

MABECS QuickGuides





ALL YOU NEED TO KNOW ABOUT

Chemical Engineering





SPECIALLY CURATED FOR YOU BY





BEFORE WE GO FURTHER...

Who is MABECS

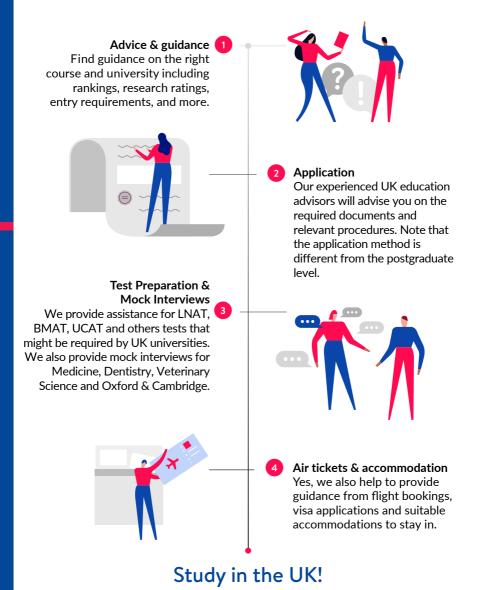
MABECS is Malaysia's most experienced advisory service on UK degrees.

Our service is free of charge.



To find out more about MABECS' history and services, turn to the inside back cover. To reach a MABECS Education Advisor, call us at +603-7956 7655 / +6017-339 7453 or email enquiries@mabecs.com

From enquiry to successful student placement, we take care of it **all**.



CONTENTS

01

GET TO KNOW CHEMICAL ENGINEERING

Introduction	02
Course Organisation	03
Course Content	03



APPLYING FOR CHEMICAL ENGINEERING

How it works	05
Course Codes & Fees	06
Entry Requirements	13
Selectors' Attitude	14
Personal Statement	14



LOOKING AHEAD

Career Path 16

Have a different set of questions about studying in the UK?

Call us* at 03-7956 7655 / +6017-339 7453 to reach us immediately, or email enquiries@mabecs.com if you're the shy type.

*Our Education Advisors have all been educated in the UK with over 10 years of experience in counselling. They help provide first-hand information on UK education as well as student life in the UK.



DISCLAIMER

The MABECS QuickGuides are for reference purposes only.

Course content, entry requirements, and tuition fees could change from time to time. You're advised to check the specific university website for the latest information.

01

GET TO KNOW

CHEMICAL

ENGINEERING

Introduction

Chemical Engineering is about transforming raw materials into valuable products in a safe and cost-effective way. Oil Refining, Pharmaceuticals, Food Processing, Fertiliser Production and Mineral Processing are some examples. Much of modern industry depends on Chemical Engineers.

This booklet is meant to be a starting point in your research into finding which universities with Chemical Engineering degrees will give you the university life and course that suits you well.

There are relatively few universities with these programmes but your choice is still important because there are major differences that you should consider.

The courses included in this booklet are accredited by the Engineering Council UK as indicated on the website of the respective universities. However, you are advised to check the following link http://www.engc.org.uk/education-skills/course-search/acad/ as well as the universities' official website for the latest information.

First, you should consider the degree course structure and options, but do also consider the following factors:

- the opportunity for paid work experience as a part of your course;
- · the fees, location, cost of living and;
- · entry requirements.



Course Organisation

Degree programmes are structured in three different ways:

- Unified Engineering Courses
- Grouped Chemical Engineering Courses
- Specialised Chemical Engineering courses

The broadest category are the Unified Engineering courses. These start with a basic introduction to all the major Engineering disciplines, such as Civil, Mechanical, Electrical, Electronic, Information, etc. Besides allowing you to make your degree and career choice based on some knowledge of Engineering, Unified Engineering gives you a working understanding and the language of all engineers, a considerable asset in a career in Engineering. Only Cambridge and Oxford offer these programmes leading to Chemical Engineering.

Most universities offer several Chemical Engineering degrees with various specialised fields. The degree group share a common first year or two so that you can opt for areas that you find interesting and appropriate. The Cambridge degree is more science oriented, whereas other universities such as Newcastle and Strathclyde place greater emphasis on the commercial aspects, such as Cost Engineering, Process Design, and Process Optimisation. These are often described as process-oriented

Some universities including Manchester and Imperial, have specialised degrees. Although there are always optional modules in later years, allowing you some choice, the degree you enter for is the degree you study throughout.

Course Content

Most degree courses are based on the same subject areas. In the first year, for instance the subjects (except at Unified Engineering universities) are Chemistry, Maths, Fluid Mechanics and Heat Transfer, Engineering Drawing and Design, and Chemical Process Principles and Treatment of Experimental Data. In the final years, there will always be a range of specialist subject options but this choice is best made on the basis of degree level knowledge and understanding, and not as a basis for choosing a particular university.

02

APPLYING FOR CHEMICAL ENGINEERING

How it works

Applications for undergraduate degrees for most of the UK universities go via UCAS. You will need to register and complete the UCAS form, with payment, by the set deadline. Colleges will usually set internal deadlines for their students. With the exception of Oxford and Cambridge, the UCAS deadline for competitive universities is January 14, 2026.

The final deadline to submit a UCAS application is June 30.



Course Codes & Fees

Name of University	Course Title & UCAS Code	Course Duration	Tuition fees (£) per academic year 2025	Entry Requirements	Remarks
University of Aberdeen	MEng Chemical Engineering (H810) MEng Petroleum Engineering (H850)	5 years (Scottish University)	£24,800	A Levels: ABB (AB required in Mathematics, plus at least one from Physics, Design & Technology, Engineering or Chemistry) IB: 34 points including Maths and Physics at HL (6 or above) and English at SL.	The first two years cover general Engineering, with elements of Chemical, Mechanical, Petroleum and Electrical/Electronics, as well as Civil. In the later years you specialise, following
				For entry to Chemical and Petroleum Engineering an SQA Higher or GCE A Level or equivalent qualification in Chemistry is required for entry to year 1, in addition to the general Engineering requirements.	your chosen discipline in greater depth. You do not need to finalise your choice of specialisation until you begin third year.
Aston University	MEng Chemical Engineering (H804)	4 years 5 years (SW)	21,500	A Levels: BBC inc Maths and one other STEM (a) subjects. BCC inc Maths and one other STEM (a) subjects (with an EPQ or Core Maths* at grade B). CCC in Maths and one other STEM (a) subjects (contextual offer) IB: 29 points overall with 5, 5, 4 in HL including Maths and another STEM (a) listed subject.	The MEng (Hons) Chemical Engineering is designed to develop your engineering skills, in the context of a firm grounding in chemistry. To ensure this you share a common first year with chemists. In later years you go on to specialise at a more advanced level in the core engineering topics
University of Bath	MEng Chemical Engineering (H803) MEng Chemical Engineering with Environmental Engineering (H820)	4 years 5 years (SW)	30,500	A Levels: A*AA in three A levels including Chem & Maths. IB: 36 points and 7, 6, 6 in three HL subjects including HL Chemistry and either HL Mathematics.	
University of Birmingham	MEng Chemical Engineering (H810)	4 years 5 years (SW)	31,050	A Levels: A*AA / AAAA to inc A level Maths & Chem or Physics. IB: 7,6,6 at HL, to include Maths and Chem at HL 6	
				with a minimum of 32 points. We will consider SL Maths 7.	

Name of University	Course Title & UCAS Code	Course Duration	Tuition fees (£) per academic year 2025	Entry Requirements	Remarks
University of Bradford	MEng Chemical Engineering (H8X0)	4 years 5 years (SW)	24,456	104 UCAS tariff points. A Levels: BBC to include Maths at min C plus another science subject. IB: to include HL Maths at 5 and an additional HL Science subject plus HL 3 or SL 4 English.	Final year options include: Food & Pharmaceutical Processes Engineering Polymer & Materials Engineering Water & Waste Water Treatment Risk Assessment & Management Oil & Gas Management
University of Cambridge	MEng Chemical Engineering via Engineering (H810) via Natural Sciences (H813)	4 years	41,124	A Levels: A*A*A Maths, Chem & Physics required. IB: 41-42 points, with 776 at HL including HL Maths (Analysis and Approaches), Chem & Physics.	Chemical engineers spend their first year studying either Engineering or Natural Sciences. These routes provide equally good preparation for becoming a chemical engineer, and are taken up by a similar number of students.
University of Chester	MEng Chemical Engineering (51H7)	4 years	14,450	A Levels: BBC (BEng) / BBB (MEng) including B in Maths & Chem. IB: 26 points (BEng) / 30 points (MEng) with 5 in HL Maths and Chem.	
The University of Edinburgh	MEng Chemical Engineering (H804) MEng Engineering (H100)	5 years (Scottis h Univers ity)	36,800	A Levels: AAA-ABB, Maths & Chem at B. GCSEs: English at C or 4, Physic or Science at B or 6. IB: 37 points with 666 at HL - 32 points with 655 at HL, Maths & Chem at 5. SL: Eng & Phy at 5	
Heriot-Watt University	MEng Chemical Engineering (H801)	5 years (Scottish University) 6 years (S/W)	25,008	A-Levels:BBB-AAB. Must include Chemistry & Maths, with one at B. IB: 30 points. Must include Chemistry and Maths, both at HL 5. Year 2 A-Levels: AAB inc Maths & Chem with one at A. Year 2 IB: 34 points (with Maths & Chem HL 6).	Inter-campus transfer between Malaysia & UK possible, for a semester a year or longer.

Name of University	Course Title & UCAS	Course Duration	Tuition fees (£) per	Entry Requirements	Remarks
Oniversity	Code	Duration	academic year 2025		
University of Huddersfield	MEng Chemical Engineering (H810)	4 years 5 years (S/W)	17,600	A Levels: AAB-BBB inc Maths & either Chem or Physics.	The final year of the MEng includes further taught material on advanced aspects of chemical engineering, along with a substantial 40-credit Research Project in which you'll have the chance to learn research skills, drawing on our wideranging research interests including graphene nanomaterials, biorefining, process design and simulation, catalysis and industrial ecology for sustainability.
University of Hull	MEng Chemical Engineering (H811)	4 years 5 years (S/W)	20,000	128 UCAS tariff points. A Levels: ABB to include Maths at B or above. IB: 32 points with 6 in HL Maths and Chem.	Final year options include: Chemical Engineering of Nano-materials Energy Technologies Advanced Process Modelling & Simulation Techniques Computational Fluid Dynamics & Heat Transfer Petroleum & Petrochemical Engineering Electrochemical Engineering & Product Development Energy Generation from Conventional & Renewable Fuels
Lancaster University	MEng Chemical Engineering (H811) MEng Engineering (H102)	4 years	29,820	A Levels: AAA with Maths and a Science: Chem, Physics or Bio. IB: 36 points with 16 points from the best 3 HL subjects including either: Maths HL 6 (either pathway) plus HL 6 in a Physical Science. Maths HL 6 (either pathway) plus SL 6 in two Physical Sciences. Maths SL 7 (Analysis and Approaches) plus HL 6 in a Physical Science.	Our accredited Chemical Engineering programme recognises the broad field of the subject and as such starts with a common first year, which is shared among all our engineering subjects. This is in recognition that Chemical Engineers do not work in isolation and that modern engineering is just as much about effective teamwork and communication, as it is the underlying science.

Name of University	Course Title & UCAS Code	Course Duration	Tuition fees (£) per academic year 2025	Entry Requirements	Remarks
University of Leeds	MEng Chemical Engineering (H800) MEng Chemical and Energy Engineering (H801) MEng Chemical and Materials Engineering (HJ85) MEng Chemical and Nuclear Engineering (H891)	4 years	32,250	A-levels: AAA inc Maths & Physics or Chem. IB: 36 points, with 18 at HL to include 5 in Maths & either Physics or Chem.	The first two years of our chemical engineering degrees share the same set of modules, focusing on the fundamental science and engineering concepts associated with the subject. Not only does this give you a firm foundation for your studies, but it also means you can switch easily between our courses if you choose.
Imperial College London	MEng Chemical Engineering (H801) MEng Chemical with Nuclear Engineering (apply via H801)		43,300	A Levels: A*A*A overall, to inc A* in Chem, A* in Maths & A in Biology, Business Studies, Econs, Further Maths or Physics. IB: 40 points, to inc 7 in Maths at HL, 7 in Chem at HL, 6 in Bio, Business Mgmt, Econs or Physics at HL. Typical offer: 41-42 points	We conduct interviews south-east Asia for our applicants there. Due to the demanding nature of courses, you need to be highly qualified and motivated to study at Imperial. As result, both academic apersonal qualities are taken into account whe we make offers.
London South Bank University	MEng Chemical Engineering (H806) MEng Chemical & Energy Engineering (H808)	4 years 5 years (S/W)	15,900	A Levels: AAB. 136 UCAS points, including Maths and Physical Science subjects (Chemistry is preferred).	The course combines the essentials of chemical engineering with an added flavour of geoscience, exploration and processing to highlight and develop a deep understanding of the energy mix. It will show how oil and gas techniques can be used to harness geothermal energy, develop concepts of carbon dioxide storage in sub-surface environments and inform you on the myriad of renewable energy technologies that are available.

Name of University	Course Title & UCAS Code	Course Duration	Tuition fees (£) per academic year 2025	Entry Requirements	Remarks
University College London	MEng Chemical Engineering (H801)	4 years	,	A Levels: AAA with Maths & Chem required. Another science preferred as third subject, but not essential.	
	MEng Biochemical Engineering (H813)		39,800	IB: 38 with a total of 18 points in three HL subjects to inc grades 6,6 in Maths & Chem, with no score lower than 5. Another science at HL preferred, but not essential.	
Loughborough University	MEng Chemical Engineering (H803)	4 years 5 years (S/W)	29,750	A Levels: AAA including Maths and at least one from Chemistry or Physics IB: 37 (6,6,6 HL) including Maths and nd at least one from Chem or Physics at HL	
The University of Manchester	MEng Chemical Engineering (H801) MEng Chemical Engineering with Energy and Environment (H8F4)	4 years	36,000	A Levels: AAA inc Maths A & either Physics or Chem plus one other academic subject. IB: 36 points inc 6,6,6 at HL inc Maths & Physics or Chem.	Our student design project groups have won the IChemE's Macnab-Lacey Prize three times since its introduction in 2011. The prize is awarded to the student design project which best demonstrates how engineering can contribute to a more sustainable world.
Newcastle University	MEng Chemical Engineering (H813) MEng Chemical Engineering with Bioprocess Engineering (H831) MEng Chemical Engineering with Process Control (H830) MEng Chemical Engineering with Process Control (H830)	4 years	29,850	A Levels: AAB inc Maths & Chem & at least one of Further Maths, Physics, IT or Biology. IB: 34 points with Maths & Chem at HL 6 or above. Physics required at SL 5 or above if not offered at HL.	Written Exams: 40%

Name of University	Course Title & UCAS Code	Course Duration	Tuition fees (£) per academic year 2025	Entry Requirements	Remarks
University of Nottingham	MEng Chemical Engineering (H800) MEng Chemical Engineering with Environmental Engineering (H8H2) MEng Environmental I Engineering (H805)	4 years 5 years (S/W)	30,750	A Levels: AAA including A in Maths and A in one of Chemistry or Physics. IB: 34 points overall or 666 in 3 Higher Level Certificates	We have a common first year across the department that introduces the principle engineering sciences together with the fundamental aspects of process engineering design.
University of Oxford	MEng Engineering Science (H100)	4 years	59,260	A Levels: A*A*A to inc Maths & Physics. The A*s must be in Maths, Physics or Further Maths. IB: 40 (inc core points) with 776 at HL (with 7s in HL Maths & Physics). All candidates must take the Physics Aptitude Test (PAT) as part of their application.	The first two years are devoted to topics which we believe all Engineering undergraduates should study. In the third and fourth years there is scope for specialisation into one of six branche of engineering: Biomedical, Chemical, Civil, Electrical, Information and Mechanical.
University of the West of Scotland	MEng Chemical Engineering (H811)	5 years (Scottish Universit y)	18,000	120 UCAS tariff points for adv entry to BEng. Adv entry to Year 2 Meng is not possible. A Levels: BBC to include Maths & Physics (112 UCAS Tariff points). IB: 28 inc Maths & Chem at HL (Physics also recommended).	
Queen's University Belfast	MEng Chemical Engineering (H802)	4 years 5 years (S/W)	25,300	A Levels: AAA inc Maths & at least one from Chemistry (preferred), Biology, Computer Sci, Digital Tech, Geography, ICT (not Applied ICT), Physics, Software Systems Dev or Tech & Design. IB: 36 points inc 6,6,6 at HL inc Maths & a relevant Science subject (Chem preferred).	A common curriculum in the 1st semester for Chemistry and Chemical Engineering students offers the possibility of transfers between these subjects.

Name of University	Course Title & UCAS Code	Course Duration	Tuition fees (£) per academic year 2025	Entry Requirements	Remarks
The University of Sheffield	MEng Chemical Engineering (H800) MEng General Engineering (H100)	4 years 5 years (S/W)	30,570	A Levels: AAA, inc Maths, a science or tech subject & exc General Studies & Critical Thinking. IB: 36, 6 in HL Maths & a science subject.	Assessment Exams/tests 42% Coursework 46% Practical 12%
The University of Strathclyde	MEng Chemical Engineering (H801) MEng Chemical Engineering (distance learning)	5 years (Scottish Universit y)	29,350	A Levels: Year 2 entry A*AA-AAB (Maths & Chem or Physics). IB: Year 2 entry 38 - 34 (Maths HL6, Chem HL6, Physics HL6)	The Year 4 design project includes masterclasses on safet and risk analysis from and gas representative while MEng final-year classes include options on emerging technologies delivered by a number of highly experienced industrial engineers and scientis
University of Surrey	MEng Chemical Engineering (H803) MEng Chemical and Petroleum Engineering (H813)	4 years 5 years (S/W)	26,000	A Levels: AAA-ABB with Maths & Chem. IB: 35-34 with HL5/SL6 in Maths (Analysis and approaches at HL/SL or Applications and interpretation at HL) & Chem.	
Swansea University	MEng Chemical Engineering (H801)	4 years 5 years (S/W)	24,700	A Levels: AAB-ABB at A level inc Maths. IB: 34 with either 5 at HL (or 6 at SL) "Maths: analysis & approaches", or 5 at HL (or 7 at SL) "Maths: applications & interpretation".	
Teesside University	MEng Chemical Engineering (H810)	4 years 5 years (S/W)	17,000	A Levels: 112-128 UCAS tariff points from any combination of recognised Level 3 qualifications including Maths B. The preferred second subject is Chem, but alternatives can be considered. IB: Award of IB including 5 in HL Maths.	

Entry Requirements

The typical offer level is given in Column 4 of the Course Codes & Fees section of this booklet. Most requirements listed are for MEng entry. Otherwise, the BEng offer level is quoted, but transfer to the MEng programme is always possible with a good level of academic performance at the university.

You should note that universities aim their courses to suit their typical student, so a high score will indicate an initially high level of assumed knowledge and a stronger emphasis on theory.

Scottish universities have 5-year courses leading to the MEng degree, but applicants with strong A-level qualifications may apply for second year entry. Scottish universities will accept Australian and Canadian preuniversity qualifications for entry to the first year, as does Queen's University Belfast. Unless otherwise stated, the entry requirements of Scottish universities listed are for 2nd year entry.

Selectors' Attitude

Your UCAS application is always considered as a whole; taking into account your qualifications, experience, personal statement and reference. Some universities may require applicants to attend interviews.

Universities will look for certain skills and attributes which they believe make an ideal candidate for Chemical Engineering.

Personal Statement

Your personal statement should reflect your academic interests and show why you have chosen the subject. Selectors are looking for applicants who are able to cope with the demands of the course, evidence that they have done some work to pursue their academic interests and have the relevant aptitude and skills for a degree and career in Engineering. Matters like hobbies and non-academic interests can also serve to assist universities in diversifying the cohort of students they admit.

UCAS has implemented a system called the UCAS Similarity Detection Service to verify the authenticity of Personal Statements. If significant amounts of similarities are detected and the Verification staff decides to flag a personal statement, the university and the applicant will be notified via email by UCAS.



03

LOOKING AHEAD

Career Path

Careers in Chemical Engineering are still popular in a developing country like Malaysia. Sectors include Oil & Gas, Food & Beverage, and Pharmaceuticals, among others. Additionally, an Engineering degree is known to open doors to a wide variety of jobs.

After completing an accredited degree, you may register as a Graduate Engineer with the Board of Engineers Malaysia (BEM) and take up 3 years of relevant professional training, before passing a Professional Assessment Examination by the board and thus qualify as a Professional Engineer.

MEng Degree Graduate Registration

Training

Assessment

Professional Status





If all that information is making you feel overwhelmed, don't worry. You're not alone. Countless students have felt the same way and they've found it helpful to consult MABECS for their UK degree applications. For an overview of our services, check out the Inside Front Cover page.

Here is how your MABECS Education Advisor can help you in detail:



BEFORE APPLYING

MABECS provides detailed information on:

- UK universities' environment, fees, and facilities
- course structure, content and specialisation
- entry requirements and university standards
- specific university's research ratings and teaching quality assessments



We can also recommend suitable and relevant universities based on your academic results and preferences.



PRE-DEPARTURE HELP

MABECS provides guidance on:

- visa applications
- accommodation arrangements
- flight bookings



APPLICATION

MABECS provides detailed information on:

- undergraduate degree application explained from start to end
- personal guidance for your Personal Statement
- mock interviews
- monitoring the progress of your application
- providing advice at stages where important decisions need to be made
- being the intermediary (middle person) between you and universities if our assistance is required
- counselling sessions with visiting UK admissions tutors and university representatives
- IELTS registration with the British Council



About Us

MABECS was set up in 1985 to assist students in Malaysia to find suitable places at universities in the United Kingdom.

Since 1985, students we have counselled have successfully enrolled in top UK universities – both at undergraduate and postgraduate levels.

Whether you're an individual student seeking counselling for your UK degree application, or an education institution hoping to achieve the same for your pre-university students, MABECS is here to help.



Visit our website at www.mabecs.com for a quick overview of how MABECS helps students from start to end of their UK degree application process. You'll also find many helpful articles on studying in the UK, including real student stories!

UK degree applications made easy

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UK degree applications made easy.

We take care of everything in your UK degree application with your cooperation - free of charge.



Student-centered

Our strong student-centered approach to counselling, means that we give students the fullest possible information on all available options, to help them make sensible decisions.



Free Consultation

Advice, information and assistance with applications, are given free of charge and our Education Advisors are always ready to sort out any problems that may arise, and to brief you on preparations for travel to the UK.



Accessible

Our friendly multi-racial, open-access office, can be easily reached by public transport, and no appointment is necessary to drop in and browse through the reference library, talk to an Education Advisor, or complete and send an application.



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