

AREAS FOR FURTHER DEVELOPMENT

T LEVEL: DESIGN AND DEVELOPMENT FOR ENGINEERING AND MANUFACTURING

T Level learners will have covered a broad spectrum of knowledge and understanding of the concepts, theories and principles relevant to the T level in the core content. They will then specialise and cover the knowledge and skills required in that occupational specialism, putting this into practise during the industry placement. There may be some areas a learner will need to further develop in a workplace environment following a T Level to reach full competence, such as behaviours. Following engagement with employers, industry experts and providers, we have captured below what these areas for development may be following a T Level. This will depend on the learner and an initial assessment. The RPL guidance gives further details.

To note, the occupational standard has a number of options which are listed below with the corresponding T Level occupational specialism.

Occupational Specialisms:

- **Mechanical engineering**

Standard: Engineering Design and Draughtsperson

Option: Mechanical and Piping design and draughtsperson

Aspects for further development

Core

K10: Relevance and application of Building Information Modelling (BIM)

Area for further development:

Full coverage within Mechanical engineering and Electrical and electronic engineering.

S12: Communicate and co-ordinate engineering design options with relevant stakeholders, colleagues and clients using sketches, schemes, models, detailed drawings and reports

Area for further development:

Coordinate engineering design options

Option Mechanical design and draughtsperson (Mechanical engineering)

K3: Mechanical handling

Area for further development:

Full development and coverage

Option Piping design and draughtsperson (Mechanical engineering)

K1: Piping and flow control

Area for development:

Need to further develop their understanding of piping and completely cover flow control

K2: Service conditions such as flow rates, material characteristics, temperature and working pressures

Area for further development:

Minimal coverage of material characteristics, temperature- learner will need further development

K4: Pipe supports, welding, fittings, valves and associated equipment

Area for further development:

Minimal coverage - learner will need further development

Additional Learning

Further Practical Application of knowledge and skills to reach full occupational competence. They will need further support to apply their knowledge and skills, particularly in non-routine situations to develop their:

- Quality of skill
- Pace
- Adaptability
- Independence and focus
- Appropriate workplace behaviours

Behaviours.