4a. T Level in Engineering, Manufacturing, Processing and Control

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 apprenticeship'.

For some apprenticeships, in particular the relevant apprenticeship, 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 at level 3, the relevant apprenticeship is Machining Technician

At level 4, there is the Process Leader and Engineering Manufacturing Technician apprenticeships.

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** at level 3, the relevant apprenticeships, Engineering Fitter **(accelerated)** and the Engineering Technician **(accelerated)** apprenticeships, are being revised. Further information will be added once the revisions are finalised. Other level 3 apprenticeships include Maintenance & Operations Engineering Technician , Survival Equipment Fitter (Military) (being revised), Heritage Engineering Technician ,Marine Engineer , Food and Drink Maintenance Engineer (being revised).

At level 4, there is the Electrical Power Networks Engineer , Electrical Power Protection & Plant Commissioning Engineer, and Engineering Manufacturing Technician apprenticeships.

At level 5, there is the Food and Drink Engineer 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** at level 3, the relevant apprenticeships are Boatbuilder **(accelerated)** and Composites Technician **(accelerated)**. Other level 3 apprenticeships include Motor Vehicle Service & Maintenance Technician (Light Vehicle).

At level 4, there is the Process Leader, Space Engineering Technician, Automation and Controls Engineering Technician and Rail Engineering Advanced Technician apprenticeships.

At level 6, there is the Control Technical Support Engineer (being revised), Manufacturing Engineer and Manufacturing Manager 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** at level 3, the relevant apprenticeships include the Metal Fabricator **(accelerated)**, Pipe Welder **(accelerated)**, Plate Welder **(accelerated)**. The Non-Destructive Testing apprenticeship is being revised. Further information will be added once the revisions are finalised.

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

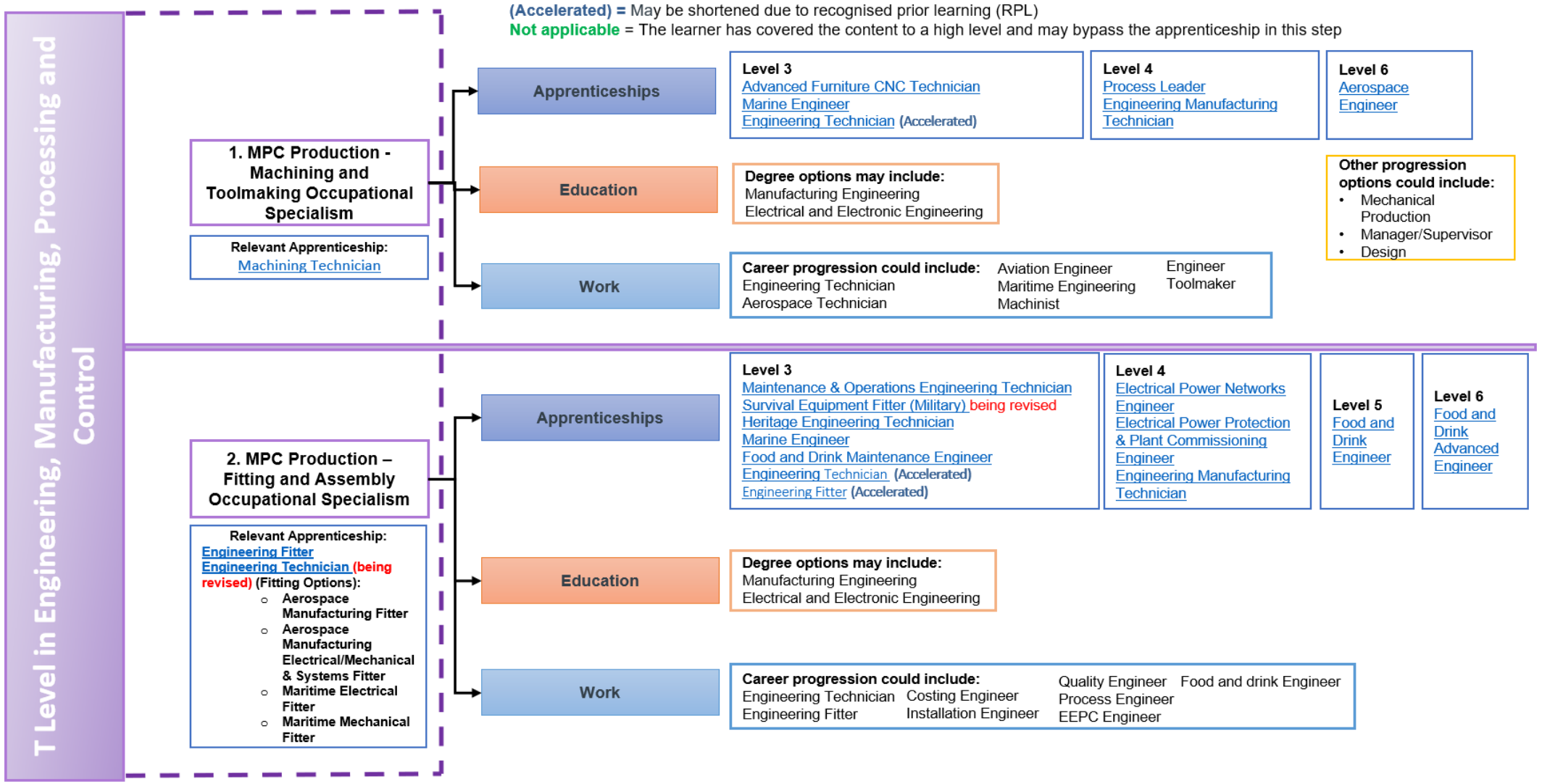
At level 5, there is the Metal Recycling Technical Manager apprenticeship.

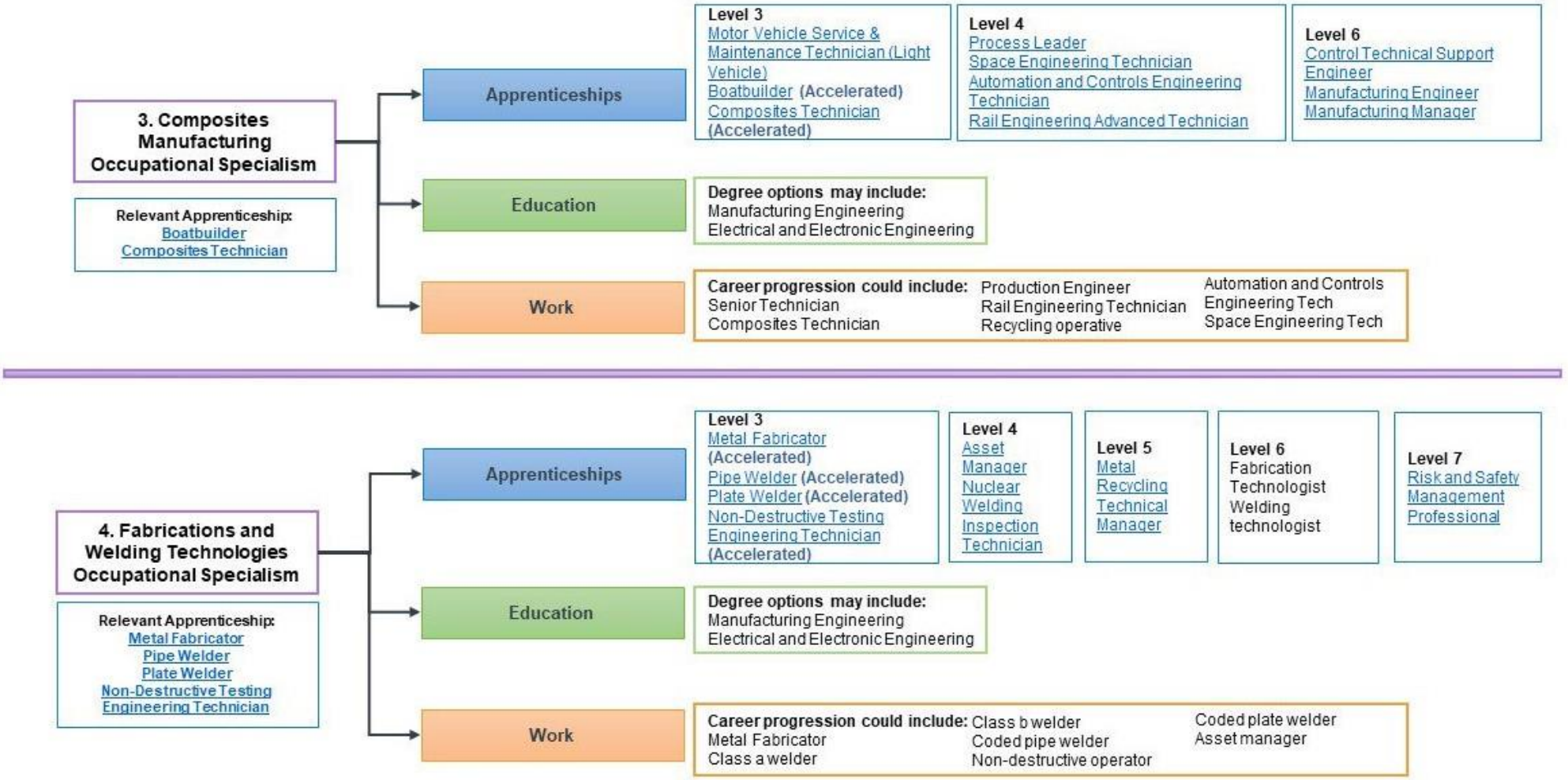
At level 6, there are the potential Fabrication Technologist and Welding Technologist apprenticeships.

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.


T Level in Engineering, Manufacturing, Processing and Control
(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
1. MPC Production - Machining and Toolmaking Occupational Specialism
Relevant Apprenticeship:
Machining Technician
Apprenticeships
Level 3
Advanced Furniture CNC Technician
Marine Engineer
Engineering Technician (Accelerated)
Level 4
Process Leader
Engineering Manufacturing Technician
Level 6
Aerospace Engineer
Education
Degree options may include:
Manufacturing Engineering
Electrical and Electronic Engineering
Other progression options could include:
Mechanical Production
Manager/Supervisor
Design
Work
Career progression could include:
Engineering Technician
Aerospace Technician
Aviation Engineer
Maritime Engineering
Machinist
Engineer
Toolmaker
2. MPC Production – Fitting and Assembly Occupational Specialism
Relevant Apprenticeship:
Engineering Fitter
Engineering Technician (being revised) (Fitting Options):
Aerospace Manufacturing Fitter
Aerospace Manufacturing Electrical/Mechanical & Systems Fitter
Maritime Electrical Fitter
Maritime Mechanical Fitter
Apprenticeships
Level 3
Maintenance & Operations Engineering Technician
Survival Equipment Fitter (Military) being revised
Heritage Engineering Technician
Marine Engineer
Food and Drink Maintenance Engineer
Engineering Technician (Accelerated)
Engineering Fitter (Accelerated)
Level 4
Electrical Power Networks Engineer
Electrical Power Protection & Plant Commissioning Engineer
Engineering Manufacturing Technician
Level 5
Food and Drink Engineer
Level 6
Food and Drink Advanced Engineer
Education
Degree options may include:
Manufacturing Engineering
Electrical and Electronic Engineering
Work
Career progression could include:
Engineering Technician
Engineering Fitter
Costing Engineer
Installation Engineer
Quality Engineer
Process Engineer
EEPC Engineer
Food and drink Engineer


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