# Welcome to the T Level Engineering & Manufacturing

The webinar will begin shortly

October 2021

# Engineering and Manufacturing

An overview for new providers





# Using the webinar platform

Our action plan supports the planning and delivery stages to prepare for the TQ launch

Send any questions in the question area throughout the webinar All attendees will be set to mute

Webinar resources will be shared on our website shortly after

# **Engineering and Manufacturing T Levels Team**



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## Agenda

- Welcome
- About T levels
- Engineering & Manufacturing Pathway
  - Core
  - Occupational Specialisms
  - GLH
  - Funding Bands
- Industry Placements
- Higher Education & Progression for learners
- How we support you
  - What next?
  - Resources
- Opportunity for Questions

#### 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



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.

# Engineering and Manufacturing T Level programme composition

1400-1800 GLH hours over two years. Achievement of T Level must include all components. UCAS points will be attached and will be equivalent to 3 A levels.

Core 50% Total TQ time Graded A* - E Paper 1 Maths & Science Paper 2 Engineering Concepts ESP Employer Set Project		Occupational specialism 50% Total TQ time Graded Pass/merit/distinction Based on occupational maps No less than 50% of the total qualification planned time	
Assessment: External set and marked exams	Asses Practica	ssment: al assignment(s)	
<b>Industry Placement</b> 315-420 hours Min 45-60 days	Maths & English at a minimum of Functional Skills Level 2	of GCSE or Employability, Enrichment & Pastoral 2 Requirements	

#### **The T Level Course**





# **Technical Qualification overview for Engineering:**



#### Learners must complete:

- Engineering Core
- 1 Occupational specialism within a pathway

#### **Route: Engineering and Manufacturing**



## **Route: Engineering and Manufacturing**



#### **Route: Engineering and Manufacturing**



#### **Guided Learning Hours**

#### Core and OS content

Engineering and Manufacturing					
Design and Development		Maintenance, Installation and Repair		Manufacturing, Processing and Control	
Core Content (GLH)	Occupational Specialism (GLH)	Core Content (GLH)	Occupational Specialism (GLH)	Core Content (GLH)	Occupational Specialism (GLH)
680	680	680	680	680	680
1360		1360		1360	

- To put this into context:
  - $3 \times A \text{ Levels} = 1080 \text{ hours}$

## **Funding Bands**

#### E&M – D&D, MPC and MIR TQs:

These TQs will fall into band 8 large T Level @£11,168 which requires delivery hours to be planned on average at 1510Hrs.

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1510Hrs / 2 = 755Hrs per year 755Hrs / 36 weeks delivery = Average 21 hrs per week delivery excluding any Maths and English\*\*.

#### Additional hours funding:

315 hours – Industry placement 150 hours – Employability, enrichment and pastoral hours

\*\*Maths & English a single £750 payment per subject over 2 years if applicable (current funding amount)



#### **Industry Placement**

Every T Level includes an industry placement with an employer focused on developing the practical and technical skills required for the occupation. These will last a minimum of 315 hours (approximately 45 days) but can last longer.

Providers will ensure learners have an industry placement and will support employers offering industry placements.

This will include assistance with the necessary paperwork, a careful planning process and support with designing the industry placement.

The Education and Skills Funding Agency (ESFA) and National Apprenticeship Service (part of ESFA) are working with employers and providers on industry placements.

Read the updated Industry placement policy (March 2021)

# So, what are industry placements?

- Time spent learning and working within an organisation
- Making a meaningful contribution within that organisation
- Occupationally-specific developing practical and technical skills in the subject the student is studying
- A requirement for all T Level learners from September 2020 and, for learners on other vocational programmes
- Employers can offer industry placements as a block, day release or a mix of these, and can discuss sharing part of the placement with another employer if necessary.
- Incentive Payment of £1,000 is paid to an Employer for delivering a T Level Industry Placement which commences between 27 May 2021 and 31 July 2022.



## **Industry Placement support – AOC website**

https://www.aoc.co.uk/ip-guidance-resources

#### • For providers 'How to' guidance

- Before placements
- For students
- During placements
- Tools and templates
  - Employer engagement
  - Before placements
  - During placement
  - Post placements
  - For employers





**T-LEVELS** Institute for Apprenticeships & Technical Education

# Higher Education & Progression





# **HE Engagement**

- University of Vocational Awards Council (UVAC)–member of their Higher Education and Awarding Organisation Vocational Qualifications Committee
- Presented on several occasions to the Russell Group Qualifications Network
- UCAS-broad understanding of UCAS tariffs and entry requirements, explaining how the different grading systems align to traditional academic GCEs
- Universities-head of admissions, admission managers and teams, academics and OVCs
- Institute of Education UCL



## How will T Levels be graded?



- A nationally recognised certificate to show their overall grade and a breakdown of what they have achieved.
- An overall grade of Pass, Merit, Distinction or Distinction\*.

The T Level certificate will also include:

- a separate grade for the core component, using A\* to E
- a separate grade for each occupational specialism, shown as pass, merit or distinction
- grades for maths and English qualifications (if required)
- completed the industry placement
- met any additional mandatory requirements
- Learners who do not pass all elements of their T Level will get a T Level statement of achievement which will show the elements they have completed.

Please note that the T Level certificate will be issued by Education and Skills Funding Agency (ESFA)

# **UCAS Points and T Level Grading**

Fig.1.DfE grading of core, occ specialism overall T Level grade

		Occupation	nal Specialism	Grade	]	
		Distinction	Merit	Pass		
ade	A*	Distinction*	Distinction	Distinction	٦	
ent Gr	А	Distinction	Distinction	Merit		
upone	в	Distinction	Merit	Merit		Overall
e Con	с	Merit	Merit	Pass		Grade
Cor	D	Merit	Pass	Pass		
	Е	Pass	Pass	Pass		

Fig.2 UCAS points

UCAS tariff points	T Level overall grade	A level
168	Distinction* (A* on the core and distinction in the occupational specialism)	A*A*A*
144	Distinction	AAA
120	Merit	BBB
96	Pass (C or above on the core)	ССС
72	Pass (D or E on the core)	DDD

#### Potential Progression to HE from Engineering and Manufacturing T Level

Foundation Year	Degree Course
BEng (Hons) Electrical and Electronic Engineering with Foundation Year	BEng (Hons) Electrical and Electronic Engineering BEng (Hons) Electronic Engineering
BEng (Hons) Mechanical Engineering with Foundation Year	BEng (Hons) Mechanical Engineering BEng (Hons) Marine Technology BEng (Hons) Aerospace Technology BEng (Hons) Aerospace Systems Engineering
BEng (Hons) Civil Engineering with Foundation Year BSc (Hons) Civil Engineering with Foundation Year	BEng (Hons) Civil Engineering BSc (Hons) Civil Engineering BEng (Hons) Civil and Coastal Engineering
Aircraft Engineering FdEng (two-year course)	BEng (Hons) Aircraft Engineering
Engineering Foundation Year with pathways in Aerospace, Civil, Mechanical Engineering	BEng (Hons) Aerospace Engineering BEng (Hons) Civil and Infrastructure Engineering BEng (Hons) Mechanical Engineering
BEng (Hons) Aerospace Engineering with Foundation Year	BEng (Hons) Aerospace Engineering
BEng (Hons) Chemical Engineering with Foundation Year	BEng (Hons) Chemical Engineering

## **T Level Progression Routes – Potential Progression**

#### **ROUTE: ENGINEERING AND MANUFACTURING**

Pathway	Occupational Specialism	Apprenticeship or Higher Ed	Level
Design and Development for	Mechanical Engineering	Engineering Design & Draughtsperson	Level 3
Engineering and Manufacturing		BEng (Hons) Mechanical Engineering (Foundation Year)	Level 5
		BEng (Hons) Mechanical Engineering	Level 6
		BEng (Hons) Aerospace Technology	Level 6
	Electrical & Electronic Engineering	Engineering Design & Draughtsperson	Level 3
		BEng (Hons) Electrical/Electronic Engineering (Foundation Year)	Level 5
		BEng (Hons) Electrical/Electronic Engineering	Level 6
	Control & Instrumentation Engineering	Engineering Design & Draughtsperson	Level 3
		Automation & Controls Engineering Technician	Level 4
	Structural Engineering	Engineering Design & Draughtsperson	Level 3
		Engineer Surveyor	Level 4
		BEng (Hons) Civil Engineering (Foundation Year)	Level 5
		BEng (Hons) Civil Engineering (Foundation Year)	Level 6

## **T Level Progression Routes – Potential Progression**

#### **ROUTE: ENGINEERING AND MANUFACTURING**

Pathway	Occupational Specialism	Apprenticeship or Higher Ed	Level
Maintenance, Installation & Repair for Engineering and Manufacturing	Mechanical	Maintenance & Operations Engineering Technician (MOET)	Level 3
	Mechatronic	Lift & Escalator Electro mechanic	Level 3
		Engineering Technician	Level 3
		Automation & Controls Engineering Technician	Level 4
	Electrical & Electronic	Maintenance & Operations Engineering Technician (MOET)	Level 3
	Control & Instrumentation	Automation & Controls Engineering Technician	Level 4
	Light & Electric Vehicle	Vehicle damage mechanical, electrical and trim (MET) Technician	Level 3
		Accident Repair Technician	Level 3
		Motor Vehicle Service & Maintenance Technician (Light Vehicle)	Level 3

## **T Level Progression Routes – Potential Progression**

#### **ROUTE: ENGINEERING AND MANUFACTURING**

Pathway	Occupational Specialism	Apprenticeship or Higher Ed	Level
Engineering, Manufacturing,	Fabrication and Welding	Metal Fabricator	Level 3
Processing and Control		Plate/Pipe Welder	Level 3
		Non-Destructive Testing Engineering Technician	Level 3
	Composites Manufacturing	Engineering Technician	Level 3
		Engineering Manufacturing Technician	Level 4
	Production Fitting & Assembly	Engineering Fitter	Level 3
		Engineering Technician	Level 3
	Machining & Toolmaking	Engineering Technician	Level 3

# How we support you

Updates/Topics/Networks



Blended approach to communication

Provider networks and events

e-bulletin content and email updates

Website





27



# Support and Guidance

Ready to support eligible providers and stakeholder engagement

- Updated webpage for T Levels
- Timeline
- Provider focus groups
- Employer Industry Boards
- e-bulletins
- Draft specification
- Dedicated Technical Advisors

T Levels for Providers - T Levels

# Draft Specifications

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

Engineering and Manufacturing: Design and Development Technical Qualification Specification

Engineering and Manufacturing: Maintenance, Installation and Repair Technical Qualification Specification

Engineering and Manufacturing: Manufacturing, Processing and Control Technical Qualification Specification



## 12 month countdown timeline for providers



#### 12-month countdown timeline for providers

#### T Level Technical Qualifications in Engineering and Manufacturing

City & Guilds and EAL are developing the T Level Technical Qualifications (TQs) in Engineering and Manufacturing, which will be available for first teaching from September 2022 - available in England only.

- T Level Technical Qualification in Design and Development for Engineering and Manufacturing
- T Level Technical Qualification in Maintenance, Installation and Repair for Engineering and Manufacturing
- T Level Technical Qualification in Engineering, Manufacturing, Processing and Control

#### Key dates for your diary



You can download the countdown timeline here <u>t-levels-wave-3-engineering-and-manufacturing-</u> <u>12-month-countdown</u>





Note: Final TQs specifications and SAMs will be live on the website from November 2021 (Subject to the Institute for Apprenticeships and Technical Education's approval).

#### Learner flyer for E&M

You can download the learner flyer here <u>t-levels-</u> <u>learner-flyer-engineering-and-manufacturing</u>



# **Coming Soon**

- Resource development
- Curriculum planning support
- Workshops
  - Core (including ESP)
  - Occupational Specialisms
- Teaching & Learning Support for exam component
- Face-to-face events
- Ask a T Level expert question sessions
- Engineering & Manufacturing T Levels High level overview of the TQ for providers 10<sup>th</sup> November at 2pm <u>Registration link for</u> <u>providers</u>
- Employer new to T Levels webinar on 10<sup>th</sup> November at 9:30am <u>Registration link for</u> <u>employers)</u>



## **Websites to Support Providers**

T Level Industry Placement Delivery Guidance (updated 05/07/21) <u>T Level industry placements delivery guidance - GOV.UK (www.gov.uk)</u>

T levels T levels - GOV.UK (www.gov.uk)

How T Levels are funded (updated 05/07/21) How T Levels are funded - GOV.UK (www.gov.uk)

T Level transition programme framework for delivery 2020 to 2021 <u>T Level transition programme framework for delivery 2020 to 2021 - GOV.UK (www.gov.uk)</u>

T Levels resources for teachers and careers advisers <u>T Levels resources for teachers and careers advisers - GOV.UK (www.gov.uk)</u>

Strategic Development Network | T Level and industry Placements Strategic Development Network | T Level and industry placement support

#### **ETF Foundation – T Levels**

33

T Level Professional Development - Education & Training Foundation (et-foundation.co.uk)

#### **Associate Vacancies**

There are a variety of contracted associate roles you may wish to apply for, such as Lead and Independent End-Point Assessors, External Quality Assurers, Moderators, Roles with our T Level Qualifications (Moderators, Principal Moderators, Technical Qualification Associates) Examiners and Assured Consultants

#### Associate Vacancies | City & Guilds Group Careers



34



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# **T-LEVELS**

Questions? Thank you for attending

October 2021

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