

# A LEVEL PROFESSIONAL PATHWAY SCIENCE TECHNOLOGY ENGINEERING & MATHS (STEM)



## WHAT WILL I STUDY?

The STEM Professional Pathway provides the academic and professional skills you need to secure a successful career in the science, technology and engineering industries.

The programme will encourage you to gather evidence and gain the necessary skills to support your UCAS application for STEM degrees.

This pathway is supported by local industries, including the missile, defence and nuclear sectors.

The College's strong industry links and the advantage of studying in the multimillion pound Centre for Excellence in Engineering provides the perfect foundation for those who wish to follow a career in STEM subjects.

## A LEVEL PROFESSIONAL PATHWAYS

**Chemistry**  
**Maths**  
**Physics**

+ a further AS Level in year 1

OR

**Computer Science**  
**Maths**  
**Physics**

+ a further AS Level in year 1

## ENTRY REQUIREMENTS

### GCSE TARIFF

**A minimum of 5 GCSE subjects graded 9-5 including English and Maths and 2 GCSE subjects graded 9-6**

Following successful completion of the AS year you may choose to continue to study all four subjects to A Level, or you may progress with three subjects and retain an AS qualification in one, which will contribute to your UCAS or higher apprenticeship applications.

## COURSE FEATURES

- Combines traditional academic A Level subjects with essential industry related experiences.
- Achieve industry related qualifications highly regarded by employers including the Performing Engineering Operation (PEO) qualification.
- Academic Development Day - opportunity to take additional qualifications and develop skills alongside academic studies.
- Partnerships with some of the UK's leading employers.
- Programme designed in response to the findings of some of the UK's leading universities and businesses.
- Exceptional learning facilities.
- Small class sizes.
- Additional academic support tutorials delivered individually or in small groups.
- Mock interviews.
- Opportunities to undertake enterprise projects and compete in local and national competitions.
- Enrichment opportunities that add value to applications for higher study and chosen careers, including an enhanced guest speaker programme.

The STEM Professional Pathway will prepare you for progression to a range of careers.

The programme will encourage you to gather evidence and gain the necessary skills to support your UCAS applications.

## COURSE LENGTH

The Pathway is full-time for two academic years.

If you have any queries please contact our Admissions Team: **01942 761 111** or email: **applications@wigan-leigh.ac.uk**

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## A LEVEL EXTENDED CHOICES - COMPUTING & TECHNOLOGY

If you choose to attend Parsons Walk, Wigan you may study a mixed programme of A Levels and a BTEC Level 3 qualification to help you fulfil your career ambitions.

This provides an alternative route to university and degree apprenticeships and may be suitable for those who prefer a combination of coursework and examinations.

A LEVELS (choose two from the following)	BTEC LEVEL 3 EXTENDED CERTIFICATE (equivalent to one A Level)	ENTRY REQUIREMENTS
<b>Business</b> <b>Chemistry</b> <b>Maths</b> <b>Physics</b>	<b>BTEC Level 3 Extended Certificate in Computing</b> Learn how a computer works and organises data, including introduction to programming constructs in different languages and object oriented and procedural programming. Explore data security and encryption techniques.	<b>6 GCSEs graded 9-5</b> <b>If you wish to study A Level Maths or Science, you will need a grade 6 in these subjects at GCSE.</b>

### HOW WILL I BE ASSESSED?

Through a combination of written and on-screen examinations, coursework and practical assessments.

### WHAT CAN I PROGRESS TO?

We will support you in applying for places at prestigious universities nationwide, or to secure employment.

### ACADEMIC DEVELOPMENT DAY

Students will benefit from a variety of extra qualifications, work placements, volunteering opportunities and a range of masterclasses delivered by industry experts.

Options include:

- **CREST Gold Award**
- **Science Club**
- **Extended Project Qualification**
- **HE+ programme in partnership with Cambridge University**
- **Guest speakers from industry and universities**
- **Work experience**

### CAREER PROSPECTS

Chartered Engineers can expect to earn more than £80k a year.

Other careers include:

- **Aircraft Design and Build Engineer**
- **Chemical Engineer**
- **Civil Engineer**
- **Contracts Manager**
- **Electrical Engineering Technicians**
- **Electrical Engineers**
- **Environmental Engineer (including renewable energies and resources)**
- **Estimator**
- **Project Manager**
- **Robotics Engineer**
- **Scientist**
- **Statistician**
- **Structural Engineer**



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