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Wrexham University **STEM** Summer School 2025

Prifysgol Wreccsam
Wrexham University

Wrexham University STEM Summer School 2025

This programme will run for four weeks from:
(Monday 4th August – Friday 29th August 2025)

The Wrexham University STEM Summer School is a great way to continue studying a subject you enjoy, gain new subject knowledge and as preparation for further study. The Summer School take place in August, and we offer the opportunity to experience a mixture of academic lectures and engaging study opportunities.

You may study at our Summer School purely for the interest value. However, the programme offers university credits and top-up pathways leading to full undergraduate qualifications. The programme has students from multidisciplinary backgrounds, such as Aeronautical, Automotive Engineering, Computing, and Industrial Mechatronics. You will also collaborate with students from all parts of Europe, such as Germany, Austria, France, and Switzerland.



Why Choose This Programme?

Our Summer School allows you to experience academic study either as a continuation of your current studies or as preparation courses for joining the final year of our degree programmes. You will study a mixture of academic lectures, engaging study sessions, and English language classes.

Key Course Features?

The Wrexham University Summer School is worth a total of 60 UK university credits. Learn key knowledge and skills that will help prepare you for academic study in the final year of your undergraduate degree course.

On completing the top-up course, you can go onto the final year of an Honours Bachelor's degree programme and complete the degree in one year. After completing the bachelor's degree final year, you will have the opportunity to complete a master's degree in one year, hence two qualifications in just two years.

What Will You Study?

You will study 3 modules covering a range of topics relating to Science, Technology, Engineering, & Mathematics (STEM) related field. Furthermore, you will study 1 English language module designed to address the English language needs of non-native speakers studying or working in the STEM field.



W ENG5B9 Analytical Techniques:

The module aims to further develop knowledge of functions suitable for solving a range of mathematical problems. To demonstrate a repertoire of problem-solving skills and an ability to generalise and transfer ideas appropriate to various STEM applications of mathematical concepts.

Assessment: In-Class Test.

W ENG5B7 Research Methodologies:

This module aims to build up skills in research and development related to engineering, computing, science, and technology in students. This module will enable the students to effectively study and propose solutions to various engineering, computing, science, and technical problems.

Assessment: 2500 Word Research Proposal.

W ENG5B8 Emerging Technologies:

This module allows students to identify and examine a range of current and future technical and social issues in computing, engineering, and technology and, in so doing, develop an awareness of the impact of current and emerging research and development. In a general sense, the module will introduce students to the field of 'Futurology'.

Assessment: Portfolio.

W LAN474 English for STEM:

This module will focus on developing productive and receptive language skills to enable participants to engage more effectively in processing, creating, analysing, and sharing scientific information within the STEM community. There will also be a strong emphasis on expanding participants' mental lexicon of core STEM vocabulary through exercises and activities to increase retention and recall.

Assessment: In-Class Test.



Entry Requirements & Applying

Our courses are open to international students over the age of 18, whatever their background or country of residence.

Our Summer School is designed for students with at least one year of study at the Higher Education level in a STEM-related subject. If you are an international student, you must also demonstrate B2 level (or equivalent) in English to join the Programme.

Fees & Funding

Option 1:

With Accommodation – **£1,750**

Option 2:

Without Accommodation – **£1,250**

The cost includes technical and English language tuition, accommodation (Opt.1), one-weekend trip (location TBD) and a final farewell party. Costs do not include transportation to/from the airport, food, extracurricular activities.

NOTE: Please note that the programme is often in popular demand; however, if the programme does have an insufficient number of students registered, it will not be offered. In such an event, any registered students will be offered an alternative programme or given a full refund of any fees paid.

Apply for STEM Summer school:

[**Apply Here**](#)

Admissions to Engineering & Computing Top-Up Programmes

The following top-up programmes are available for academic year 2024-2025 in the Faculty of Arts, Computing & Engineering (FACE).

Engineering:

- BEng Aeronautical & Mechanical Engineering
- BEng Automotive Engineering
- BEng Electrical & Electronic Engineering
- BEng Renewable & Sustainable Engineering
- BEng Industrial Engineering (Mechatronics)

Computing:

- BSc Cyber Security
- BSc Computer Science
- BSc Computing

For further information regarding fees for our Bachelor top up courses, please contact international@wrexham.ac.uk

A p p l y



Advanced Standing

The following incoming qualification has an advance standing in place for the respective programmes.

Germany

Incoming Qualification (German State Certified Technician/Engineer)	Top-Up Programme
Elektrotechnik (Electrical Engineering)	BEng Electrical & Electronic Engineering BEng Industrial Engineering (Mechatronics)**
Fahrzeugtechnik (Automotive Engineering)	BEng Aeronautical & Mechanical Engineering* BEng Automotive Engineering
Maschinentechnik (Machine Engineering) Maschinenbautechnik (Mechanical Engineering)	BEng Aeronautical & Mechanical Engineering BEng Renewable and Sustainable Engineering* BEng Automotive Engineering* BEng Industrial Engineering (Mechatronics)**
Mechatronik (Mechatronics Technology)	BEng Aeronautical & Mechanical Engineering BEng Electrical and Electronic Engineering BEng Industrial Engineering (Mechatronics)**
Umweltschutztechnik (Renewable Engineering)	BEng Renewable and Sustainable Engineering
Informatiktechnik (Information Technology)	BSc Cyber Security BSc Computer Science BSc Computing

* Subject to optional modules taken from respective incoming qualification.

** Advance standing not required to this programme, only subject to admission tutors approval.

Switzerland

Incoming Qualification (Höhere Fachschule for Technik Mittelland)	Top-Up Programme
Mechanical Engineer Diploma	BEng Aeronautical and Mechanical Engineering BEng Electrical & Electronic Engineering BEng Renewable and Sustainable Engineering
Systems Engineer Diploma	BEng Electrical & Electronic Engineering

What Will You Study?

The modules you study in your top-up programme will depend on the pathway you have chosen. The programme will give you the knowledge and understanding of principles relevant to the respective chosen pathway, demonstrate awareness of environmental implications and the need for sustainable development. You'll investigate principles and design, construct and test devices and systems before preparing descriptive, interpretive and evaluative technical reports.

Engineering



BEng Aeronautical & Mechanical Engineering

The key aim of the Aeronautical & Mechanical Engineering Degree is to develop intellectual and application skills through knowledge acquisition, problem solving, deductive skills, synthesis, analysis, and evaluation. This also encompasses social and environmental implications.

SEM1

ENG6A5 Mechanical Engineering

Modelling & Simulation

ENG687 Aerodynamics

ENG647 Aircraft Design & Flight Stability

SEM2

ENG6A8 Professional Engineering

SEM1/2

ENG6AG Project



BEng Automotive Engineering

This honours degree has been designed for the automotive industry in response to the shortfall of mechanical engineers. It is for those who have a strong interest in mechanical engineering and a clear desire to develop their knowledge and skills in automotive engineering.

SEM1

ENG6A5 Mechanical Engineering

Modelling & Simulation

ENG6B1 Automotive Dynamics

ENG6B2 Modern Automotive Powertrains

SEM2

ENG6A8 Professional Engineering

SEM1/2

ENG6AG Project



BEng Electrical & Electronic Engineering

From transport and renewable energy to aerospace and robotics, this degree equips you with the sought-after skills to work at the forefront of new and emerging technologies. The course, accredited by the Engineering Council, explores how electrical engineers shape the future of these sectors through innovation and design.

SEM1

ENG6C2 Digital Signal Processing

ENG60D Electronic Design & Testing

ENG6B9 Power Electronics and Electrical Machines

SEM2

ENG6A8 professional Engineering

SEM1/2

ENG6AG Project



BEng Renewable & Sustainable Engineering

This degree tackles some of the biggest challenges facing mankind today - affordable energy, climate change, global warming and pollution control. For students wanting to be at the forefront of new engineering and cost-effective solutions that will help satisfy the need for renewable energy, this degree could be your next step.

SEM1

ENG6A5 Mechanical Engineering Modelling & Simulation

ENG6B7 Smart Grids, Storage, and Energy Mix

ENG6B8 Energy Saving, Low Carbon, and Recycling Systems (Opt.1)

SEM2

ENG6A8 Professional Engineering

SEM1/2

ENG6AG Project



BEng Industrial Engineering (Mechatronics)

Designed to meet the needs of people working in engineering, the BEng Industrial Engineering (Mechatronics) course is delivered along part-time students to fit around employment. It has been developed with employers from a variety of industries and incorporates several work-based modules.

SEM1

ENG60D Electronic Design & Testing

ENG6A3 Mechatronics Application

SEM2

ENG6AE Managing Workforce, Engagement & Commitment

ENG6A8 Professional Engineering

SEM1/2

ENG6AG Project

Computing



BSc Cyber Security

Our Cyber Security degree is industry-focused, ensuring you have the tools and techniques needed to meet the growing national skills gap in this sector. You will acquire the practical skillsets to counter emerging threats, and to maintain the overall security of a system whilst learning through immersive and gamified environments.

SEM1

COM645 Network Security

COM644 IT Project Management

COM642 Ethical Hacking

SEM2

COM643 Future Technologies

SEM1/2

COM646 Project



BSc Computer Science

Computer Science is an exciting and dynamic field at the cutting edge of technology, and this creative degree has the vision to provide professionals who can deliver. You will develop programming, data management, hardware and software skills to understand and develop solutions for today's computer-dominated world.

SEM1

COM648 Computability and Optimisation

COM644 IT Project Management

COM641 Distributed Data and Data Analytics

SEM2

COM643 Future Technologies

SEM1/2

COM646 Project





BSc Computing

Computing specialists are in high demand as technology now plays a role in almost everything we do. Our Computing degree combines the core principles of the field with a forward-looking approach to embracing and driving new developments.

SEM1

COM640 Advanced Mobile Development

COM644 IT Project Management

COM641 Distributed Data and Data Analytics

SEM2

COM643 Future Technologies

SEM1/2

COM646 Project

For More Information Contact

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