

Engineering Fundamentals

Learn for free, in your own time and at your own pace

The Faculty of Engineering at Strathclyde is delighted to offer a newly developed online course in Engineering Fundamentals for launch 25th October 2021.

This course will be taught exclusively online and is fully funded through the Scottish Funding Council (SFC), which enables us to offer it free of charge to learners who are domiciled in Scotland and who can apply [here](#) to enrol. If you are not domiciled in Scotland please contact eng-upskilling@strath.ac.uk to discuss how you might still avail of the course and what options are available to you.

The course aims to provide an insight into studying engineering and an opportunity to develop skills relevant across different engineering disciplines. Combining online materials developed by the highly acclaimed departments of Mechanical and Aerospace Engineering, Electronic and Electrical Engineering, Design Manufacturing and Engineering Management and Civil and Environmental Engineering the course aims to contextualise what it means to be an engineer, the impact engineers have on the industry and environment around them and seeks to nurture and develop engineering habits of mind.

There will be 4 main sections covering generic engineering skills relevant across a broad range of engineering disciplines:

1

Industry and the Engineer

– industry, productivity, project planning, process optimisation and supply chains

2

Engineering Mechanics

– acceleration, velocity, kinematics, structured problem solving and free body diagrams

3

Fundamentals of Electronic and Electrical Engineering – charge, current, energy & power, Kirchoff's Laws, DC circuits, digital analysis

4

Introduction to Engineering Materials – properties of engineering materials, selection of materials, sustainability and environmental impact of material

Delivery: This module is delivered online and flexibly running from 25th October 2021 – 25th March 2022. You can start and end on any date in between, learning at your own pace in your own time. The course will be taught exclusively online through a blend of online lectures and tutorials and there will be online quizzes to complete and upon completion you will receive a certificate from the University of Strathclyde. You can attempt them any number of times and there will be online tutor support to help you.

This course is suitable for:

- Senior school leavers planning to/interested in studying Engineering at college or University
- Anyone thinking about an Engineering Apprenticeship/ currently undertaking an Apprenticeship.
- Anyone interested in a Graduate Apprenticeship
- Anyone thinking about or returning to a career in Engineering

Credit Value and Pre-requisites: This course is worth 10 credits at SCQF Level 7. To be eligible you will have Nat 5 or Higher Maths/Physics or equivalent qualification/experience.

How to apply: For Scottish domiciled applicants you can register directly [here](#). For anyone out with Scotland please get in touch at eng-upskilling@strath.ac.uk to hear about how you can register for the course.