

Level 3 Project Controls Technician (PCT)

End Point Assessment (EPA) Specification



Why choose NSAN as your End Point Assessment Organisation (EPAO)?

NSAN is led by nuclear sector employers, who live and breathe the skills needed in the whole of the UK nuclear industry, with client engagement at the heart of everything we do.

As a trusted and respected organisation leading skills delivery, we harmonise internal staff expertise with standard-specific subject matter experts from across relevant industries to develop and deliver our EPA.

As an approved EPAO since 2017, we have the expertise to ensure that you will be fully supported with navigating the EPA process and can be assured your apprentices are being tested against the latest industry standards.

What's involved in the NSAN Project Control Technician (PCT) EPA?

There are 3 components for the PCT EPA. Each component must be achieved before moving to the next:

Component 1 – Knowledge test

A two-unit knowledge assessment (closed book), enabling apprentices to demonstrate core technical knowledge across the PCT standard:

- Unit 1 - 50 minutes - 50 simple multiple-choice questions.
- Unit 2 - 40 minutes - 10 complex multiple-choice questions based on a scenario.

Component 2 – Practical test

A 2-hour paper-based practical assessment, based on real-world scenarios, to test the apprentice's ability to take raw data, review it, analyse it, interpret it, identify issues and assumptions, and communicate it appropriately.

Component 3 - Structured interview

A 60-80 minute interview, conducted by a panel, to consolidate the apprentice's application of the knowledge, skills and behaviours (KSBs) across the standard.

How long does the PCT EPA take?

The PCT apprenticeship will typically take 36-42 months to complete, with the EPA typically being taken within the 3 months before the apprentice's expected end date.

What criteria does the PCT EPA test the apprentice on and how will they be assessed?

The PCT standard is broken down into three key areas: knowledge, skills and behaviours (KSBs). The apprentice must achieve all KSBs across the standard. If the apprentice meets the pass mark for the knowledge test and/or practical test but fails to achieve a particular KSB within the assessment(s), it may be carried forward to the structured interview.

KEY	KT - Knowledge Test
	PT - Practical Test
	SI - Structured Interview

The right-hand columns show which assessment method(s) will be used to ensure a synoptic approach to assessment:

Ref	Behaviours - the Project Controls Technician is expected to demonstrate:	KT	PT	SI
B1.	Attention to detail, with an enquiring mind, not afraid to ask questions, seek assistance or challenge.		✓	✓
B2.	Applies and upholds principles of social responsibility, environmental sustainability, equality and diversity.		✓	✓
B3.	Strong work ethic, takes personal responsibility for own work, meets deadlines, sets the right example for others and displays honesty and integrity.			✓
B4.	Team player that shows sensitivity to others and works collaboratively demonstrating an openness to others' ideas and input.			✓
B5.	Positive attitude, constructive thinking and able to adjust to change.			✓
B6.	Committed to advancing own learning and competence, showing a willingness to learn new skills.			✓

Ref	Skills Competencies - the Project Controls Technician is expected to demonstrate their ability to:	KT	PT	SI
S1.	Develop work breakdown and coding structures to meet the scope laid out in the projects' technical information and specification, ensuring that the controls will monitor project progress and performance accurately.		✓	
S2.	Manage data: source, retrieve, check, edit, format, record and analyse data – using it to create relevant time, cost and resource reports		✓	
S3.	Estimate: develop cost estimates for defined scopes of work, create appropriate benchmarks, analyse quotes from sub-contractors and suppliers, and input to tenders and the early stages of projects.		✓	
S4.	Schedule and plan: break down the scope into activities to create a logical linked control schedule to input to the development of outline and integrated plans and baseline schedules; identify critical milestones; gather accurate progress data for controlling the schedule; and monitor progress.		✓	
S5.	Cost engineer and control: prepare control budgets, carry out cost control activities, gather and interpret cost data, monitor progress on a regular basis, interpret trends and forecasts; keep in line with contractual requirements, maintain baselines; ensure accurate reporting and control.		✓	
S6.	Monitor progress/performance and analyse data: associated with milestones, schedules, progress, manpower, resource and costs; undertake earned value analysis, create progress reports and identify variances from plan and likely consequences if no corrective action is taken.		✓	
S7.	Effectively communicate: with good interpersonal skills and share the right information with the right people in an appropriate format to enable effective project control.		✓	
S8.	Problem solve: recommend early corrective actions to reduce variances, identify issues and risks, present and maintain related action plans and contingencies.		✓	✓
S9.	Input to project closeout: generate key benchmarks and outturns including lessons learnt.		✓	✓
S10.	Observe and apply professional ethics, and maintain a duty of care.		✓	✓
S11.	Apply safety in the context of the role: comply with relevant national and international health, safety and environmental requirements.		✓	✓
S12.	Use computer based technology: model potential trends and resource use etc. using the right software package for the right task.			✓
S13.	Work in accordance with company management systems, policies and procedures: especially those relating to quality, data security, risk, change and document management.			✓

Ref	Knowledge Competencies - the Project Controls Technician is expected to demonstrate:	KT	PT	SI
K1.	Project controls: the project life-cycle, breakdown structures, the relationship between time and cost, quality and risk, how project controls is critical to successful project delivery.	✓		
K2.	Estimating practice: classes of estimate, how to interpret technical requirements and specifications to develop the estimate, techniques for estimate development such as parametric, analogous, bottom-up.	✓		
K3.	Planning and scheduling practice: difference between planning and scheduling, key terms and processes used to produce control schedules, how to interpret the technical requirements to produce a workable control schedule including development of logic networks, dependencies, critical paths, resource management, levelling and smoothing and impact of uncertainty and risk.	✓		
K4.	Cost engineering practice: key terms and processes related to preparing control budgets, cash flow, cost control and cost engineering relationships.	✓		
K5.	Work breakdown and coding structures: their purpose, how to create, use and interpret them to enable accurate control and the need for flexibility.	✓		
K6.	Tracking data and progress reporting: collection, validation and monitoring of data against plan, reviewing accuracy of reporting, how to tailor the presentation of data for understanding and buy-in.	✓		
K7.	Analysis techniques: how to identify trends and variances using techniques such as earned value analysis, forecasting, critical path analysis and risk analysis.	✓		
K8.	Commercial matters: how they impact on the role, the basics of contract and supply chain management.	✓		
K9.	Technical information: how to review and interpret technical information from different sources e.g. engineering drawings, manufacturing plans or construction plans to develop the scope for control.	✓		✓
K10.	Employer organisation, management systems, and procedures: related governance including quality, change control, data management and security, configuration management, version control, risk analysis and management, and document control.	✓		✓
K11.	Project controls related software and IT systems: attributes, limitations and systems used, in-house and proprietary applications used for: planning and scheduling, cost and risk analysis, estimating and progress and performance monitoring.	✓		✓
K12.	Importance of safety: relevant engineering, construction and infrastructure specific knowledge including related national and industrial health, safety and environmental standards and legislation.		✓	✓
K13.	Technical, engineering and mathematical principles: what these are and how to apply them to support effective project controls within the context of the role.			✓

What does the apprentice need to do to prepare for the PCT EPA?

Achievement of a level 3 diploma/vocational qualification in Project Controls Practice is a mandatory pre-requisite for the apprentice taking the EPA.

Before taking the EPA, the apprentice will also need to meet the requirements of the Gateway.

What are the requirements of the PCT EPA Gateway?

Prior to the EPA the employer and provider will confirm that the apprentice has satisfactorily met the on-programme training requirements and has achieved mandatory gateway requirements for EPA.

The mandatory requirements are:

- a declaration of readiness, signed by the apprentice, employer and training provider
- evidence of achievement of a Level 3 diploma/vocational qualification in Project Controls Practice

If the apprentice was aged under 19 on the start date of their apprenticeship, they will **also** need to provide:

- evidence of achievement of Level 2 (or equivalent) maths and English

*Recommended PCP qualifications:

- BTEC Level 3 Diploma in Operations & Maintenance Engineering
- BTEC Level 3 Diploma in Construction and the Built Environment
- BTEC Level 3 Diploma in Engineering ECITB Certificate in Project Controls
- ECITB Certificate in Project Controls

*If an alternative/higher qualification has been used, please confirm this with NSAN before Gateway to ensure it fulfils the Gateway requirements.

How is the PCT EPA graded?

Each component of the EPA is awarded a mark and graded as Pass, Merit, Distinction or Fail. The final overall grade will be determined by collective performance in the three assessment methods, based on a weighting system and grading rules.

EPA Component	Weighting	Total of component marks multiplied by weighting = aggregated mark	Grade	Grading rules for overall grade
Knowledge test	25%	Less than 65%	Fail	Fail in any method
Practical test	50%	65% - 74%	Pass	Pass for all three elements
Structured interview	25%	75% - 84%	Merit	Must include merit for practical test
		85% or above	Distinction	Must include distinction for practical test

If the result of any assessment is Fail, the overall result will be Fail.

How much does the PCT EPA cost?

£2,750. This is a fixed cost, which covers the full EPA process including planning, guidance, development, delivery, assessor expenses and certification.

Fees are payable at three points of the EPA.

- 10% non-refundable deposit at contract agreement
- 70% at gateway
- 20% on completion of the first attempt at the final method of assessment

Progression route - where can it lead?

Apprentices who achieve the PCT EPA will be eligible to apply for membership of the Association of Cost Engineers (ACostE) as a Graduate Member and will also be eligible to apply for registration as an Engineering Technician (EngTech), subject to having suitable engineering experience and undergoing a professional review process.