

Purpose statement

The following purpose is for the **Advanced Technical Extended Diploma in Land-based Engineering (1080) 601/7463/8**

Area	Description
OVERVIEW	
Who is this qualification for?	This qualification is for you if you are aged 16-19, and want to work in land-based engineering. It is designed to provide you with a wide range of specialist technical practical skills and detailed knowledge and understanding which will equip you to progress to employment, or to further learning and training, within the land-based engineering industry.
What does this qualification cover?	<p>This qualification covers all of the skills, knowledge and understanding required to enter employment in the land-based engineering industry. You will study a wide range of areas that include safe working practices, workshop practice, calculations for land-based engineering, repairing land-based compression-ignition (diesel) engines, spark-ignition petrol engines, land-based electric systems and testing land-based electronic systems. In addition you will also learn how to repair a wide range of systems and machinery including mechanical power transmission systems, synchromesh transmissions and clutches, powershift transmissions, cultivation or drilling machinery, forage harvesting machinery and combinable or root crop harvesting machinery.</p> <p>Centres and providers work with local employers who will contribute to the knowledge and delivery of training. Employers will provide demonstrations and talks on the industry and where possible work placements will also be provided by the employers. This practical based training is ideal preparation for gaining employment in the land-based engineering industry or specialist further study.</p>
WHAT COULD THIS QUALIFICATION LEAD TO?	
Will the qualification lead to employment, and if so, in which job role and at what level?	<p>This two-year qualification exposes you to the whole industry, and the opportunities within it. On completion, it is likely that you will enter the industry by working for a manufacturer, dealership or within an agricultural or horticultural workshop. As you will have gained a breadth and depth of skills and knowledge over a wide range of units, you could progress within work to become a:</p> <ul style="list-style-type: none"> • Land-based service engineer.
Why choose this qualification over similar qualifications?	There are no other sized qualifications in land-based engineering at Level 3.

	You are likely to take this qualification full-time over at least 2 years in a college. You would take this qualification if you want to become a land-based service engineer. You will gain a wide range of skills and knowledge that employers recognise and value.
Will the qualification lead to further learning?	You may want to progress into Higher Education.
WHO SUPPORTS THIS QUALIFICATION?	
Employer/Higher Education Institutions	The British Agricultural and Garden Machinery Association (BAGMA) Institution of Agricultural Engineers (IAgrE) Agricultural Engineers Association (AEA)
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.