



Australian Fluid Power Society Inc. Fluid Power Skills Classification & Curriculum Matrix

AFPS Reference	Unit of Competency	Description	HPHA - Hose Assembly	Sales General	Mechanical Fitter	Technician Fluid Power	Supervisor Foreman	Sales Technical	Engineer Project	Manager	Eng Associate TBA
		Certification Level Blue Mandatory Subject Pink Recommended Subject	II	II	III	IV	Dip Trade	III Tech	Dip Tech	Dip Tech	Adv Dip
	MEM05005	Carry out mechanical cutting	X		X						
	MEM05007	Perform manual heating and thermal cutting			X						
	MEM05012	Perform routine manual metal arc welding			X						
	MEM05049	Perform routine gas tungsten arc welding			X						
	MEM05050	Perform routine gas metal arc welding			X						
	MEM06007	Perform basic incidental heat/quenching, tempering and annealing			X						
	MEM07005	Perform general machining			X						
	MEM07006	Perform lathe operations			X						
	MEM09002	Interpret technical drawing	X	X	X						
	MEM10006	Install machine/plant				X					
	MEM10010	Install pipework and pipework assemblies				X					
	MEM11011	Undertake manual handling	X								
	MEM11005	Pick and process order		X							
	MEM11007	Administer inventory procedures		X							
	MEM12023	Perform engineering measurements	X	X	X						
	MEM12024	Perform computations			X				X		
	MEM12025	Use graphical techniques and perform simple statistical computations					X		X		
	MEM13002	Undertake occupational health and safety activities in the workplace		X			X				
	MEM13003	Work safely with industrial chemicals and materials	X				X				
	MEM13014	Apply principles of occupational health and safety in the work environment	X	X	X						
	MEM14002	Undertake basic process planning							X		
	MEM14004	Plan to undertake a routine task	X	X	X						
	MEM14005	Plan a complete activity			X						
	MEM14081	Apply mechanical engineering fundamentals to support design and development of projects							X	X	
	MEM14086	Apply mechatronic engineering analysis techniques							X	X	
	MEM15002	Apply quality systems	X	X	X						
	MEM15007	Conduct product and/or process capability studies								X	
	MEM15012	Maintain/supervise the application of quality procedures								X	
	MEM15024	Apply quality procedures	X	X	X						
	MEM16003	Provide advanced customer service								X	
	MEM16004	Perform internal/external customer service	X	X							
	MEM16005	Operate as a team member to conduct manufacturing, engineering or related activities	X	X							
	MEM16006	Organise and communicate information		X	X			X	X	X	
	MEM16007	Work with others in a manufacturing, engineering or related environment	X	X	X						
	MEM16008	Interact with computing technology		X	X			X	X	X	
	MEM16009	Research and analyse engineering information					X				
	MEM16011	Communicate with individuals and small groups					X				



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	MEM16012	Interpret technical specifications and manuals					X			X	
	MEM16014	Report technical information					X			X	
	MEM17003	Assist in the provision of on the job training	X		X						
	MEM18001	Use hand tools	X	X	X						
	MEM18002	Use power tools/hand held operations	X		X						
	MEM18003	Use tools for precision work			X						
	MEM18004	Maintain and overhaul mechanical equipment			X						
	MEM18005	Perform fault diagnosis, installation and removal of bearings			X						
	MEM18006	Repair and fit engine bearing components			X						
	MEM18007	Maintain and repair mechanical drives and mechanical transmission assemblies			X						
	MEM18009	Perform leveling and alignment of machines and engineering components			X						
	MEM18010	Perform equipment condition monitoring and recording				X					
	MEM18011	Shut down and isolate machines/equipment	X		X						
	MEM18012	Perform installation and removal of mechanical seals			X						
IPM *	MEM18018	Maintain pneumatic system components			X						
IPT *	MEM18019	Maintain pneumatic systems				X					
IHM *	MEM18020	Maintain hydraulic system components			X						
IHT *	MEM18021	Maintain hydraulic systems				X					
HSR *	MEM18022	Maintain fluid power controls				X					
	MEM18023	Modify fluid power system operation					X				
MHM *	MEM18052	Maintain fluid power systems for mobile plant									
	MEM18055	Dismantle, replace and assemble engineering components			X						
C&C *	MEM18071	Connect/disconnect fluid conveying system components	X			X					
C&C *	MEM18072	Manufacture fluid conveying conductor assemblies	X	X		X					
	MEM23003	Operate and program computers and/or controllers in engineering situations							X		
	MEM30007	Select common engineering materials						X	X	X	
	MEM30008	Apply basic economic and ergonomic concepts to evaluate engineering applications						X	X	X	
	MEM30010	Set up basic hydraulic circuits						X	X		
	MEM30011	Set up basic pneumatic circuits						X	X		
	MEM30012	Apply mathematical techniques in a manufacturing, engineering or related environment					X	X	X	X	
	MEM30019	Use resource planning software systems in manufacturing								X	
	MEM30023	Prepare a simple cost estimate for a manufactured product						X	X	X	
	MEM30025	Analyse a simple electrical system circuit							X		
	MEM30027	Prepare basic programs for programmable logic controllers							X		
	MEM30028	Assist in sales of technical products/systems						X	X	X	
	MEM09158	Perform mechatronics engineering design drafting							X		
	MSS403002	Ensure process improvements are sustained								X	



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	MSS402030	Apply cost factors to work practices								X	
	MSS402080	Undertake root cause analysis							X	X	
	MSS405002	Analyse and map a value chain								X	
	MSAEVE272	Participate in environmentally sustainable work practices			X			X	X	X	

Note: * Indicates that the International Fluid Power Society (IFPS) competency and the AFPS competency are not necessarily direct equivalents and the IFPS certification of a competency may NOT provide a full AFPS Curriculum Matrix competency credit

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