4b. T Level in Maintenance, Installation and Repair for Engineering and Manufacturing

The Progression Profile

This T Level has five occupational specialisms: Maintenance engineering technologies: Mechanical Occupational Specialism; Maintenance engineering technologies: Mechatronic Occupational Specialism; Maintenance engineering technologies: Electrical & Electronic Occupational Specialism; Maintenance, installation, and repair: Light and Electric Vehicles Occupational Specialism; and Maintenance engineering technologies: Control & Instrumentation Occupational Specialism

For these occupational specialisms, there are progression pathways into apprenticeships, education and work.

The T Level is based on an occupational standard. The occupational standard will have an apprenticeship option, which is referred to in the profile as the ‘relevant occupation’.

For some apprenticeships, in particular the relevant occupation, a learner may have covered the content to a high level. They will not need to complete the apprenticeship in this step, this is noted as ‘not applicable’. An apprenticeship may also be shortened due to recognised prior learning (RPL), this is noted as accelerated. Links to the mapping have been included which detail the areas in need of further development before full competence is reached in that occupation.

For work, whilst some roles may be accessed after completing the T Level, others are available after further training and gaining more experience.

Please see below, the progression options for each occupational specialism.
1. **Maintenance engineering technologies: Mechanical Occupational Specialism**

For apprenticeships and technical qualifications at level 3, the relevant occupation **Maintenance & Operations Engineering Technician (mechanical option)** (accelerated) is being revised. Further information will be added once the revisions are finalised.

At Apprenticeships at level 4, there is the **Electrical Power protection and Plant commissioning engineer**, **Lead Engineering Maintenance Technician** (to be developed), **Automation and Controls Engineering Technician** and **Electrical Power Networks Engineer** apprenticeships.

At HTQ’s at level 4, there is the **Automation and Controls Engineering Technician**

Other progression options may include aerospace engineering.

For **education**, degree options may include Civil and Railway Engineering, Electrical and Railway Engineering, Civil Engineer and Mechanical Engineering.

For **work**, career progression could include Maintenance & Operations Engineering Technician, Leisure and Entertainment Engineering Technician, Automation and Controls Engineer, Electrical Power Networks Engineer and Lead Engineering Maintenance Technician.

2. **Maintenance engineering technologies: Mechatronic Occupational Specialism**

For apprenticeships and technical qualifications at level 3, the relevant occupation **Maintenance & Operations Engineering Technician (Electromechanical option)** (accelerated) is being revised. Further information will be added once the revisions are finalised.
At level 4, there is the **Electrical Power protection and Plant commissioning engineer** and **Electrical Power Networks Engineer** apprenticeships.

For **education**, degree options may include Civil and Railway Engineering, Electrical and Railway Engineering, Civil Engineer and Mechanical Engineering.

For **work**, career progression could include Maintenance & Operations Engineering Technician, Electrical Power Protection and Plant Commissioning engineer and Electrical Power Networks Engineer.

### 3. Maintenance engineering technologies: Electrical & Electronic Occupational Specialism

For apprenticeships and technical qualifications at level 3, the relevant occupation **Maintenance & Operations Engineering Technician (Electrical system and process control option) (accelerated)** is being revised. Further information will be added once the revisions are finalised.

Other level 3 apprenticeships include **Motor Vehicle Service & Maintenance Technician (Light Vehicle)** and **Heavy Vehicle Service and Maintenance Technician**.

At level 4, there is the **Electrical Power protection and Plant commissioning Engineer** and **Electrical Power Networks Engineer** apprenticeships.

For **education**, degree options may include Civil and Railway Engineering, Electrical and Railway Engineering, Civil Engineer and Mechanical Engineering.

For **work**, career progression could include Maintenance & Operations Engineering Technician, Motor Vehicle Service & Maintenance Technician, Heavy Vehicle Service
and Maintenance Technician and Electrical Power protection and Plant Commissioning Engineer.

4. **Maintenance, installation, and repair: Light and Electric Vehicles**

**Occupational Specialism**

For apprenticeships and technical qualifications at level 3, the relevant occupation is **Motor Vehicle Service & Maintenance Technician (Light Vehicle) (accelerated)**.

Other level 3 apprenticeships include **Motorcycle Technician (Repair and Maintenance)**, **Bus and Coach Engineering Technician**, **Heavy Vehicle Service and Maintenance Technician** and **Vehicle Damage Panel Technician**.

At level 4, there is the **Road Transport Engineering Manager (in development)**, **Vehicle Damage Assessor** and **Propulsion Technician** apprenticeships.

For **education**, degree options may include Civil and Railway Engineering, Electrical and Railway Engineering, Civil Engineer and Mechanical Engineering.

For **work**, career progression could include Motor vehicle service and maintenance technician, Motorcycle Technician. Bus and coach engineering technician and Vehicle Damage Panel Technician.

5. **Maintenance engineering technologies: Control & Instrumentation**

**Occupational Specialism**

For apprenticeships and technical qualifications at level 3, the relevant occupation **Maintenance & Operations Engineering Technician (Control and Instrumentation option) (accelerated)** is being revised. Further information will be added once the revisions are finalised.
Other level 3 apprenticeships include Utilities Engineering Technician and Commercial Catering Equipment Technician.

At Apprenticeships at level 4, there is the Automation and Controls Engineering technician and Lead Engineering Maintenance Technician apprenticeships.

At HTQ's at level 4, there is the Automation and Controls Engineering Technician.

For education, degree options may include Civil and Railway Engineering, Electrical and Railway Engineering, Civil Engineer and Mechanical Engineering.

For work, career progression could include Maintenance & Operations Engineering Technician, Utility Engineering Technician, Commercial Catering Equipment Technician and Automation and Controls Engineering technician.
A learner could potentially move across progression routes from the different OS's due to broad core content.

(Accelerated) = May be shortened due to recognised prior learning (RPL)
Not applicable = The learner has covered the content to a high level and may bypass the apprenticeship in this step
In development = standard is being developed
Under revision = standard is being revised.

1. Maintenance engineering technologies: Mechanical Occupational Specialism
   - Relevant Apprenticeship: Maintenance & Operations Engineering Technician (mechanical option)
   - Apprenticeships and technical qualifications
   - Education
   - Work

2. Maintenance engineering technologies: Mechatronic Occupational Specialism
   - Relevant Apprenticeship: Maintenance & Operations Engineering Technician (Electromechanical option)
   - Apprenticeships and technical qualifications
   - Education
   - Work

3. Maintenance engineering technologies: Electrical & Electronic Occupational Specialism
   - Relevant Apprenticeship: Maintenance & Operations Engineering Technician (Electrical system and process control option)
   - Apprenticeships and technical qualifications
   - Education
   - Work

Level 3
- Maintenance & Operations Engineering Technician
  - (Accelerated)

Level 4
- Electrical Power protection and Plant commissioning engineer
- Lead Engineering Maintenance Technician
- Automation and Controls Engineering Technician
- Electrical Power Networks Engineer

Career progression could include:
- Maintenance & Operations Engineering Technician
- Leisure and Entertainment Engineering Technician
- Automation and Controls Engineer
- Electrical Power Networks Engineer
- Lead Engineering Maintenance Technician
- Aerospace

Degree options may include:
- Civil and Railway Engineering
- Civil Engineer
- Electrical and Railway Engineering
- Mechanical Engineering

Level 3
- Maintenance & Operations Engineering Technician
  - (Accelerated)

Level 4
- Electrical Power protection and Plant commissioning engineer
- Electrical Power Networks Engineer

Career progression could include:
- Maintenance & Operations Engineering Technician
- Electrical Power Networks Engineer
- Electrical Power Protection and Plant Commissioning engineer

Degree options may include:
- Civil and Railway Engineering
- Civil Engineer
- Electrical and Railway Engineering
- Mechanical Engineering

Level 3
- Motor Vehicle Service & Maintenance Technician (Light Vehicle)
- Heavy Vehicle Service and Maintenance Technician
- Maintenance & Operations Engineering Technician
  - (Accelerated)

Level 4
- Electrical Power protection and Plant commissioning Engineer
- Electrical Power Networks Engineer

Career progression could include:
- Heavy Vehicle Service and Maintenance Technician
- Electrical Power protection and Plant Commissioning Engineer
- Motor Vehicle Service & Maintenance Technician
- Engineer
A learner could potentially move across progression routes from the different QLSs due to core content.

**Accelerated** = May be shortened due to recognised prior learning (RPL)
**Not applicable** = The learner has covered the content to a high level and may bypass the apprenticeship in this step.
**In development** = Standard is being developed.
**Under revision** = Standard is being revised.

### Level 3
- **Motorcycle Technician (Repair and Maintenance)**
- **Bus and Coach Engineering Technician**
- **Heavy Vehicle Service and Maintenance Technician**
- **Vehicle Damage Panel Technician**
- **Motor Vehicle Service & Maintenance Technician (Light Vehicle)(Accelerated)**

### Level 4
- **Road Transport Engineering Manager**
- **Vehicle Damage Assessor**
- **Propulsion Technician**

### Degree options may include:
- Civil and Railway Engineering
- Civil Engineer
- Electrical and Railway Engineering Mechanical Engineering

### Career progression could include:
- Motorcycle Technician
- Bus and coach engineering technician
- Vehicle Damage Panel Technician

### Level 3
- **Utilities Engineering Technician**
- **Commercial Catering Equipment Technician**
- **Maintenance and Operations Engineering Technician**
  - (Accelerated)

### Level 4
- **Apprenticeships**
- Automation and Controls Engineering technician
- Lead Engineering Maintenance Technician
- HTQ Automation and Controls Engineering Technician

### Degree options may include:
- Civil and Railway Engineering
- Civil Engineer
- Electrical and Railway Engineering Mechanical Engineering

### Career progression could include:
- Commercial Catering Equipment Technician
- Automation and Controls Engineering technician

### Education

### Work