

## Level 6 NDT Engineer

## New Apprenticeship Standard

At Skills Training UK we go further in fully understanding what it is that our employer clients want to achieve from their training. We work as their partner in delivering on that vision, developing stronger employees who work well as individuals and as part of a team.



Skills Training UK has partnered with the University of Northampton and specialist NDT training schools to deliver a Level 6 NDT Engineer Apprenticeship. The degree-level qualification is for project managers who are responsible for the planning, operation and oversight of NDT procedures.

This Apprenticeship is suitable for senior NDT practitioners across large and SME employers from all associated STEM industries, which include: aerospace, nuclear, automotive, engineering, motorsport, power generation and distribution, manufacturing, railways, oil and gas (on-and offshore).

On completion of the Apprenticeship, the NDT Engineer will hold a BSc Non-Destructive Testing degree. This degree is closely linked to the personal certificate of Non-Destructive Testing (PCN) through the British Institute of NDT (BINDT). Apprentices will also need to achieve Level 2 English and maths prior to taking their end-point assessment.

### Employer Commitment

An employer must be prepared to provide the learner with the opportunity to carry out work and be part of projects that will enable them to produce substantial evidence towards their qualification.

In order to ensure the successful progression of the learner we request that employers participate in joint reviews of the learner's progress at regular intervals throughout the Apprenticeship. This helps to ensure continued and positive progress and also provides the opportunity to discuss and agree how any issues are to be resolved and how additional stretching and challenging activities can be built in.

### Duration

The duration of this Apprenticeship is typically 4 years to complete (although this can vary depending on the experience of the individual). An independent end point assessment must be completed at the end of the Apprenticeship in order to pass (see over).

### Training and Support from Skills Training UK

Skills Training UK will work with the employer to develop a training plan for the Apprentice and our Trainer Assessor will visit the Apprentice within the workplace at least once per month in order to support their learning and development. They will also be supported between visits by off-site information, advice, guidance, academic progress and technical competence support. We will ensure that all learning needs are being met in order to ensure successful progression against all elements of the Apprenticeship.

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## << Eligibility

Individual employers will set their own selection criteria for the Level 6 NDT Engineer Apprentices. Typically, candidates will either have achieved grades A-C in three A-Levels, including maths and a science or engineering subject.

Alternatively, Apprentices may hold a minimum of three NDT Level 2 methods, including at least one complex method (ultrasonic, radiography, eddy current, shearography, vibration analysis, acoustic emission, oil analysis or thermography) or will hold advanced NDT qualifications, such as NDT Level 3 certification.

Other relevant qualifications may be considered as an alternative.

## How the NDT Engineer Apprenticeship is delivered

The Apprenticeship Standard is delivered through a combination of on-line learning, on-site assessment and training with end point assessment through the BINDT.

If relevant, Apprentices completing the NDT Level 3 certification as part of their Apprenticeship will do so through an approved specialist NDT training school.

## Requirements: Knowledge, Skills and Behaviours

Below is a summary of the required knowledge, skills and behaviours for a Level 6 NDT Engineer:

### Knowledge and Skills:

- Commercial awareness, business improvement and management techniques relevant to the engineering industry
- Understanding of material properties, electronic principles, mathematics and technical project management
- Advanced NDT, condition monitoring, structural health monitoring and quality management
- Regulatory and international standards requirements, technology, safety and the environment
- Understanding of the interaction between NDT and other engineering functions
- Applying design processes, including materials selection that meet NDT standards
- Root cause analysis and learning from experience (LFE) processes
- The advantages of collaboration with other industry sectors in order to apply best practice

### Behaviours:

- Communicate effectively and appropriately using a full range of skills: technical speaking to a scientific/engineering audience, active listening, professional writing and technical presentation
- Demonstrate reliability, integrity and respect for confidentiality on work and personal matters in accordance with professional codes of conduct and ethical principles
- Understand the impact of work on others, especially where related to diversity and equality
- Take responsibility for personal development, demonstrating commitment to learning and self-improvement and be open to feedback
- Demonstrate a strong commitment to personal safety behaviours
- Demonstrate compliance by following rules, procedures and principles to ensure work completed is fit for purpose, pay attention to detail and carry out verification checks throughout work activities

## Independent End Point Assessment

To successfully complete the Apprenticeship, the learner needs to pass an end point assessment. This is an independent assessment which has several stages:

- A portfolio of real work projects
- A presentation on a specific project
- Questions and answers session

The EPA panel will comprise of an independent assessor, a representative from the university and a representative from the employer.

## Professional Qualification and Professional Recognition

On completion of the Apprenticeship, the NDT Engineer will hold a degree (BSc Non-Destructive Testing)

This degree is closely linked to the personal certificate of Non-Destructive Testing (PCN) through the British Institute of NDT (BINDT).

The NDT Engineer will also be eligible to apply for professional registration as an Incorporated Engineer (IEng) and membership of the British Institute of NDT.