# <u>4a. T Level in Engineering, Manufacturing, Processing and Control</u>

#### **The Progression Profile**

This T Level has four occupational specialisms: MPC Production – Machining and Toolmaking; MPC Production – Fitting and Assembly; Composites Manufacturing; and Fabrications and Welding Technologies.

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. MPC Production - Machining and Toolmaking Occupational Specialism

For apprenticeships and technical qualifications at level 3, the relevant occupation is Machining Technician

At Apprenticeships at level 4, there is the <u>Process Leader</u> and <u>Engineering</u> <u>Manufacturing Technician</u> apprenticeships.

At HTQ's at level 4, there is the <u>Process Leader</u> and <u>Engineering Manufacturing</u> <u>Technician</u>.

At level 5, there is the Aerospace Engineer apprenticeship.

Other progression options may include mechanical production or manager/supervisor.

For **education**, degree options may include Manufacturing Engineering; and Electrical and Electronic Engineering.

For **work**, career progression could include Engineering Technician, Aerospace Technician, Aviation Engineer, Maritime Engineering, Machinist, Engineer and Toolmaker.

### 2. MPC Production - Fitting and Assembly Occupational Specialism

For apprenticeships and technical qualifications at level 3, the relevant occupations, <a href="Engineering Fitter"><u>Engineering Fitter</u></a> (accelerated) and the <a href="Engineering Technician"><u>Engineering Technician</u></a> (accelerated) apprenticeships, are being revised. Further information will be added once the revisions are finalised. Other level 3 apprenticeships include <a href="Maintenance & Operations Engineering"><u>Maintenance & Operations Engineering</u></a>

<u>Technician</u>, <u>Survival Equipment Fitter (Military)</u> (being revised), <u>Heritage</u>
<u>Engineering Technician</u>, <u>Marine Engineer</u>, <u>Food and Drink Maintenance Engineer</u>
(being revised).

At Apprenticeships at level 4, there is the <u>Electrical Power Networks Engineer</u>, <u>Electrical Power</u>

<u>Protection & Plant Commissioning Engineer,</u> and <u>Engineering Manufacturing Technician</u> apprenticeships.

At HTQ's at level 4, there is the Engineering Manufacturing Technician.

At level 5, there is the <u>Food and Drink Engineer</u> apprenticeship.

At level 6, there is the Food and Drink Advanced Engineer apprenticeship.

For **education**, degree options may include Manufacturing Engineering; and Electrical and Electronic Engineering.

For **work**, career progression could include Engineering Technician, Engineering Fitter, Food and Drink Engineer, Costing Engineer, Installation Engineer, Quality Engineer, Process Engineer and EEPC Engineer.

## 3. Composites Manufacturing Occupational Specialism

For apprenticeships and technical qualifications at level 3, the relevant occupations are <a href="Boatbuilder">Boatbuilder</a>

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

At Apprenticeships at level 4, there is the <u>Process Leader</u>, <u>Space Engineering</u>

<u>Technician</u>, <u>Automation and Controls Engineering Technician and Rail Engineering</u>

Advanced Technician apprenticeships.

At HTQ's at level 4, there is the <u>Process Leader</u>, <u>Space Engineering Technician</u>, <u>Automation and Controls Engineering Technician</u> and <u>Engineering Manufacturing Technician</u>.

At level 6, there is the <u>Control Technical Support Engineer</u> (being revised), <u>Manufacturing Engineer</u> and <u>Manufacturing Manager</u> apprenticeships.

For **education**, degree options may include Manufacturing Engineering; and Electrical and Electronic Engineering.

For **work**, career progression could include Senior Technician, Composites Technician, Production Engineer, Rail Engineering Technician, Recycling Operative, Automation and Controls Engineering Tech and Space Engineering Tech.

## 4. Fabrications and Welding Technologies Occupational Specialism

For apprenticeships and technical qualifications at level 3, the relevant occupations include the Metal

<u>Fabricator</u> (<u>accelerated</u>), <u>Pipe Welder</u> (<u>accelerated</u>), <u>Plate Welder</u> (<u>accelerated</u>). The <u>Non-Destructive Testing</u> apprenticeship is being revised. Further information will be added once the revisions are finalised.

At level 4, there is the <u>Asset Manager</u> and <u>Nuclear Welding Inspection Technician</u> apprenticeships.

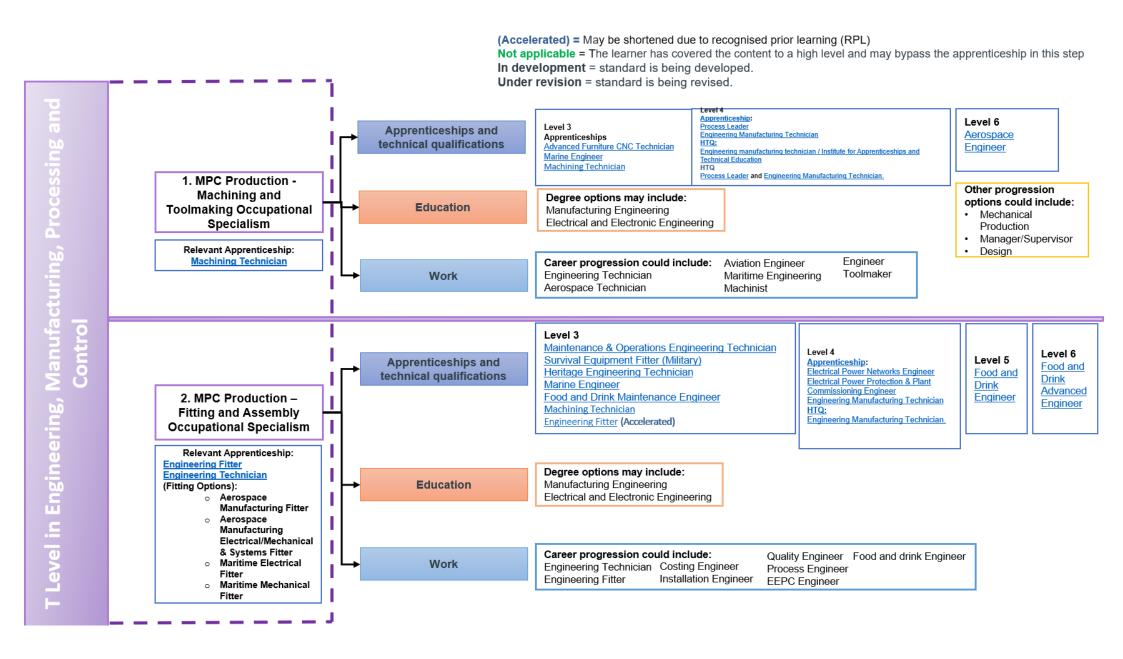
At level 5, there is the Metal Recycling Technical Manager apprenticeship.

At level 6, there are the potential Fabrication Technologist and Welding Technologist apprenticeships.

At level 7, there is the Risk and Safety Management Professional apprenticeship.

For **education**, degree options may include Manufacturing Engineering; and Electrical and Electronic Engineering.

For **work**, career progression could include Metal Fabricator, Class A Welder, Class B Welder, Coded Pipe Welder, Non-Destructive Operator, Coded Plate Welder and Asset Manager.



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 T Level in Engineering, Manufacturing, Processing and Level 4 Motor Vehicle Service & Level 6 Apprenticeship: Process Leader Maintenance Technician (Light Control Technical Support Space Engineering Technician Vehicle) Engineer Apprenticeships and Automation and Controls Engineering Technician Boatbuilder (Accelerated) Manufacturing Engineer Rail Engineering Advanced Technician technical qualifications Composites Technician Manufacturing Manager 3. Composites (Accelerated) Process Leader, Space Engineering Technician, Manufacturing Automation and Controls Engineering Technician and Engineering Manufacturing Technician. Occupational Specialism Degree options may include: Education Manufacturing Engineering Relevant Apprenticeship: Electrical and Electronic Engineering Boatbuilder Composites Technician Automation and Controls Career progression could include: Production Engineer Engineering Tech Work Senior Technician Rail Engineering Technician Space Engineering Tech Composites Technician Recycling operative Level 3 Level 6 Level 7 Level 4 Metal Fabricator (Accelerated) Level 5 Fabrication Apprenticeship: Risk and Apprenticeships and Pipe Welder (Accelerated) Metal Asset Manager Technologis Safety technical qualifications Plate Welder (Accelerated) Recycling **Nuclear Welding Inspection** t and Managemen Technical Non-Destructive Testing Welding Technician Machining Technician Manager 4. Fabrications and technologist **Professional Welding Technologies** Occupational Specialism Degree options may include: Education Manufacturing Engineering Relevant Apprenticeship: Metal Fabricator Electrical and Electronic Engineering Pipe Welder **Plate Welder** Non-Destructive Testing **Engineering Technician** Career progression could include: Class b welder Coded plate welder Work Metal Fabricator Asset manager Coded pipe welder Class a welder Non-destructive operator

(Accelerated) = May be shortened due to recognised prior learning (RPL)