Master of Engineering (MEng)

Distance learning degree qualification

GLOBAL STUDY
GLOBAL RECOGNITION
Qualification details

This integrated masters degree course in engineering builds on undergraduate study and offers you an opportunity to fulfill the educational requirements for Chartered Engineer (CEng) status. The MEng course aims to meet professional development needs as specified by the Engineering Council and relevant engineering institutions in the UK Standard for Professional Engineering Competence (UK-SPEC).

This qualification is accredited for Chartered Engineer status by the Institution of Engineering Designers (IED) and the Chartered Institution of Building Services Engineers (CIBSE). A pathway through our MEng is also accredited by the Institution of Mechanical Engineers (IMechE) and the Institution of Engineering and Technology (IET).

Planning your study

For this qualification you need to complete our Bachelor of Engineering (Honours) (BEng) and to complete an additional 120 credits at postgraduate level. Your honours degree will contribute 360 credits towards the 480 credits required for the qualification.

You must complete the postgraduate part of your MEng studies within four years of the date your honours degree was awarded. If you are unable to complete your MEng studies within this time, there is instead our Postgraduate Diploma in Engineering (E22), which has no time limit for completion.

Career relevance and employability

This qualification will help you to develop your skills in engineering, as well as a range of transferable skills, such as: the ability to use specialist knowledge to solve problems creatively; effective communication skills; project management skills; the ability to turn concepts into reality; a professional approach to your work.

The knowledge and practical experience you gain during your postgraduate studies mean you'll be well placed to take advantage of the many senior engineering and technology employment opportunities available at home and abroad. At the same time, you'll be developing capabilities that are highly prized by employers in a variety of other sectors, where your logical thinking, numeracy skills, and team working abilities will be in demand.

Modules

Once you have completed our Bachelor of Engineering (Honours) (BEng) you must complete an additional 120 credits at postgraduate level. Complete 90 credits from a range of modules in technology, computing, mathematics and science and then complete the compulsory 30 credit module, Team Engineering. The following pages introduce the modules of the Bachelor of Engineering and the compulsory MEng module.

Assessment key

- TMA = Tutor-marked assignment
- iCMA = Interactive computer marked assessment
- EMA = End-of-module assessment
- CMA = Computer marked assessment

Exploring mathematics (MS221)

For a full list of modules available, please refer to our website, www.openuniversity.edu.

Assessment:

| Credits: | 30 at Undergraduate Level 1 |
| Assessment: | 4 TMA's, 1 Examination |

Exploring mathematics builds on the concepts and techniques in Using mathematics (MST121) and uses the same software. It looks at questions underlying some of those techniques, such as why particular patterns occur in mathematical solutions and how you can be confident that a result is true. It introduces the role of reasoning and offers opportunities to investigate mathematical problems.

Engineering: mechanics, materials, design (T207)

| Credits: | 60 at Undergraduate Level 2 |
| Assessment: | 7 TMA's, 1 Examination |

Engineering is about extending society's horizons by solving technical problems – from meeting basic needs for food and shelter to generating wealth by trade. Engineers prefer to see difficulties as challenges or opportunities – they appear to be solving problems, but they're actually creating solutions: an altogether more imaginative activity. In exploring how technical solutions are created, this course combines the mechanics of solids and fluids with the structure and properties of materials.

Design for engineers (T218)

In a new module available from October 2013, you'll learn about the process of designing, about how designs are conceived, presented and developed, as well as basic principles of mechanics and materials that are required by the engineering designer.

| Credits: | 30 at Undergraduate Level 2 |
| Assessment: | To be confirmed |


Innovation: designing for a sustainable future (T307)

| Credits: | 60 at Undergraduate Level 3 |
| Assessment: | 5 TMA's, 1 EMA |

How do successful innovations emerge? How do designers, technologists, managers and end-users create and develop new ideas, designs and inventions? How are these translated into marketable products? This course examines these questions, but its concerns go beyond innovation just for commercial and competitive advantage. It also looks at whether and how innovation
can be directed towards ensuring a socially, economically and environmentally sustainable future. You’ll work on a project either individually or in a team that makes use of the ideas and methods taught in the course. This course is fully accessible even if you do not have a technical background.

**Structural integrity: designing against failure (T357)**

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<tr>
<th>Credits</th>
<th>30 at Undergraduate Level 3</th>
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</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>3 TMAs, 2 CMAs, 1 Examination</td>
</tr>
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</table>

Structural integrity is the study of the safe design and assessment of components and structures under load, and has become increasingly important in engineering design. It integrates aspects of stress analysis, materials behaviour and the mechanics of failure into the engineering design process. The course is well-illustrated with case studies, and will be of interest to anyone associated with the design of any component or structure that experiences loading, and will be of benefit in developing skills in the analysis and assessment of product design. It has universal applicability in the UK and across international boundaries.

**The engineering project (T450)**

| Credits | 30 at Undergraduate Level 3 |

This course is the compulsory project module of the BEng (Hons). It gives you an opportunity to demonstrate the knowledge and skills you have already acquired in your Level 3 engineering studies, by completing an individual engineering project. You’ll choose the theme from a selection of broad project headings: electronic materials, engineering small worlds, environmental monitoring, fluid mechanics, innovation and design, managing complexity, materials failure, solid mechanics and structural integrity. You’ll develop the project topic, execute it and then write it up.

**Team engineering (T885)**

<table>
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<tr>
<th>Credits</th>
<th>30 at Postgraduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>4 TMAs, 1 EMA</td>
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Team engineering aims to develop the essential professional engineering skill of working with others. You’ll work as part of a small project team. Projects will encompass a broad sweep of engineering, requiring cooperative development of the knowledge and skills needed to analyse an engineering system and produce a revised specification for that system. You’ll work together in a team via email, telephone and virtual conferencing, under guidance from your tutor.

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**FAQs**

**Can I study in any country?**

This course is not available in all countries. Please use the Course Finder menu at [www.openuniversity.edu](http://www.openuniversity.edu) to see what courses are available in your country.

**Is an OU qualification recognised in my country?**

An OU degree is equal in academic standard to a degree from any other British university. The University is subject to the same quality assurance procedures, through the Quality Assurance Agency (QAA), as all other British universities, and uses external assessors and examiners to ensure comparability of standard and level in its courses.

A leaflet is available on how you can apply for formal recognition in your country. To download the leaflet, please go to [www.openuniversity.edu/brochures/recognition.pdf](http://www.openuniversity.edu/brochures/recognition.pdf).

**What tutor support will I receive?**

The OU excels in its unrivalled support for students. You’ll have email and online support from a tutor and you will be able to discuss your study in online tutor group discussions, using our customised learning environment. Our community websites Platform and OpenLearn offer a different perspective on your subject, and a huge range of OU resources on YouTube and iTunes U can expand your understanding. In addition, you can tap into a range of enthusiastic and welcoming OU social network groups on Facebook, Twitter and LinkedIn.

**Are there any entry requirements?**

For most undergraduate qualifications you don’t need any formal qualifications, or to pass an entry test to study with us. Our undergraduate qualifications are open to all because we believe anyone who is keen to succeed should have the opportunity to study.

As part of the registration process, however, you will be asked to confirm your proficiency in English. (If you are unsure, you can take a short online test, which you will find when completing the online registration form.)

**Can I count previous study towards an OU qualification?**

Any higher-education level studies you’ve successfully completed elsewhere may count towards your OU degree or other qualification. We enable you to do this by awarding you a certain amount of ‘transferred credit’. By transferring credit gained from previous study, you can reduce the amount you need from OU study to achieve your qualification. For more information please go to [www.openuniversity.edu](http://www.openuniversity.edu).

**How do you work towards a qualification?**

We measure the size of our qualifications in credits – an honours degree is 360 credits, made up of three 120-credit stages. Each stage is made up of a number of modules which cover different parts of the subject. Modules are also measured in credits and are set at different ‘levels’. Levels give an indication of a module’s relative complexity and/ or depth of learning. Most modules are worth either 30 or 60 credits and are set at Levels 1, 2 and 3, which roughly equates to studying in the first, second and third year at a campus-based university.

So for a typical three-stage honours degree you would study:

- 120 credits at Stage 1, taking modules worth 30 or 60 credits at Level 1
- 120 credits at Stage 2, taking modules worth 30 or 60 credits at Level 2
- 120 credits at Stage 3, taking modules worth 30 or 60 credits at Level 3.

In the example given above, each stage could consist of two 60-credit modules or one 60-credit module and two 30-credit modules, or four 30-credit modules.

**How long does it take?**

Our qualifications are designed to be flexible. So if you want to vary the amount of time you spend studying, you can. The table below is a guide on the time required, and the time taken to complete your course.

<table>
<thead>
<tr>
<th>Undergraduate qualifications</th>
<th>Credits required</th>
<th>Time required to complete</th>
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</thead>
<tbody>
<tr>
<td>Diploma of higher education (Dip HE)</td>
<td>240</td>
<td>2 years full-time study or 4 years part-time study</td>
</tr>
<tr>
<td>BEng degree with honours</td>
<td>360</td>
<td>3 years full-time study or 6 years part-time study</td>
</tr>
<tr>
<td>MEng degree</td>
<td>480</td>
<td>4 years full-time study or 8 years part-time study</td>
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**How much will it cost?**

If you are studying with us for the first time our standard fee for 2012/2013 is £5,000 – based on 120 credits of study – which is equivalent to a year’s full-time study at a campus-based university. Of course you don’t have to study 120 credits a year and the price you pay will be proportionate to the standard fee. So, for example, if you...
only study 60 credits a year, you will pay 50 per cent of the standard fee.

<table>
<thead>
<tr>
<th>Credit studied each year</th>
<th>Percentage of standard fee</th>
<th>Cost per year</th>
<th>Time taken to complete a 360-credit honours degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 credits a year</td>
<td>100%</td>
<td>£5,000</td>
<td>3 years full-time study</td>
</tr>
<tr>
<td>60 credits a year</td>
<td>50%</td>
<td>£2,500</td>
<td>6 years part-time study</td>
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</tbody>
</table>

*For illustrative purposes only – in most cases you can vary the number of credits taken per year and therefore the time taken to complete the course. Please note: prices are approximate and subject to change. Visit our website or call us for latest details.

**When can I start?**
To give you more opportunities to start, most qualifications have two intakes a year – October and February. To start in October 2013, for example, you need to register no later than 10th September 2013.

**What payment options are there?**
Your payment options include spreading the cost over monthly instalments with our own affordable student budget account, OUSBA (for certain EU countries). For more information please go to www.open.ac.uk/ousba.

**Can I meet and network with other students?**
Definitely – when you start with the OU you automatically become a member of the Open University Student Association (OUSA). OUSA also runs a popular student forum site. For more information, go to www.ousa.org.uk.

**How is my privacy protected?**
We record your personal information when you contact us and use this to manage registration, study, examination and other services. When you register, we’ll tell you more about how we process and use your personal information.

**When should I apply?**
Apply as early as you can – particularly if you wish to claim credit for previous study. Registration open dates are shown in the Courses section at www.openuniversity.edu.

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**One of the greatest revelations about learning with The Open University is discovering the tutors are really on your side and they really want you to succeed.**

Chris Latham, Open University student

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**What do I need to do next?**

It takes just 2 simple steps.
Begin the process to secure your place. Here’s how easy it is.

1. **Register now**
   Go to www.openuniversity.edu, select the Courses section and the degree you require. You will then be asked to select a pathway to register. (Pathways are different selections of course modules to complete your degree.)
   Alternatively call us on +44 845 241 6555.
   Don’t worry, you don’t need to pay anything at this stage.
   As soon as you have registered you’ll get an email confirmation which contains your login details.

2. **Choose your first module, make payment to enrol**
   Before you start studying you will need to choose and register on your first modules and arrange payment; instructions for this will be emailed to you.
   Once complete you will officially be an Open University student – welcome!