Manufacturing Industry Skills Alliance

Annual Training Product Development Plan (V3)

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 Training Product Development Methodology which aligns to the requirements of the Training Package Organising Framework.

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Jobs and Skills Councils
An Australian Government Initiative

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Annual Training Product Development Plan

Title	Descriptor	Scope	Prioritisation	Commencement Date	Completion Date
***MEM Manufacturing and Engineering Training Package* (MEM)**					
FY 2023 – 24 Projects					
MPT_ANN_2324_001 **Blacksmith Project**	The current training program for the blacksmithing trade specialisation within MEM31922 Certificate III in Engineering – Fabrication Trade 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).	This work proposed changes to the following training products. Updates to 6 units of competency: • MEM06001 Perform hand forging • MEM06002 Perform hammer forging • MEM06005 Perform drop and upset forging • MEM06006 Repair springs • MEM06008 Hammer forge complex shapes • MEM06009 Hand forge complex shapes Updates to the Blacksmithing Trade specialisation in 1 qualification: • MEM31922 Certificate III in Engineering - Fabrication Trade Develop up to 2 new units in the use of hydraulic press and include them in the qualification.	Fast track	31 January 2024	30 June 2024
MPT_ANN_2324_002 **Update to MEM80122 Graduate Diploma of Engineering**	Recent changes to MEM80122 Graduate Diploma of Engineering 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 totaling 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.	This work proposed changes to the following training products. Updates to the packaging rules and elective bank in one qualification: • MEM80122 Graduate Diploma of Engineering	Fast track.	31 January 2024	30 June 2024

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Title	Descriptor	Scope	Prioritisation	Commencement Date	Completion Date
MPT_ANN_2324_004 **Sheetmetal Project**	The Sheetmetal trade specialisation within MEM31922 Certificate III in Engineering – Fabrication Trade 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.	This project proposed changes to the following training products. Review the Sheetmetal Trade specialisation in 1 qualification: • MEM31922 Certificate III in Engineering - Fabrication Trade Develop up to 1 new unit of competency (3D CAD).	Fast track.	31 January 2024	30 June 2024

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Title	Descriptor	Scope	Prioritisation	Commencement Date	Completion Date
***MEA Aeroskills Training Package* (MEA)**					
FY 2023 – 24 Project					
MPT_ANN_2324_003 **Update to unit of competency MEA362 Maintain aircraft vapour cycle air conditioning services**	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: • MEA362 Maintain aircraft vapour cycle air conditioning services	Fast track.	31 January 2024	30 June 2024

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Title	Descriptor	Scope	Prioritisation	Commencement Date	Completion Date
***MSM Manufacturing Training Package* (MSM)**					
FY 2023 – 24 Project					
MPT_ANN_2324_005 **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 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* (MSM), requiring the alignment of MSM30318 III Certificate in Manufactured Mineral Products with current job requirements and the reinstatement of currently deleted units of competency.	This project proposed changes to the following training products. Review of 1 qualification: • MSM30318 III Certificate in Manufactured Mineral Products An update to two units of competency: • MSMPMC304 Prepare for production • MSMPMC324 Move materials Development of up to 14 new units of competency.	Routine	31 January 2024	31 December 2024

Title	Descriptor	Scope	Prioritisation	Commencement Date	Completion Date
***MEM Manufacturing and Engineering Training Package* (MEM)**					

FY 2022 – 23 Projects Ongoing

MPT_ANN_2223_002 Non-Destructive Testing Skills was approved for 2022 – 23. A project variation request to extend the project timelines was approved by the Department of Employment and Workplace Relations (DEWR) on 18 December 2023.

Titles of units of competency are subject to change after review and consultation with stakeholders, the following provided are draft titles.

MPT_ANN_2223_002 **Non-Destructive Testing Skills**	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* (MEM). 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	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. The work will include the review and update of the following 10 qualifications and a skill set to ensure these skills are appropriately reflected to support job roles: • MEM50422 Diploma of Engineering – Non-Destructive Testing • MEM30119 Certificate III in Engineering - Production Systems • MEM30219 Certificate III in Engineering - Mechanical Trade • MEM30522 Certificate III in Engineering – Technical • MEM31922 Certificate III in Engineering - Fabrication Trade • MEM40119 Certificate IV in Engineering • MEM50119 Diploma of Engineering - Advanced Trade • MEM50222 Diploma of Engineering – Technical • MEM50522 Diploma of Engineering – Materials • MEM60122 Advanced Diploma of Engineering • MEMSS00002 Non-Destructive Testing - Level 2 NDT practitioner	Variation approved 18 December 2023. The project's fast-track priority status reflects the urgent need to ensure that training reflects updated international standards for non-destructive testing (ISO9712:2021) which were adopted in Australia in early 2023.	30 June 2023	28 June 2024

Title	Descriptor	Scope	Prioritisation	Commencement Date	Completion Date
***MEM Manufacturing and Engineering Training Package* (MEM)**					

FY 2022 – 23 Projects Discontinued

MPT_ANN_2223_001 Review of Trade-Related CNC Skills was approved for 2022 – 23. A project variation request was approved by the Department of Employment and Workplace Relations (DEWR) on 18 December 2023 This project has been discontinued.

MPT_ANN_2223_001 **Review of Trade-Related CNC Skills**	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. 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.	This project has been discontinued.	N/A	30 June 2023	1 December 2023