

BTEC

BTEC Level 3: Edexcel BTEC Level 3 Diploma in Vehicle Technology (QCF) & Edexcel BTEC Level 3 Diploma in Vehicle Technology (Motorsports) (QCF)



Learn to keep pace with the advances in automotive technology internationally and be able to partake in a focus of Hands-On training to lead students to be adept in skills and up-to-date in the technology advancement. It covers 70% continue assessment and 30% unit final exam. Learn to be innovative and gain the skills to confidently apply your knowledge in a wide range of situations that you may face during the studies and apply it during the real life-working world.

Course Outline:

Mandatory Units

- 1 Operation of Vehicle Chassis Systems
- 2 Vehicle Engine Principles, Operation, Service and Repair
- 3 Vehicle System Fault Diagnosis and Rectification
- 4 Vehicle Project
- 24 Motorsport Workshop Practices
- 25 Motorsport Vehicle Preparation and Inspection

Optional Units

- 6 Electrical and Electronic Principles for Vehicle

Technology

- 7 Vehicle Electrical Charging and Starting Systems
 - 8 Function and Operation of Vehicle Petrol Injection Systems
 - 10 Operation and Testing of Vehicle Electronic Ignition Systems
 - 11 Vehicle Engine Management Systems
 - 12 Operation and Maintenance of Light Vehicle Transmission Systems
 - 14 Light Vehicle Suspension, Steering and Braking Systems
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BTEC Level 5: Higher National Diploma (HND)

The Certificate is an extensive induction programme. Students will undergo comprehensive foundation training in automotive programme while building their confidence to self-explore later in their chosen field upon completion of this course.

Higher National Diploma in Automotive Engineering



The BTEC Higher Nationals in Automotive Engineering are accredited on the Qualifications and Credit Framework (QCF). QCF is the national credit transfer system for education qualification in England, Northern Ireland and Wales. The qualifications are delivered at universities and colleges and provide an excellent choice for Further Education providers looking to broaden their vocational offering to meet the demands of learners seeking a cost-effective, vocational

pathway to Higher Education.

Course Outline:

Mandatory Core Units:

- 1 Analytical Methods for Engineers
- 2 Engineering Science
- 3 Project Design, Implementation and Evaluation
- 25 Engine and Vehicle Design and Performance

Specialist units Group A :

- 6 Health, Safety and Risk Assessment in Engineering
- 74 Vehicle Fault Diagnosis
- 75 Vehicle Systems and Technology
- 79 Vehicle Electronics
- 80 Business Strategy Planning for Vehicle Operations
- 81 Vehicle Parts Management

Specialist units Group B :

- 26 Employability Skills
- 27 Personal and Professional Development
- 30 Quality Assurance & Management
- 101 Electrical and Electronic Principles
- 78 Automotive Accident Investigation
- 77 Plan and co-ordinate Vehicle Maintenance