

Manufacturing Industry Skills Alliance

# **Annual Training Product Development Plan**

The Manufacturing Industry Skills Alliance's Annual Training Product Development Plan outlines the training products to be developed and the project timelines. The plan also describes the industry need for the work, the scope of work to be undertaken and the reasoning for the prioritisation.

All projects will be undertaken in accordance with the principles of the <u>Training Product</u> <u>Development Methodology</u> which aligns to the requirements of the <u>Training Package</u> <u>Organising Framework</u>.

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Manufacturing Industry Skills Alliance is a Jobs and Skills Council funded by the Australian Government Department of Employment and Workplace Relations



Projects starting 2023-24

Title	Descriptor	Scope	Prioritisation	Start Date	Expected Completion Date		
MEM Manufacturi	MEM Manufacturing and Engineering Training Package (MEM)						
Blacksmithing (MPT_ANN_2324_001)	The current training program for the blacksmithing trade specialisation within <u>MEM31922 Certificate III in Engineering</u> – <u>Fabrication Trade</u> heavily relies on the Industrial Railways syllabus, which is over 40 years old. Due to this, there is a need for MEM31922 to better align with current employment opportunities and industry requirements. Additionally, there are core requirements within the blacksmithing industry that are not adequately covered within MEM31922 and for which units of competency need to be developed including working with hydraulic presses and addressing regulatory changes relating to gas forges (class B gas devices).	<ul> <li>This work proposed changes to the following training products.</li> <li>Updates to 6 units of competency: <ul> <li>MEM06001 Perform hand forging</li> <li>MEM06002 Perform hammer forging</li> <li>MEM06005 Perform drop and upset forging</li> <li>MEM06006 Repair springs</li> <li>MEM06008 Hammer forge complex shapes</li> </ul> </li> <li>MEM06009 Hand forge complex shapes</li> <li>Updates to the Blacksmithing Trade specialisation in 1 qualification: <ul> <li>MEM31922 Certificate III in Engineering - Fabrication Trade</li> </ul> </li> <li>Develop up to 2 new units in the use of hydraulic press and include them in the qualification.</li> </ul>	Fast-track	31 January 2024	24 April 2025 <sup>(a)</sup>		



Title	Descriptor	Scope	Prioritisation	Start Date	Expected Completion Date
Update to MEM80122 Graduate Diploma of Engineering (MPT_ANN_2324_002)	Recent changes to <u>MEM80122 Graduate</u> <u>Diploma of Engineering</u> have been identified by stakeholders as limiting the qualification's flexibility, as the total number of available elective units of competency has been reduced from 7 to 4. Additionally, concerns have been raised that having an achievement totalling 7 units of competency for the qualification does not align with the higher education requirement of 8 units within their Graduate Diploma framework, thereby complicating articulation arrangements. Group B elective table also needs to be reinstated.	<ul> <li>This work proposed changes to the following training products.</li> <li>Updates to the packaging rules and elective bank in one qualification:</li> <li><u>MEM80122 Graduate Diploma of Engineering</u></li> </ul>	Fast-track	31 January 2024	24 April 2025 <sup>(a)</sup>
Sheetmetal Fabrication (MPT_ANN_2324_004)	The Sheetmetal trade specialisation within <u>MEM31922 Certificate III in Engineering –</u> <u>Fabrication Trade</u> requires updates to align with current and emerging industry demands. This includes incorporating essential skills such as thermal cutting, setting and editing computer controlled thermal cutting machines, and the use of 3D CAD.	<ul> <li>This project proposed changes to the following training products.</li> <li>Review the Sheetmetal Trade specialisation in 1 qualification:</li> <li><u>MEM31922 Certificate III in Engineering – Fabrication Trade</u></li> <li>Develop up to 1 new unit of competency (3D CAD).</li> </ul>	Fast-track	31 January 2024	28 February 2025



Title	Descriptor	Scope	Prioritisation	Start Date	Expected Completion Date
MEA Aeroskills Trair	ning Package				
Update to unit of competency MEA362 Maintain aircraft vapour cycle air conditioning services (MPT_ANN_2324_003)	Feedback, in particular from Defence, has raised concerns about the Assessment Conditions of the unit of competency MEA362 Maintain aircraft vapour cycle air conditioning services. Specifically, limitations were identified in assessing two key areas: the condenser extension and retraction system, and the throttle system shutoff. Research indicates that this is not a standard system design for new aircrafts and, therefore, makes accessibility untenable for part of the Defence workforce. There is a need to update MEA362 to meet the needs of industry requirements as currently enrolled students are potentially being placed on-hold or delayed due to training organisations being unable to deliver or assess the requirements.	This project proposed changes to the following training products. Review 1 unit of competency: • <u>MEA362 Maintain aircraft vapour cycle air conditioning services</u>	Fast-track	31 January 2024	30 April 2025 <sup>(a)</sup>



Title	Descriptor	Scope	Prioritisation	Start Date	Expected Completion Date		
MSM Manufacturing	MSM Manufacturing Training Package						
Manufactured Mineral Products – Precast Concrete Manufacturing	Precast concrete components offer advantages in quality control, efficiency, and construction speed as they are manufactured off-site and then transported for assembly.	This project proposed changes to the following training products. Review of 1 qualification:	Routine	31 January 2024	30 September 2025 <sup>(a)</sup>		
(MPT_ANN_2324_005)	This method is experiencing significant growth in Australia due to demand for cost-effective and sustainable construction. Skills gaps regarding precast concrete production and handling have been identified within the MSM Manufacturing Training Package, requiring the alignment of <u>MSM30318 III Certificate in Manufactured</u> <u>Mineral Products</u> with current job requirements and the reinstatement of currently deleted units of competency.	<ul> <li>MSM30318 III Certificate in Manufactured Mineral Products</li> <li>An update to two units of competency:</li> <li>MSMPMC304 Prepare for production</li> <li>MSMPMC324 Move materials</li> <li>Development of up to 14 new units of competency.</li> </ul>					



#### Ongoing projects started during 2022-23

Title	Descriptor	Scope	Prioritisation	Start Date	Expected Completion Date		
MEM Manufacturin	MEM Manufacturing and Engineering Training Package						
Non-Destructive Testing Skills (MPT_ANN_2223_002)	Revised international standards for non- destructive testing (NDT) which underpin certification for NDT technicians, has impacted units in the MEM Manufacturing and Engineering Training Package. The ISO standards have been adopted in Australia and there is now a need to ensure that MEM units and qualifications reflect current industry practice. It is critical for the training products to be urgently updated in line with the new industry standards to remain relevant to current practice for certification of materials, products and structures through NDT testing, and will impact 19 NDT units used extensively across both trade, post-trade and technician occupations.	<ul> <li>This work is expected to see the review and update of 19 units covering non-destructive testing to align to ISO standards and certification of NDT technicians.</li> <li>The work will include the review and update of the following 11 qualifications and a skill set to ensure these skills are appropriately reflected to support job roles:</li> <li><u>MEM50422 Diploma of Engineering – Non-Destructive Testing</u></li> <li><u>MEM30119 Certificate III in Engineering - Production Systems</u></li> <li><u>MEM30219 Certificate III in Engineering – Technical</u></li> <li><u>MEM30522 Certificate III in Engineering – Technical</u></li> <li><u>MEM40119 Certificate III in Engineering – Fabrication Trade</u></li> <li><u>MEM40119 Certificate III in Engineering – Certificate III in Engineering – Technical</u></li> <li><u>MEM50119 Diploma of Engineering – Advanced Trade</u></li> <li><u>MEM50522 Diploma of Engineering – Meth50522 Diploma of Engineering – Meth50522 Diploma of Engineering – Materials</u></li> <li><u>MEM60122 Advanced Diploma of Engineering – Materials</u></li> <li><u>MEM60122 Advanced Diploma of Engineering – Materials</u></li> <li><u>MEM500002 Non-Destructive Testing – Level 2 NDT practitioner</u></li> </ul>	Fast-track	30 June 2023	24 April 2025 <sup>(a)</sup>		



#### 2022-23 projects discontinued

Title	Descriptor	Scope	Prioritisation	Start Date	Expected Completion Date	
MEM Manufacturing and Engineering Training Package						
Review of Trade – Related CNC Skills (MPT_ANN_2223_001)	Initial research and consultation undertaken in the MEM Review of Trade Related CNC Skills Project provided valuable intelligence on advances in CNC technology and programming and related skills and job roles.	This project has been discontinued.	N/A	30 June 2023	31 January 2024	
	The intelligence identified issues that need to be considered by the MEM industrial parties prior to Training Package product development work. The project has been discontinued to enable due processes to address these issues.					

Note: <sup>(a)</sup> Manufacturing Alliance has undertaken a thorough review of the activities and timeline for all current training package projects to ensure they are well-placed for success – for industry (employers and employees), and learners. As a result, revised timelines for these projects were approved by the Department of Employment and Workplace Relations on 17 September 2024.