



Skills England

Draft Preview

DRAFT APPRENTICESHIP ASSESSMENT PLAN FOR THE TOOL PROCESS DESIGN ENGINEER APPRENTICESHIP

ST0641/V2

APPRENTICESHIP REFERENCE NUMBER	LEVEL OF THIS APPRENTICESHIP	INTEGRATION
ST0641	6	None

Assessment Plan

Assessment details

Introduction

This Apprenticeship Assessment Plan (AAP) sets out the requirements for the assessment of the level 6 Tool process design engineer apprenticeship. It should be read in conjunction with the General Requirements for Apprenticeship Assessment. Where there is conflict between this AAP and the General Requirements, this AAP takes precedence. Assessment organisations must also comply with the relevant regulatory framework for apprenticeship assessment.

It is important that the assessment of apprentices is proportionate, valid, and provides reliable evidence of an apprentice's attainment of the relevant knowledge and skills. As such, assessment organisations must design assessments to ensure:

- employers have confidence that the apprentice has reached the expected performance standard
- apprentices are sufficiently secure in their knowledge and skills, so that they could demonstrate their competence in different contexts, for example, a different workplace

Assessment Outcomes

The assessment outcomes group and summarise the knowledge and skills that must be demonstrated in assessments. All assessment outcomes must be assessed.

Knowledge and skills statements in **bold** are mandatory and must be assessed in every version of the assessment that is made available.

Assessment Outcome	Mapping
AO1 Tooling Process Design Applies engineering principles and specialist software to design and develop new tooling processes, including press tooling, gauges, and forming simulations, ensuring they meet technical and production requirements.	K1, K6, K8, K11 S1, S2, S3
AO2 Advanced Tooling Development and Validation Demonstrates comprehensive expertise in advanced lean manufacturing, precision measurement, CAE simulation, and tooling design to optimise performance and quality. Consistently delivers robust, customer-compliant tooling solutions that meet OEM specifications while addressing sustainability, ethical standards, and efficient problem resolution.	K7 S4, S5, S7
AO3 Process Feasibility and Cost Analysis Evaluates the feasibility of proposed tooling processes, estimates production costs, and applies business improvement techniques to deliver economically viable solutions aligned with project objectives.	K2, K3, K4, K9 S6
AO4 Leadership and Collaborative Project Management Leads multidisciplinary teams to deliver tooling projects from concept to production, managing stakeholder relationships and applying effective communication, negotiation, and influencing techniques.	K5, K10 S8, S9, S10

Assessment requirements

Assessment organisations must set apprenticeship assessments. Assessment organisations should consider how technology and digital tools can support innovation and efficiency.

Assessment organisations must design apprenticeship assessments to include a **project** and, if applicable, any relevant constraints.

Any additional assessment, or assessments, must be selected from the following list of methods, to ensure the assessment outcomes are met in full. Assessments available in the list may be used more than once:

- **presentation**
- **professional discussion**
- **portfolio**
- **questions and answers**

Assessment organisations must have due regard to any relevant frameworks, standards, guidance or other documents that may be published by industry regulators, professional bodies, and other representative groups.

Apprentices may be assessed at any appropriate point during their apprenticeship programme.

Assessments may be designed to allow a centre or training provider to mark assessments. The assessment organisation is responsible for ensuring all assessments are sufficiently reliable and valid, and for the accuracy of any centre or training provider marking.

Performance descriptors

Performance descriptors describe the level of performance required to achieve a pass or distinction grade. Assessment organisations must design assessments that align with these descriptions.

Performance Category	Pass	Distinction
Applied Knowledge	Applies advanced tooling process engineering knowledge to create valid and workable tooling process solutions in complex contexts involving many interacting factors, showing sound interpretation and a reasoned approach.	Applies advanced tooling process knowledge with a high level of insight and strategic awareness, producing tooling process solutions that effectively navigate complex contexts involving many interacting factors, and add value in both design and implementation.
Applied Skills	Determines, refines and adapts suitable methods, using advanced cognitive and practical skills to effectively address problems with limited definition, supported by relevant research and/or development activities.	Determines and refines methods with a strong emphasis on adaptation and optimisation, often designing or applying research and development outputs in ways that significantly improve outcomes.
Regulatory and Procedural Awareness	Applies regulatory and procedural knowledge strategically, aligning compliance with organisational goals and adapting approaches to meet evolving requirements within tooling process activities.	Anticipates and interprets regulatory change, shaping responses within tooling process activities that ensure compliance while enabling strategic advantage or operational resilience.
Communication and Collaboration	Communicates, influences, and collaborates across a	Leads strategic communication and collaboration that

	range of stakeholder groups, aligning communication with organisational goals and values within complex or sensitive contexts.	engages, aligns, and influences stakeholders. Demonstrates keen judgement and responsiveness in complex or sensitive contexts.
Information Use and Decision Making	Critically analyses, interprets and evaluates complex information and ideas to inform decisions, demonstrating an awareness of theoretical perspectives and their application within the occupational setting.	Engages critically with a wide range of theories, schools of thought or models, using them to inform a nuanced evaluation of complex concepts or information and to justify innovative or forward-thinking approaches.
Responsibility and Autonomy	Exercises accountability in planning and delivering courses of action capable of supporting change or development. Leads tasks, processes and teams, making appropriate use of resources and delegation, and makes considered judgments within broad parameters.	Plans and executes sustained action that underpins substantial change or development, showing strong leadership in the direction of others, resource allocation, and task execution. Exercises autonomy with confidence and judgment, taking accountability for complex decision-making and outcome evaluation.

Professional recognition

This apprenticeship aligns with the requirements for professional body recognition as detailed in the occupational standard.

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