Science and Engineering Foundation Studies (SEFS) Programme

The Science and Engineering Foundation Studies programme helps a variety of students who want to study a science or engineering degree at Loughborough, but who have arrived at this decision via an unconventional route.

The programme is a foundation year which gives you the fundamental skills needed to continue onto one of our science or engineering degrees whilst becoming a fully fledged Loughborough student.

Completing a foundation year can be a real attribute to your overall degree success. It not only opens doors to courses that may have previously looked closed, but also provides a sound base on which to establish a successful academic career. Many who have completed the foundation year have also said how beneficial it was to them in supporting their transition into University life.

This brochure will provide you with all the information you need to find out if this programme is right for you, if however you have any other questions please do not hesitate to contact us: sefs@lboro.ac.uk

Why Should I Choose a Foundation Year?

- Loughborough is based on a single-site campus meaning all your classes are in one location
- The programme draws on expertise from across a number of departments and schools ensuring you are prepared thoroughly for undergraduate level study
- The course is fully supported by designated members of staff who are highly experienced and knowledgeable about the foundation year and University
- The programme provides a great opportunity for integration into undergraduate student life at Loughborough before even beginning your degree
- Foundation students can take advantage of the facilities, clubs, societies and other activities available
- Guaranteed entry onto the undergraduate course you have chosen upon meeting the relevant requirements
- Bursaries are available to provide financial assistance based on household income

For more information please see our website.
www.lboro.ac.uk/sefs
The University

When choosing to go to university there is more to the decision than just which course to do. At Loughborough we provide a range of services, activities and support to make your life here as enjoyable and rewarding as possible. Below are details on some of these offerings; more comprehensive information can be found in our prospectus and on our website.

Single-Site Campus

The University is based on a superb 437 acre single-site campus in the heart of England. With over 16,000 students from over 100 countries worldwide, Loughborough boasts a lively and supportive environment with a strong sense of identity and community.

Loughborough’s Location

The University is only one mile away from the M1 motorway and has a regular bus service to and from the town and Loughborough train station. Direct trains to London leave regularly, arriving at London St Pancras International in only 90 minutes.

Enhancing Your Employment Prospects

Loughborough prides itself on being able to provide a number of opportunities to enhance your employability and career prospects. Opportunities include year-long work placements, study or work placements abroad, foreign language classes and entrepreneurial support through our Student and Graduate Enterprise Team.

Accommodation

All prospective students who make Loughborough their firm choice, and apply for a room before the end of July, will be guaranteed a room in our hall accommodation. Over 5,600 students live in University halls at Loughborough. They are a great place to meet new friends with each of the halls offering different accommodation to suit all budgets and tastes.

Support

The University provides a wide range of support for all its students. Services available include, the University Library, Careers and Employability Centre, Student Support Centre, plus many more. More details on specific support for foundation students is available on page 10.

Life at Loughborough

Loughborough is a really great place to live. The town and campus provide everything that you could ever need or want. There are a wide range of national chain stores and supermarkets, as well as locally owned boutiques. Its central location in the UK also means that getting to Nottingham or Leicester is only a 20 minute journey by train.

From the award-winning Students’ Union to the University Arts programme, there is something to suit everyone. With 52 sports clubs, over 60 societies and a wide range of volunteering and charity events to get involved in, you will never have to worry about filling your free time.

Visit our YouTube channel at www.youtube.com/lborouniversity

Watch these videos and more on our YouTube channel

See what Becca says about Loughborough's opportunities

See what Eti says about living in Loughborough

See what Michael says about entertainment and activities at Loughborough

Approximate travelling distances by road from Loughborough

Leicester 12 miles (19 km)   London 110 miles (177 km)
Nottingham 15 miles (24 km)   Cardiff 156 miles (251 km)
Birmingham 38 miles (61 km)   Edinburgh 295 miles (474 km)
Manchester 75 miles (121 km)   Dover 60 miles (96 km)
Liverpool 30 miles (48 km)   Exeter 120 miles (193 km)
Edinburgh 295 miles (474 km)   Southampton 180 miles (290 km)

In the heart of the UK, at the centre of it all

Mileage Chart
Our Courses

Studying a science or engineering degree at Loughborough provides you with a great start to a career in many different industries worldwide. With our highly respected reputation for teaching and research, our graduates are often approached by major companies seeking the best graduates.

Our stimulating and supportive learning environment, combined with our world leading staff expertise, provides students with the tools to become successful engineers and scientists. Industrial collaborations and partnerships ensure that both our teaching and research are at the cutting edge, ready to respond to the real life scenarios that face us all.

Studying a foundation year places you securely on the path to a successful science or engineering career, even when your current situation may not have immediately led you to undergraduate level study.

Science at Loughborough

Science is an important and integral part of everyday life. From the food that we eat, to the mobile technology that we use daily, science and its ever-expanding developments impact upon our lives at even the minutest level.

The courses available at Loughborough, which include the foundation year, cover a number of scientific areas including:

- Chemistry
- Computer Science
- Mathematics
- Physics

A complete list of all courses available, including details of the application process, can be found on our website.

Engineering at Loughborough

Engineering is an extensive discipline with many real life applications from designing aircraft, to creating greener fuels. Studying an engineering degree at Loughborough places you with some of the best in the country, giving you a fantastic opportunity to develop your career at the highest level.

The courses available at Loughborough, which include the foundation year, cover a number of engineering fields:

- Aeronautical Engineering
- Automotive Engineering
- Chemical Engineering
- Civil Engineering
- Electronic and Electrical Engineering
- Manufacturing Engineering
- Materials Engineering
- Mechanical Engineering
- Product Design Engineering
- Systems Engineering

Finance Packages and Scholarships

Generous financial packages are available to support foundation students, based on household income. Please see our website for specific details, including what is on offer and how to apply.

A number of progression scholarships are also awarded to students after their completion of the foundation year. These are awarded in recognition of academic success.

Career Prospects

Previous foundation year students, after graduation, have gone into jobs in a range of national and international companies including the following:

- Race Engineer with Ferrari (Mechanical Engineering with a foundation year)
- Patent Attorney for Potter Clarkson LLP (Medicinal and Pharmaceutical Chemistry with a foundation year)
- Business Development Director with Signalling Solutions Ltd (Civil Engineering with a foundation year)
- AML Technologies (Chemical Engineering with a foundation year)
- Senior Process Engineer with the Ford Motor Company (Materials Engineering with a foundation year)
Applying for Your Place

Eligibility - Who Can Apply?

- Students who are eligible for this programme include:
  - Those wishing to study a science or engineering degree without the appropriate background
  - International students with good Year 12 qualifications and a minimum of IELTS 6.5
  - Mature students returning to education
  - Those who did not meet their expected entrance requirements due to illness or other adverse situations
  - Students with alternative backgrounds and qualifications

Applications are treated on a case by case basis and a number of other personal situations may also be considered. Please contact us for more information.

Entry Requirements

Offers are usually made based on A-level and other qualification results. All applications are considered on a case by case basis, therefore entry requirements may differ between applicants. To find out if you have the necessary qualifications to enrol on our foundation year, please contact the SEFS Office directly. A general guide to entry requirements for each subject area is given on our website.

www.lboro.ac.uk/sefs/entryrequirements

Application Process

It is important not only to check that you meet the criteria for entry, but that you also decide on the degree course that you will eventually study after successfully completing your foundation year.

A range of degree courses at Loughborough offer a foundation year option. Depending on the course chosen a different UCAS code is used to make your application. Full details of what courses are available, including relevant UCAS codes, are available on our website.

- Check if you are eligible for the programme (see page 6 for more details)
- Choose the course that you would like to apply for (please see our website)
- Contact the relevant admission tutor for the course you have chosen to discuss your application – please see our website for contact details: www.lboro.ac.uk/sefs/admissioncontacts
- Apply for a place on the course via UCAS using the correct code as indicated on our website
- When writing your personal statement as part of your UCAS application, please state clearly which undergraduate degree course you wish to study after completing the foundation year

Science and Engineering Foundation Studies

The areas in which we offer foundation courses include:

- Aeronautical Engineering
- Automotive Engineering
- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Science
- Electronic and Electrical Engineering
- Manufacturing Engineering
- Materials Engineering
- Mathematics
- Mechanical Engineering
- Physics
- Product Design Engineering
- Systems Engineering
Foundation Year Structure

Academic Year
The academic year usually begins at the start of October and finishes the following June. The year is split into two semesters, each 15 weeks in length, with the same format:

weeks 1 – 11: new material learning and coursework
week 12: revision week
week 13 – 15: examinations

There are a number of University holidays during these two semesters, more details are available on our website:

www.lboro.ac.uk/student/enquiries/termdates

Your Week
Although this will depend upon your final module choices, you will typically have about 18 hours a week of contact time with our highly experienced staff. This contact time may include a variety of tutorials (smaller classes), lectures (larger classes), workshops and laboratory classes. Attendance at all sessions is compulsory for successful completion of the year.

It is expected that for every hour you are in a structured class, you should spend two hours of your own time researching, writing up, learning work or doing set questions etc.

Module Choices
Modules are a unit of teaching and learning on a specific subject. Each of the subject modules you will complete is worth a number of credits which are added up to equal the 60 credits that you must successfully achieve each semester. All of our modules are worth 10 – 15 credits each. You must complete 120 credits during the foundation year, which will be made up from a variety of compulsory modules and optional modules related to the undergraduate degree you have decided to study after your foundation year.

Typical Modules:
- Applicable Mathematics 1 & 2
- Basic Physics and Materials
- Learning and Communication Skills
- Foundations of Physical Chemistry
- Introduction to Programming 1
- Business Skills for Engineers and Scientists
- Chemical Methods

Further details on exactly which modules each academic department requires you to take during your foundation year is available on our website at:

www.lboro.ac.uk/sefs/modules

Assessment
Modules are assessed by a combination of written exams and/or coursework assignments. Some modules are continually assessed throughout the year. Typical coursework assignments include:

- Laboratory reports
- Essays
- Poster presentations
- Assessed tutorials
- Workshops
- Peer review (review fellow students’ performance)
- Dissertations (extended essays)

Progression Requirements
As well as specific module preferences, each department has different minimum entry requirement levels that you must achieve during your foundation year to enable you to progress to Year 1 of your undergraduate degree. For more details on what these are please visit our website:

www.lboro.ac.uk/sefs/progression
At Loughborough we pride ourselves on providing dedicated support for all our students. Foundation students specifically benefit from the support available through the SEFS team.

Their insight and knowledge on the area provides expertise that is second to none and very useful in supporting you from initial enquiry to completion of your studies. If you have any questions or queries do not hesitate to get in touch with them.

sefs@lboro.ac.uk

Specific areas of student support, found elsewhere at the University, that have been very useful to our students in past include:

The Mathematics Learning Support Centre – this service offers a range of mathematics and statistics help, including one-to-one drop in sessions and workbooks to improve learning.

mlsc.lboro.ac.uk

Student Support Centre – this service is especially useful for international students in providing English language support, as well as providing advice for all students on a number of other issues.

www.lboro.ac.uk/service/studentsupportcentre

Counselling and Disability Service – this service offers support for students with a disability, learning differences or medical condition. As part of its service, the Centre provides specialist support for those with dyslexia, dyspraxia and dyscalculia.

www.lboro.ac.uk/services/cds

For further information on all the support services we provide please see our prospectus. We also have a number of student videos about the support services. See opposite or visit www.youtube.com/lborouniversity

Student Life:
What our students say

Ollie Preedy, BSc Chemistry

“As I did arts based subjects I did not have suitable A-Levels to progress onto the BSc Chemistry course, therefore in order to secure a place I was required to do the foundation year. The foundation year was extremely enjoyable and the skills that I have learnt have been invaluable. As the modules are taught by the lecturers, some of the content had already been covered upon progressing to the BSc course. It was a great way to make friends and meant that when starting the BSc course I was already settled in at university, which made concentrating on study easier.”

Tom Johnson, BEng Aeronautical Engineering

“I enrolled onto the SEFS course at Loughborough University as a mature student. I had just finished a six year stint with the British Armed Forces. I initially found it hard to work at the required pace, as I had not studied some of the required subjects for nine years. The lecturers and academic help centres (i.e. Mathematics Learning Support Centre) helped immensely with my learning for which I am grateful. I remember school being a bore of apparently boring equations and writing. The SEFS staff explained the relevance of each topic we covered, and made the subjects thoroughly interesting to the point where I found myself reading additional material on quantum mechanics and space. I thank SEFS for an amazing start, and I thank Loughborough for providing me with an interesting and exciting learning experience, which I regard as a lifelong gift.”

Lydia Wallsworth, BSc Physics and Management

“During my A-Level exam period I was extremely ill in hospital. This meant I was unable to take many of my modules and my overall grades dropped significantly. I took a gap year to recover medically and then applied to Loughborough University for the Science and Engineering Foundation Programme (SEFS). The SEFS team were fantastic and gave me the opportunity to prove myself. The course has been a fantastic opportunity to build back up to full-time education and I would recommend it to anyone. I will be graduating in the summer but have already been able to gain a place with the Thales UK graduate programme, starting in July. This programme has an extremely high number of applicants and I believe that the SEFS programme and my experience at Loughborough has been key to my successful application.”

Gaukhar Massabayeva, BEng Electronic and Computer Systems Engineering

“The choice to do a foundation year was definitely one of the best decisions of my life. During the year I have been able to get a better understanding of what engineering is in general, as well as making sure that Electrical Engineering is exactly what I need to do. Moreover, the foundation year not only involves studying, but is also fun. It has helped me to make friends with students from different countries and learn more about the world. As an international student I feel very welcome on the course. The uncertainty I felt in the beginning went very quickly as I found more and more friends amongst course mates.”

Lydia Wallsworth, BSc Physics and Management

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