

## BTEC Certificate in Motorsport Engineering Level 3



### In a nutshell

This course has been designed to give you the foundation knowledge and specific skills required to meet the needs of modern mechanical/motorsport engineering industries.

### This course is for you if...

- ... You want a career in engineering
- ... You have a passion for motorsport
- ... You're hard working and good at problem-solving

### What will I be doing?

This is one of the most exciting and growing industries in the UK, with increasing links between the world of motorsport and other high-performance engineering sectors, such as automotive, defence, marine and aerospace. With the £120 million investment in the Ebbw



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Vale Automotive Technology Park and the Circuit of Wales, there has never been a better time to study a course in motorsport engineering.

Alongside your theoretical studies, there are several extra-curricular activities to get involved with. During your first year, you'll get the opportunity to build a Caterham from scratch. During your second year, you'll have the opportunity to be part of Coleg Gwent Racing, where you'll compete in the Radical SRI Cup. Once you've completed the course, we have a number of pathways you can follow into employment, whether it be an apprenticeship or a university degree.

On this course you'll study:

Year 1

Subsidiary Diploma in Engineering (60 Credits)

Operation of Vehicle Chassis Systems  
Motorsport Workshop Practices  
Motorsport Vehicle Preparation and Inspection  
Vehicle Engine Principles, Operation, Service and Repair  
Professional Practice and Logistics for Motorsports  
Mathematics for Engineering Technicians

Plus 30 additional credits

Engineering Design  
Applications of Vehicle Science and Mathematics  
Engineering Drawing for Technicians

Year 2

Vehicle Project  
Vehicle System Fault Diagnosis and Rectification  
Fabrication Processes and Technology  
Light Vehicle Suspension Steering and Braking Systems  
Electrical and Electronic Principles for Vehicle Technology  
Properties and Applications of Engineering Materials  
Function and Operation of Vehicle Petrol Injection Systems  
Welding Technology

To develop your practical skills, you'll have access to a state-of-the-art workshop and can take

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part in numerous motorsport events throughout the UK. You'll also have bolt on qualifications in Composite Engineering using our sector leading composite training facility.

### What is expected of me?

To enrol, you'll need a minimum of 5 GCSEs at Grade C or above, including Mathematics at Grade B and preferably a Science at Grade B.

You need to have a keen interest in engineering and have the enthusiasm and drive to develop your practical and analytical skills. Full commitment to attendance is required, as is respect for others, enthusiasm for the subject and self-motivation. Having the right attitude and enthusiasm are viewed critically by a would-be employer.

There is an expectation that you'll continue your studies and coursework during your own time. You'll also be expected to attend as many race events as possible and network with as many people as you can.

You'll be assessed through coursework, a portfolio and practical assessment. Upon completion, you'll achieve:

Level 3 Subsidiary Diploma in Vehicle Technology (Motorsports) plus 30 additional credits (Year 1)

Level 3 Extended Diploma in Vehicle Technology (Motorsports) (Year 2)

Welsh Baccalaureate

[Maths and English](#) (you'll be required to attend classes if you achieved less than a Grade C in these subjects at GCSE level)

Other relevant qualifications to enhance your skill set

### What comes next?

University level qualification in Motorsport Engineering or another engineering related subject

Higher Apprenticeship

Employment

### Additional information

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You'll need to purchase PPE (Personal Protective Equipment) which will cost approximately £40.00.

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