Non-Destructive Testing (NDT)

Apprenticeships:
- NDT Operator
- NDT Engineering Technician
- NDT Engineer

Costs
There are a number of costs that are associated with an apprenticeship and these will have to be paid for by the ‘two-for-one’ matched funding allocation. These costs include:
- External training, certification and qualification costs
- Lead provider management fee
- NDT training provider management fee (if applied)
- Independent assessment organisation fee
- Professional body (British Institute of NDT) fee (free).

Funding system
The trigger for employers paying the apprenticeship levy is if the employer’s pay bill exceeds £3 million.

Levy payers – The levy will be paid into an employer’s digital account, which can then be used to fund training up to the designated cap. If at any stage, an employer has insufficient funds in their digital account, then the government will provide 90% of the funding and the employer will provide 10% of the funding.

Non-levy payers – will pay 5% towards training, which will be supported by a further 95% provided by the government. Employers with fewer than 50 employees will have 100% of the training and assessment costs covered when training an apprentice aged 16-18.

For levy and non-levy payers – The government will pay £1000 to employers and a further £1000 to training providers if they train an apprentice aged 16-18. Digital funds will be available for 24 months, meaning that levies paid in year one will be available throughout year one and up to the end of year two. Funds will automatically leave the digital account on a monthly basis, the cost will be spread over the lifetime of the apprenticeship and the government will hold back 20% of the total cost, which will be paid on completion of the apprenticeship.

Digital funds and government funding can be used for apprenticeship training and assessment, against an approved framework or standard, with an approved training provider and assessment organisation, up to the funding band maximum for that apprenticeship.

Digital funds and government funding cannot be used for wages, travel and subsistence costs, managerial costs, traineeships, work placement programmes or the cost of setting up an apprenticeship programme.

NDT apprenticeships
Employers can fill an apprenticeship vacancy with new staff or use the schemes to upskill existing members of staff. The training provided will allow them to acquire substantially new skills and the content of the training is materially different to any prior training or a previous apprenticeship. This gives a significant boost to staff development and personal achievement. BINDT offers a comprehensive apprenticeship pathway for people at all levels within their NDT career. Employers can advertise and apprentices can apply for apprenticeships at: https://www.apprenticeships.gov.uk/

Requirements for employing an apprentice
As an employer offering an apprenticeship you need to:
- Employ an apprentice for a minimum of 30 hours per week
- Pay at least the national minimum wage for apprentices
- Induct the apprentice and support their on-the-job learning using skills and knowledge in the workforce
- Be involved in reviewing the progress of an apprentice.

An NDT training provider can offer support to an employer to:
- Identify the apprenticeship that fits your business requirements
- Recruit an apprentice
- Develop a training plan that reflects the apprentice and employer requirements
- Review and test the progress of the apprentice and provide feedback
- Provide training to support the knowledge elements of the programme.

You should think about including some or all of this content in your apprenticeship:
- On-the-job coaching and learning
- Off-the-job learning
- Employer induction and training
- Online learning and support
- Workbooks
- Projects
- Mentoring and line management support
- Specific training for individuals
- Supervised NDT experience.

NDT training can only be delivered by BINDT-approved training organisations (ATOs) and examinations leading to the issue of a certificate or letter of approval can only be delivered by authorised qualifying bodies (AQBs).

Secure funding to train and develop your NDT apprentices
NDT Operator Apprenticeship

- **Duration:** 18 months.
- **Funding Cap:** Up to £12,000.
- **Apprenticeship Level:** This is a Level 2 apprenticeship.
- **Standard Reference:** ST0358.
- **Entry Requirements:** Level 1 English and maths and good aided or unaided eyesight.
- **Qualifications Gained***: NDT Level 2 certification in one method in accordance with national and international standards.

**Occupational Profile**
The NDT Operator apprenticeship is aimed at NDT Operators performing inspections within manufacturing processes, often in production-line environments and with high product volumes, using a single NDT method. Inspections apply within manufacturing, in-service inspection or specialised applications, such as NDT equipment development.

In addition to the single NDT method, knowledge and skills will be gained in: health & safety pertinent to the specific requirements of the relevant NDT method; an awareness of other NDT methods and their general capabilities and limitations; the knowledge required (by standards) for the assessment of defects against acceptance/rejection criteria; relevant sector-specific technology, quality aspects and working practices, such as inductions and confidentiality; material and product technology associated with the specific industry sector; and developing an understanding of the consequences of failure and the risk to life.

*** PCN, EN4179 and CSWIP qualifications are accepted by prospective employers.

NDT Engineering Technician Apprenticeship

- **Duration:** 36 months.
- **Funding Cap:** Up to £18,000.
- **Apprenticeship Level:** This is a Level 3 apprenticeship.
- **Standard Reference:** ST02888.
- **Entry Requirements:** Three GCSEs at grade C or above, including English and maths and good aided or unaided eyesight.
- **Qualifications Gained***: NDT Level 2 certification in three methods in accordance with national and international standards.

**Occupational Profile**
NDT Engineering Technicians will be required to inspect materials, welds, components and plant to verify their integrity without rendering them unfit for further service. The role involves technical supervisory responsibility for NDT Operators and other junior staff within the organisation.

NDT uses various methods, such as ultrasonics, radiography and infrared thermography, to detect cracks and other imperfections in manufactured components, including those that have been in service for a period of time. The results of inspections are taken at face value and, therefore, specialists rely on NDT accuracy when deciding whether to operate, repair or replace a component. The importance of the role of the NDT Engineering Technician cannot, therefore, be overstated. The NDT Engineering Technician will oversee, validate and audit by re-inspection the work of NDT Operators and manage projects and specific areas of work. A successful NDT Engineering Technician will hold three NDT certificates (mapped to engineering Council registration at the Engineering Technician level).

**Occupational Profile**
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**Professional Recognition:**
This apprenticeship meets the requirements for Engineering Council registration at the Engineering Technician level.

NDT Engineer Apprenticeship

- **Duration:** 4 years.
- **Funding Cap:** Up to £27,000.
- **Apprenticeship Level:** This is a Level 6 apprenticeship.
- **Standard Reference:** ST0369.
- **Entry Requirements:** Grades A-C in three A-levels, including maths and a science or engineering subject, or hold a minimum of three NDT Level 2 methods, or hold advanced NDT qualifications, such as NDT Level 3 certification.
- **Qualifications Gained***: Degree (BSc NDT or BEng NDT).

**Occupational Profile**
The NDT Engineer will be eligible to apply for professional registration as an Incorporated Engineer (IEng) and membership of the professional body (BINDT).

**Occupational Profile**
NDT Engineers use their acquired knowledge, skills and behaviours to enable NDT systems to operate safely, efficiently and in an environmentally sustainable way, meeting the requirements set out by the employer and those of the professional body. They maintain and manage applications of current and developing technology and undertake engineering design and development within manufacturing, construction and operations.

NDT Engineers use theoretical knowledge to solve problems in developed technologies using proven analytical techniques. They successfully apply knowledge to deliver engineering projects or services using established technologies and methods. They provide financial planning and management, together with taking some responsibility for leading and developing other professional staff. Their knowledge and skills will include cutting-edge NDT techniques, such as corrosion analysis, thermography testing, vibration analysis and advanced inspection techniques. On completion of the apprenticeship, the NDT Engineer will hold a degree (BSc Non-Destructive Testing or BEng Non-Destructive Testing) and will be eligible to apply for professional registration as an Incorporated Engineer (IEng).