

Your insight into BS 7671 www.theiet.org/wm

The new Trailblazer apprenticeships and the effect on electrical apprentices

Peter Tanner, Lead Technical Consultant: City and Guilds, writes exclusively for Wiring Matters about the changes made to the Trailblazer apprentice schemes.

Over the past 18 months the government has been introducing changes throughout education and training. This includes reforms to the apprenticeships known as Trailblazers. The apprenticeship for trainee electricians was included in the 'phase one' round of reforms to Trailblazers, which means that the development of the new framework is almost complete and is set to roll out from July this year.

One of the reasons that the electrical apprenticeships were included in the 'phase one' round of developments is because the current structure provides a model for all Trailblazers, as it has an independent end test (AM2). This end testing model is something that will feature in all Trailblazers across all sectors.

In the past, electrical apprenticeships were developed by the sector skills council SummitSkills following initial consultation with employers. The new Trailblazers involve employers throughout the entire development process and beyond.

The electrical apprenticeship was developed by a strong employer group representing a good cross section of small, medium and large enterprises. The group was led and chaired by the IET and also included representation from the awarding organisations (AOs), including <u>City & Guilds</u>, <u>National Electrotechnical Training (NET)</u> and <u>EAL</u>, as well as representation by some training providers who all acted as advisories to the employer group.

The new electrical trailblazer brings changes to:

- training and assessment (the qualification);
- AM2;
- grading;
- professional recognition; and
- funding.

The qualification

As there is more than one AO, the employer group were very keen to see parity between the AOs. As a result, a joint assessment plan was created to ensure assessment of the qualification was the same no matter what AO certificates the qualification. Assessment across all the units will use a mixture of:

- multiple choice online assessments (MC);
- practical performance assessments at the training centre (PP);
- written examinations (WE);
- project-based assignments (PA); and
- on-site performance assessments that are carried out in the workplace (OSP).

All knowledge-based assessments will take place at the training provider's facility, which could be an independent training centre or FE college. Performance-based assessments will



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be carried out in the real working environment and assessed by a mixture of direct observation, witness testimony, reflective accounts and professional discussion. The new City & Guilds 5357 qualification comprises of 15 units in the following subjects (jointly agreed assessment methods in brackets):

- knowledge of health and safety (MC, PP);
- performance of health and safety (OSP);
- knowledge of organising and overseeing the workplace (MC);
- performance of organising and overseeing the workplace (OSP);
- knowledge of cables, wiring systems and terminations (PP);
- performance of cables, wiring systems and terminations (OSP);
- knowledge of electrical science and principles (MC, WE);
- knowledge of the requirements of BS 7671 (MC) based on the current City & Guilds 2382 qualification;
- knowledge of installation design (MC, PA);
- knowledge of inspection and testing; initial verification (MC, PP, WE) based on the current City & Guilds 2394 qualification;
- performance of initial verification (OSP);
- knowledge of fault finding and diagnosis (MC, PP);
- performance of fault finding and diagnosis (OSP);
- performance of installing electrical installation systems (OSP); and
- performance of maintaining electrical installation systems (OSP).

Note: The final two units are optional. Selection depends on whether the trainee is to become an installation electrician or maintenance electrician. All other units are mandatory.

AM2

The AM2 assessment, as before, will take place at an independent assessment facility approved by NET. It will be extended to re-introduce the installation of common wiring and support systems and will serve, as before, as the final assessment of an apprentice, judging overall skills and competence.

The AM2 was seen as an invaluable method of testing the overall ability of an apprentice, which is why all other Trailblazers across various sectors will use this model of independent end testing in the future.

Grading

On successful completion of the apprenticeship, the candidate will be graded as pass, merit or distinction. The overall grading will be based on two factors: the grade obtained in the science and principles unit, and the grading obtained in the AM2 assessment.

Much discussion took place about the grading of all units in the qualification. It was felt, however, that many of the disciplines that make up the units should be graded pass or fail only. To give an example, when it comes to health and safety, an electrician is either safe or unsafe. This argument applies to many of the skills within the units: they can either work to industry standards, or they cannot.

The two elements that are graded will enable future prospective employers to see if an electrician who has successfully completed the apprenticeship excels academically (science

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and principles) and/or by performance (AM2), which is why it was decided to only grade these elements and use them towards the overall grade.

Professional recognition

All candidates who have completed the qualification part of the apprenticeship will be eligible to make a streamlined application for EngTech status. Much of the qualification was developed and designed to align with the Engineering Council's standards for engineering technicians (electrical). This means that all candidates will be able and encouraged to make an application by providing a short reflective account only. If they have met the assessment requirements of the qualification, they have met much of the criteria for EngTech.

Funding

Initially, funding will be based on a system where the <u>Skills Funding Agency (SFA)</u> will contribute £2 towards training and assessment for every £1 invested by the employer.

The model for the future of Trailblazer includes a voucher system, where the SFA gives vouchers to the employer allowing choice of training provider based, perhaps, on an agreed price. It is still currently unclear how this will fully work and most small and medium enterprises are likely to appoint a lead provider who manages the funding aspects of the apprenticeship. The lead provider could be a training centre, further education college or industry training organisation such as <u>JTL</u>.

Electrical Trailblazer has been allocated the maximum funding bracket, meaning the government's contribution towards training and assessment currently stands at £18,000. This includes incentive payments to employers for recruitment and completion of apprentices.

Summary

In order for a trainee electrician to become qualified, recognised and eligible for JIB approval, they must successfully have:

- completed the new training and assessment units that make up the overall qualification (City & Guilds 5357);
- possession of, at minimum, level 2 functional skills or GCSE grade 4 (old C) in English and Maths;
- passed the AM2 independent assessment.

In addition, they should be encouraged to make an application for EngTech status.

It is anticipated that the apprenticeship would take four years to complete for an average candidate.

Further information on the apprenticeship reforms can be found on the City & Guilds website.

Further information on the City & Guilds 5357 apprenticeship qualification can be found on the <u>qualification webpage</u>.