

Engineering and Natural Built Environment

School and College
Outreach Offer

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Engineering and Natural Built Environment

Sheffield Hallam University's School of Engineering and Natural Built Environment offers hands-on, industry-focused courses in our cutting-edge £11 million Hertha Ayrton STEM Centre. Students gain practical experience with tools like flight simulators, robotics labs, and wind tunnels, preparing them for careers in Aerospace, Automotive, Chemical, Electrical, and Mechanical Engineering, as well as construction, surveying, and physics.

With strong industry partnerships, including Rolls-Royce and Network Rail, and accredited courses, our graduates are highly employable. We are committed to shaping the engineers and built environment professionals of tomorrow, equipping them to design and shape the world.



Construction

Our Construction courses prepare students for careers in shaping the built environment. Students learn from industry experts and work on real-world projects, with opportunities for placements to gain hands-on experience. Alongside earning an accredited qualification, they will develop practical, transferable skills that enhance their employability and career prospects.

Future career pathways include:

- Project management (client or consultancy)
- Construction management

Quantity Surveying

Our Quantity Surveying course prepares students to manage and control construction projects to the highest standard. With a focus on practical experience and industry connections, this course is highly regarded by employers. Accredited by RICS, CIOB, and other international bodies, it offers excellent career prospects in quantity surveying and commercial management.

Future career pathways include:

- Professional consultancy practice
- Local authorities

Building surveying

Our Building Surveying course equips students with the skills to refurbish existing buildings and develop new ones with an environmental focus. They will gain practical knowledge in areas like building pathology, construction technology, conservation, and project management. Accredited by the Royal Institution of Chartered Surveyors (RICS) and the Chartered Institute of Building (CIOB), this course prepares students for a dynamic career in building surveying.

Future Career Pathways Include:

- Building control
- Property development

Construction project management

Our Construction Project Management course equips students to lead and manage projects in a digital, sustainable, and global era. Students gain hands-on experience with the latest industry technology and techniques. Accredited by RICS and CIOB, this course prepares students for Chartered status and a successful career in shaping the built environment.

Future career pathways include:

- Project management
- Site management and logistics

Physics

Our Physics course at Sheffield Hallam University combines hands-on exploration with real-world applications of core physics principles. Accredited by the Institute of Physics, it offers personalised support, expert teaching, and opportunities to collaborate with leading researchers. This course prepares students for careers in research, data analysis, and aerospace science.

Future career pathways include:

- Technology consultancy
- Academic research

Mechanical Engineering

Our Mechanical Engineering course equips students with state-of-the-art scientific knowledge, practical experience, and professional skills to tackle future challenges in the industry. With a focus on mechanical science, design, systems, and sustainable engineering practices, this course prepares students for diverse and rewarding engineering roles, enabling them to create innovative solutions across various sectors.

Future career pathways include:

- Mechanical design
- Manufacturing and production

Mechatronics and Robotics

Our Mechatronics and Robotics course equips students with the technical knowledge and professional skills to design and integrate advanced systems across mechanical, electrical, and software components. With a focus on solving real-world industrial challenges, this course will develop and build students professional engineering skills to help them progress towards recognition as an accredited engineer with the relevant professional engineering institution.

Future career pathways include:

- Automation and control
- Robotics

Automotive Engineering

Our Automotive Engineering course prepares students to develop sustainable vehicle technologies and create future-focused solutions for the industry. With a strong emphasis on practical experience and innovation, this course meets the academic benchmark for registration as an Incorporated Engineer (IEng), offering excellent career prospects in automotive engineering and beyond.

Future career pathways include:

- Manufacturing
- Design research and development

Electrical Engineering

Our Electrical Engineering course equips students with the skills and knowledge to excel in electrical and electronic engineering, powering the smart world of tomorrow. With a focus on practical experience and innovation, this course is accredited by the Institution of Engineering and Technology (IET), offering excellent career prospects and opportunities for further academic study.

Future career pathways include:

- Electrical engineering – supply and distribution
- Electronic engineering – design, development and test

Aerospace Engineering

Our Aerospace Engineering course prepares students to become the next generation of engineers, equipping them with the scientific knowledge and practical skills needed to tackle challenges in air and space transportation. This course meets the academic benchmark requirements for registration as an Incorporated Engineer (IEng), providing excellent career prospects in the aerospace sector.

Future career pathways include:

- The aerospace industry
- Civil and military aviation

Chemical Engineering


Our Chemical Engineering course develops technical knowledge and professional skills through hands-on projects, preparing students for careers in green and sustainable industries. With practical laboratory sessions and site visits to chemical and process plants, students gain insights into how chemical engineers design systems and consider their broader societal impact.

Future career pathways include:

- Project engineering
- Sustainability consultancy
- Process improvement



EXAMPLE TASTER DAY

Timings	Session
<p>10:00</p>  <p>14:00</p>	Welcome
	Engineering and Natural Built Environment Overview Talk
	Course workshop in a Engineering and Natural Built Environment subject area of Your Choice
	Campus tour
	Lunch
	Course workshop in a Engineering and Natural Built Environment subject area of Your Choice
	Closing and evaluations

Mix and match course workshops in Engineering and Natural Built Environment subject areas of your choice



HE Talks and Workshops

Sheffield Hallam University offer talks and workshops to support students to make an informed decision regarding higher education. Below is an overview of what schools and colleges can access, these can be stand alone sessions or incorporated into a subject taster day.

TALKS

Our talks, tailored for Y12, Y13, and mature students, can be delivered either in classrooms or assembly sessions.

SHOULD I GO
TO
UNIVERSITY?

SHOULD I GO TO
UNIVERSITY AS A
MATURE LEARNER?

HOW DO I
APPLY FOR
UNIVERSITY?

CAN I AFFORD
TO GO TO
UNIVERSITY?

WHAT IS A
DEGREE
APPRENTICESHIP?

WHAT IS IT LIKE BEING
A STUDENT AT
SHEFFIELD HALLAM
UNIVERSITY?

WORKSHOPS

Designed for Y12 and Y13 students. Suitable for classroom delivery with a maximum of 30 students. Access to table-top desk space is required.

WHICH
COURSE
SHOULD I DO?

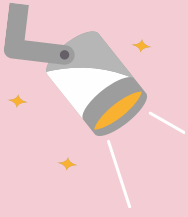
FEELING
OVERWHELMED BY
YOUR STUDIES?

WHAT MAKES A
GOOD PERSONAL
STATEMENT?

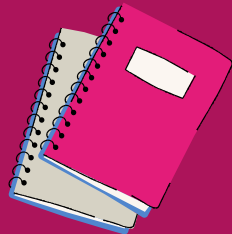
HOW DO I
BUDGET AT
UNIVERSITY?

HOW DO I APPLY
FOR A DEGREE
APPRENTICESHIP?

AM I
UNIVERSITY
READY?



WE RECOMMEND THE FOLLOWING TIMELINE TO BOOK IN OUR OUTREACH ACTIVITIES



NOV - DEC

Talk: 'What is a Degree Apprenticeship?' Delivered assembly style to unlimited student numbers.

Workshop: 'How do I apply for a Degree Apprenticeship?' Typically classroom based and limited to 30 students.



APR - MAY

Talk - 'What is it like being a student at Sheffield Hallam University?' Delivered assembly style to unlimited student numbers.

Workshop - 'Am I University ready?' Typically classroom based and limited to 30 students.

Talk: 'Feeling overwhelmed by your studies?'

SEPT - OCT

Book a meeting

Talk: 'Applying to University.' Delivered assembly style to unlimited student numbers.

Workshop: 'What does a good personal statement look like?' Typically classroom based and limited to 30 students.

On Campus visit: a great opportunity for your students to experience our bespoke Uni Insight Day.



JAN - MAR

Talk: 'Can I afford to go to University?' Delivered assembly style to unlimited student numbers.

Workshop: 'How do I budget for University?' Typically classroom based and limited to 30 students.



JUNE - JULY

Book a meeting - This is the perfect way to review activities that have been delivered and book in talks and workshops for the next academic year.

Access Support at Hallam



SHU Progress

SHU Progress provides support for applicants whose personal circumstances might mean that there are barriers to going to university.

The scheme provides additional support in the year of application and throughout the application process, including the transition to becoming a university student.

How to join

In order to join the scheme, students must be nominated by a professional (such as a teacher, social worker, support worker, etc.) who knows the applicant and their background. You can find the nomination form, as well as further details on eligible groups and the support on offer, by scanning the QR code. Alternatively, visit shu.ac.uk/shuprogress

If you have any questions, you can email the team at:

SHU-Progress@shu.ac.uk

or call **0114 225 4777**



Black British Applicant Support

As a university we recognise the additional barriers that many prospective students face when pursuing higher education. As part of the response to this, our Access team also provide additional support for black British applicants, with tailored support throughout the application and transition process.

For more information, you can email the team at **access@shu.ac.uk**



sclo@shu.ac.uk



shu.ac.uk/sclo



[@shuoutreach](https://www.instagram.com/shuoutreach)



Sheffield Hallam
University Outreach Team