

Why project controls?

Project controls plays a vital role in businesses that operate at the cutting edge of developments in society and technology. There is a shortage of skilled professionals and there are great career opportunities.

The Government has updated apprenticeships in England to make them more focused on occupations. Employers are in the driving seat and have created this apprenticeship with a focus on the knowledge, skills and behaviours that are required to have a successful career as a project controls technician.

A collaborative, employer-led approach

Chaired by Costain and supported by the Engineering Construction Industry Training Board (ECITB) a large number of companies, organisations and professional bodies came together as a working group to create a new Project Controls Technician Apprenticeship Standard that sets the benchmark for project controls and gives apprentices a flying start to a career in this vital profession.

About the Project Controls Technician Apprentice Standard (level 3)

This standard has been developed to train competent project controllers that work in project teams on complex projects in sectors such as construction, manufacturing, engineering, energy and infrastructure — where detailed progress /performance tracking, and an understanding of on-site hazards, health and safety requirements and compliance is critical. Apprentices develop the knowledge, skills and behaviours to undertake a wide range of project controls tasks including estimating, planning, scheduling and cost engineering. This handson role is crucial to ensuring the successful delivery of complex projects and a shortage of

skilled professionals provides opportunities for a secure, fulfilling long-term career in a wide range of industries.

The Project Controls Technician standard

The apprenticeship set outs the key knowledge, skills, and behaviours of a Project Controls Technician to:

- Understand the project life-cycle, work breakdown and coding structures, and the relationship between time and cost, quality and risk;
- Understand how to review and interpret technical information from sources such as engineering drawings, manufacturing or construction plans;
- Understand the terms and processes relating to project controls, planning & scheduling, estimating, and cost engineering;
- Define cost estimates for different scopes of work, creating benchmarks, analyse quotes and input to project tenders;
- Break down project scope into activities, plans and schedules and identify milestones:
- Gather progress data and monitor progress associated with milestones, schedules, progress, manpower, resources and costs:
- Prepare and monitor control budgets, interpret trends and forecasts and ensure accurate reporting and control;
- Identify problems, issues and risks and maintain related action plans and contingencies;
- Understand the relevant technical, engineering and mathematical principles in the context of project controls;
- Understand and apply relevant engineering, construction and infrastructure health, safety and environmental principles and legislation.

Duration of apprenticeship

This apprenticeship typically takes 36 months to complete, during which time the apprentice will study to gain technical background knowledge in science or engineering alongside gaining a comprehensive grounding and practical experience in project controls.

Professional recognition and career progression

On completion the apprentice can choose to apply for membership of the Association of Cost Engineers (ACostE) as a Graduate Member, and if they have suitable engineering and work experience, they can apply for registration as an Engineering Technician (EngTech) subject to undergoing a professional review process.

With additional training the apprentice could also progress to more specialist roles in areas such as planning, scheduling, estimating, cost control, risk and quality and ultimately a role as project controls manager or director.

20/20 Business Group	First Planner
ACostE	Fluor
ACSL	Gardiner and Theobold
AkerSolutions	Gen2 (training company)
Wood Group	HS2
APM	KBR
Atkins Global	LakerVent
Balfour Beatty	Magnox
BCECA	Manchester University
Bechtel	Monitor Mpower
Cavendish Nuclear	N-SAN
CB&I	Pathfinder planning
CH2MHill	Petrofac
CICES	Prima Uno
Costain	Project Controls Online (training)
Cumbria University	Richmond College
Decipher Group	Sunbeam
Diviani Consulting	Turner and Townsend
Doosan	TASC (training)
EDF Energy	Engineering Construction Institute
Fabricom Engie	Tranport for London

The standard is approved and the apprenticeship is ready for delivery. Funding is available up to £21,000 (plus £2,000) in specific circumstances. See: https://www.instituteforapprenticeships.org/apprenticeship-standards/project-controls-technician/

"I have led Project Controls in Qatar, South Africa and now, with CH2M, across Europe. It's been a great career for me that just gets more interesting. And that's what keeps me here, new projects in new places with new challenges that force me to change and adapt and there is always more to know."

Simon Springate, CH2M

Level 6 Project Controls Professional apprentice standard - IN DEVELOPMENT

Development of a level 6 project controls professional apprentices standard has been approved by the Insstitute of Apprenticeships and Technical Education.

Chaired by Fluor, a group of employers, training providers and professional bodies are currently working together with ECITB to develop this standard. There is a growing demand for project controls professionals across the public and private sector to work on complex projects from the very start to the end such as HS2, Hinkley Point C, Dreadnought and Thames Tideway. The broad purpose of the occupation is to ensure that multi-faceted engineering and infrastructure projects deliver successfully and safely to time, cost and quality: by critically analysing, interpreting and evaluating technical information to develop coding structures, cost and time objectives, robust recommendations and recovery plans for the project, programme or portfolio manager.

A project controls engineering professional is needed where the level of risk associated with the project such as commercial; safety; environmental; legal; and/or people, is sufficiently great to require independent assurance and verification of technical information.

If you are interested in joining the working group that is developing this exciting new level 6 apprentice standard please contact:

Catherine Lambert, catherine.lambert@ecitb.org.uk

"In 2000 I switched my career into Controls, learned everything that I could and set up my first controls office in 2001.

So, getting a proper professional standing/recognition for controls professionals was why I got into controls and ,is why I am still in controls . There have been huge advances in this over the past few years, the ECITB training courses are a welcome breakthrough; there is still work to do after training (possibly for a professional CPD programme or something like that); and work to do with employers/companies to get them to ensure they have the minimum standards required to allow their controls staff to do their jobs."

Michael Morrice, Amey



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