

# **MEM Manufacturing and Engineering**

## **TRAINING PACKAGE**

### **Version 1 & 1.10**

## **WA NOMINAL HOURS GUIDE**

15 October 2015

## Introduction

This Guide has been generated to enable the stakeholders in the Manufacturing and Engineering Industry in Western Australia to participate in the managed implementation of the National MEM Manufacturing and Engineering Training Package.

This Guide is designed to aid Registered Training Organisations (RTOs) to convert from existing Training Package qualifications to new Training Package qualifications within the scope of their training delivery.

The Guide should be read in conjunction with the endorsed components of the Training Package.

**Version 1** of the MEM Manufacturing and Engineering was released by Training.Gov.Au (TGA) on the 30 April 2015.

**Version 1.10** of the MEM Manufacturing and Engineering was released by Training.Gov.Au (TGA) on the 16 June 2015.

### Modification history details

Release 1.1 - ISC upgrade to correct list of prerequisites in MEM10025 Undertake a capstone assessment.  
Release 1 - Initial release

## Transition Arrangements

Registered Training Organisations (RTOs) are required to deliver Training Package qualifications in accordance with the Standards for RTOs. For further information visit the Training Accreditation Council website [www.tac.wa.gov.au](http://www.tac.wa.gov.au)

## Nominal Hours

Nominal hours are the hours of training notionally required to achieve the outcomes of units of competency.

Nominal hours are identified for nationally endorsed qualifications. Nominal hours may vary for a qualification depending on the selection of units of competency.

In Western Australia, nominal hours are used as a mechanism for funding allocation.

## Contact Details

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## Qualifications and Nominal Hours

The following table provides a summary of the qualifications and nominal hours in the MEM Manufacturing and Engineering Training Package.

National Code	National Title	Nominal Hours
MEM31215	Certificate III in Engineering – Industrial Electrician	996

## Units of Competency and Nominal Hours

The following table provides a summary of the units of competency and nominal hours in the MEM Manufacturing and Engineering Training Package.

National Code	Unit Title	Nominal Hours	Points
MEM10016	Terminate and test electrical wiring and accessories	36	4
MEM10018	Select cable types and sizes to suit loads and electrical installation environment	36	4
MEM10019	Select circuit protection devices by type and rating, fit to switchboards and install earthing	36	2
MEM10020	Install low voltage cabling and fit-off accessories, appliances and equipment	36	4
MEM10021	Inspect, test and verify electrical installations	36	4
MEM10022	Commission and decommission high and low voltage equipment or installations	36	2
MEM10023	Design and connect control switching of circuits for building services and industrial equipment	36	4
MEM10024	Install and troubleshoot luminaires and ancillary equipment	36	2
MEM10025	Undertake a capstone assessment	9	1
MEM13016	Work in hazardous areas	18	2
MEM13017	Apply safety practices, procedures and compliance standards associated with licensed electrical work	18	2
MEM18100	Fault-find, test and rectify AC machines and circuits	36	4
MEM18102	Fault-find, test and rectify single and three-phase transformers	36	4
MEM18103	Fault-find, test and rectify electrical circuits and equipment	36	4
MEM18104	Dismantle, replace and assemble electrical components and equipment	36	3
MEM18105	Disconnect and reconnect high voltage fixed wired equipment	36	3
MEM18106	Terminate communication and data cables	36	4
MEM18108	Troubleshoot analog and digital electronic equipment	36	4
MEM18109	Troubleshoot instrumentation systems and equipment	36	4

## Qualification Mappings

The following table provides an overview of the qualifications from Version 1.10 which replace qualifications from the existing version of the MEM Manufacturing and Engineering Training Package.

MEM05 Current Qualification				MEM Replacement Qualification		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
	No previous equivalent		-	MEM31215	Certificate III in Engineering – Industrial Electrician	996

## Unit of Competency Mapping

The following table provides an overview of the Units of Competency from Version 1.10 which replace Units of Competency from the existing version of the MEM Manufacturing and Engineering Training Package.

MEM05 Current Unit				MEM Replacement Unit		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
	No previous equivalent		-	MEM10016	Terminate and test electrical wiring and accessories	36
	No previous equivalent		-	MEM10018	Select cable types and sizes to suit loads and electrical installation environment	36
	No previous equivalent		-	MEM10019	Select circuit protection devices by type and rating, fit to switchboards and install earthing	36
	No previous equivalent		-	MEM10020	Install low voltage cabling and fit-off accessories, appliances and equipment	36
	No previous equivalent		-	MEM10021	Inspect, test and verify electrical installations	36
	No previous equivalent		-	MEM10022	Commission and decommission high and low voltage equipment or installations	36
	No previous equivalent		-	MEM10023	Design and connect control switching of circuits for building services and industrial equipment	36
	No previous equivalent		-	MEM10024	Install and troubleshoot luminaires and ancillary equipment	36
	No previous equivalent		-	MEM10025	Undertake a capstone assessment	9
	No previous equivalent		-	MEM13016	Work in hazardous areas	18
	No previous equivalent		-	MEM13017	Apply safety practices, procedures and compliance standards associated with licensed electrical work	18
	No previous equivalent		-	MEM18100	Fault-find, test and rectify AC machines and circuits	36
	No previous equivalent		-	MEM18102	Fault-find, test and rectify single and three-phase transformers	36
	No previous equivalent		-	MEM18103	Fault-find, test and rectify electrical circuits and equipment	36
	No previous equivalent		-	MEM18104	Dismantle, replace and assemble electrical components and equipment	36
	No previous equivalent		-	MEM18105	Disconnect and reconnect high voltage fixed wired equipment	36
	No previous equivalent		-	MEM18106	Terminate communication and data cables	36
	No previous equivalent		-	MEM18108	Troubleshoot analog and digital electronic equipment	36
	No previous equivalent		-	MEM18109	Troubleshoot instrumentation systems and equipment	36