T Level TQs in Onsite Construction and Building Services Engineering – Familiarisation update

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How do T Levels compare?

A Levels

Subject-based qualifications

two years
at local college or school

T Levels

2-year technical programmes at
Local colleges, schools, training providers
80% classroom based
20% in a placement

Includes **Industry Placements** to build attitudes and behaviours and to develop practical skills

Apprenticeship Level 2/3

at least 12 months work-based training

80% on the job
20% off the job

Followed by possible progression to:

- Higher Education
- Skilled Employment
- Progression onto an Apprenticeship
- Higher / Degree Apprenticeship

How is a T Level different from an Apprenticeship?

- T Levels and Apprenticeships are based on the same employer designed standards but will suit different learning styles.
- Apprenticeships are paid work, suitable for learners who know what occupation they want to pursue and wish to train ‘on the job’.
- T Levels are largely classroom based, with a substantive industry placement
- T Levels offer a broader course content, and students will specialise later in their programme. The content of Apprenticeships is narrower and focussed on a specific occupation from the outset.
- T Level is the new ‘gold standard’ in technical education and the technical course of choice for learners in the future.

The Road Ahead: 2020 to 2023

Route	Pathway	Delivery	Awarding Organisation
Construction	Design, Surveying and Planning for Construction	2020	Pearson
	Onsite Construction	2021	City & Guilds/EAL
	Building Services Engineering for Construction	2021	City & Guilds/EAL
Education & Childcare	Education and Childcare	2020	NCFE
Digital	Digital Production, Design and Development	2020	Pearson
	Digital Support Services	2021	NCFE
	Digital Business Services	2021	NCFE
Health & Science	Health	2021	NCFE
	Healthcare Science	2021	NCFE
	Science	2021	NCFE
Legal, Finance & Accounting	Legal	2023	Pearson
	Finance	2022	Pearson
	Accounting	2022	Pearson

The Road Ahead: 2020 to 2023 cont…

Route	Pathway	Delivery	Awarding Organisation
Engineering & Manufacturing	Design and Development for Engineering and Manufacturing	2022	City & Guilds/EAL
	Maintenance, Installation and Repair for Engineering and Manufacturing	2022	City & Guilds/EAL
	Engineering, Manufacturing, Processing and Control	2022	City & Guilds/EAL
Business & Administration	Management and Administration	2022	City & Guilds
	Human Resources	2023	TBC
Hair & Beauty	Hair, Beauty and Aesthetics	2023	NCFE
Creative & Design	Craft and Design	2023	NCFE
	Media, Broadcast and Production	2023	NCFE
Catering & Hospitality	Catering	2023	Highfield
Agriculture, Environmental & Animal Care	Animal Care and Management	2023	City & Guilds
	Agriculture, Land Management and Production	2023	City & Guilds

The Structure of T Levels

T Level programme

- Approximately 1,800 hours over two years
- Learners will need to achieve all elements to receive their T Level certificate.
- Subject content is set by T Level employer panels, developed by Awarding Organisations (AOs), and approved by the Institute for Apprenticeships & Technical Education (“the Institute”). The Institute then oversees the delivery of the qualifications to providers by AOs.

Technical Qualification (TQ)

Between 900-1400 hours / Undertaken in a college / school-based setting

Core Component

- Knowledge and understanding of the concepts, theories and principles relevant to the T Level and the broader route.
- Core skills relevant to the T Level.
- *Assessed through an external examination, and a substantial employer set project (ESP) undertaken in the classroom setting and set by Awarding Organisation (AO) employer panels.*

Occupational Specialism(s)

- Knowledge, skills and behaviours required to achieve threshold competence in an occupational specialism.
- Maths, English and digital skills are included where necessary to achieve threshold competence.
- Students must complete at least one occupational specialism.
- *Assessed synoptically through rigorous practical assignments.*

T Level Industry Placement

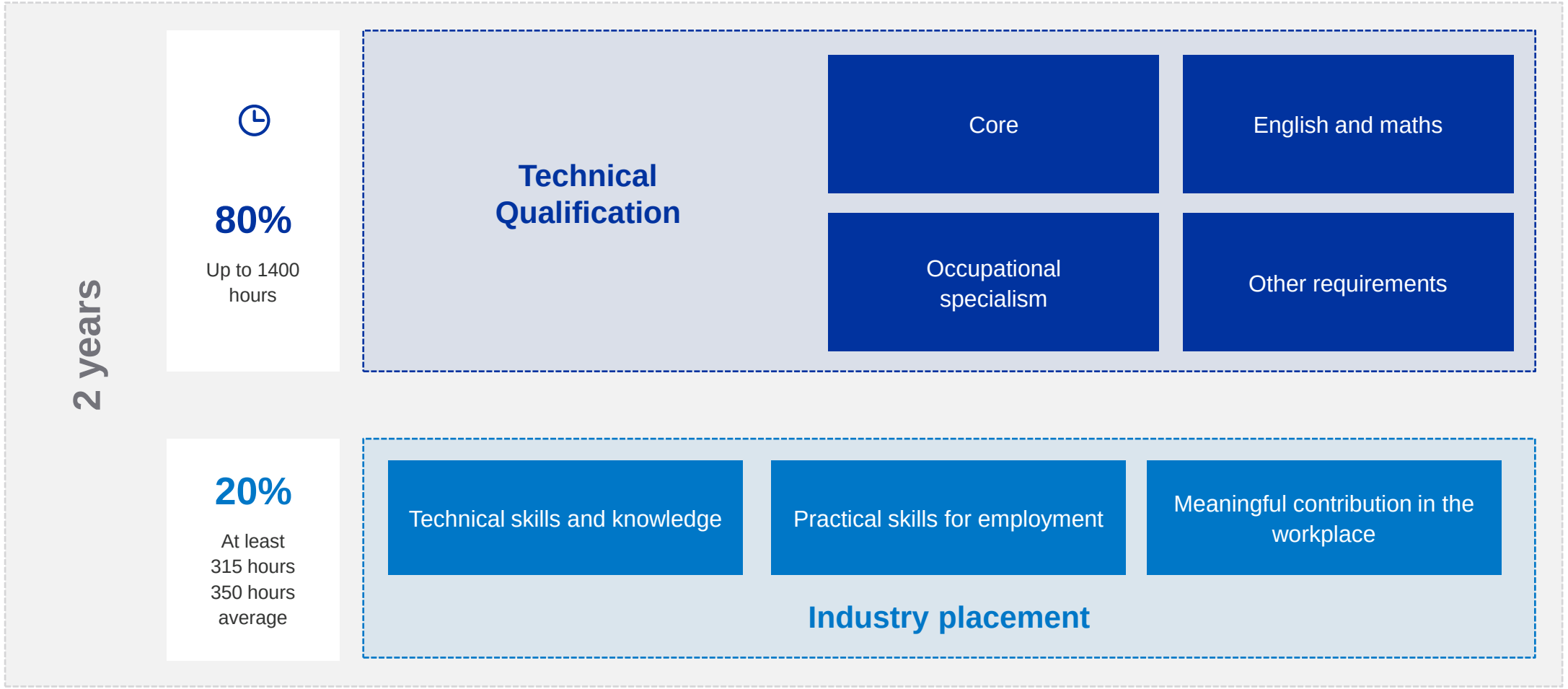
- Undertaken in an employer setting.
- Minimum of 45 days, *between 315-420 hours*.
- Students develop technical skills and apply their knowledge in a workplace environment.
- Provider should pay / contribute to travel and subsistence costs, if not covered by the employer.
- Employers are not expected to pay students

Other Requirements

- T Level panels may set occupation-specific requirements, if they are essential for skilled employment, e.g. a licence to practice qualification or professional qualification.

Employability, Enrichment & Pastoral Requirements

The T Level Programme

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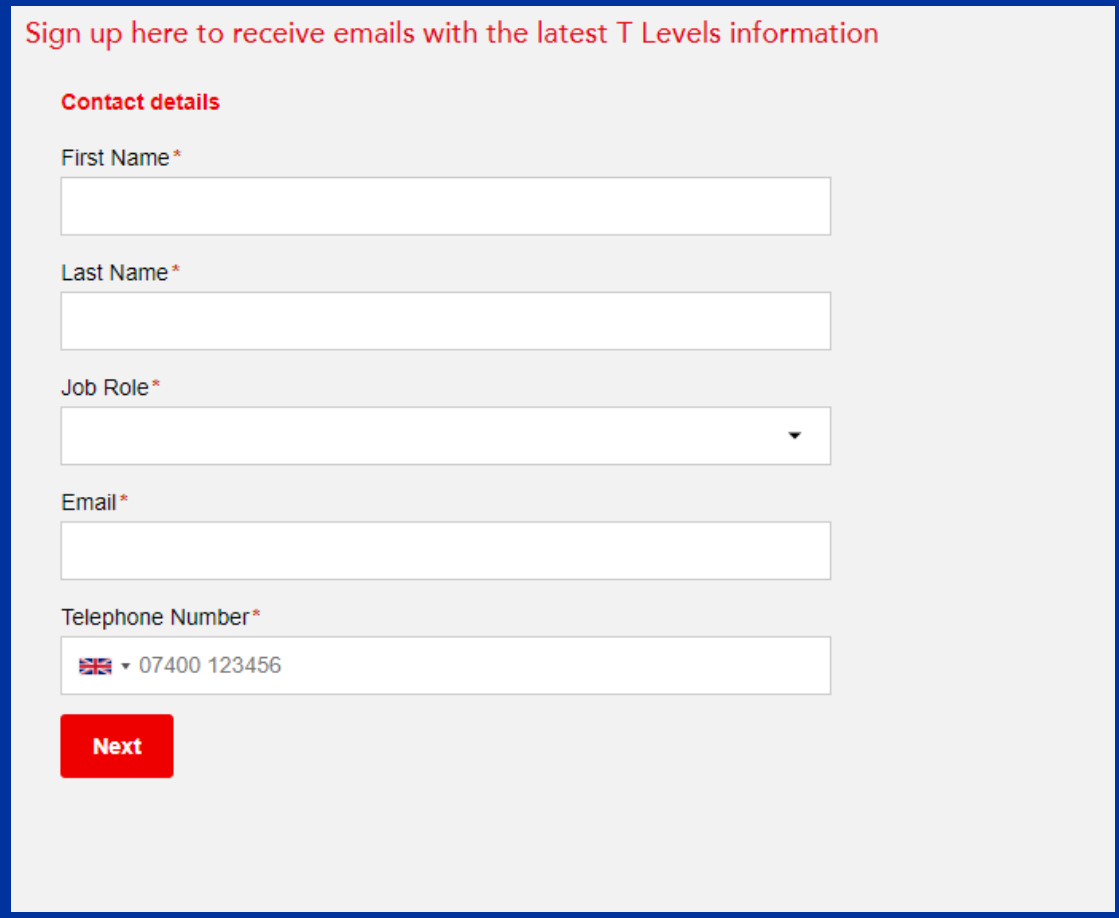
Don’t miss out…

Sign up for T Level information

To ensure you receive all the latest information and updates regarding the Construction On-Site and BSE T Levels including our events, networks and webinars sign up via the link below adding your details into the relevant areas on the webpage.

https://www.cityandguilds.com/tlevels/construction-bse



Developed by Industry for Industry

Start your career in Onsite Construction with a T Level

Overview of the Technical Qualification

To achieve the T Level Technical Qualification in Onsite Construction you'll need to complete the two components of the TQ. These are known as the core component and the occupational specialism. You'll have the choice of studying one standalone occupational specialism alongside the core component:

Core

(Assessed by two externally set and marked exams and an employer set project)

Onsite Construction

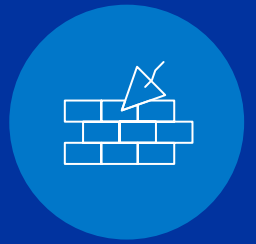
Group B Combination Occupational Specialisms:

(Assessed by an externally set and moderated practical synoptic assignment)

Carpentry & joinery

Plastering

Painting & decorating



Bricklaying

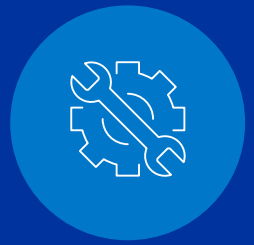
Start your career in Building Services Engineering with a T Level

Overview of the Technical Qualification

To achieve the T Level Technical Qualification in Building Services Engineering (BSE) for Construction you'll need to complete the two components of the TQ. These are known as the core component and the occupational specialism. You'll have the choice of studying one standalone occupational specialism or a combination of specialisms as listed below:

Core

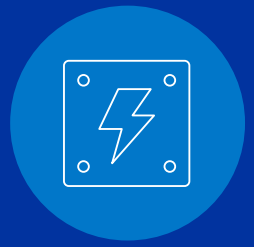
(Assessed by two externally set and marked exams and an employer set project)



Building Services Engineering

Group A Standalone Occupational Specialisms:

Occupational Specialism, either grouped (bottom set) or single (top set) (Which is assessed by a practical assignment for each Occupational Specialism)



Electrotechnical engineering

Electrical and Electronic equipment engineering

Protection system engineering

Gas engineering

Group B Combination Occupational Specialisms:

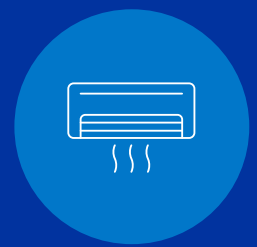
Plumbing engineering

Heating engineering

Heating engineering

Ventilation

Refrigeration engineering



Air condition engineering

T Level Technical Qualifications

On-site construction	
8711 - 30	**Core**
8711 - 35	Bricklaying
8711 - 36	Carpentry and joinery
8711 - 37	Painting and decorating
8711 - 38	Plastering

Building Services Engineering	
8710 - 30	**Core**
8710 - 32	Electrical and electronic equipment engineering
8710 - 33	Electrotechnical engineering
8710 - 34	Gas engineering
8710 - 35	Plumbing and heating engineering
8710 - 36	Heating engineering and ventilation
8710 - 37	Protection systems engineering
8710 - 38	Air conditioning and Refrigeration engineering
8710 - 32	Electrical and electronic equipment engineering

Registration information- Core first before OS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T LEVELS AND INDUSTRY PLACEMENTS

SAM NEVIN & CHRISTOPHER HOOPER

TL

HM Government

WHAT ARE INDUSTRY PLACEMENTS?

- Time spent by a 16–19-year-old student, **learning** and **working** in an organisation
- In a **real environment** – with an employer making a meaningful contribution to the organisation
- Minimum of **315 hours** (approx. 45 working days) –average 350 hours.
- **Occupationally-specific** – developing students' practical and technical skills
- Placements can be in **single block**, **day release** or a mix of the two.

WHAT AN INDUSTRY PLACEMENT SHOULD OFFER

A high quality industry placement should:

✓ Give students a chance to **put into practice Level 3 technical skills** that they have learnt as part of their T Level, developing and honing the knowledge and skills they need to **progress**

✓ Give students **credibility** with prospective employers

✓ I**mprove** a student's **confidence, competence** and **employability**

✓ **Give the employer the opportunity to develop and shape young people's skills to build their future workforce** to meet their needs, as well as seeing what the young person is capable of before potentially taking then on as an apprentice or an employee

✓ Give an opportunity for the provider to **ensure that the course equips students** with the **skills employers are look for** and are **ready for the working world**

EXISTING MODELS AND APPROACHES FOR PLACEMENTS

Allowable Models and Approaches (outlined in Annex A of the Industry Placements Delivery Guidance)

- **PART-TIME WORK** can count towards the industry placement hours, if job is occupationally relevant
- **MULTIPLE EMPLOYERS**: A placement can be split across a maximum of 2 employers
- **WORK-TASTER ACTIVITIES**: Up to a maximum of 35 hours of work taster activities, can be counted towards students' total number of placement hours and can be delivered virtually
- **ROUTE LEVEL PLACEMENTS**: Digital and Engineering and Manufacturing placements can be undertaken at Route Level as opposed to those only relevant to their occupational specialism
- **USE OF SKILLS HUBS or EMPLOYER TRAINING CENTRES**: Students studying for a Construction or Engineering & Manufacturing T Level can begin their placement within an established skills hub or employer's training centre for a maximum of 105 hours.
- **COMMERCIAL, CHARITABLE OR COMMUNITY PROJECTS**: Students studying Construction T Levels can work in small teams alongside an external construction employer / industry professional(s) for 105 hours to plan and implement a project that develops students' construction skills
- **ONE LEAD EMPLOYER FACILITATING A PLACEMENT THROUGH ITS SUPPLY CHAIN** relating to Construction and Engineering & Manufacturing T Levels only
- **STUDENTS WITH SEND:** can undertake 105 hours of the placement on the providers' on-site facilities

INDUSTRY PLACEMENTS: SUPPORT WE HAVE IN PLACE FOR PROVIDERS AND EMPLOYERS

- Provided over £200m in **capacity and delivery funding (CDF)** to providers to help them establish the infrastructure and resources needed to deliver industry placements since 2018/19

- **Industry Placements Delivery Guidance** for providers and employers published, a streamlined version for employers and a **student guide** to help them prepare. We also published the **Industry Placement Employer Guide,** which is a short version of the delivery guidance, written specifically for employers to help them to deliver high-quality placements.

- We have appointed an organisation to **deliver a Provider Support Package, aiming at supporting 2020, 2021 and 2022 providers** to help them deliver high-quality placements in line with the delivery guidance

- The **Employer Engagement and Apprenticeships Performance Service (EEAP),** formerly known as the **National Apprenticeship Service,** is providing a referral and matching service to make it easier for employers to be put in touch with local providers – NAS has engaged with over 16,000 employers

- **Civil Service and public sector** - we are coordinating the delivery of industry placements across the Civil Service and working with public sector organisations, such as the Local Government Association and NHS Trusts, to support industry placements provision. We are also raising awareness of, and increasing the number of placements delivered, via Government's suppliers

- An **Employer Support Package is being delivered,** comprising online guidance, case studies and workshops to help employers to host high-quality industry placements

- **Employer Incentive Fund**, a short-term £10m fund in response to the effects of the Covid-19 pandemic to incentivise employers to host industry placements for Wave 1 and 2 T Level students, with a start date of 27 May 2021 – 31 July 2022. Employers can claim up to £1,000 per student (for a maximum of 10 students, per region)

RESOURCES

- **NAS helpline: 08000 150 600**
- **Industry Placements Policy Statement –** https://www.gov.uk/government/publications/industry-placements-policy-framework
- **Industry Placement guidance / resources (hosted on the AoC website) –** https://www.aoc.co.uk/industry-placements-guidance-resources
- **Industry Placement case study videos on YouTube –** https://www.youtube.com/playlist?list=PL6gGtLyXoeq-rt4HRUDy_MY77BEH7r9Rc
- **Industry Placement Delivery Guidance –** https://www.gov.uk/government/publications/t-level-industry-placements-delivery-guidance
- **T Levels Employer Support website –** https://employerindustryplacements.co.uk/

For any follow up questions, please contact the industry placements policy team at:

- industry.placements@education.gov.uk

Wider provider support found at:

- https://support.tlevels.gov.uk/


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Handbook and Assessment material Construction (Qual code 8711)

https://www.cityandguilds.com/qualifications-and-apprenticeships/construction/construction/8711-t-level-technical-qualification-in-onsite-construction#tab=documents

Course Handbook

300 Onsite construction core

Level:	3
GLH:	400
Assessment method:	Knowledge exam Employer set project

What is the component about?

This component focuses on the learner's knowledge and understanding of contexts, concepts, theories and principles relevant to onsite construction. The component is designed to raise learners' awareness of the industries and develop knowledge and understanding of:

- Fundamental Health & Safety practices associated with carrying out construction work
- Scientific principles related to construction activities
- The construction industry and careers within it
- Principles of sustainability and design, relevant to construction projects
- Information, data and principles of measurements
- Tools, equipment and materials used in construction work
- Legislation, regulations and approved standards that apply to the construction industry

Learners may prepare by asking themselves questions such as:

- How are teams of different specialists co-ordinated to work together on construction projects?
- What are different career pathways and destinations within the construction industry?
- What factors influence whether construction projects are profitable?
- What kind of tasks do Onsite trades perform?
- What tools and equipment Onsite trades use as part of their role?

Core component- Onsite

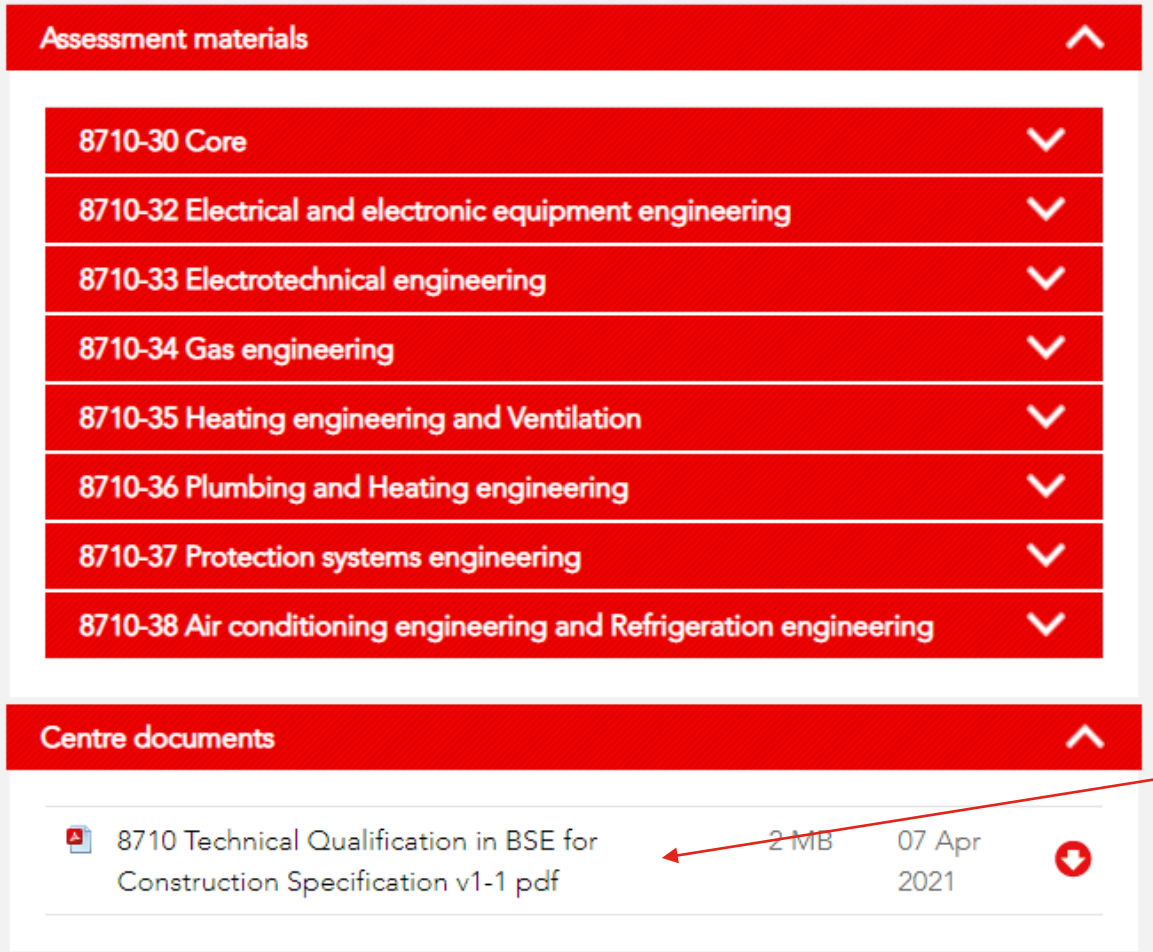
Underpinning knowledge outcomes

On completion of this Onsite Core, learners will understand:

1. Health and safety in construction
2. Construction science principles
3. Construction design principles
4. Construction & the built environment industry
5. Construction sustainability principles
6. Construction measurement principles
7. Building technology principles
8. Construction information and data principles
9. Relationship management in construction
10. Digital technology in construction
11. Construction commercial/business principles

Handbook and Assessment material BSE (Qual code 8710)

https://www.cityandguilds.com/qualifications-and-apprenticeships/building-services-industry/electrical-installation/8710-t-level-technical-qualification-in-building-services-engineering-for-construction#tab=documents



Course Handbook

350 Building Services Engineering Core

Level:	3
GLH:	520
Assessment method:	Two Knowledge tests Employer-set project

What is the component about?

This component focuses on the learner's knowledge and understanding of contexts, concepts, theories and principles relevant to Onsite construction and Building Services Engineering (BSE). The component is designed to raise learners' awareness of the industries and develop knowledge and understanding of:

- Fundamental Health and Safety practices associated with carrying out construction and BSE work
- Scientific principles related to construction activities
- The construction industry and careers within it
- Principles of sustainability and design, relevant to construction projects
- Information, data and principles of measurements
- Tools, equipment and materials used in BSE work
- Legislation, regulations and approved standards that apply to BSE systems.

Learners may prepare by asking themselves questions such as:

- How are teams of different specialists co-ordinated to work together on construction projects?
- What the different career pathways and destinations are within the construction industry?
- What factors influence whether construction projects are profitable?
- What kind of tasks does a building service engineers perform?
- What systems do Building Service Engineers work on?
- What tools and equipment building service engineers use as part of their role?

Core component- BSE

Underpinning knowledge outcomes

On completion of the BSE Core, learners will understand

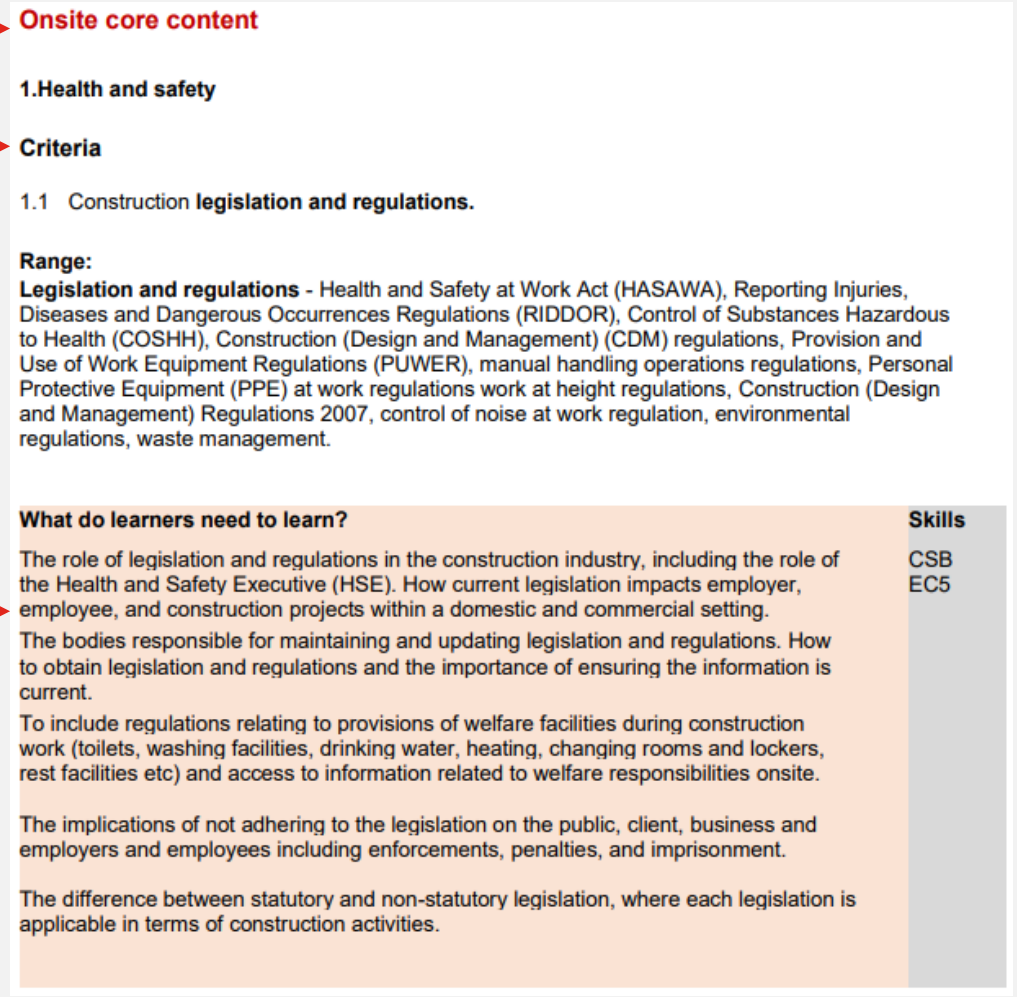
1. Health and safety in construction
2. Construction science principles
3. Construction design principles
4. Construction and the built environment industry
5. Construction sustainability principles
6. Construction measurement principles
7. Building technology principles
8. Construction information and data principles
9. Relationship management in construction
10. Digital technology in construction
11. Construction commercial/business principles
12. Building Services Engineering (BSE) systems
13. Maintenance principles
14. Tools, equipment and materials

Qualification handbook & Core component layout

Learning Outcome

This section of the specification outlines the subject or topic that needs to be delivered and assessed. Criteria are often supported by ‘range’

What do learners need to learn? The primary purpose of these sections is to support the delivery of the content in the criteria.
These sections provide context in relation to the depth and breadth to which a subject or topic needs to be taught.



Onsite core content

1.Health and safety

Criteria

1.1 Construction **legislation and regulations.**

Range:
Legislation and regulations - Health and Safety at Work Act (HASAWA), Reporting Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), Control of Substances Hazardous to Health (COSHH), Construction (Design and Management) (CDM) regulations, Provision and Use of Work Equipment Regulations (PUWER), manual handling operations regulations, Personal Protective Equipment (PPE) at work regulations work at height regulations, Construction (Design and Management) Regulations 2007, control of noise at work regulation, environmental regulations, waste management.

What do learners need to learn?	Skills
The role of legislation and regulations in the construction industry, including the role of the Health and Safety Executive (HSE). How current legislation impacts employer, employee, and construction projects within a domestic and commercial setting.	CSB EC5
The bodies responsible for maintaining and updating legislation and regulations. How to obtain legislation and regulations and the importance of ensuring the information is current.	
To include regulations relating to provisions of welfare facilities during construction work (toilets, washing facilities, drinking water, heating, changing rooms and lockers, rest facilities etc) and access to information related to welfare responsibilities onsite.	
The implications of not adhering to the legislation on the public, client, business and employers and employees including enforcements, penalties, and imprisonment.	
The difference between statutory and non-statutory legislation, where each legislation is applicable in terms of construction activities.	

provides the detail of the information
required to be delivered as part of that topic. For example, with BSE systems as the topic, the range would list the systems that would need to be covered in delivery and assessment

Relate to Core Skills and General competencies in English, Mathematics and Digital Skills

Assessment methods for the core

Construction On-Site

Technical Qualification Scheme of Assessment overview

Core Component – Learners must complete **all** assessment components

Assessment component	Method	Duration	Marks	Weighting	Marking	Grading
Exam paper 1	Externally set exam	2 hours	90	35%	Externally marked	This component will be awarded on the grade scale A* - E
Exam paper 2	Externally set exam	2 hours	90	35%	Externally marked	
Employer set project	Externally set project	17 hours	100	30%	Externally marked	

BSE

Core Component – Learners must complete **all** assessment components

Assessment component	Method	Duration	Marks	Weighting	Marking	Grading
Exam paper 1	Externally set exam	2.5 hours	110	35%	Externally marked	This component will be awarded on the grade scale A* - E
Exam paper 2	Externally set exam	2.5 hours	110	35%	Externally marked	
Employer-set project	Externally set project	17 hours	100	30%	Externally marked	

Assessment methods for the specialism

Construction On-Site

Occupational Specialism Component - Learners must complete **one** assessment component						
Assessment component (number)	**Method**	**Duration**	**Marks**	**Weighting**	**Marking**	**Grading**
Bricklaying (305)	Externally set assignment	24 hours	90	100%	Externally moderated	All occupational specialism components will be awarded on the grade scale P, M, D
Carpentry and Joinery (306)	Externally set assignment	27 hours	90	100%	Externally moderated	
Painting and Decorating (307)	Externally set assignment	27 hours	90	100%	Externally moderated	
Plastering (308)	Externally set assignment	26 hours	90	100%	Externally moderated	

Assessment methods for the specialism

BSE standalone specialism

Occupational Specialism Component - Learners must complete one assessment component from the below						
Assessment component (number)	**Method**	**Duration**	**Marks**	**Weighting**	**Marking**	**Grading**
Electrotechnical engineering (353)	Externally set assignment	24 hours	90	100%	Externally moderated	All occupational specialism components will be awarded on the grade scale P, M, D
Electrical and electronic equipment (352)	Externally set assignment	16 hours	90	100%	Externally moderated	
Protection systems engineering (357)	Externally set assignment	15 hours	90	100%	Externally moderated	
Gas engineering (354)	Externally set assignment	24 hours	90	100%	Externally moderated	

Assessment methods for the specialism

BSE paired specialism (2 x synoptic assignments)

Occupational Specialism Component* – Learners must complete both assessment components from one of the combinations below						
Assessment component	**Method**	**Duration**	**Marks**	**Weighting**	**Marking**	**Grading**
Plumbing and Heating engineering						
Plumbing engineering (356)	Externally set assignment	21 hours	90	100%	Externally moderated	All occupational specialism components will be awarded on the grade scale P, M, D
Heating engineering (355)	Externally set assignment	20 hours	90	100%	Externally moderated	
Heating engineering and Ventilation						
Ventilation (359)	Externally set assignment	20 hours	90	100%	Externally moderated	All occupational specialism components will be awarded on the grade scale P, M, D
Heating engineering (355)	Externally set assignment	20 hours	90	100%	Externally moderated	

Paid for resources: supporting delivery with Hodder Education

Hodder Education Resources

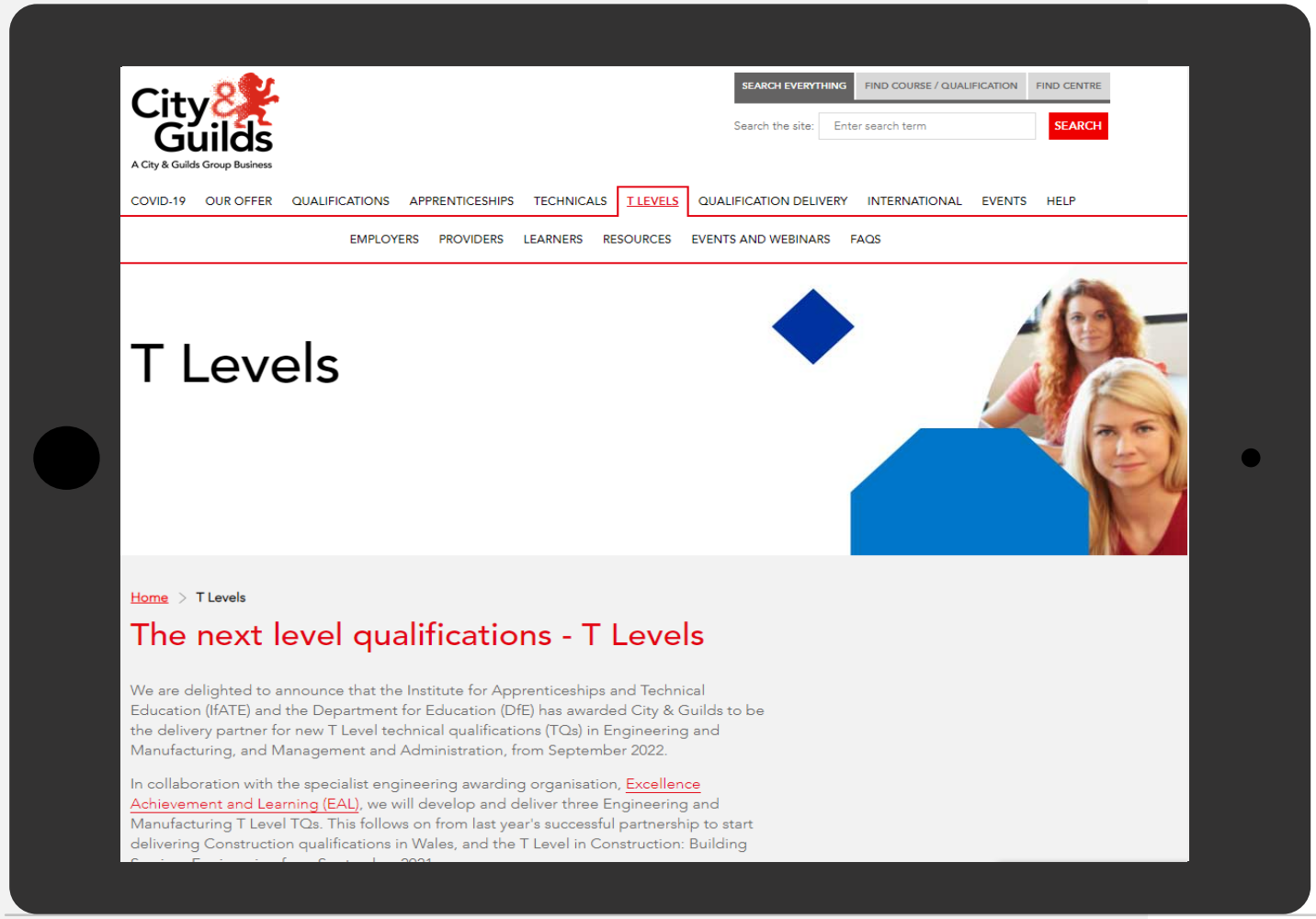
Publishing details for the two books are as follows:

Building Services Engineering for Construction T Level: Core (9781398332874, Spring 2022, 416 pp, £34)

On-site Construction T Level: Core (9781398332904, Spring 2022, 320 pp, £34)

Mapping grids: Current Hodder trade textbooks to Occupational Specialisms. Accessed here.

Hodder T Level webpage

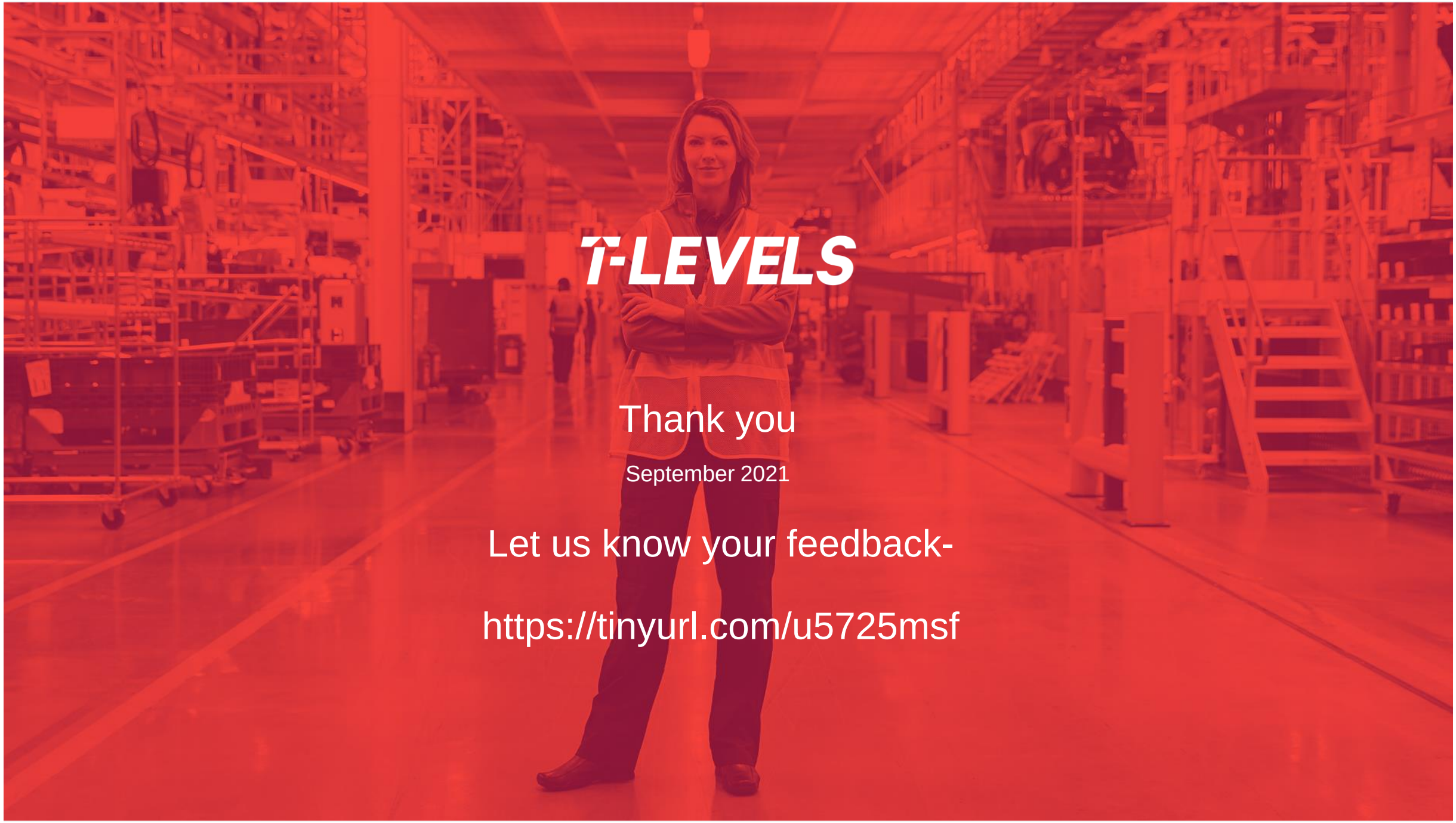


Support and Guidance

Ready to Support eligible providers and stakeholder engagement

- Delivery Resources
- Updated webpage for T Levels
- Timeline
- Planning and delivery resources
- Provider focus groups
- Employer Industry Boards
- e-bulletins
- Draft specification
- Dedicated Technical Advisors

https://www.cityandguilds.com/tlevels/providers



Thank you

September 2021

Let us know your feedback-

https://tinyurl.com/u5725msf

About City & Guilds

Founded in 1878 to develop the knowledge, skills, and behaviours needed to help businesses thrive, we offer a broad and imaginative range of products and services that help people achieve their potential through work-based learning. We believe in a world where people and organisations have the confidence and capabilities to prosper, today and in the future. So we work with likeminded partners to develop the skills that industries demand across the world.

About EAL

EAL is the specialist awarding organisation for engineering and manufacturing qualifications and apprenticeships. We invest in the industries we serve and the careers of those within them. Our unrivalled understanding of employer skills needs stems from decades of experience forging industry partnerships. That's why employers trust our skills solutions to deliver real career benefits for learners.