I am pleased to introduce you to the School of Mechanical, Aerospace and Civil Engineering and hope that you will enjoy finding out more about our undergraduate courses, our facilities, our students and the fantastic career opportunities a degree from The University of Manchester provides.

In this School we offer both BEng and MEng degrees and we have 14 different course options across the three disciplines, including courses with Management and with Industrial Experience, so there is something to suit everyone. We are a friendly, vibrant community of staff and students who come from all over the world to work and study here. The School has outstanding laboratory facilities and our students get to work with world leading academic staff who deliver teaching inspired by cutting edge research.

We also have many student societies, clubs, sports teams and an award winning Peer Assisted Study Support (PASS) scheme which is run by our current students to support our first year undergraduates in their academic studies, and to help them settle in to life in Manchester.

I look forward to receiving your application and welcoming you to our School.
Civil engineers can be involved in designing, building and maintaining towers, tunnels, bridges, dams, harbours, sports stadia, hospitals, airports, roads, railway networks and large structures.

We remember great civilisations throughout history, such as the Romans, who were able to develop building techniques and systems to support life. Today, civilisation relies more than ever on inventive and resourceful engineers to design, build and maintain the sophisticated environment and the infrastructure in which we live.

Infrastructure encompasses everything that supports modern daily life—things like roads, railways and airports, hospitals, access to drinking water and shelter.

Civil engineers help to build a better world—from building bridges that connect communities, to piping clean water to remote communities. They improve the quality of life in our homes, they are needed after earthquakes, during droughts and at times of war. Making a positive difference by helping the local population rebuild or maintain the vital infrastructure that will keep them alive is what civil engineers do.

There’s no telling where this qualification could take you!

Infrastructure is important in maintaining our quality of life, and because it works, we can often take it for granted. But if any parts of our infrastructure fail or are taken away, we very quickly appreciate its value.

Civil engineers shape the world around us. Each time you enter a building, catch a train or cross a road, you are benefiting from civil engineering. Without civil engineers, the world as we know it would not exist. A degree in civil engineering leads to many career opportunities; our graduates are in demand from all sectors of the civil engineering industry, professions, commerce and public services.

The skills taught on our courses enable students to analyse and solve complex problems by a rigorous approach and to communicate the results effectively, meaning that our graduates have an array of excellent transferrable skills, as well as engineering knowledge, which are essential for any career.

Our BEng and MEng courses share a common first two years which means you have the freedom to switch between courses up to the end of your second year depending on academic performance.
Accreditation

All our Civil Engineering courses are accredited by the Joint Board of Moderators which means that your Civil Engineering degree from The University of Manchester can be used to apply for Chartered Engineer status. Chartered Engineer CEng is the highest professional qualification for engineers. The qualification process to become a professional Chartered Engineer has three stages:

Stage 1: The Educational Base (accredited MEng, or accredited BEng with MSc);
Stage 2: Initial Professional Development;
Stage 3: A Professional Review.

In order to apply for chartered engineer status, you must hold an accredited degree to Master’s level—Therefore graduates with an MEng degree fulfil the academic requirements to apply for CEng. Students who graduate with a BEng can then go on to take an accredited MSc course in order to fulfil the academic requirements to apply for CEng status.

Facilities

Our students have access to extensive laboratory space and equipment to use during their studies, including the heavy structures and concrete labs, hydraulics tank, as well as excellent teaching facilities such as high-spec computer cluster, workshop facilities and well-equipped lecture theatres.

Our courses are taught through a mix of lectures, tutorials, example classes and laboratory sessions, supplemented by extensive online resources to help support your study. Our well-equipped laboratories include state-of-the-art facilities such as wind tunnels, laser and explosives testing laboratories, dedicated structural testing, hydraulics and geotechnics laboratories and fire testing facilities, together with extensive workshop and manufacturing capabilities.

Support

All students are assigned an academic adviser—this is a designated member of staff who is here to offer help and guidance throughout your studies. You will be expected to participate in weekly tutorials with your tutor throughout your first year in small tutor groups.

In addition to this, the School has a dedicated Student Welfare Officer who is available to support and help students with any issues or concerns they may have. The University also has a Student Support team who are based on Oxford Road to help with anything from academic advice to timetabling and project submission enquiries.

What our students say

Patrick Oliver Kroell

I had the opportunity to be part of the Peer Assisted Study Scheme (PASS) helping out new students who are unfamiliar with the course.

Jad Zeidan

The school facilities available are outstanding and encourage students to carry out their own study with passion.

Vincent Mulgrew

The University has some very influential lecturers. There is a good student network and sense of community and a campus that encourages you to assist and coach others.

Jifeng Yuan

My advice to new students would be to start work experience early to gain practical engineering knowledge.

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My advice to new students would be to start work experience early to gain practical engineering knowledge.
As the field of engineering is wide and diverse, so are the career opportunities for our graduates. From the conception of new ideas, planning and maintenance, or the managing of complex products and constructions, engineering is an exciting profession, and one in which an individual can take pride.

Our Civil Engineering courses prepare you for professional careers in the built environment sector (including design, construction, local authority and specialist work), as well as in other areas such as project management and finance. The spectrum of jobs our graduates enter includes consultancy, construction, design, manufacturing, management, and many others.

We aim to instil not just knowledge of engineering science, but also a base of practical skills, an understanding of design, comprehension of the commercial world and competence in transferable skills (problem solving, team working, creativity, communications and IT). Our degrees also provide an excellent route for individuals wishing to proceed to postgraduate study or research.

We are top-rated for graduate employment, and any one of our degrees will open up a whole range of opportunities to you. Our courses have a strong practical base, to ensure you leave us with not only the theory behind civil engineering, but also the skills to put theory into practice.

You could help solve some of the biggest global challenges facing humanity, like climate change, maintaining infrastructure, developing new transport system. Or you could create an invention that changes the world.

A range of scholarships and bursaries are available or students who choose to study Civil Engineering at The University of Manchester. Several industrial scholarships are also available once you have started your course.

Further details available from: http://www.mace.manchester.ac.uk/study/undergraduate/scholarships-and-bursaries and, http://www.manchester.ac.uk/study/undergraduate/student-finance

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## Our courses

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Duration</th>
<th>UCAS Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering BEng</td>
<td>3 yrs</td>
<td>H200</td>
</tr>
<tr>
<td>Civil Engineering MEng</td>
<td>4 yrs</td>
<td>H201</td>
</tr>
<tr>
<td>Civil and Structural Engineering MEng</td>
<td>4 yrs</td>
<td>H220</td>
</tr>
<tr>
<td>Civil Engineering (Enterprise) MEng</td>
<td>4 yrs</td>
<td>H204</td>
</tr>
<tr>
<td>Civil Engineering with Industrial Experience MEng</td>
<td>5 yrs</td>
<td>H207</td>
</tr>
</tbody>
</table>

### Civil Engineering (MEng, BEng)

Our Civil Engineering courses cover topics such as structural, fluid and soil mechanics, engineering design, and maths; as well as emerging subjects crucial to the future of society such as climate change; resource usage and management; and intelligent and futureproof infrastructure. The BEng and the first three years of the MEng course share a common syllabus, allowing students to transfer between them (subject to academic performance). The MEng course allows students to spend an additional year studying Civil Engineering and therefore they study more advanced course units and can develop their skills and knowledge even further, which is reflected in the award of a Masters of Engineering (MEng).

### Civil and Structural Engineering (MEng)

This is a four year course leading to a Master of Engineering qualification in Civil and Structural Engineering. During the first two years the course follows the same broad-based topics as the Civil Engineering programme, whilst the emphasis in the later years is on structural theory and design. This degree is particularly aimed at those wishing to become structural engineers, but is also suitable for those aiming at a civil engineering career.

### Civil Engineering (Enterprise) (MEng)

Engineering is not just about technology. It is about people, companies, manufacturing and commerce. Engineering decisions must normally be made within a commercial context and engineers are often found in senior management positions where they are required to be leaders and strategic planners, as well as problem-solvers and designers. Therefore, we also offer our Civil Engineering MEng with Enterprise which is designed for those students wanting to gain a sound engineering background, coupled with studying units in business, finance and project management.

### Civil Engineering with Industrial Experience year (MEng)

Students find an integrated industrial year highly beneficial, both to their university education and subsequent employability. This course offers you the chance to complete a placement year in industry, which would normally be completed after the first three years of the Civil Engineering degree course, ie your fourth year, before the final MEng year. However, a small number of students have opted to organise their industrial experience placement during their third year.

### Example course units for Year 1

#### Semester one
- Design 1
- Structures
- Exploring Enterprise (with Enterprise)
- Hydraulics 1
- Mathematics 1M1
- Sustainability & Built Environment
- Tools for Engineers

#### Semester two
- Civil engineering Practice
- Entrepreneurial Skills (with Enterprise)
- Geotechnics 1
- Materials 1
- Mathematics 1M2
- Mechanics
- Electrical Energy Supply and Circuits

All our courses give you an excellent grounding in the knowledge and experience necessary to prepare you for a variety of careers in engineering, technology, business and management.
## Entry requirements

### English qualifications

<table>
<thead>
<tr>
<th>GCSE or equivalent</th>
<th>Five A-C Grades, including English language, Maths and Physics or Dual Science (We require Grade 4 or above for applicants holding newly reformed GCSEs in England)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELTS</td>
<td>Overall score of 6 with no component less than 5.5</td>
</tr>
<tr>
<td>TOEFL</td>
<td>80 overall with a minimum of 20 in each component</td>
</tr>
</tbody>
</table>

### BEng Civil

<table>
<thead>
<tr>
<th>GCE A Level</th>
<th>AAB in any order, in Mathematics and Physics and one other subject. We accept all subjects as the third A level, apart from General Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC Diploma</td>
<td>Grade A in Mathematics A Level plus DDM or DM in either the National Extended Diploma or the National Standard Diploma respectively</td>
</tr>
<tr>
<td>Welsh Baccalaureate</td>
<td>Grades AAB including Maths and Physics. WB core will be considered in place of third A level</td>
</tr>
<tr>
<td>Scottish Advanced Higher</td>
<td>Grades AAB including Maths and Physics</td>
</tr>
<tr>
<td>Irish Leaving Certificate</td>
<td>Grades H1H1 H2 H2 H2 at Higher/Honours level in the Irish Leaving Certificate, with grades H1H1H2 in Mathematics, Physics and Applied Mathematics</td>
</tr>
<tr>
<td>International Baccalaureate</td>
<td>35 points overall with 6 in Maths and Physics, both at Higher Level, and 5 in English at Standard level</td>
</tr>
</tbody>
</table>

### MEng Civil

<table>
<thead>
<tr>
<th>GCE A Level</th>
<th>AAA in Mathematics and Physics and one other subject. We accept all subjects as the third A level, apart from General Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC Diploma</td>
<td>Grade A in Mathematics A Level plus DDD or DD in either the National Extended Diploma or the National Standard Diploma respectively</td>
</tr>
<tr>
<td>Welsh Baccalaureate</td>
<td>Grades AAA including Maths and Physics. WB core will be considered in place of third A level</td>
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</tr>
<tr>
<td>International Baccalaureate</td>
<td>36 points overall with 6 in Maths and Physics, both at Higher Level, and 5 in English at Standard level</td>
</tr>
</tbody>
</table>
For alternative English qualifications please visit: www.manchester.ac.uk/mace

Applications are made via UCAS www.ucas.com

If you are living in the UK and receive an offer from us, you will be invited to attend a UCAS Visit Day where you can learn more about our course and School and participate in a subject-specific activity. These take place on Wednesday afternoons between November - March.

If you are not able to visit us in person we would encourage you to see our Virtual Open Day to take an online tour around our school www.mace.manchester.ac.uk/study/virtual-open-day

Clubs and societies run by MACE students also organise a range of social functions, as well as an annual careers fair, competitions and sports events.

Societies

Civil Engineering students would generally become members of the Civil and Construction Society, which is a student-led society who arrange relevant site visits and industrial speakers as well as social events. Many other active student societies are run in the School by students, for students. For example: Engineers without Borders, Formula Student team, Robotics Society, UAV Society, as well as Mechanical Engineering Society and Aerospace Society for our other engineering students.

Sports

The University of Manchester provides all students with the opportunity to take part in a huge range of sports, and MACE in particular has a number of sports teams including rugby, netball and football.

Peer-Assisted Support Scheme (PASS) PASS is a student led, student owned scheme, with the purpose of helping first year students with both their academic studies and settling into Manchester. Higher year students are trained as PASS leaders each year to run PASS sessions for first year students. PASS groups meet once a week, giving students the opportunity to ask questions about their course, cover any coursework or tutorial sheets, raise queries about exams, or ask questions about Manchester or the University more generally.

The University of Manchester is committed to helping you have the best possible student experience throughout your degree, and the School of MACE has a dedicated Student Experience Team with this as their aim. We organise a variety of events throughout the year for students, ranging from quizzes to football tournaments, pizza nights to a summer BBQ. We also keep our students up to date with regular newsletters and via our social media channels, and regularly work in conjunction with the Careers Service to provide you with a wide range of employability events, information and opportunities.
Your New Engineering Home

Manchester Engineering Campus Development

Your soon to be new home! A dynamic engineering campus providing you with the next generation learning spaces, creatively planned by award winning architects.

One of the largest construction projects undertaken by a university in the UK

Student consultation groups have taken place in order to understand modern learning behaviours, preferences and styles

A custom made building enabling students to communicate, collaborate and challenge thinking

Sustainability features include low carbon heat, energy generation and intelligent energy controls

New engineering campus reflects our pride in Manchester’s rich academic and civic heritage, while showcasing our ongoing evolution of education and research

16 17

Civil Engineering
Learn without boundaries
Enjoy interdisciplinary, international and entrepreneurial study options outside your course.

Understand the issues that matter
Become ethically, socially and politically informed on some of humanity’s most pressing global issues.

Make a difference
Contribute to and learn from local and global communities through volunteering.

Step up and lead
Gain confidence and experience by assisting and inspiring your peers.

Create your future
Explore countless opportunities for professional career development.

GET STARTED > www.stellify.manchester.ac.uk
This brochure was printed in 2018 for the purposes of the 2019 intake. It has therefore been printed in advance of course starting dates and for this reason, course information may be amended prior to you applying for a place. There are a number of reasons why changes to course information and/or published term dates may need to be made prior to you applying for a place – more details can be found on our website. Prospective students are therefore reminded that they are responsible for ensuring, prior to applying to study, that they review up-to-date course information by searching for the relevant course at:

www.manchester.ac.uk/undergraduate/courses