



Engineering Operative Level 2

Apprenticeship Standard

Overview



Engineering Operatives work individually or as part of a team to carry out a range of engineering operations which could include:

- servicing and maintaining machines and equipment
- dealing with breakdowns
- operating a variety of machines (CNC or conventional)
- assembling and repairing machine and press tools, dies, jigs, fixtures
- fabrication/installation of sheet fabrications and equipment
- providing technical support using communications software, test tools and e-commerce technology.

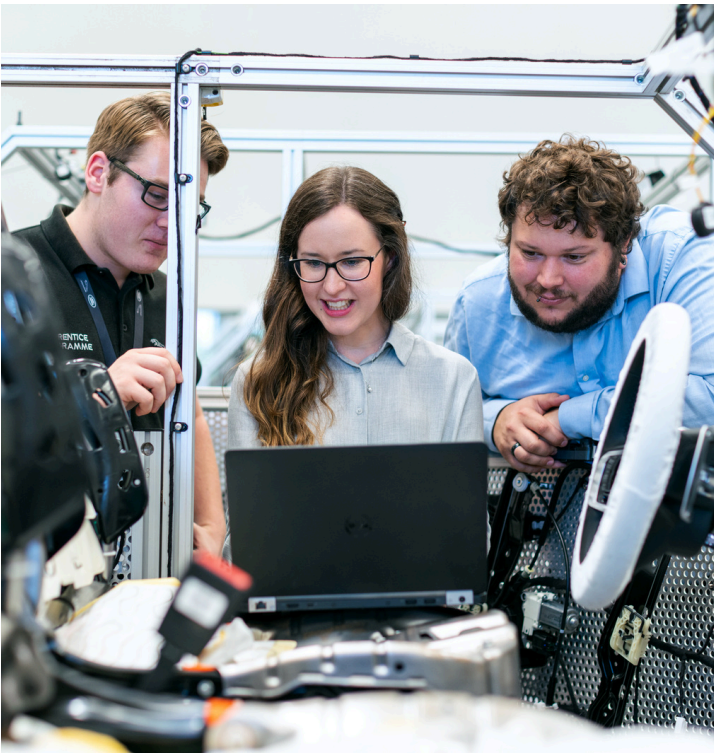
Duration:

12 months + 3 months for the End Point Assessment

Entry Guidelines:

English & maths at GCSE grade A*-E/2-9 or Functional Skills level 1

NB All apprenticeship standards require apprentices to provide evidence of their English and maths grades before they can progress through the Gateway to their End Point Assessment and achieve the apprenticeship qualification.



Engineering Operative Level 2 Course Overview

Pre-programme	On Programme Learning covering Knowledge, Skills and Behaviours	Gateway	Independent End Point Assessment
Initial assessment English & Maths	Certificate/Diploma in Engineering Operations Level 2 course (day release, Twelve Quays Campus)	<ul style="list-style-type: none"> e-portfolio of evidence 	<ul style="list-style-type: none"> Practical Skills Observation
Skills Scan	Portfolio of evidence	<ul style="list-style-type: none"> Certificate / Diploma in Engineering Operations level 2 	<ul style="list-style-type: none"> Professional Discussion
Induction with Trainer Assessor	On programme Assessments & Reviews: <ul style="list-style-type: none"> On-programme learning assessments 6-8 weekly sessions with Trainer Assessor & 8-10 week Progress Reviews with apprentice and employer 	<ul style="list-style-type: none"> English level 2 test Maths level 2 test 	

Course Details

This apprenticeship programme is designed to develop the knowledge, skills and behaviours required to be an effective Engineering Operative.

The **Skills & Behaviours** element of the apprenticeship is to be completed with support from a Trainer Assessor making periodic visits to the apprentice in the workplace. The Trainer Assessor will support and guide the apprentice to ensure that they are developing the skills and competency required in accordance with the apprenticeship standard. The apprentice will use the e-portfolio system called OneFile to build a portfolio of work throughout the development stage, which is a key component of End Point Assessment and demonstrates their occupational competency.

Engineering Operatives must complete one of the following job role options:

- Working within a maintenance role
- Working within a mechanical manufacturing role
- Working within an electrical and electronic engineering role
- Working within a fabrication role
- Working within a materials, processing or finishing role
- Working within a technical support role

Depending on the specialist job role, the Technical Knowledge element of the course will include:

1. Maintenance planning.
2. Diagnostic and fault-finding techniques.
3. Specific safe working practices, maintenance procedures and environmental regulations.
4. Specific equipment operating parameters.
5. Mechanical manufacturing techniques.
6. Specific quality specifications for mechanical manufacturing operations.
7. Electrical and electronic assembly and testing techniques.
8. Fabrication and joining techniques.
9. Specific machinery, equipment and tooling required for the materials, processing or finishing operation.
10. Different technical support techniques.

Depending on the specialist job role, the Occupational Skills element of the course will include:

1. Carry out fault location on appropriate equipment using suitable maintenance diagnostic techniques.
2. Carry out maintenance activities in line with work instructions.
3. Produce individual components, sub-assemblies or completed assemblies using mechanical manufacturing techniques.
4. Wire and terminate different types of cabling.
5. Assemble and test a range of electrical and electronic components.
6. Follow appropriate completion activities and restore equipment/system to service after testing has been completed.
7. Shape and join materials using the appropriate methods and techniques, to meet specification requirements.
8. Prepare equipment, tooling and materials and then carry out the material, processing or finishing operation in line with specific safe working practices.
9. Plan, prepare equipment, tooling and materials and then carry out the technical support operation in line with specific safe working practices and specification requirements.
10. Carry out quality checks during and after activities / operations.

Skills & Behaviours

The **Skills & Behaviours** element of the apprenticeship is to be completed with support from a Trainer Assessor making periodic visits to the apprentice in the workplace. The Trainer Assessor will support and guide the apprentice to ensure that they are developing the core behaviours required in accordance with the apprenticeship standard, including:

- Personal responsibility and resilience
- Work effectively in teams
- Effective communication and interpersonal skills
- Focus on quality and problem solving
- Continuous personal development

The apprentice will use the e-portfolio system called OneFile to build a portfolio of work throughout the development stage, which is a key component of End Point Assessment and demonstrates their occupational competency.

Gateway

To progress through the Gateway to the End Point Assessment, the Engineering Operative apprentice must have:

- Achieved Certificate / Diploma in Engineering Operations level 2
- Taken tests in English and maths at level 2 (if they don't already have level 2)
- Completed their portfolio of evidence.

The apprentice's employer must sign-off the portfolio of evidence, that has been completed by the apprentice during their programme, to confirm the apprentice has demonstrated the knowledge, skills and behaviours assigned to this apprenticeship standard.

End Point Assessment

The End Point Assessment must only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, which means they have achieved occupational competence.

End Point Assessment (EPA) normally takes 3 months to complete and consists of:

- 1 Practical Skills Observation
- 2 Professional Discussion

1 Practical Skills Observation

The practical observation will be carried out by an independent assessor in the apprentice's place of work, if possible. Apprentices will be observed and assessed against the core knowledge, skills and behaviours and their chosen specific job role option. During the observation, the independent assessor may ask between 3-6 open questions to assess the apprentice's knowledge.

The observation lasts 2 hours.

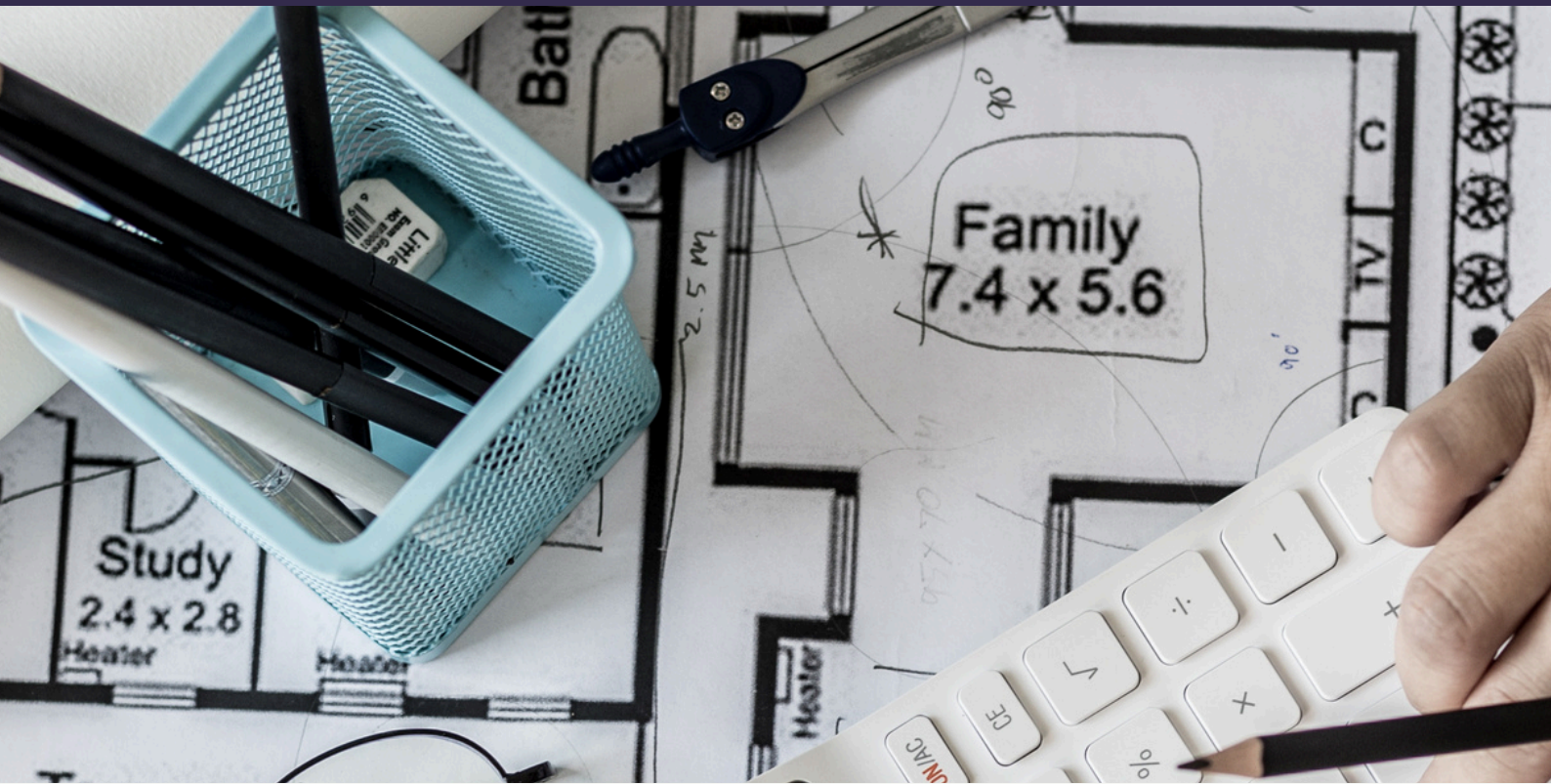
2 Professional Discussion

The professional discussion is designed to enable the apprentice to showcase how he/she combines their core skills, technical knowledge and core behaviours in order to carry out his/her occupational role effectively.

The apprentice should expect to discuss evidence of work so the independent assessor can ascertain the apprentice's role in completing the work, what barriers they overcame etc.

The structured interview typically lasts 40 minutes.

Grading & Progression



Apprenticeship grading

The available grades for this apprenticeship programme are **Distinction, Pass or Fail.**

Where can apprentices progress to?

The apprentice may choose to progress on to a level 3 apprenticeship and/or a higher level position in Engineering and Manufacturing.



Conway Park Campus
10 Europa Boulevard, Birkenhead CH41 4NT
tel: 0151 551 7610 email:
employerservices@wmc.ac.uk