advisors.

Additional costs:

While the university will provide suitable personal protective equipment (PPE) for students to work in workshops and/or laboratories where PPE is required, students have to provide their own steel-toe-capped footwear.

Alternative Locations of Delivery

Not applicable