Occupational Map: Construction

This is one of 15 occupational maps that group together occupations that require similar knowledge, skills and behaviours. Career pathways and occupational clusters have been used to provide further grouping of occupations, with the pathways indicating options for likely career progression. Every apprenticeship standard has been captured, as well as other skilled occupations where there is a substantial requirement for technical knowledge and practical skills. This map contains a large number of occupations that have been split into three career pathways: design, surveying and planning; on-site construction; and building services engineering. The construction operative/supervisor, metal and steel operative and construction specialist operative/technician clusters have been identified as suitable for learning via apprenticeships only, so government does not intend to launch T levels for these.

Occupations in green: approved for delivery
Occupations in amber: standard published
Occupations in red: standard in development
Occupations in black: proposed standard
(): the number shown in brackets is the level of the

apprenticeship (if the level is known)

Career pathway

Technical Occupations

Technical occupations: skilled occupations that a college leaver or an apprentice would be entering, that typically require qualifications at levels 2/3.



Higher Technical Occupations

Higher Technical occupations: require more knowledge and skills acquired through experience in the workplace or further technical education. They typically require qualifications at levels 4/5.



Professional Occupations

Professional occupations: occupations where there is a clear career progression from higher technical occupations, as well as those occupations where a degree apprenticeship exists.

Click here for more information on the occupations listed in this map

Design, Surveying and

Planning

Cluster: Design and Surveying Technician

Design, analyse, plan for site engineering and construction projects.

Specialisms are common (e.g. rail infrastructure, asbestos management). Significant capability in the use of IT/digital technology, data collection, analysis and presentation.

Asbestos analyst/surveyor (3)

Building services design technician (3)

Civil engineering technician (3)

Digital engineering technician (3)

Fall protection technician (2)

Geospatial survey technician (3)

Railway engineering design technician (3)

Surveying technician (3)

Cluster: Design and Surveying Advanced Technician

Identify and monitor client requirements, H&S risks, regulatory compliance, environmental impact, build quality, co-ordinate information and manage build costs.

Acoustics technician (4)

Construction design and build technician (4)

Construction site engineering technician (4)
Construction surveying technician (4)

Cluster: Design and Surveying Professional

Building/structure design, research, commercial cost management, contracts management with a wide range of knowledge of current technology developments and options, contracts, procurement and tracking. Consults with clients to determine functional and spatial requirements of new or renovated structures.

Architect (degree) (7)

Architectural assistant (degree) (6)

Building control surveyor (degree) (6)

Building services design engineer (6)

Chartered building services design engineer (6)

Chartered surveyor (degree) (6)

Chartered town planner (degree) (7)

Civil engineer (degree) (6)

Civil engineering site management (degree) (6)

Construction design management (degree) (6)

Construction quantity surveyor (degree) (6)

Geospatial mapping and science (degree) (6)

Onsite

Construction

Cluster: Core Building Tradesperson

Able to use of a range of building materials (wood, brick, block, stone etc.) to construct part/whole structures and also those which are needed to finish a structure (e.g. paint and decorate). Work across domestic through to infrastructure projects and covers both routine and complex work elements. Interprets drawings, contracts, and specifications. Has knowledge of building methods and materials including heritage ones and knowledge of appropriate regulations.

Advanced carpentry and joinery (3):

- Advanced architectural joiner
- Advanced site carpenter

Bricklayer (2)

Carpentry and joinery (2):

- Architectural joiner
- Site carpenter

Construction assembly technician (2)

Fenestration

Fencing installer (2)

Floorlayer (2)

Formworker (2)

In situ flooring operative (2)

Military engineering construction technician (3):

- Bricklayer and concreter
- Building and structural finisher
- Carpenter and joiner

Painter and decorator (2)

Plasterer (3):

Roofer (2)

Steeplejack (2)

Thatcher

Wall and floor tiler (2)

Cluster: Construction Operative/Supervisor APPRENTICESHIP ONLY

Use of heavy plant and equipment on surface construction sites and also specialist sites e.g. highways, tunnelling. Also the ability to undertake specialist construction work e.g. handling insulation, asbestos. Interprets drawings, plans and specifications along with methods and risk statement.

Asbestos removal operative (2)

Construction equipment operative

Commercial thermal insulation operative (2)

Demolition operative (2)

Highways maintenance skilled operative (2)

Highways maintenance supervisor (3)

Cluster: Construction site supervisor

Decide on construction methods and materials, project management approach and systems, quality monitoring, cost and resource management.

BEMS (Building Energy Management Systems)

Controls Engineer (4)

Construction contracts manager

Construction site supervisor (4)

Cluster: Construction Professional

Manage whole building projects covering HSE, quality, commercial and legal contracts, problem solving and finding innovative solutions.

Construction site management (6)

Industrial coatings applicator (2)

Industrial thermal insulation technician (3)

Hire Controller (Plant, Tools and Equipment)

(formally Hire Desk Controller) (2)

Temporary traffic management operative (2)

Tramway (Light Rail) Construction and Renewals Operative (2)

Tunnelling operative (2)

Cluster: Metal and steel operative

APPRENTICESHIP ONLY

Fabricate, assemble and erect steel components for on-site building projects. Interprets drawings, plans, specifications and other information. Also has additional capability as regards access and lifting of components.

Metal decking installer (2)

Scaffolder (2)

Steel fixer (2)

Structural steelwork erector (2)

Structural steelwork fabricator (2)

Cluster: Construction Specialist Operative/Technician APPRENTICESHIP ONLY

Prepare and operate specialist on-site plant and equipment for lifting, pile driving, and pipe laying.

Engineering construction (3)

Engineering construction Erector/Rigger (3)

Engineering construction pipefitter (3)

Groundworker (2)

Lifting technician (2):

Piling attendant (2)

Building Services Engineering

Cluster: Building Services Engineering Operative/Technician

Design, plan, assemble, install, house, commission, test, maintain, service and repair of all forms of a buildings' emergency, security and utility systems.

Building services engineering craftsperson (3)

Building services engineering ductwork craftsperson (3)

Building services engineering ductwork installer (2)

Building services engineering installer (2)

Building services engineering service and

maintenance engineer (3)

Building services engineering ventilation hygiene

technician (3)

Dual fuel smart meter installer (2)

Electrical, electronic product service and instillation engineer (3)

Cluster: Building Services Engineering Technician

Design and supervise the installation of building services during construction.

Building services engineering technician (4)

Cluster: Building Services Engineering Professional

Design and install buildings service systems based on agreed client specification undertaken during a building's construction.

Building services design engineer (degree)

Building services engineering site management (degree) (6)

Fire emergency and security systems technician (3):

- Fire
- Fire and emergency lighting
- Fire and security
- Security

Gas engineering (3)

Installation electrician/maintenance electrician (3):

Interior systems (2)

Plumbing and domestic heating technician (3):

- Environmental technologies
- Fossil fuel natural gas
- Fossil fuel oil
- Fossil fuel solid fuel

Powered Pedestrian Door Installer and Service Engineer (2)

Refrigeration air conditioning and heat pump

engineering technician (3)

Smart home technician (2)

Cluster: Utilities Installation and Maintenance Operative/Technician

Install, exchange, commission and maintain metering systems, appliances, lighting and other road-based utilities.

Highway electrical maintenance and installation operative (2) Highway electrician / service operative (3)

Wireless rigging technician (2)

Cluster: Facilities Management Operative/Supervisor

Manage and maintain (planned and reactive) a building's mechanisms and systems across electrical, plumbing, plant, safety systems and other equipment.

Facilities services operative (2)

Facilities management supervisor (3)

Housing/property management (3)

Housing/property management assistant (2)

Junior energy manager (3)

Multi skilled maintenance and repair operative

Property maintenance operative (2)

Cluster: Facilities Manager

Manage the services for a building including maintenance and repair.

Facilities manager (4)

Senior housing/property management (4)

Cluster: Facilities Management Professional

Manage the services for a group of buildings or an estate along with their on-going improvement and maintenance of their services.

Senior / head of facilities management (degree) (6)