ANOTHER LEVEL

Standard apprenticeships have proven very successful for vehicle engineers who have completed them and subsequently gone on to a variety of roles. But what further learning is available? John Challen investigates

The UK has had an up-and-down relationship when it comes to apprentices in its recent past. In the mid-1960s, around 35% of male school leavers aged 15 to 17 went straight into an apprenticeship, but by 1990, there were only 53,000 people on one of the schemes. Modern Apprentices – introduced in 1993 – sought to change that and numbers did increase throughout the 2000s. By 2011/12 there was a peak of 521,000 apprenticeship starts in England – a level that was maintained for a number of years until 2017/18. Since then a number of factors – such as the introduction of the apprenticeship levy and – most recently – the coronavirus pandemic and subsequent lockdowns have seen numbers fall slightly.

For the transport sector, there are current and future opportunities available. In a typical apprenticeship route, technicians will complete qualifications up to Level 3, which gives then a full and rounded understanding of vehicle engineering. Equipped with these skills, they are therefore able to apply them in the workshop environment.

In terms of future opportunities, the new T-Level scheme, which is intended for pre-apprenticeship or pre-employment routes, is ramping up. September 2022 sees the launch of two particular T-Level qualifications that could be relevant to heavy vehicles: maintenance, installation and repair for engineering and manufacturing, management and administration; and engineering, manufacturing, processing and control.

But for some people, there is a desire to further their knowledge and push themselves beyond what many of their colleagues and peers have done. Opportunities to continue on the apprentice path are currently limited, but there are a few options available within transport, and in engineering generally.

One route from Level 3 to Level 4 is via the City & Guilds course in advanced vehicle diagnostics and management, which is set at Level 4. The course is open to those candidates who are looking to improve their knowledge and skills base in diagnosing and repairing complex vehicle faults. The total number of guided learning hours for the course ranges between 530 and 556, while the total qualification time is 700 hours. The course is available to those in England, Wales and Northern Ireland. Potential job opportunities on completion include master/senior technician and workshop controller.

In addition, City & Guilds has confirmed that a Level 4 course based around electric and hydrogen fuel cell vehicles is currently being planned.

Another Level 4 qualification that is specifically tailored to the transport sector is the role of 'Road transport engineering manager'. On completion of the three-year course, the individual will be responsible for managing the road transport engineering department of a bus, coach or commercial vehicle operator. Therefore, within that team will be technicians, specialist engineers and parts operatives.

The course includes a presentation by the apprentice discussing his or her proposal for a business project with a prospective employer. In addition to regular periodic reviews, there is an end point assessment that includes a written exam, professional discussion and business research project.

This apprenticeship standard has been aligned to the professional standard for a bus and coach

The City & Guilds Level 4 advanced vehicle diagnostics and management course is for candidates looking to improve their knowledge and skills base in diagnosing and repairing complex vehicle faults

manager recognised by IRTE and the Confederation for Passenger Transport. A number of major industry figures were involved in the creation of the standard, including Arriva, MAN, Mercedes-Benz UK, Scania, Stagecoach and Volvo.

The course entry requirement is set by individual employers, but it is recommended that candidates have previously completed a relevant apprenticeship at Level 3. Alternatively, an appropriate equivalent qualification will also suffice as well as work experience in an engineering supervisor role. Candidates are also obliged to achieve Level 2 (GCSE) maths and English before their final assessment on the course.

MORE GENERAL OPPORTUNITIES

The Institute for Apprenticeships and Technical Education has recently published a proposal for a Level 4 qualification called 'Lead engineering maintenance technician'. This 42-month apprenticeship effectively replaces another Level 4 qualification, 'Extended diploma in engineering manufacture' and is open to a wide range of industries. The broad purpose of the qualification is to be trained to be someone who can offer engineering support, technical leadership and expertise for a number of different engineering scenarios. These include: installation; refit; overhaul; upgrade; maintenance and testing.

While transport is not specifically mentioned, the sector would seem to be in scope. According to the draft document, "Lead engineering maintenance technicians (LEMTs) assist in the delivery of complex and critical asset management programmes often to unique specifications involving complex maintenance and planning. They analyse technical information, plan schedules, co-ordinate, lead and deliver work on time to the required quality, with an emphasis on product safety and personal health and safety.'

Also covered in the role is carrying out inspections on systems, equipment and components and leading on commissioning back to operation following maintenance and overhaul.

BEYOND LEVEL 4

So what of Level 5? City & Guilds did run a course at that level – Motor Vehicle Engineering – but it is understood that this was only open to international candidates and is now closed. Should a similar course come back and is available to domestic candidates, it would offer the opportunity to learn 'highly advanced or specialised engineering skills'. City & Guilds also said that completion of the course led to senior management roles.

Elsewhere on the City & Guilds website there are listings for Level 5 advanced technician diplomas, which focus on higher-level engineering and the opportunity to advance into the third year of a selected university engineering degree programme. Entry criteria for the course is a Level 4 diploma in engineering, or a suitable equivalent. There are a wide range of units to choose, depending on the specific goal of the candidate. As the website states: 'You will have the potential to fulfil a role within engineering that requires a high level of responsibility requiring the use of personal initiative and critical judgement.'

There are three different options: mechanical engineering; electrical and electronics engineering and civil engineering. For the first one, City & Guilds states total guided learning hours of between 500-547 hours and a total qualification time of 750 hours. For electrical and electronic engineering, guided learning hours are 510-803, with a total qualification time of 765 hours. TE