

## **Purpose statement**

The following purpose is for the **Level 3 Advanced Technical Extended Diploma in Automotive Industry (720) (601/7383/X)** 

Area	Description
OVERVIEW	
Who is this qualification for?	This qualification is for you if you are a 16-19 year old learner who wants to gain an understanding of the automotive industry and the careers available. It will also allow you to understand the processes a vehicle follows from its design, through manufacturing to its sale and later maintenance and repair until final disposal of the vehicle.  Upon completion you will be able to either work as a workshop technician on a range of vehicles such as cars, vans, trucks or motorcycles or progress into higher education for further learning.
What does this qualification cover?	You will study both practical and theoretical aspects of the automotive industry such as:
	<ul> <li>The sectors the automotive industry consists of, the different types of business available and how to best run a motor vehicle workshop.</li> </ul>
	<ul> <li>The factors that influence the design process of a vehicle and the different manufacturing methods which can be used.</li> </ul>
	<ul> <li>The materials that are used in the construction of a vehicle, their properties and the joining methods used during vehicle manufacture.</li> </ul>
	<ul> <li>The construction and operation of engine, transmission and chassis systems and their components. The reasons for different types of systems and components and how each of them operates.</li> </ul>
	<ul> <li>The electrical and electronic systems that can be found on a vehicle, how they operate and how to diagnose and rectify faults within these systems.</li> </ul>
	<ul> <li>How to carry out vehicle inspections and follow servicing procedures safely.</li> </ul>
	How technology can be used to improve vehicle design, safety and driving experience via innovation.
	The logical thinking skills needed to diagnose and repair complex vehicle faults by using advanced

- vehicle technology processes. You will also learn how to explain to technical and non technical audiences the best solution for each repair job.
- How to apply scientific and mathematical principles in vehicle related areas: you will collect and interpret data related to the operation of vehicles and carry out calculations on vehicle performance, speed, acceleration and power.
- Management techniques to develop employees, control and allocate financial resources as well as marketing skills to run various types of business within the automotive industry.

Centres and providers work with local employers who will contribute to the knowledge and delivery of skills required. Employers will provide demonstrations and talks on the industry and where possible work placements will also be provided by the employers. This qualification is ideal preparation for gaining employment in the automotive industry or for further specialist study.

## WHAT COULD THIS QUALIFICATION LEAD TO?

Will the qualification lead to employment, and if so, in which job role and at what level?

The qualification will give you the knowledge and skills to work as an automotive technician on a range of vehicles such as cars, vans, motorcycles, trucks. You may also supervise others in the motor vehicle workshop.

Why choose this qualification over similar qualifications?

You will take this qualification as part of a two years' programme to gain in depth knowledge of the automotive industry and the careers available. You will also gain knowledge of the process a vehicle follows from its design, through manufacturing to its sale, maintenance and repair and final disposal.

Upon completion you will maximise your opportunities to progress into higher education and into employment.

If a two years' programme is too long for you and you would prefer to focus only on the practical skills to become a motor vehicle technician you may prefer to take our Advanced Technical Certificate in Automotive. This qualification lasts only for one year and will enable you to enter an apprenticeship programme.

Will the qualification lead to further learning?

The qualification could lead you to higher education into some of the following foundation and honours degrees:

- Automotive engineering and design
- Automotive technology
- Transport production design
- Motorcycle manufacturing engineering
- Motorsports



You could also continue onto the City & Guilds Level 4 Diploma in Advanced Vehicle Diagnostics and Management Principles (601/1221/9) to train to become a Master Technician.

If you are specifically interested in developing further your Leadership and management skills, you can also take a higher level qualification through the Institute of Leadership and Management (ILM).

WHO SUPPORTS THIS QUALIFICATION?	
Employer/Higher Education Institutions	This qualification is supported by the Retail Motor Industry Federation and Society of Motor Manufacturers and Traders.
FURTHER INFORMATION	Please refer to the Qualification Handbook, available on the City & Guilds website, for more information on the structure of this qualification, the content of the units, and assessment.