



University of Glasgow | School of Engineering



Engineering

Undergraduate study

One of the world's **top 1%** universities



Come and visit us

Open days and student visits

www.glasgow.ac.uk/visit

We offer many opportunities for you to visit us and find out about the University.

- **Open days:** If you're interested in visiting the University before you apply for a specific programme, we'd be happy to welcome you to one of our Open Days held in June, September and October.
- **Applicants' Visit Day:** Once you have applied to and received an offer from the University, you will get another chance to visit us on our Applicants' Visit Day in March.
- **Afternoon visits:** If you can't make either of the above we will be running three afternoon visits throughout the course of the year.
- **Plan your own visit:** You are welcome to visit the University at a time that suits you, to gather information and see the sights of our beautiful campus in your own time.

How to apply

www.ucas.com

You must apply through the Universities & Colleges Admissions Services (UCAS), tel: **0871 468 0468** or visit their website.

The Glasgow experience

The University of Glasgow is one of the world's top universities. Since opening our doors over 550 years ago, we've dedicated our time to inspiring great minds throughout history, from the father of economics, Adam Smith, to the pioneer of television, John Logie Baird.

Here are just a few reasons why our students choose to join us:

- Established in **1451**, fourth oldest University in the English-speaking world
- **23,000** students from **130** countries
- Member of the prestigious **Russell Group** of leading UK research universities
- **1st** in the Russell Group for student satisfaction (International Student Barometer 2012)
- One of the UK's **top 3** best-value universities (Student Value for Money Report 2012)
- In the UK's **top 6** for career prospects (The Guardian University Guide 2013)
- Over **100** clubs and societies, from karate to student theatre
- **Two** student unions with GUU being voted **UK Student Union of the Year**
- One of the best libraries in Europe, open **361** days of the year from 7.15am–2am with **2.5 million** print books and journals.

Find out more about the Glasgow experience:

- Get our students' views on campus life: www.glasgowgen.net
- Chat to one of our current students: www.glasgow.ac.uk/studentnetwork
- Email us direct: student.recruitment@glasgow.ac.uk

Aeronautical Engineering

Aeronautical engineering builds on the science of flight to show how aircraft are designed, constructed and powered, how they are used and how they are controlled for safe operation.

90%

MEng students were in work/study six months after finishing

YES

Additional accreditation (see panel for details)

Data published by Unistats (unistats.direct.gov.uk) January 2013.



Programme structure

You will study the same courses in the first three years whether you are on the BEng or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Year 1

In your first year you will take courses in mathematics and study engineering fundamentals including aerospace engineering, dynamics, electronics, materials, statics, thermodynamics and engineering skills.

Year 2

In your second year you will concentrate on fluid mechanics, dynamics, aeronautical engineering, thermodynamics and mathematics.

Year 3

In third year you will learn about the design of aircraft. You can begin to analyse and understand the aircraft behaviour, predict its performance, understand its propulsion systems and begin to perform detailed analysis of aircraft structural components.

Years 4 and 5

The main route to becoming a fully chartered engineer is through the MEng degree, which usually takes five years. The BEng degree remains popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work.

In year 4 you will begin to deal with some of the advanced concepts in aeronautics. These include the study of composite materials, aeroelasticity, high-speed aerodynamics, fluid dynamics, flight dynamics and control theory.

For BEng students individual project work allows you to apply the knowledge you have gained during your studies to a problem in aeronautical

engineering. MEng students undertake an interdisciplinary team project instead.

Fifth-year study in MEng will widen your knowledge and involve more in-depth study of aircraft and their systems. You will learn about aircraft handling qualities, aircraft operations, and advanced structural analysis techniques. Half of this year is devoted to project work.

A range of optional courses is available in fourth and fifth years to allow you to develop and follow your own interests.

Special features

Laboratories feature in each year of study. You will run a jet engine, test structural components and perform wind tunnel tests. MEng students take a flight-testing course in a Jetstream Aircraft.

Partnership and industry links

Industry involvement comes both from contributions to aircraft design classes by engineers from the industrial sector and, whenever possible, from visits to industrial sites. Most MEng projects are carried out in industry.

Our international links

The MEng degree programme allows you to take your fifth-year project in one of our partner universities, international companies and organisations in Europe. We also have partner universities in the USA and Australia, where some students take their third year of study.

Career prospects

The School of Engineering is one of three in the UK selected by BAE Systems for 'preferred' status, which can lead to industrial involvement in the programme and employment with the company. Our recent aeronautical engineering graduates have also been employed by organisations including Prospect, Williams F1, Insysen, Nuclear Decommissioning Authority, the RAF, Fluid Gravity Engineer, Rolls-Royce plc, Rolls-Royce Derby, Thales and the Met Office.

Degrees and UCAS codes

BEng (H415) – four years; MEng (H410) – five years

Accreditation

Our degrees are accredited by the Royal Aeronautical Society and the Institution of Mechanical Engineers.

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB, including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAAAB by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Advanced entry

If you have exceptional A-level or Advanced Higher grades it's possible to follow a faster route, which allows you to complete a standard MEng degree in one year less than usual – see www.glasgow.ac.uk/undergraduate/degrees/advancedentry.

Glasgow International College

For international students entry to this programme is supported by courses from Glasgow International College - www.glasgow.ac.uk/gic.

E: eng-teachingoffice@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/aeronauticalengineering



Aerospace Systems

Aerospace systems focuses on the design and use of onboard systems found on most aircraft and spacecraft, and how these systems may be used to improve the operation and performance of aerospace vehicles.

90%

Students in work/
study six months
after finishing

YES

Additional
accreditation (see
panel for details)

Data published by
Unistats (unistats.direct.gov.uk) January 2013.

Degrees and UCAS codes

BEng (H402) – four years
MEng (H401) – five years

Accreditation

Our BEng and MEng degrees are accredited by the Royal Aeronautical Society.

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAAAB by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Advanced entry

If you have exceptional A-level or Advanced Higher grades it's possible to follow a faster route, which allows you to complete a standard MEng degree in one year less than usual – see www.glasgow.ac.uk/undergraduate/degrees/advancedentry.

Glasgow International College

For international students entry to this programme is supported by courses from Glasgow International College - www.glasgow.ac.uk/gic.

E: eng-teachingoffice@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/aerospacesystems

Programme structure

You will study the same courses in the first three years whether you are on the BEng or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Year 1

You will take courses in mathematics and study engineering fundamentals including aerospace engineering, electronics, dynamics, materials, statics, thermodynamics and engineering skills. These courses will form a solid foundation for development later in the degree programme and are supported by individual and group project and laboratory work.

Years 2 and 3

In your second and third years you will concentrate on aerospace dynamics, aeronautical engineering, electronics and systems, electrical circuits and mathematics. Throughout the programme there will be a focus on developing key software programming skills.

Years 4 and 5

The main route to becoming a fully chartered engineer is through the MEng degree, which usually takes five years. The BEng degree remains popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work.

In year 4 you will study topics including flight simulation, aerospace vehicle guidance and control, radio and radar, dynamics, aircraft handling qualities and aircraft operations.

For BEng students, individual project work allows you to apply the knowledge you have gained during your studies to a problem in aerospace systems. MEng students undertake an interdisciplinary team project instead.

Fifth-year study in MEng widens your knowledge and provides you with more in-depth study of aircraft systems. You will learn about aircraft handling qualities, aircraft operations, and advanced control concepts. Half of your fifth year is devoted to project work.

Special features

Laboratories are present in each year of study. A feature of the fifth year of the MEng is a flight-testing course in a Jetstream Aircraft.

Partnership and industry links

Industry involvement comes both from contributions to aircraft design classes by engineers from the industrial sector and, whenever possible, from visits to industrial sites. Most MEng projects are carried out in industry.

Our international links

The MEng degree programme allows you to take your fifth-year project in one of our partner universities, international companies and organisations in Europe. We also have partner universities in the USA and Australia, where some students take their third year of study.

Career prospects

The School of Engineering is one of three in the UK selected by BAE Systems for 'preferred' status, which can lead to industrial involvement in the programme and employment with the company. The constant demand for the renewing of aircraft and the increase in the complexity of aircraft systems leads to a demand for aerospace systems engineers, with a wide spectrum of career opportunities in the fields of software and hardware design, simulation and expert systems. Past graduates have gained employment with companies such as QinetiQ, Logica, BAE Systems, Thales and Unisys, while a number of graduates have proceeded to postgraduate research in this specialised and expanding branch of engineering.

Biomedical Engineering

Biomedical engineering is about finding engineering solutions to medical problems. It includes biomechanics, biomaterials, biofluid mechanics and medical electronics and has applications throughout medicine.

Our engineers are working with hospital doctors to develop machines that help paralysed people exercise.



Programme structure

You will study the same courses in the first three years whether you are on the BEng or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Year 1

You will take courses in mathematics and study engineering fundamentals including biomedical engineering, dynamics, electronics, materials, statics, thermodynamics and engineering skills. These courses will form a solid foundation for development later in the degree programme and are supported by individual and group project and laboratory work.

Year 2

In your second year you will study further engineering and biomedical subjects including applied mathematics, applied mechanics, biomaterials, biomedical engineering skills, electronic engineering, human form and function, physiology and neuroscience.

Year 3

In your third year you will study more advanced engineering and biomedical subjects including biomedical engineering, design and manufacture, electronic design, biological fluid mechanics, medical electronics, medical imaging, and immunology and drug delivery.

Years 4 and 5

The main route to becoming a fully chartered engineer is through the MEng degree, which usually takes five years. The BEng degree remains popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work.

In the BEng programme, in addition to your final-year project, which takes up one third of the year, you will continue to take courses in

engineering, biomedical and life sciences and medicine, such as rehabilitation engineering, biosensors, bioethics, and cell and tissue engineering.

If you are an MEng student, in your fifth year you will spend six months working on a detailed research-based project undertaken within the University or elsewhere, in industry or another university in the UK or overseas.

Special feature

In first year, you will have the opportunity to take part in a variety of activities, including visiting local hospitals.

Partnership and industry links

This degree programme has very close links with industry, with industrialists contributing to projects, lectures and case studies, as well as vacation and year-out employment opportunities for students. In addition, there are links with the local hospitals and clinical research institutes.

Our international links

You will be able to apply to spend one year of your academic studies abroad at an accredited partner university. MEng students will also have the opportunity to undertake their six-month project in industry or academia abroad.

Career prospects

Biomedical engineering is a rapidly expanding industry, with the development of technologies to meet the demands of healthcare today. Our graduates are well represented in manufacturing companies and a wide range of industries in this country and abroad. Some of our graduates see this as an excellent preliminary degree for graduate entry into Medicine. The degree also provides graduates with strong transferable skills, enabling them to pursue other careers in finance, law and medicine, as well as other engineering disciplines, should they wish.

Degrees and UCAS codes

BEng (J750) – four years
MEng (J751) – five years

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAAB by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Advanced entry

If you have exceptional A-level or Advanced Higher grades it's possible to follow a faster route, which allows you to complete a standard MEng degree in one year less than usual – see www.glasgow.ac.uk/undergraduate/degrees/advancedentry.

Glasgow International College

For international students entry to this programme is supported by courses from Glasgow International College - www.glasgow.ac.uk/gic.

E: eng-teachingoffice@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/biomedicalengineering



Civil Engineering

Civil engineers design and build major structures and provide the skills and expertise to design, build and maintain the country's infrastructure, including water supply and treatment, power supply, transportation and shelter.

95%

MEng students were in work/study six months after finishing

YES

Additional accreditation (see panel for details)

Data published by Unistats (unistats.direct.gov.uk) January 2013.

Degrees and UCAS codes

BEng (H202) – four years; MEng (H200) – five years

Accreditation

MEng: this degree is accredited as fully satisfying the educational base for a Chartered Engineer. **BEng:** this degree is accredited as fully satisfying the educational base for an Incorporated Engineer and partially satisfying the educational base for a Chartered Engineer. A programme of accredited Further Learning will be required to complete the educational base for CEng.

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAA by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Advanced entry

If you have exceptional A-level or Advanced Higher grades it's possible to follow a faster route, which allows you to complete a standard MEng degree in one year less than usual – see www.glasgow.ac.uk/undergraduate/degrees/advancedentry.

Glasgow International College

For international students entry to this programme is supported by courses from Glasgow International College - www.glasgow.ac.uk/gic.

E: eng-teachingoffice@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/civilengineering

Programme structure

You will study the same courses in the first three years whether you are on the BEng or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Year 1

In your first year you will take courses in mathematics and study engineering fundamentals including civil engineering, dynamics, electronics, materials, statics, thermodynamics and engineering skills. These courses will form a solid foundation for development later in the degree programme and are supported by individual and group project and laboratory work.

Years 2 and 3

You will take a range of courses within structural engineering, water engineering, transportation, geotechnical engineering and construction management. Courses cover both fundamental principles and practical applications. We place considerable emphasis on practical work, in the form of laboratory classes, physical and computational modelling exercises, project work, surveying fieldwork, design projects and site visits.

In your third year you will take part in a multidisciplinary design project called INTERACT. Together with students of architecture and quantity surveying from other universities, you will work in small teams to solve real-life design problems, just as you would do in professional life.

Years 4 and 5

The main route to becoming a fully chartered civil engineer is through the MEng degree, which usually takes five years. The BEng degree remains popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires

further study after graduation, which can be done part-time while you are working.

In your fourth year, MEng students study a greater range of advanced analytical topics than BEng students. Year five of the MEng programme is largely devoted to a series of case studies, based on real problems and with strong industrial input, which are intended to develop high-level problem-solving skills.

Special feature

There is an optional London visit to view civil engineering structures, usually planned for after the Easter vacation in third year, with visits arranged to places such as the Thames Barrier, the London Eye and the Millennium Bridge. Other local site visits are also organised, eg to the Falkirk Wheel and the Forth Road Bridge.

Partnership and industry links

We have excellent links with industry, with industrialists contributing to projects, lectures and case studies. Many engineering employers are involved in the University's prestigious Club 21 work experience programme, which offers well-paid summer placements and, in some cases, sponsorship.

Our international links

You may apply to study abroad in years 2 or 3. In addition, MEng students can work on their fourth-year project at overseas institutions.

Career prospects

Our recent graduates have been employed by

- ARUP, civil engineer
- Jacobs Engineering Ltd, civil engineer
- Balfour Consultancy Ltd, structural engineer
- BAM Nuttall, civil engineer
- Laing O'Rourke, civil engineer
- Scottish Southern Energy, civil engineer
- WSP Group, civil engineer
- Atkins Global, graduate civil engineer
- SEPA, trainee flood risk scientist.

Civil Engineering with Architecture

This is a unique degree programme in collaboration with The Glasgow School of Art, which will give you an understanding of the architect's role in construction and the interaction between architect and civil engineer.

95%

Students in work/
study six months
after finishing

YES

Additional
accreditation (see
panel for details)

Data published by
Unistats (unistats.direct.gov.uk) January 2013.



Programme structure

You will study the same courses in the first three years whether you are on the BEng or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Year 1

In your first year you will take courses in mathematics and architecture and study engineering fundamentals including civil engineering, dynamics, materials, statics, thermodynamics and engineering skills.

Years 2 and 3

You will take a range of courses within civil and structural engineering, and architecture. We place considerable emphasis on practical work, in the form of laboratory classes, physical and computational modelling exercises, project work, surveying fieldwork, design projects and site visits.

In your third year you will take part in INTERACT, a multidisciplinary design project. Together with students of architecture and quantity surveying from other universities, you will work in small teams to solve real-life design problems, just as you would do in professional life.

Years 4 and 5

The main route to becoming a fully chartered civil engineer is through the MEng degree, which usually takes five years. The BEng degree remains popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work.

In fourth year, MEng students study a greater range of advanced analytical topics than BEng students. Year 5 of the MEng programme is largely devoted to a series of case studies, based on real problems and with strong

industrial input, which are intended to develop high-level problem-solving skills.

Special features

There is an optional London visit to view civil engineering structures, with visits arranged to places such as the Thames Barrier, the London Eye and the Millennium Bridge. Other local site visits are also organised.

The architectural component is entirely design-oriented, studio-based and directed towards the production of sketches, drawings and models and their compilation into an annual portfolio. This component of the programme is taught at the Mackintosh School of Architecture, The Glasgow School of Art.

Partnership and industry links

We have excellent links with industry, with industrialists contributing to projects, lectures and case studies. Many engineering employers are involved in the University's prestigious Club 21 work experience programme, which offers well-paid summer placements and, in some cases, sponsorship.

Our international links

You may apply to study abroad in years 2 or 3. In addition, MEng students can work on their fourth-year project at overseas institutions.

Career prospects

Our recent graduates have been employed by companies such as ARUP, Buro Happold and Atkins Global.

Case study: As a Senior Structural Engineer and Team Leader at the firm of international consultants Buro Happold, Geoff Crow, who graduated with a first-class MEng degree, has been responsible for managing a multidisciplinary team of engineers and technicians. He has worked on a number of projects, such as a large new campus building for Queen Margaret University, Edinburgh.

Degrees and UCAS codes

BEng (H2KC) – four years
MEng (H2K1) – five years

Accreditation

MEng: this degree is accredited as fully satisfying the educational base for a Chartered Engineer.

BEng: this degree is accredited as fully satisfying the educational base for an Incorporated Engineer and partially satisfying the educational base for a Chartered Engineer. A programme of accredited Further Learning will be required to complete the educational base for CEng.

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAAB by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

E: eng-teachingoffice@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/civilengineeringwitharchitecture



Electronic & Software Engineering

Electronic and software engineering combines the study of hardware and software. It will give you a deep understanding of the knowledge required to lead the teams that will design and build the computerised systems of the future.

90%

Computer Science students were satisfied overall

91%

Electronic & Electrical Engineering students were satisfied overall

YES

Additional accreditation (see panel for details)

Data published by Unistats (unistats.direct.gov.uk) January 2013.

Degrees and UCAS codes

BSc (Hons) (GH66) – four years; BEng (GHP6) – four years; MEng (HG66) – five years

Accreditation

The BEng and MEng degrees are accredited by the Institution of Engineering & Technology. The BSc degree is accredited by the British Computer Society.

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics. **A-levels:** A*AA including Mathematics and Physics. **IB:** 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A. Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAAA by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects. **A-levels:** AAB including Mathematics and Physics. **IB:** 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

BSc

Highers: AAAA or AAABB (including two science subjects) in first sitting = unconditional offer. Applicants who achieved AAAB or AABBB (including two science subjects) at their first sitting WILL receive a conditional or unconditional offer. Additional conditional or unconditional offers MAY be made to applicants who achieved between ABBB and AABB (including two science subjects) at their first sitting. Applicants who receive an offer conditional on second sitting results will be required to study Advanced Highers in relevant subjects as an integral part of their conditional offer. **A-levels:** AAB, including two science subjects. Normally have A-level Mathematics at B or above. **IB:** A minimum of 34 points is required to be considered for an offer. Actual offers will specify subjects and grades to be attained at Higher Level.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

E: student.recruitment@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/electronicsoftwareengineering

Programme structure

You will study the same courses in the first three years whether you are on the BEng, BSc or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Year 1

Your first year of study will include courses in electronics and electrical engineering, mathematics and computing science. You will study foundational analogue and digital electronics, and will design, simulate and test circuits in the laboratory. You will develop computer problem-solving skills that are applicable in any programming language.

Years 2 and 3

You will gain a thorough grounding in hardware and software aspects of computer systems, including expertise in programming and software engineering using Java, detailed knowledge of operating systems and networking, a solid foundation in databases and experience with electronic design software. This will be combined with a working knowledge of electrical circuit theory, analogue and digital electronic system design and digital communications.

Years 4 and 5

The main route to becoming a fully chartered engineer is through the MEng degree, which usually takes five years. The BEng and BSc degrees remain popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work.

Whether you are a BSc, BEng or MEng student, you will have a wide choice of technical options in fourth year, choosing half your specialist topics from electronics and electrical engineering (including VLSI design and robotics) and half from computing science (including

artificial intelligence, software engineering processes and network communications).

You will also gain expertise in professional aspects including economics, project organisation, environmental issues and safety. If you are a BEng or BSc student, you will undertake a substantial individual project under one-to-one supervision.

If you are admitted into the MEng route you will have the opportunity to take part in a multidisciplinary integrated system design project, working in teams alongside students of other engineering disciplines. In fifth year you will complete a six-month project abroad and then take further advanced technical subjects.

Partnership and industry links

Between third and fourth year you will undertake a work placement in industry. We can assist you in finding a placement in the UK or overseas. There is also an option to concentrate on a comprehensive management course supported by many manufacturing companies in Scotland.

Our international links

As an MEng student you will complete a six-month research and development project in an international company or research lab, in fifth year. If you have chosen to study a European language you may be assigned to a host organisation in Europe.

Career prospects

Previous graduates have found employment in a wide range of industries, including software houses, electronics companies designing computer-based equipment and commercial institutions such as banks and insurance companies. Our graduates have found jobs with Agilent, ARM, BMW, Ion Torrents, Thales and Wolfson Microelectronics, among many others.

Electronics & Electrical Engineering

This degree programme is broadly based to prepare you for a wide range of professional careers. As a graduate engineer you will be able to deal with anything from power engineering to microelectronics, radar installations to the design of digital systems.

91%

MEng students were satisfied overall

YES

Additional accreditation (see panel for details)

Data published by Unistats (unistats.direct.gov.uk) January 2013.



Programme structure

You will study the same courses in the first three years whether you are on the BEng or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Year 1

In your first year you will take courses in mathematics and study engineering fundamentals including analogue and digital electronics, dynamics, materials, thermodynamics and engineering skills. These courses will form a solid foundation for development later in the degree programme and are supported by individual and group project and laboratory work.

Years 2 and 3

The following two years will contain a core of compulsory and optional subjects such as management or languages. The core courses will give you a firm grounding in the knowledge and skills required of any professional electronics or electrical engineer, whether your career takes you to work with hydroelectric projects or wind farms, designing high-tech gadgets and communications devices or creating new electronic components at the nano-scale. These courses are augmented with practical construction and project work in each year – working both alone and in teams.

Years 4 and 5

The main route to becoming a fully chartered engineer is through the MEng degree, which usually takes five years. The BEng degree remains popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work.

Both BEng and MEng students have a wide choice of technical options in fourth year. You will also gain expertise in professional aspects including economics, project organisation, environmental issues, and safety. BEng students complete their studies with a substantial individual project, under the one-to-one supervision of a member of academic staff.

If you are admitted into the MEng route you will have the opportunity to take part in a multidisciplinary integrated system design project instead of the fourth-year individual project. You will learn the skills of project management and work alongside students of other engineering disciplines. In fifth year you will complete a six-month project abroad and then take further advanced technical subjects.

Special feature

In third year you will undertake a team design project in which the complete design process of an item of electronic equipment is carried out, from the initial specification to the completed product.

Our international links

As an MEng student you will complete a six-month research and development project in an international company or research lab, in fifth year. If you have chosen to study a European language you may be assigned to a host organisation in Europe.

Career prospects

Our recent Electronics & Electrical Engineering graduates have been employed by Atkins, QinetiQ, BAE Systems Surface Ships, BAE Systems, Ventus green energy, and the RAF, among other organisations.

Degrees and UCAS codes

BEng (H600) – four years
MEng (H601) – five years

Accreditation

Our BEng and MEng degrees are accredited by the Institution of Engineering & Technology.

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAA by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Advanced entry

If you have exceptional A-level or Advanced Higher grades it's possible to follow a faster route, which allows you to complete a standard MEng degree in one year less than usual – see www.glasgow.ac.uk/undergraduate/degrees/advancedentry.

Glasgow International College

For international students entry to this programme is supported by courses from Glasgow International College - www.glasgow.ac.uk/gic.

E: eng-teachingoffice@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/electronics



Electronics with Music

This unique degree provides an opportunity to combine musical interests with a thorough study of modern electronics, enabling you to seek employment in the highly competitive recording and broadcast industries.

91%

Electronic & Electrical Engineering students were satisfied overall

94%

Music students were satisfied overall

YES

Additional accreditation (see panel for details)

Data published by Unistats (unistats.direct.gov.uk) January 2013.

Degrees and UCAS codes

BEng (H6W3) – four years
MEng (H6WJ) – five years

Accreditation

Our BEng and MEng degrees are accredited by the Institution of Engineering & Technology.

Entry requirements

This programme requires Higher/A-level Music or Grade 6 in the Associated Board Practical and Theory exams.

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAAB by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Programme structure

You will study the same courses in the first three years whether you are on the BEng or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Year 1

In your first year you will take courses in mathematics and study engineering fundamentals including computing, analogue and digital electronics and electrical engineering. These courses are supported by individual and group project and laboratory work. The music component includes recording and studio skills, plus either general musicianship or performance (subject to audition at the start of the year).

Year 2

During the second year, you will study core engineering subjects of analogue and digital electronics, electrical circuits, computer architecture, a design project and mathematics, together with audiovisual composition, Max MSP programming, and one other music option.

Years 3

In your third year you will continue the pattern of a mix of electronics (two-thirds) and music (one-third) topics, including systems design, communication systems, control, real-time systems, electromagnetic compatibility, mathematics, sonic arts and a music option. These courses are supported by project work.

Years 4 and 5

The main route to becoming a fully chartered engineer is through the MEng degree, which usually takes five years. The BEng degree remains popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work.

On the MEng programme your choice of technical options is the same as that of the BEng degree but instead of an extended individual project you carry out a team project combined with a course in project management. You may also choose an appropriate European language course. In fifth year you will complete a six-month project and then take further technical subjects and management subjects.

Special features

If you are an accomplished performer, you may be admitted to performance options.

On the MEng route you will have the opportunity to take part in a multidisciplinary integrated system design project, working alongside students of other engineering disciplines.

Our international links

As an MEng student you will complete a six-month research and development project in an international company or research lab. If you have chosen to study a European language you may be assigned to a host organisation in Europe.

Career prospects

Graduates are fully qualified electronics and electrical engineers with particular skills in music technology. This degree is far more prestigious than a vocational qualification in audio recording and production and you will be able to seek employment in both the recording and broadcasting industries, and also the much broader field offered by the electronics industry as a whole. Our graduates have found jobs ranging from designing Intel processors to investigating wind and wave power.

Mechanical Design Engineering

This programme treats design and manufacture as the basis for mechanical engineering and integrates courses with project activity, thereby enhancing the design aptitude and analytical skills required to develop innovative products.

90%

Students in work/
study six months
after finishing

YES

Additional
accreditation (see
panel for details)

Data published by
Unistats (unistats.direct.gov.uk) January 2013.



Programme structure

You will study the same courses in the first three years whether you are on the BEng or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Year 1

You will take courses in mathematics and study engineering fundamentals including design, dynamics, electronics, materials, manufacturing, statics, thermodynamics and engineering skills. These courses will form a solid foundation for development later in the degree programme and are supported by individual and group project and laboratory work.

Year 2

You will study further basic engineering subjects including applicable mathematics, applied mechanics, electrical power engineering, engineering computing, materials, power electronics, thermodynamics and design and manufacture.

Year 3

You will study more advanced engineering subjects in third year such as: engineering design, dynamics, control and fluid power, heat transfer, design and manufacture, materials and simulation, and mechanics of materials and structures.

Years 4 and 5

The main route to becoming a fully chartered engineer is through the MEng degree, which usually takes five years. The BEng degree remains popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work.

In your fourth year of the BEng you will undertake an individual design project carried

out under the personal supervision of a member of staff, and a multidisciplinary product design group project. The fourth year also includes compulsory and optional engineering science subjects including robotics, advanced materials, vibration, microelectronics, mechanics of solids and thermal engineering. The fifth year of the MEng programme includes the final design project, which could run for two years (4 and 5) in collaboration with industry. It also provides additional design management skills and in-depth options of engineering subjects including mechanics of solids, lasers, dynamics and advanced manufacture.

Special features

An extensive design project, including studio work, helps to integrate the various engineering skills and to understand the business and social context within which design takes place. You will also take part in a multidisciplinary integrated system design project, working in teams with students of other engineering disciplines.

Partnership and industry links

The degree programme has very close links with industry, with industrialists contributing to courses, as well as vacation and year-out employment opportunities for students.

Our international links

You can apply to spend one year of your academic studies abroad at an accredited partner university. In year 5 MEng students can work on their project at overseas institutions.

Career prospects

In years 3 and 4, industrial experience during the summer vacations can be very useful. You will know enough by then to contribute usefully to the firm's activities; it enables both you and the company to sound each other out about the prospect of full-time employment after graduation, and it may provide ideas for your final-year project, which can benefit both yourself and the company.

Degrees and UCAS codes

BEng (HH37) – four years
MEng (HHJ7) – five years

Accreditation

Our BEng and MEng degrees are accredited by the Institution of Mechanical Engineers and the Institution of Engineering Designers.

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAAA by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Advanced entry

If you have exceptional A-level or Advanced Higher grades it's possible to follow a faster route, which allows you to complete a standard MEng degree in one year less than usual – see www.glasgow.ac.uk/undergraduate/degrees/advancedentry.

Glasgow International College

For international students entry to this programme is supported by courses from Glasgow International College - www.glasgow.ac.uk/gic.

E: eng-teachingoffice@glasgow.ac.uk

W: www.glasgow.ac.uk/ug/mechanicaldesignengineering



Mechanical Engineering

A mechanical engineering degree will allow you to develop a fundamental understanding of engineering principles by studying engineering sciences and mathematics and learning to apply them to real engineering problems.

90%

Students in work/
study six months
after finishing

YES

Additional
accreditation (see
panel for details)

*Data published by
Unistats (unistats.direct.
gov.uk) January 2013.*

Degrees and UCAS codes

BEng (H300) – four years
MEng (H302) – five years

Accreditation

Our BEng and MEng degrees are accredited by the Institution of Mechanical Engineers.

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAAB by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Advanced entry

If you have exceptional A-level or Advanced Higher grades it's possible to follow a faster route, which allows you to complete a standard MEng degree in one year less than usual – see www.glasgow.ac.uk/undergraduate/degreed/advancedentry.

Glasgow International College

For international students entry to this programme is supported by courses from Glasgow International College - www.glasgow.ac.uk/gic.

Programme structure

You will study the same courses in the first three years whether you are on the BEng or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Year 1

You will take courses in mathematics and study engineering fundamentals including applied mechanics, fluid mechanics, dynamics, thermodynamics and properties of materials. These courses are supported by individual drawing and practical skills and group project and laboratory work.

Year 2

In your second year you will study further basic engineering subjects including applicable mathematics, applied mechanics, electrical power engineering, engineering computing, materials, power electronics, thermodynamics and design and manufacture.

Year 3

In third year you will visit a number of industries in the UK and study more advanced engineering subjects including dynamics, control and fluid power; engineering design; fluid mechanics; gas dynamics; heat transfer; instrumentation and data systems; materials and manufacture; mathematical modelling and simulation; and mechanics of materials and structures.

Years 4 and 5

The main route to becoming a fully chartered engineer is through the MEng degree, which usually takes five years. The BEng degree remains popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work.

In fourth year you will study a range of courses from elements of law for engineers,

marketing, microeconomics, advanced thermal engineering, control, lasers and electro-optic systems, materials engineering, mechanics of solids, robotics, and vibration. You will also undertake project work.

In fifth year individual project work forms a major component of the MEng programme and frequently has a strong industrial bias. Further courses are chosen from advanced control systems engineering, dynamics, desalination, laser design and applications, materials engineering, and mechanics of solids and structures.

Special feature

In fourth year you will take part in a multidisciplinary integrated system design project. You will work in teams alongside students of other engineering disciplines.

Partnership and industry links

The degree programme has very close links with industry, with industrialists contributing to courses, as well as vacation and year-out employment opportunities for students.

Our international links

You can apply to spend one year of your academic studies abroad at an accredited partner university. In year 5 MEng students can work on their project at overseas institutions.

Career prospects

Our graduates are well represented in manufacturing companies and a wide range of industries in this country and abroad. Recent graduates have been employed by Babcock (Marine Division), Chevron, TECHNIP UK Ltd, Wood Group, Spooner, Green Co. Mineral Water, Extreme Well Solution, Scottish Power Renewables, Aker Solutions, ABS Consulting Ltd, Nuclear, Jee Ltd, Oyl Manufacturing, BAE Systems, Rolls-Royce, Score Europe, BYARD Piping Mills, among others.

Mechanical Engineering with Aeronautics

This degree programme combines the breadth and wide appeal of mechanical engineering with the opportunities offered by advanced study of mechanical, aeronautics and aerospace subjects.

YES

Additional accreditation (see panel for details)

Programme structure

You will study the same courses in the first three years whether you are on the BEng or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Year 1

In your first year you will take courses in mathematics and study engineering fundamentals including aerospace engineering, dynamics, electronics, manufacturing, materials, statics, thermodynamics and engineering skills.

Year 2

In your second year you will study further basic engineering subjects all of which are compulsory – applicable mathematics, applied mechanics, design and manufacture, electrical power engineering, elements of thermodynamics for aerospace propulsion, engineering computing, introduction to aerodynamics, materials and power electronics.

Year 3

In your third year you will visit a number of industries in the UK and study more advanced engineering subjects – aerodynamics and fluid mechanics, aircraft performance, dynamics, control and fluid power, flight mechanics, materials and manufacture, mathematical modelling and simulation, mechanics of materials and structures, propulsion and turbomachinery, and software engineering.

Years 4 and 5

The main route to becoming a fully chartered engineer is through the MEng degree, which usually takes five years. The BEng degree remains popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work.

In fourth year you will study a range of core mechanical engineering subjects and core aeronautics subjects, plus a choice of advanced options. You will also undertake a team aerospace design project.

In fifth year (MEng only) an aerospace-focused individual project forms a major component of the programme.

Special features

A feature of the fifth year of the MEng programme is a flight-testing course in a Jetstream aircraft.

In addition to the aerospace design project you will also take part in a multidisciplinary integrated system design project, working in teams with students of other engineering disciplines.

Partnership and industry links

You will benefit from the close ties with industry developed by staff involved in the programme, with industrial case studies focused on the aerospace industries.

Our international links

You can apply to spend one year of your academic studies abroad at an accredited partner university. In year 5 MEng students can work on their project at overseas institutions.

Career prospects

The degree aims to allow students who wish to pursue a professional engineering career in mechanical engineering but who have a particular interest in aeronautical and aerospace engineering, to keep their career options open. Graduates will have all the engineering and transferable skills of mechanical engineers with a strong additional speciality in aeronautics. Mechanical engineering graduates are well represented in aerospace industries and this degree provides enhanced employment opportunities in this sector.



Degrees and UCAS codes

BEng (H3H4) – four years
MEng (H3HK) – five years

Accreditation

These degrees are accredited by the Institution of Mechanical Engineers and the Royal Aeronautical Society.

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAA by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Advanced entry

If you have exceptional A-level or Advanced Higher grades it's possible to follow a faster route, which allows you to complete a standard MEng degree in one year less than usual – see www.glasgow.ac.uk/undergraduate/degrees/advancedentry.

Glasgow International College

For international students entry to this programme is supported by courses from Glasgow International College - www.glasgow.ac.uk/gic.

E: eng-teachingoffice@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/mechanicalengineeringwithaeronautics



Mechatronics

Mechatronics is a fusion of mechanical, electrical, electronic and control engineering. Modern manufacturing industry depends for its success in global markets on its ability to integrate electronics, control, software and mechanical engineering into a range of innovative products and systems.



Additional accreditation (see panel for details)

Degrees and UCAS codes

BEng (H730) – four years
MEng (H731) – five years

Accreditation

Our BEng and MEng degrees are accredited by the Institution of Mechanical Engineers.

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAAAB by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Glasgow International College

For international students entry to this programme is supported by courses from Glasgow International College - www.glasgow.ac.uk/gic.

Programme structure

This degree programme will bring together aspects of all branches of engineering that contribute to mechatronics, notably mechanical, electrical, electronic and control engineering.

Year 1

In your first year you will take courses in mathematics and study engineering fundamentals including dynamics, analogue and digital electronics, manufacturing, materials, statics, thermodynamics and engineering skills. These courses are supported by individual and group project and laboratory work.

Year 2

You will continue to study mathematics and fundamental engineering courses linking the mechanical and electrical domains which form the basis for the study of mechatronics.

Year 3

In your third year you will develop knowledge and skills in electronic system design, real-time programming and control systems. This is combined with study of mechanical, instrumentation and data systems to develop the interdisciplinary skills necessary to undertake a mechatronic group design project.

Years 4 and 5

The main route to becoming a fully chartered engineer is through the MEng degree, which usually takes five years. The BEng degrees remain popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work. Your selection for BEng or MEng depends on your progress record in your first three years.

In years 4 and 5 you will take a range of courses in engineering including courses in control, robotics and mechatronic systems. In addition

you will take courses in professional practice including activities such as developing business plans, understanding professional and legal requirements, and management.

In your final year you will undertake a major individual project which, for the MEng degree, may be undertaken in industry or on an industry-supported topic. The final year is completed with a range of in-depth technical courses.

Special feature

In fourth year you will take part in a multidisciplinary integrated system design project, working in teams alongside students of other engineering disciplines.

Partnership and industry links

The School of Engineering has excellent links with industry. Our major national and international joint research programmes are key providers of student projects and placements. Many engineering employers are involved in the University's prestigious Club 21 work experience programme, which offers well-paid summer placements and, in some cases, sponsorship.

Our international links

You will be able to apply to spend one year of your academic studies abroad at an accredited partner university. MEng students will also be able to work on their final-year project at overseas institutions.

Career prospects

There is increasing demand for graduates who can work in an interdisciplinary engineering environment. Graduates from this degree programme will have the interdisciplinary approach necessary to integrate electronics, control, software and mechanical engineering. In addition, you will acquire skills that are transferable to service industries and other areas of the business community.

Product Design Engineering

This degree is jointly delivered by the University and The Glasgow School of Art and integrates the science of engineering with the activity of designing.

92%

MEng students were satisfied overall

YES

Additional accreditation (see panel for details)

Data published by Unistats (unistats.direct.gov.uk) January 2013.



Programme structure

You will study the same courses in the first three years whether you are on the BEng or MEng degree programme. Your selection for BEng or MEng depends on your progress record in your first three years.

Years 1 and 2

You will take courses in mathematics and product design engineering and study engineering fundamentals including dynamics, electronics, materials, statics, thermodynamics and engineering skills.

These courses are complemented by design studies at The Glasgow School of Art which aim to develop creativity, exploration and expressions of ideas, and to build confidence in the design process.

Year 3

The third year develops and integrates the application of theory through structured projects, with an increased amount of studio work at The Glasgow School of Art. You will study more advanced engineering subjects at the University – materials and manufacture, dynamics, control and fluid power, heat transfer, mathematical modelling and simulation, and mechanics of materials and structures.

Years 4 and 5

The main route to becoming a fully chartered engineer is through the MEng degree, which usually takes five years. The BEng degree remains popular and can normally be completed in four years. To become a fully chartered engineer with a BEng degree requires further study after graduation, which can be done part-time from work.

In the final year of the BEng, you will propose your own programme of individual product development and prototyping leading to concept and detailed design proposals. You will also study advanced subjects in engineering,

management and design. These include advanced materials, mechanics of solids, microelectronics and design studies.

In fourth year of the MEng degree you will study the same taught courses as for the BEng, and undertake a group design project, with mechanical engineering and mechanical design engineering students. Studio activities at The Glasgow School of Art will continue and you will study advanced subjects in engineering, management and design. In year 5 you will work on a programme of product development and prototyping proposed by you, leading to concept and detailed design proposals.

Special features

Before your final-year project you will go on a fieldtrip to a number of industrial locations throughout the UK. You will take part in a multidisciplinary integrated system design project, working in teams alongside students of other engineering disciplines.

Partnership and industry links

This degree programme has strong links with industry and we try to maximise these opportunities. As our students work closely with industry in their final years, they have an excellent record of employment in industry.

Our international links

As part of the MEng programme there is the possibility that you spend the fourth year in Trondheim, Norway. We are establishing links with universities in the Netherlands and in Australia to provide similar possibilities.

Career prospects

Career prospects range from leading international companies to design studios. Our recent product design engineering graduates have been employed by Core PD, Red Button Design, Selex Galileo, Space Right Europe Ltd, and ULMA Packaging Industry, among others.

Degrees and UCAS codes

BEng (H3W2) – four years
MEng (H3WG) – five years

Accreditation

These degrees are accredited by the Institution of Mechanical Engineers and the Institution of Engineering Designers.

Entry requirements

MEng

Highers: AAAAA by end of S5 including Mathematics and Physics.

A-levels: A*AA including Mathematics and Physics.

IB: 36 points including Mathematics HL6 and Physics HL6.

BEng

Highers: Entry from S5 – AAAA or AAABB including Mathematics and Physics at grades A/B or B/A.

Entry from S6 – applicants who achieved a minimum of ABBB including Mathematics and Physics at grades A/B or B/A in S5, may receive an offer based on them attaining AAAAAAB by the end of S6. Applicants receiving these offers will be required to study Advanced Highers in relevant subjects.

A-levels: AAB including Mathematics and Physics.

IB: 34 points including Mathematics HL5 and Physics HL5.

BEng students who perform well may transfer to the MEng programme upon completion of years 1, 2 or 3.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Advanced entry

If you have exceptional A-level or Advanced Higher grades it's possible to follow a faster route, which allows you to complete a standard MEng degree in one year less than usual – see www.glasgow.ac.uk/undergraduate/degrees/advancedentry.

Glasgow International College

For international students entry to this programme is supported by courses from Glasgow International College – www.glasgow.ac.uk/gic.

E: eng-teachingoffice@glasgow.ac.uk

W: www.glasgow.ac.uk/ug/productdesignengineering



The city of Glasgow

- The UK's **3rd largest** city and one of the world's **top** student cities (QS Best Student Cities 2012)
- Lively nightlife with more than **700** bars, pubs and nightclubs and **7** cinemas, including the tallest cinema in the world
- More than **20** museums and art galleries, including **Kelvingrove Art Gallery & Museum** and the **Gallery of Modern Art**
- Known as 'dear green place' with over **90** parks and public gardens
- Host of the **MOBO** awards **x 2** plus over **10** different festivals each year
- UK's first **UNESCO City of Music**, host to around **130** music events every week
- **Largest** retail centre in the UK outside London with everything from high street favourites to independent and vintage stores
- **Commonwealth Games** host **2014**
- Excellent sports facilities including wall climbing venues, indoor and outdoor ski slopes and the **Sir Chris Hoy Velodrome**.

'Glasgow is one of Britain's urban gems.'

James Bainbridge, Author,
Lonely Planet's Study Glasgow



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