

Nuclear Standards Advisory Group

Apprenticeship Map for the Nuclear Sector

September 2017



Nuclear Standards Advisory Group

Apprenticeship Map for the Nuclear Industry

This Apprenticeship Map has been developed in conjunction with the Nuclear Standards Advisory Group. It is intended to be a useful guide for those in the UK nuclear industry looking for suitable apprenticeship routes for their employees in common occupations. Since the nations of the UK have separate apprenticeship systems, it lists available Standards in England and Frameworks in Scotland and Wales. It does not address Northern Ireland.

The system of developing Standards in England is still in process, and each Standard is colour coded to show whether it is Ready for Delivery, Approved (but not yet ready for delivery), or still In Development. Please note that there are other Standards which may be at early stages of development, which are not included here because they have not formally had an Expression of Interest approved by the Institute for Apprenticeships. These will be some time from being ready for delivery and will be added when they formally enter the system.

Standards and Frameworks are not always directly comparable. In these cases, the map shows the nearest likely equivalent. These may be at a higher or lower level, or may only be suitable in certain parts of the sector (for example, a Framework in Project Controls for Engineering Construction may be comparable to the Project Controls Standard, but only be suitable for those operating in the Engineering Construction sector). Where there is no obvious candidate, the columns are blank.

The range of occupations was originally derived from an exercise by the Standards Advisory Group to map existing Apprenticeship Frameworks in England to new emerging Standards. For this reason, it concentrates on occupations most commonly using apprenticeship routes in the sector, including nuclear-specific and technical roles, and those of particular strategic importance to the sector. There are of course more general apprenticeship occupations such as business administration and finance, which are listed with less detail towards the end of the document.

The full lists of Apprenticeship Standards and Frameworks for each nation are available online at:

England: www.gov.uk/government/collections/apprenticeship-standards

Scotland: www.apprenticeships.scot/take-on-an-apprentice/modern-apprenticeships/browse-frameworks/

Wales: www.afo.sscalliance.org/

The map will be updated as Standards and Frameworks are developed and revised.

For further information on apprenticeships, including available provision and application of the Standards and Frameworks in the workforce, please contact martin.mcmanus@coagentskills.com

Nuclear Standards Advisory Group

Colour code:

Ready for delivery	
Standard approved (but no Assessment Plan yet)	
Standard in development	

Apprenticeship Occupational area / Framework	Level	Trailblazer Standards (England)				Scotland Frameworks	Wales Frameworks
		Standard name	Availability	Funding Band (£)	Duration (months)		
Radiological Protection (Monitor)	2	Nuclear Health Physics Monitor (L2)	Ready for Delivery	9k	24		Nuclear Working (Radiation Protection Pathway) (L2)
Decommissioning and Process Operative	2	Nuclear Operative (Decommissioning or Process Pathway) (L2)	Standard approved	TBC	24		Nuclear Working (Nuclear Decommissioning Pathway) (L2)
Power Plant Production Technician	3	Maintenance and Operations Engineering Technician (MOET) (L3)	Ready for delivery	27k	36-42	Engineering (L3)	Nuclear Power Plant Operations (L3)
Nuclear Welding Inspection Technician	4	Nuclear Welding Inspection Technician (L4)	Ready for delivery	27k	48	Engineering Construction (NDT Pathway) (L3)	Advanced Engineering Construction (NDT Pathway) (L3)

Nuclear Standards Advisory Group

Apprenticeship Occupational area / Framework	Level	Trailblazer Standards (England)				Scotland Frameworks	Wales Frameworks
		Standard name	Availability	Funding Band (£)	Duration (months)		
Laboratory and Science Technician	3	Laboratory Technician (L3)	Ready for delivery	21k	18-24	Life Sciences (L2,3,4) <i>(Lab technician Pathways)</i>	Laboratory & Science Technicians (L2 & L3)
Laboratory Scientist	5	Laboratory Scientist (L5)	Ready for delivery	27k	60		Life Science & Related Science Industries <i>(Chemical Science or Process Technician Pathways)</i> (L4)
Engineering Maintenance Technician - Mechanical - Electrical - C&I - Process Operations	3	Science Industry Maintenance Technician (L3)	Ready for delivery	27k	36-42	Engineering <i>(Eng Maint Pathway)</i> (L3)	Engineering Manufacture <i>(Eng Maint Pathways)</i> (L2 & L3)
		OR Maintenance and Operations Engineering Technician (MOET) (L3)	Ready for delivery	27k	36-42		
		OR Science Manufacturing Technician (L3)	Ready for delivery	27k	18-30		
Nuclear Related Technology <i>(Apprenticeship Framework)</i>	4	Nuclear Technician (L5)	Ready for delivery	21k	42	Engineering <i>(Eng Maint Pathway)</i> (L3)	Engineering Manufacture <i>(Eng Maint Pathways)</i> (L2 & L3)
		OR Science Industry Maintenance Technician (L3)	Ready for delivery	27k	36-42		
Engineering Maintenance	4	OR Maintenance and Operations Engineering Technician (MOET) (L3)	Ready for delivery	27k	36-42		Advanced Engineering Construction <i>(Mech Maint Pathway)</i> (L3)

Nuclear Standards Advisory Group

Apprenticeship Occupational area / Framework	Level	Trailblazer Standards (England)				Scotland Frameworks	Wales Frameworks
		Standard name	Availability	Funding Band (£)	Duration (months)		
Mechanical Fitter	3	Science Industry Maintenance Technician (L3) <i>OR</i>	Ready for Delivery	27k	36-42	Engineering Construction (<i>Mechanical Fitting Pathway</i>) (L3)	Advanced Engineering Construction (<i>Mechanical Fitting Pathway</i>) (L3 & L4)
		Maintenance and Operations Engineering Technician (MOET) (L3) <i>OR</i>	Ready for delivery	27k	36-42		
		Science Manufacturing Technician (L3)	Ready for delivery	27k	18-30		
		Advanced Manufacturing Fitter	In development	TBC	TBC		
Installation Electrician, Maintenance Electrician	3	Electro Technical – Installation Electrician/Maintenance Electrician (L3)	Ready for Delivery	18k	42-48	Electrical Installation (L3)	Advanced Engineering Construction (<i>Electrical Installation Pathway</i>) (L3)
Welder	2,3	Welder (L2)	Ready for delivery	9k	18	Engineering (<i>Fab & Welding Pathway</i>) (L3)	Engineering Construction (<i>Supporting Welding Activities Pathway</i>) (L2)
		Welder (L3)	Ready for delivery	12k	38		Advanced Engineering Construction (<i>Welding Pathways – Pipework or Plate</i>) (L3)

Nuclear Standards Advisory Group

Apprenticeship Occupational area / Framework	Level	Trailblazer Standards (England)				Scotland Frameworks	Wales Frameworks
		Standard name	Availability	Funding Band (£)	Duration (months)		
Fabricator	2,3	Fabricator	In development	TBC	TBC	Engineering (<i>Fab & Welding Pathway</i>) (L3)	Engineering Manufacture (<i>Fabrication & Welding Pathways</i>) (L2 & L3) OR Advanced Engineering Construction (<i>Welding or Pipefitting Pathways</i>) (L3)
Design and Draughtsperson	3	Design and Draughtsperson (L3)	Ready for delivery	27k	42	Engineering (<i>Draughting & Design Pathway</i>) (L3)	Advanced Engineering Construction (<i>Design & Draughting Pathway</i>) (L3)
		Engineering Technician (<i>Pathway = Product Design & Development Technician</i>)	Ready for delivery	27k	42-48		
Non Destructive Testing occupations	3	Non-Destructive Testing Engineering Technician	Ready for delivery	18k	36	Engineering Construction (<i>NDT</i>) L3	Advanced Engineering Construction (<i>NDT Pathway</i>) (L3)
	2	Non-Destructive Testing Operator	Ready for delivery	12k	18		

Nuclear Standards Advisory Group

Apprenticeship Occupational area / Framework	Level	Trailblazer Standards (England)				Scotland Frameworks	Wales Frameworks
		Standard name	Availability	Funding Band (£)	Duration (months)		
	6	Non-Destructive Testing Engineer (Degree)	Standard approved	TBC	48		
Pipefitter	3	Engineering Construction Pipefitter	Standard approved	TBC	36	Engineering (<i>Pipefitting Pathway</i>) (L3)	Adv. Engineering Construction (<i>Welding or Pipefitting Pathways</i>) (L3)
Machining Technician	3	Engineering Technician (<i>Pathway = Machinist – Advanced Manufacturing Engineering</i>)	Ready for delivery	27k	42-48	Engineering (<i>Machining Pathways</i>) (L3)	
		OR Science Manufacturing Technician (L3)	Ready for delivery	27k	18-30		
Steel Fixer	2	Steel Fixer	Ready for delivery	12k	18-24	Construction Specialist (<i>Steel Fixing</i>) (L3)	Construction Civil Engineering (L2)
Steel Erector	3	Structural Steelwork Erector	Standard approved	TBC	24	Engineering Construction (<i>Steel Erecting</i>) (L3)	Adv. Engineering Construction (<i>Steel Erecting Pathway</i>) (L3)
Rigger	3	Engineering Construction Erector / Rigger	Standard approved	TBC	36-42	Engineering Construction (<i>Moving Loads</i>) (L3)	Adv. Engineering Construction (<i>Rigging Pathway</i>) (L3)

Nuclear Standards Advisory Group

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		Standard name	Availability	Funding Band (£)	Duration (months)		
Plater	3	Plating	In development	TBC	TBC	Engineering Construction <i>(Plating)</i> (L3)	Advanced Engineering Construction <i>(Plating Pathway)</i> (L3)
Maritime Defence Engineering	7	Systems Engineering Masters Level (L7)	Ready for delivery	27k	36-60		
Manufacturing Process Operative	2	Science Manufacturing Process Operative (L2)	Standard approved	TBC	18-24	Process Manufacturing (L3)	Process Manufacturing (L2, L3)
		<i>OR</i> Science Manufacturing Technician (L3)	Ready for delivery	27k	18-30		
Manufacturing Process Engineer	6	Science Industry Process/Plant Engineer Degree Apprenticeship (L6)	Standard approved	TBC	60		Advanced Manufacturing (L6) <i>(Nuclear Related Technology Pathway)</i>
Commissioning Technician	5,6	Nuclear Scientist and Nuclear Engineer Degree Apprenticeship (L6) <i>OR</i> Nuclear Technician (L5)	Ready for delivery	27k	36-60		Advanced Manufacturing (L6) <i>(Nuclear Related Technology Pathway)</i>
Test and Commissioning Engineer			Ready for delivery	21k	42		
Trials Engineer							
Cost Engineer							
Quality Engineer							

Nuclear Standards Advisory Group

Apprenticeship Occupational area / Framework	Level	Trailblazer Standards (England)				Scotland Frameworks	Wales Frameworks
		Standard name	Availability	Funding Band (£)	Duration (months)		
Electrical Engineer	6	Electrical / electronic technical support engineer (degree)	Ready for delivery	27k	60-72		
Control Engineer	6	Control / technical support engineer (degree)	Ready for delivery	27k	60-72		
Systems Engineer	7	Systems Engineering (masters)	Ready for delivery	27k	60		
Other high level Engineer occupations	7,8	Post Graduate Engineer (<i>11 Pathways</i>)	Ready for delivery	27k	24-30		
Project Controller	3	Engineering Project Controls Technician	Standard approved	TBC	36-42		Advanced Engineering Construction (<i>Project Control Pathway</i>)(L3)
Project Manager	4	Associate Project Manager	Ready for delivery	9k	24		Project Management (L4)
Project / programme / portfolio manager	6	Project / programme / portfolio manager (degree)	In development	TBC	TBC		
Cyber security	4	Cyber Intrusion Analyst / Security Analyst	Ready for delivery	18k	24		Information Security (L3, L4)
	4	Cyber Security Technologist	Ready for delivery	18k	24		
Safety Management	6	Risk & Safety Management Practitioner (degree)	Standard approved	TBC	36		

Nuclear Standards Advisory Group

Ancillary Roles with Potential Apprentice Cohorts			
Apprenticeship Discipline	Replacement Trailblazer Standards	Availability	Funding Band (£)
<p>Business, Administration, Human Resources, IT, Finance and Commercial (range of roles)</p> <p>A range of roles have been developed and/or approved. Examples are given here→</p> <p>There is similarly a range of civil engineering and construction occupations with developed Standards.</p>	Business Administrator	Standard approved	TBC
	Bookkeeper	In development	TBC
	Payroll Administrator	Standard approved	TBC
	Credit Controller	Ready for delivery	5k
	Credit Controller/ Debt collection specialist	Ready for delivery	9k
	Bid and Proposal Coordinator	Standard approved	TBC
	HR Consultant/Partner	Standard approved	TBC
	HR Support	Standard approved	TBC
	Network Operations	Standard approved	TBC
	Project Controls Technician	Standard approved	TBC
	Chartered Manager (degree)	Ready for delivery	27k

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Contact us:

t. 01925 515200

e. martin.mcmanus@cogentskills.com

w. cogentskills.com/nssg

NSSG

c/o Cogent Skills

Unit 5 Mandarin Court

Centre Park

Warrington WA1 1GG