NATIONAL COLLEGE FOR NUCLEAR

Assuring skills for a net zero carbon future

Nuclear Academics- September 2023

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What is NCfN?

In June 2014 the Government issued a call for engagement from employers to create a number of National Colleges with the aim to address essential skills gaps in the UK economy.

Through due diligence in 2016 5 national colleges emerged High-Speed Rail, Onshore Oil and Gas, **Digital Skills, Creative and Cultural Industries and Nuclear.**

National Colleges were not intended to duplicate existing Provision

Employer leadership at a national level, with a clear strategy for employer involvement in governance and the operation of the College, and appropriate mechanisms for engagement with businesses of all sizes.

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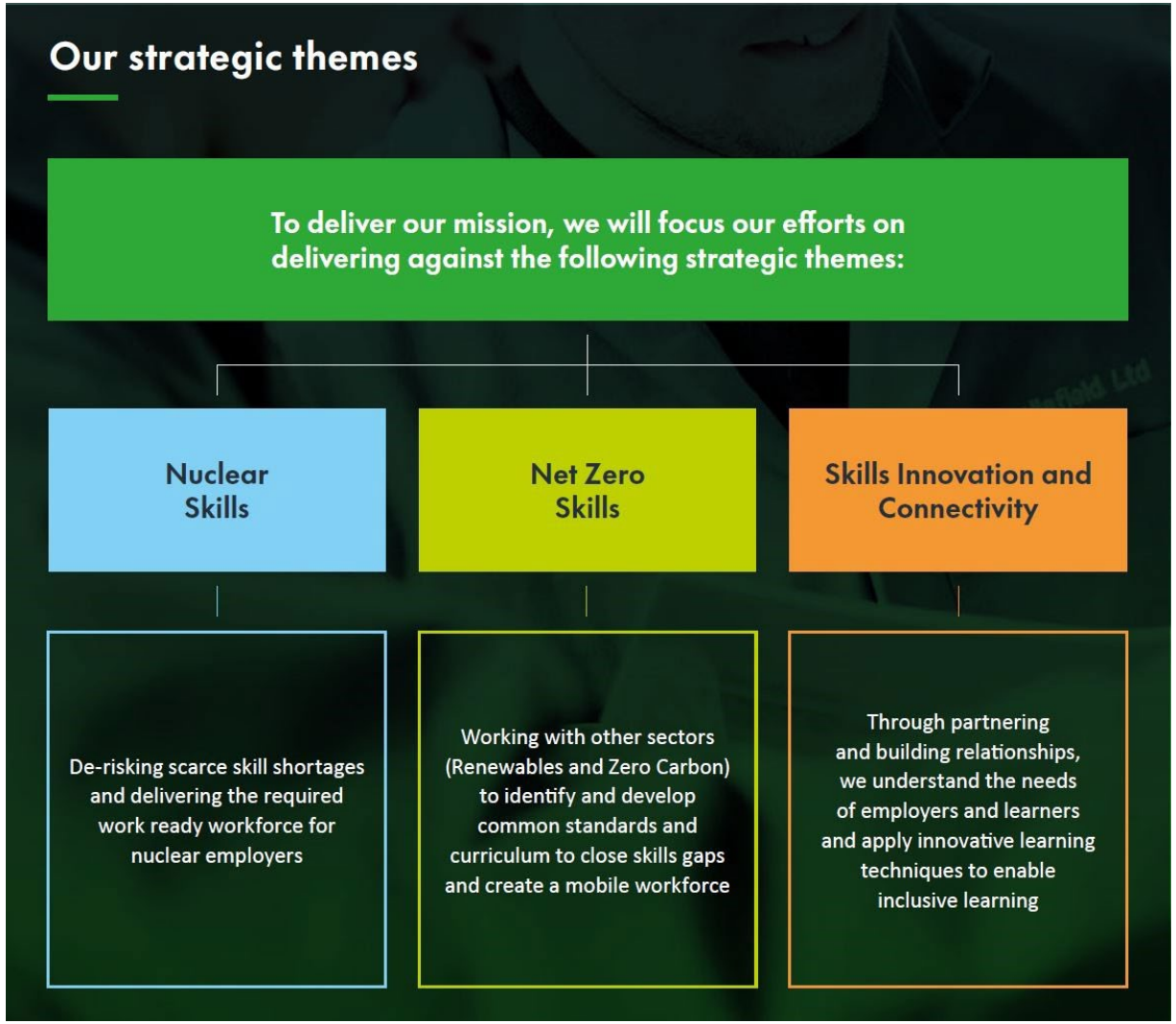
Our purpose is to provide innovative, current, high quality technical skills and education for the Nuclear and Clean Energy sectors by:

1. **Employers** - rapid response in the creation and provision of learning facilities and educational capability to provide a pipeline of apprentices and skilled workers
2. **Learners** - Provide experiential learning and work-ready behaviours within specific qualifications for Nuclear and Clean Energy, attracting school leavers and new adult recruits, whilst upskilling existing colleagues and sector transfers from military, thermal energy and offshore
3. **Employees** – High quality sector-specific employer-led qualifications that promote and encourage employee retention
4. **Education providers** – Collaborative, federated network of high class providers providing assured, high-quality, innovative and work ready qualifications and curriculum. Using best practise and up to date resources, as well as supporting educational providers to upskill in nuclear and be ready to meet the demand
5. **Government** – provide a capability and model that can be expanded nationally to meet the bow wave of demand from the sector and utilise synergies within the growing Zero Carbon sector



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What is NCfN?

A non-profit partnership between Nuclear employers and education

Federated Model of Approved Education (FE, HE) Providers delivering skills for nuclear

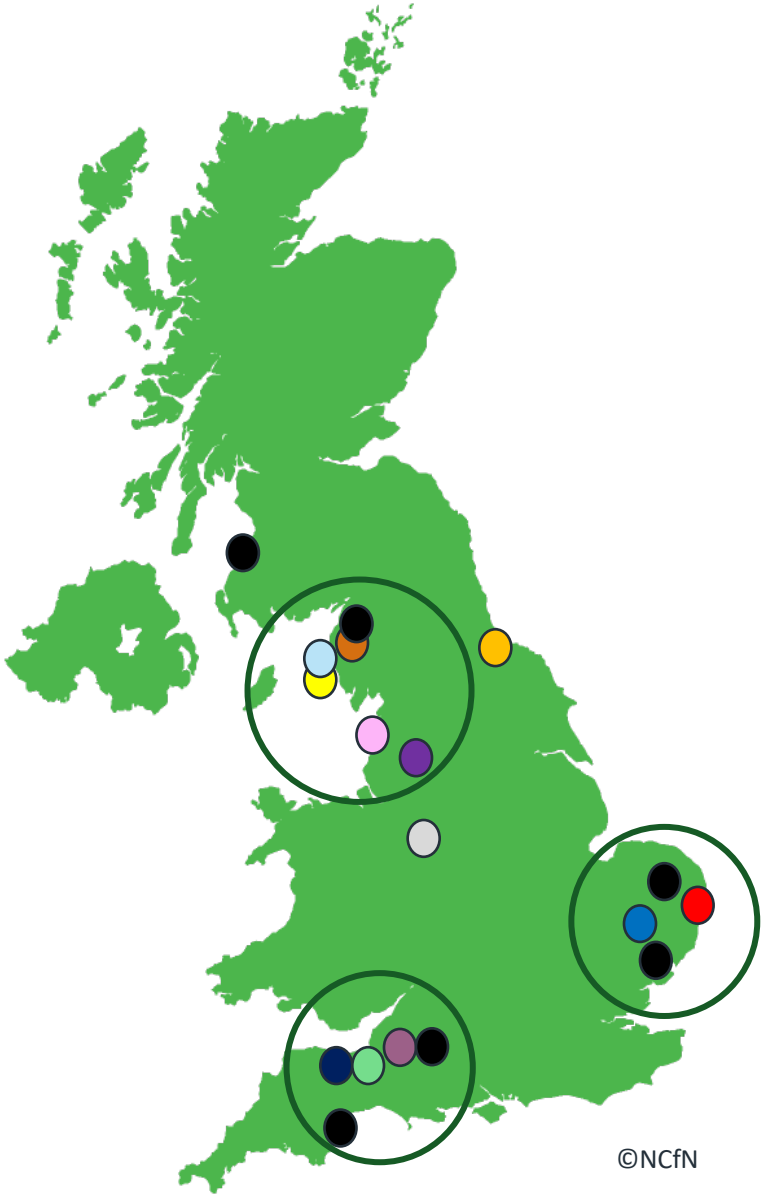
Founding Partners:

- Sellafield Ltd
- Lakes College
- University of Cumbria
- EDF Energy
- Bridgwater & Taunton College
- University of Bristol

Approved Providers:

- University of Derby
- Lancaster & Morecombe College
- West Suffolk College
- East Coast College
- Nelson & Colne College
- Hartlepool Group

Pipeline Providers:



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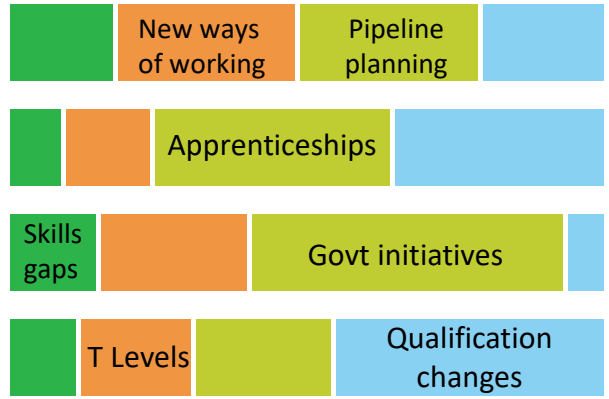
5000+

apprentices trained to date

Experience in supporting employers with:



Specialised curriculum

Unique nuclear experiential learning approach

20% energy and nuclear-focused content

Curriculum uniquely devised for high hazard, safety critical environments

500+

apprenticeship starts in 2022

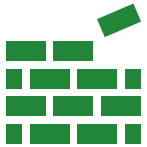
Over

60

different NCfN courses on offer

Focus of the Partnership

1. Bringing together employers, the school and the Approved Providers to address skills gaps, creating access/progression pathways into STEM/nuclear careers



2. Provide access to ready to use Nuclear educational curricula - short courses, apprenticeships to BEng hons with delivery being firmly rooted in employer-led experiential learning

3. Provide access to nuclear simulation facilities

4. Reach back available from NCfN provider network

5. Produce a talent pool and site-ready employees, fully conditioned in nuclear behaviours

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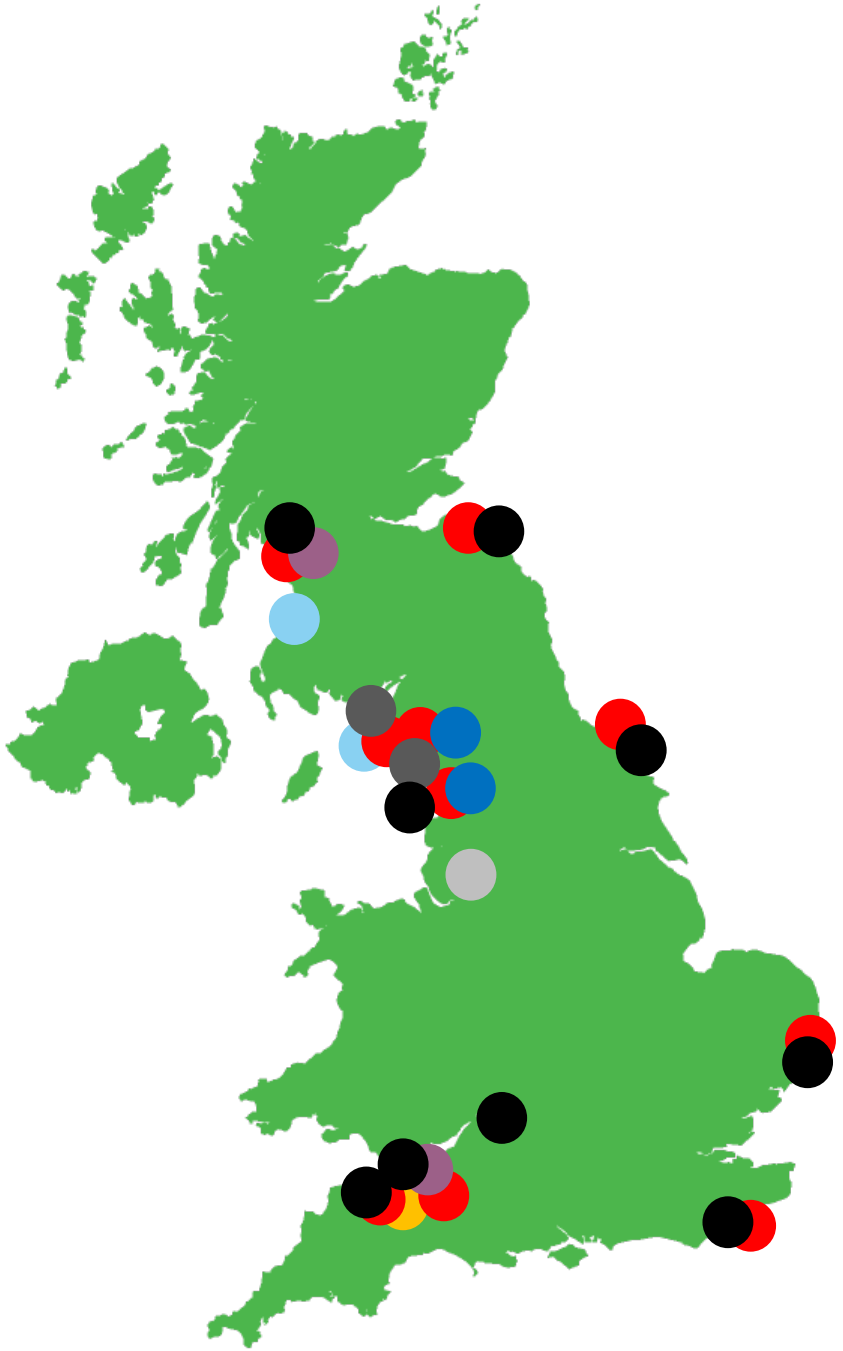
NCfN Simulation Facilities

Key:

- Aquatic Test Facility
- Construction
- Design Engineering
- Flow Loop Simulator
- Glove Box Facility
- Lifting & Handling
- Radiological
- Reactor Ops Facility



Big Rig video – Lakes College

Practice Flow Rig – Bridgwater & Taunton College

What its like to be an NCfN apprentice

Nuclear Degree Apprenticeships

Nuclear Degree Apprenticeships

Designed by employers in collaboration with Education providers to adress skills gaps, creating access/progression pathways into STEM/nuclear careers

3 Nuclear Degree Apprenticeships

- Nuclear Technician ST0380 – Level 5- Funding £21,000 (March 2017)
- Nuclear scientist and nuclear engineer (integrated degree) ST0289 - Level 6 - Funding £27,000 (Sept 2015)
- Nuclear Reactor desk engineer ST0784 - Level 6 - Funding £27,000 (May 2021)

Typical 5 year programme;
Years 1-3:

- Level 5 apprenticeship – with Foundation degree / HNC/HND

Years 4 & 5:

- Level 6 apprenticeship - Top up degree (BEng or BSc)

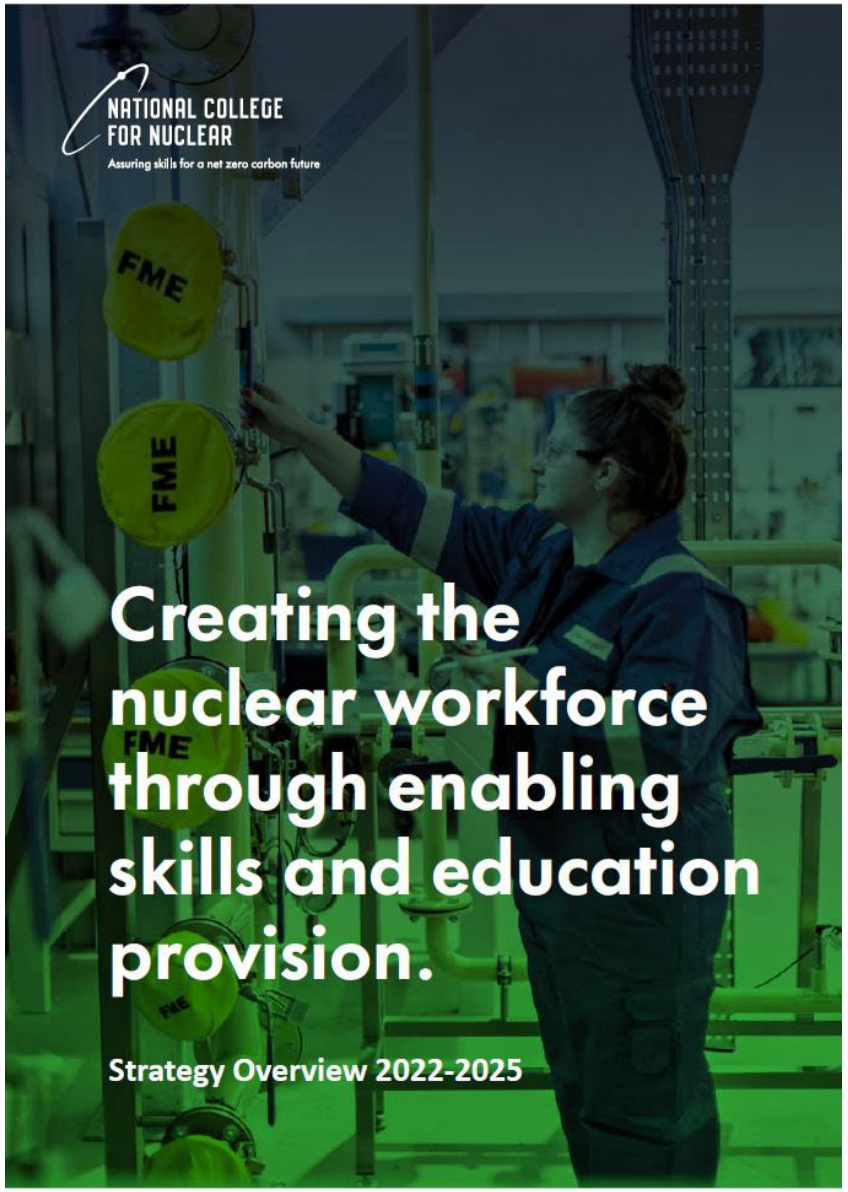
Nuclear Degree Apprenticeships

The degree apprentice programme consists of 3 key parts:

- Education
- Apprenticeship - Gateway and End Point Assessments
- Workplace performance – may include placements/secondments

Multiple Degree pathways developed with individuals placed on career ‘pathways’ working within the business. (e.g. Technical/Engineering/Manufacturing/Civils/Operations/Quality/Design)

Technical and professional development – Leading to Chartership



Vision

Being the 'go-to' for skills and capability development for nuclear and Net Zero energy missions.

Mission

We are the bridge between employer demand and education providers, delivering the required workforce through the use of shared and assured curriculum.

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