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UNIVERSITY OF
ABERDEEN

Undergraduate FAQs

School of Engineering



1. What are the compulsory modules/classes I will be taking in first year?

The School of Engineering at the University of Aberdeen follows a general engineering model, which means all engineering students study the basic underpinning concepts and fundamentals of engineering during their first two years before specialising in one of the following five disciplines in Year 3: Chemical Engineering, Civil Engineering, Electrical and Electronic Engineering, Mechanical Engineering, or Petroleum Engineering.

The following courses are compulsory for all degrees in the School of Engineering in year 1:

- Principles of Electronics
- CAD and Communications in Engineering Practice
- Fundamentals of Engineering Materials
- Engineering Mathematics 1
- Fundamental Engineering Mechanics

The full list of courses taken by students in year 1 and each subsequent year are listed on the prospectus pages for each programme at www.abdn.ac.uk/study or you can refer to the programme structure for each of the undergraduate degrees in engineering at www.abdn.ac.uk/registry/calendar/engineering.php

2. Can I take optional modules/classes?

Students also choose optional courses alongside their core engineering courses. Optional courses are designed to give students a greater breadth of learning and to improve employability by further developing your other skills and knowledge. For example, you can choose courses in Languages, Mathematics, Sciences, Computing, Social Sciences, Management, Arts and Music, subject to normal timetabling restrictions.

3. What is the difference between the BEng and MEng degree?

The Masters of Engineering (MEng) takes five years of study. The Bachelor of Engineering (BEng) degree takes four years of study. Our 5 year MEng programmes are accredited as fully meeting the educational requirements for Chartered Engineer (CEng) registration. Our 4 year BEng programmes are accredited as partially meeting the educational requirements for CEng registration.

It is possible to transfer from one type of degree to another based on academic performance. The academic performance is reviewed at the end of each academic year and students will be notified if they must transfer to another degree or should consider transferring to another degree.

4. What are the advantages of studying engineering at Aberdeen?

As mentioned above, the School of Engineering follows a general engineering model of teaching. The reason we follow this model is because we know that professional engineers don't work in teams consisting of a single discipline. Real engineering projects require multidisciplinary teams of Chemical, Civil, Electrical and Electronic, Mechanical and Petroleum Engineers to work together.

To achieve this effectively, professional engineers must have a mutual understanding of what each discipline does, why they do it, how they do it and how they impact upon one another's activities. Studying engineering at Aberdeen allows you to develop this critical ability from day 1.

Materials, mechanics, thermodynamics, mathematics, design, safety, management, ethics and sustainability: these are amongst the topics and fundamentals which underpin all engineering disciplines. By studying with us, you will learn about these topics in an interdisciplinary environment during the first two years of your degree and then develop these skills further when you specialise in your chosen discipline in year 3.

A further benefit of our general engineering approach is that, regardless of which degree you register for, we can help you to choose your optional courses to keep your honours degree options open. This gives you time in which to experience a bit of everything and do your research before truly deciding which engineering discipline is the one for you.

5. What are the careers prospects for Aberdeen engineering graduates?

90% of our students go on to high-skilled occupations after graduating, according to respondents to the Graduate Outcomes Survey 2018/19.

The general engineering structure in the first two years and the discipline specific courses covered in the honours years when combined with the graduate attributes (e.g. teamwork, communication skills, IT skills, etc.) that our courses provide make University of Aberdeen engineering graduates highly sought after across a wide range of industry sectors.

6. Should I chose Aberdeen even if I'm not interested in working in oil and gas?

Yes! Although we are based in the “Energy Capital of Europe”, studying engineering at Aberdeen University is not about oil and gas. All of our degree programmes provide students with deep understanding and applications of fundamental engineering and design concepts that are applicable and relevant to all engineering industries/sectors.

Our graduates go on to work across a wide range of industry sectors, including oil and gas, but also, renewable energy, pharmaceuticals, construction, automotive as well as finance and insurance, telecommunication, power generation, etc.



7. What is the balance between practical/design work and lectures?

- 1st year: 3 afternoons/week (6 hrs/week) of practical/design plus about 12 hours/week of lectures and tutorials.
- 2nd year: 3 mornings/week (9 hrs/week) of practical/design plus about 12 hours/week of lectures and tutorials.
- 3rd year: 1 afternoon/week (3 hrs/week) of practical work, plus 3hrs/week of design, plus about 14 hours/week of lectures and tutorials.
- 4th and 5th years: few lab practicals, mainly lectures and group design exercises.

8. How much design/lab/project work is there throughout the programme?

Students in 1st, 2nd and 3rd year have typically 2-3 mornings or afternoons per week on design/laboratory work. In 4th year, students undertake an individual project, which accounts for 37.5% (for MEng) and 25% (for BEng) of the workload for the year.

Engineering design features across all years, with the level of complexity in the design increasing in later years. BEng do a major integrated group design in year 4, while for MEng students in 5th year, 50% of the second half-session is devoted to an interdisciplinary group design project, often based on an industrial problem. Societal and environmental impacts/considerations are considered in all the design projects. A number of the design projects are led and supervised by practicing engineers from industry.

9. What are the typical first year class sizes like?

In the first year large lecture class sizes are usually the norm but students are split up into smaller groups for tutorials, laboratory and design work. In honours years, especially in 4th year, individual project requires one-to-one meetings with the supervisor (academic staff member).

In addition, each student will also get a personal tutor, who is a member of academic staff who will be available to you for support and guidance throughout your studies.

10. Are there work placements available and are they built into the degree?

The School has no formal arrangements for the entire student cohort to study in industry, but runs an optional course in 2nd year, called "Engineering Work Experience". This course has students working in small groups on Industry-based projects during term time with a variety of Industry Partners. It should be noted that student enrolment may be limited depending on the number of projects being offered by our partners and by the demand from students to do this course.

In addition, the School undertakes a large number of projects in conjunction with industry and there is potential for students to get involved in these through project work. The university's Careers Office provides information on industry placement related vacancies and also provides support to students on CV preparation and interview skills.

11. Does the School offer summer/industrial placements?

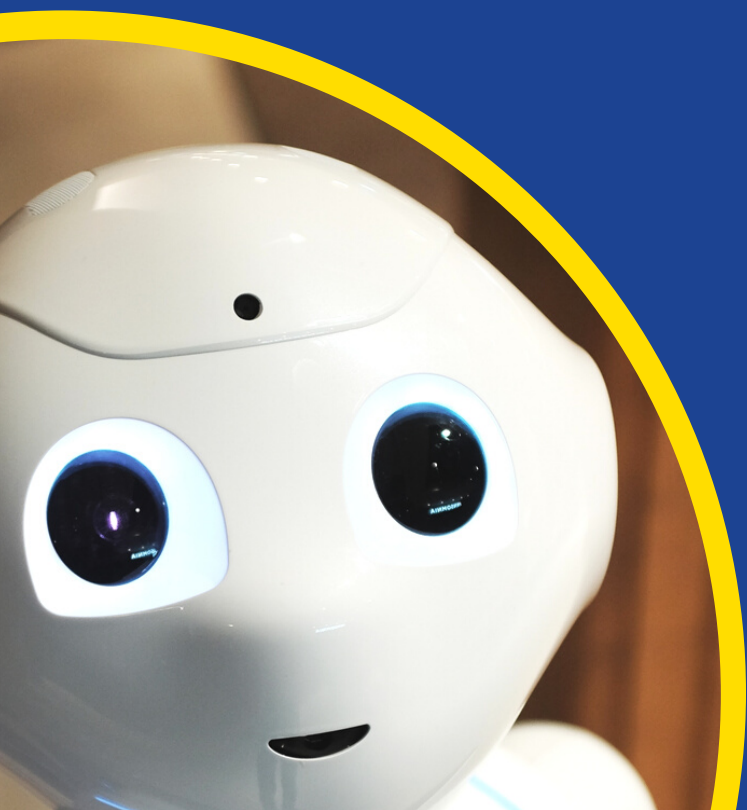
We have many industrial contacts and companies that sponsor students and offer bursaries/scholarships. For more information please visit www.abdn.ac.uk/funding

Our students have undertaken industrial placements across a broad spectrum of industries with a variety of companies, including: Aker Solutions, Chevron, Technip, Kongsberg, Fugro, Chap Group, Atkins, European Space Research and Technology Centre (ESTEC), James Hutton Institute, EADS UK, French Centre for Space Studies (CNES), GSK, Unilever, Procter & Gamble, Mondelez.

The University Careers Office provides assistance and guidance on how to apply for summer placement/internships.

12. How are my modules/classes assessed? Exam, essays, in-class work?

The main method of assessment is examinations in December and May. For a number of courses the pressure of examinations is taken off by the use of continuous assessment. Laboratory reports, presentations and other coursework are submitted and marked individually throughout the year. Class tests are also used in first and second years.



13. Are there any societies which would be good to join? E.g. societies that are for those studying my degree.

There are a number of societies related to Engineering, including TAU Racing Society, the University of Aberdeen's Formula Student team. Every year, the team designs and builds a single seat racecar to compete in the IMechE Formula Student competition.

PrototAU similarly designs and manufactures a hydrogen-powered prototype vehicle to compete in the annual Shell Eco-marathon. The team consists of 5 sub-teams which engineers from all disciplines can join.

Other engineering-related societies include the Aerospace Engineering Society, the Society of Petroleum Engineers, the Chemical Engineering Society, Energy Society, Civil Engineering Society, and the Electrical & Electronic Engineering Society.

Check out the AUSA website www.ausa.org.uk/ for a full list of societies.

14. Can I study abroad with this degree? Where can I go?

Opportunities exist for students to do study abroad at one of our overseas partner institutions as part of their degree either for a whole year or for one half-session (normally in the second year). Year 4 students can also go abroad for their individual research projects. We have partner institutions in Hong Kong, Japan, China, Canada, USA, Singapore, Mexico, Australia, Germany, Spain and France.

For more details about Study Abroad university website:

www.abdn.ac.uk/study/undergraduate/international-exchange-programme-368.php

Contact us

If you want to find out more about the School of Engineering please visit:

 www.abdn.ac.uk/engineering

 www.facebook.com/AbdnEngineering

If you would like more general information on studying at the University of Aberdeen, visit abdn.ac.uk/study, email: study@abdn.ac.uk or call +44 (0)1224 272090

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