



Casting the Future of today - for tomorrow

ICME Level 3 End Point Assessment for Metal Casting, Foundry and Patternmaking Technician Apprenticeship

Industry

Engineering and Manufacturing

Government Funding Band
£24,000*

On Programme Duration
Typically 27 Months

Gateway Requirements

- Level 2 in English and Maths
- Completed portfolio to support technical interview

Gateway Duration

Typically within 6 months

End-Point Assessment Methods:

- Technical Interview supported by a portfolio of evidence
- Practical observation & questioning

Grading

Pass/Distinction

*Funding information accurate as of August 2020. For the most up to date information, check the Institute for Apprenticeships and Technical Education (IfATE) website.

Working within the Metal Casting, Foundry and Patternmaking industry –

Metal Casting, Foundry and Patternmaking technicians are highly skilled, complex and crucial roles within the Cast Metals industry. The UK industry is a modern and advanced sector, producing 530,000 tonnes of castings in all metals with an annual value of £2.2 Billion and the 400 foundries employ more than 17,000 Operatives, Technicians, Engineers, Supervisors, Managers and Staff. Castings may weigh less than a gramme or over 600 tonnes. The industry underpins and is a vital supplier to other industries (automotive, aerospace, rail, power and renewable energy, medical, pumps & valves, defence, petrochemical and marine).

Common Technician job titles are: Pattern and Model Making or Methods Development Technician who plan how to design and make patterns in wood, resin or metal from 2D/3D drawings, sometimes using additive manufacturing techniques and simulation software programmes, to produce prototypes or sample castings to tight tolerance; Foundry Material and Process Control Technician, Foundry Production or Metal Casting Furnace and Ladle Technician who prepare and control sand or liquid metal quality for casting into moulds or dies, which may involve maintenance and control of complex automated equipment; Post Casting Technician; Inspection, Non-Destructive, Mechanical Testing and Quality Assurance Technician who inspect and carry out and record control tests on samples or castings to meet agreed tolerances.

Technicians can be employed in all sizes of companies, working independently or as part of a team in a foundry, workshop or laboratory. An eye for detail is necessary and they will need to comply with safety requirements.

On-Programme Delivery Structure

Apprentices will complete their on-programme delivery in their specific job role for the duration of the Apprenticeship programme (typically 27 months) with their allocated tutor/assessor. Apprentices will select their specific optional route with their Employer and Training Organisation.

During their delivery of the standard and selected optional route the apprentice will need to complete 20% off-the-job training hours during this on-programme phase.

The tutor/assessor will review the apprentices progress periodically against the core and optional skills, knowledge and behaviours (KSB's) during this period to ensure they are prepared for their end-point assessment.

All delivery during this phase will be reviewed to identify what will be included in the apprentice's portfolio of evidence to submit at gateway.

For further details on the standard and assessment plan follow this link; <https://www.instituteforapprenticeships.org/apprenticeship-standards/metal-casting-foundry-and-patternmaking-technician/>

Gateway Requirements

Before you can book your end-point assessment, the provider and employer sign off that the apprentice is ready to sit their EPA.

The employer and provider will need to sign a declaration to agree the apprentice has met the relevant Cast Metal, Foundry and Patternmaking Knowledge, Skills and Behaviours set out in the standard.

The apprentice must also have passed Maths and English Level 2 by this point.

As part of the EPA service ICME will check all gateway evidence before the EPA takes place giving you confidence that the apprentice is ready to sit their EPA.

Prepare through delivery

- Initial Assessment
- English and Maths delivery for achievement of qualification
- On-programme delivery and training against KSB's
- Gateway readiness assessment

Ready for Assessment

Undertake end point assessment methods:

▪ Technical Interview supported by a portfolio of evidence

Knowledge, Skills and Behaviours questioned through a 1.5-hour technical interview made up of 10 scenario and competence based questions based on the contents of the portfolio of evidence submitted at gateway

▪ Practical observation and questioning

Structured 6-hour observation of work-based tasks to demonstrate the skills, knowledge and behaviours that are appropriate to the standard, followed by 12 open questions relating to the underpinning KSB's. Both the observation and questions must be completed within the time limit given.

Progression

Progression routes from this apprenticeship are expected to be into a specific Cast Metal, Foundry or Patternmaking role with the ability to develop or move into supervisory or higher management role.

Completion of the Apprenticeship is designed to be recognised by the Institute of Cast Metals Engineers to meet the requirements set out in the Engineering Council's Specification for Engineering Technician to allow professional registration.

Why choose ICME?

- We are industry experts leading the charge to drive and develop Technical Apprenticeships for the sector, working with Training Organisations and Employers to give added value to Apprentices
- Clear and informative guidance on the End point assessment process, including invaluable resources and documentation
- The heart of our ethos is high quality delivery underpinned by rigorous internal and external quality assurance
- We pride ourselves on our flexible and supportive approach for apprentices, employers and training organisations through the end point assessment process
- Invaluable ongoing support from our dedicated EPA team, who are committed to providing you with the best possible service
- We are open and transparent about pricing. There are no hidden charges
- We meet the needs of the Apprentice and Employer

If you would like any further information, please contact **Amy Worrallo** on epainfo@icme.org.uk or call a member of the icme team on **0121 752 1810**
www.icme.org.uk

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