Physics for Engineers

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

The Faculty of Engineering at Strathclyde is delighted to offer a unique course, Physics for Engineers, launching from 24th April 2023. <u>Apply Now!</u>

This course will be taught exclusively online and is fully funded through the Scottish Funding Council (SFC), together with support from The Allan Glen's Endowment Scholarship Trust, which enables us to offer it free of charge to learners who are currently living in Scotland. If you are not domiciled in Scotland, please contact <u>eng-upskilling@strath.ac.uk</u> to discuss what options are available to you.

The course aims to provide an understanding of physics and investigate the applications of physics in the context of engineering. The course focuses on physics topics relevant to a range of engineering disciplines and aims to develop a solid foundation of physics applicable to common engineering problems. The course encourages analytical thinking, solving problematic situations and making reasoned evaluations.

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



Scalar and Vector Quantities

 vector definition, vector addition, resultant vectors, vector decomposition to rectangular components.

Equations of motion

 definition of displacement, velocity and acceleration; derivation of kinematic relationships and describe motion using graphical or tabular representations.

Force, Energy and Power

 – unbalanced forces and equilibrium, free-body diagrams and moments applied to simple beams.

Electronic and Electrical Fundamentals – alternating and direct current, potential difference, resistance, capacitance and practical voltage sources.

THE QUEEN'S ANNIVERSARY PRIZES 2019 & 2021 For Higher and Further Education UNIVERSITY OF THE YEAR 2012 & 2019 Times Higher Education SCOTTICH UNIVERSITY OF THE YEAR 2020

SCOTTISH UNIVERSITY OF THE YEAR 2020 The Times & The Sunday Times



Delivery: This course is delivered online and flexibly, running from **24th April until 17th July 2023**. You can start and end on any date in between, once fully registered, learning at your own pace in your own time. The course will be taught exclusively online through a blend of self-guided lessons, worked examples and online quizzes. You will have the opportunity to develop and practice your understanding through online quizzes where feedback will be provided in preparation for the assessments. You can attempt the assessments any number of times. There will be online tutor support available. Upon successful completion of this course, you will receive a certificate from University of Strathclyde after course closure date.

University of

Strathclyde

This course is suitable for:

- Individuals interested in a career in engineering or considering studying engineering in the future
- Anyone thinking about an Engineering Apprenticeship, Graduate Apprenticeship or currently undertaking an Apprenticeship
- Anyone thinking about or returning to a career in Engineering or who has identified a skills gap in their current job
- Anyone looking to reskill or upskill
- Supporting Improving Gender Balance Scotland Initiatives

Credit Value and Pre-requisites:

This course is worth 10 credits at SCQF Level 7. To be eligible, you will have Nat 5 Physics and Nat 5 Maths, Engineering Science or equivalent qualifications/ experience.

How to apply: <u>Apply here</u>. For anyone living outwith Scotland, please email <u>eng-upskilling@strath.ac.uk</u> for more details.



