



**Australian Government**

# **UEG40118 Certificate IV in Gas Supply Industry Operations**

**Release 1**

# UEG40118 Certificate IV in Gas Supply Industry Operations

## Modification History

Release 1. This is the first release of this qualification in the UEG Gas Industry Training Package

## Qualification Description

This qualification provides competencies to supervise and conduct gas supply industry activities, including installation, diagnostics and maintenance of distribution and transmission gas pipelines, cylinders and associated equipment.

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

## Entry Requirements

There are no entry requirements for this qualification

## Packaging Rules

A total of 1280 weighting points comprising:

290 core weighting points listed below; plus

990 elective weighting points from the elective units listed below.

Choose a minimum of 990 **weighting points** elective units from the list below, of which between 0 and 220 **weighting points** can be taken from Group A, between 0 and 180 **weighting points** can be taken from Group B, between 0 and 670 **weighting points** can be taken from Group C; or **elective units** between 200 and 990 **weighting points** can be taken from Group D.

**Up to 220 weighting points of the elective units Group A**, may be selected, with appropriate contextualisation, from any relevant nationally endorsed Training Package or accredited course, provided selected units contribute to the vocational outcome of the qualification. Previously assigned weighting points are listed in the UEG CVIG, if not listed weighting points will be 10 points unless directed from the Gas Industry Reference Committee (IRC). The general elective units must contribute to the vocational outcomes of the qualification.

Where imported units are selected, care must be taken to ensure all prerequisite units specified are complied with.

Where a prerequisite unit is attached to a unit, it is identified by this symbol □.

### Core units

### Weighting Points

UEGNSG005	Prepare to work in the gas industry	20
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UEGNSG132	Carry out basic work activities in a gas industry work environment	60
UEGNSG133	Comply with environmental policies and procedures in the utilities industry	40
UEGNSG141	Apply workplace health and safety regulations, codes and practices in the gas supply industry	20
UEENEEE117A	Implement and monitor energy sector OHS policies and procedures	20
BSBMGT402	Implement operational plan	40
BSBLDR403	Lead team effectiveness	50
BSBWOR404	Develop work priorities	40

**Group A: Imported and common elective units****Weighting Points**

BSBCUS401	Coordinate implementation of customer service strategies	40
BSBFLM303	Contribute to effective workplace relationships	40
BSBFLM305	Support operational plan	40
BSBFLM306	Provide workplace information and resourcing plans	40
BSBFLM309	Support continuous improvement systems and processes	40
BSBFLM311	Support a workplace learning environment	40
BSBFLM312	Contribute to team effectiveness	40
BSBINM401	Implement workplace information system	40
BSBINN301	Promote innovation in a team environment	40
BSBLED401	Develop teams and individuals	40
BSBMGT403	Implement continuous improvement	40
BSBWHS301	Maintain workplace safety	40

BSBWHS303	Participate in WHS hazard identification, risk assessment and risk control	50
BSBWOR301	Organise personal work priorities and development	40
BSBLDR402	Lead effective workplace relationships	50
CPCCLDG3001A	Licence to perform dogging	30
CPCCLRG3001A	Licence to perform rigging basic level └ CPCCLDG3001A Licence to perform dogging	40
CPCCLRG3002A	Licence to perform rigging intermediate level └ CPCCLRG3001A Licence to perform rigging basic level	40
CPCCWHS1001	Prepare to work safely in the construction industry	10
CPCPCM4012A	Estimate and cost work	40
CPPFES2005A	Demonstrate first attack firefighting equipment	15
HLTAID001	Provide cardiopulmonary resuscitation	10
HLTAID003	Provide first aid	10
HLTAID005	Provide first aid in remote situations	10
HLTWHS005	Conduct manual tasks safely	20
MEM05004C	Perform routine oxy acetylene welding	20
MEM05012C	Perform routine manual metal arc welding	20
MEM05015D	Weld using manual metal arc welding process └ MEM05012C Perform routine manual metal arc welding └ MEM05051A Select welding processes └ MEM05052A Apply safe welding practices └ MEM12023A Perform engineering measurements └ MEM18001C Use hand tools └ MEM18002B Use power tools/hand held operations	40
MEM05045B	Perform pipe welds to code standards using manual metal arc welding process └ MEM05007C Perform manual heating and thermal	60

	cutting	
	└ MEM05012C Perform routine manual metal arc welding	
	└ MEM05015D Weld using manual metal arc welding process	
	└ MEM05016C Perform advanced welding using manual metal arc welding process	
	└ MEM05026C Apply welding principles	
	└ MEM05051A Select welding processes	
	└ MEM05052A Apply safe welding practices	
	└ MEM09002B Interpret technical drawing	
	└ MEM12023A Perform engineering measurements	
	└ MEM18001C Use hand tools	
	└ MEM18002B Use power tools/hand held operations	
MSMWHS110	Follow emergency response procedures	20
MSMWHS205	Control minor incidents	30
MSMWHS216	Operate breathing apparatus	20
MSMWHS217	Gas test atmospheres	30
MSMOPS400	Optimise process/plant area	60
MSMPER200	Work in accordance with an issued permit	20
MSMPER201	Monitor and control work permits	20
MSMPER202	Observe permit work	20
MSMPER300	Issue work permits	20
	└ MSMWHS201 Conduct hazard analysis	
MSMPER400	Coordinate permit process	30
	└ MSMPER300 Issue work permits	
MSMSUP210	Process and record information	30
MSMSUP240	Undertake minor maintenance	30
MSMSUP303	Identify equipment faults	40
MSS402061	Use SCADA systems in operations	30
MSS402080	Undertake root cause analysis	50

PMAWHS211	Prepare equipment for emergency response	20
PMAWHS310	Investigate incidents	30
PMAWHS311	Lead emergency teams	20
PMAOMIR210	Control evacuation to muster point	20
PMAOMIR346	Assess and secure an incident site	30
PMAOMIR407	Audit incident preparedness and established response systems	80
PMAOMIR418	Coordinate incident response	40
PMAOMIR430	Conduct and assess incident exercises	35
PMAOMIR444	Develop incident containment tactics	40
PMAOPS312	Undertake ship loading/unloading operations	40
PMAOPS402	Respond to abnormal process situations └ MSMSUP390 Use structured problem-solving tools	50
PMAOPS405	Operate complex control systems	80
PMAOPS410	Operate remote production facilities	40
PMASUP410	Develop plant documentation	30
PMASUP444	Plan plant preparation and isolation	50
PMBWELD301	Butt weld polyethylene plastic pipelines	20
PMBWELD302	Electrofusion weld polyethylene pipelines	20
PMC563081	Carry out stock control	20
RIICCM205E	Carry out manual excavation	10
RIICCM206D	Support plant operations	10
RIICCM207D	Spread and compact materials manually	10

RIICCM208D	Carry out basic levelling	10
RIICCM210D	Install trench support	15
RIICRC208D	Lay pipes	40
RIIHAN309E	Conduct telescopic materials handler operations	80
RIIMPO304D	Conduct wheel loader operations	40
RIIMPO308E	Conduct tracked dozer operations	40
RIIMPO309E	Conduct wheeled dozer operations	40
RIIMPO318E	Conduct civil construction skid steer loader operations	70
RIIMPO319D	Conduct backhoe/loader operations	50
RIIMPO320E	Conduct civil construction excavator operations	80
RIIWHS202D	Enter and work in confined spaces	30
RIIWHS204D	Work safely at heights	20
RIIWHS205D	Control traffic with stop-slow bat	10
RIIWHS302D	Implement traffic management plan	20
RIIRIS301D	Apply risk management processes	40
RIISAM201D	Handle resources and infrastructure materials and safely dispose of non-toxic materials	15
RIIWMG203D	Drain and dewater civil construction site	20
TLIB0002	Carry out vehicle inspection	20
TLIC0003	Operate LP gas tanker └ TLILIC0001 Licence to transport dangerous goods by road	40
TLIC2002	Drive light rigid vehicle	40
TLIC2025	Operate four wheel drive vehicle	40

TLIC3003	Drive medium rigid vehicle	40
TLIC3004	Drive heavy rigid vehicle	40
TLIC3005	Drive heavy combination vehicle	40
TLIC4006	Drive multi-combination vehicle	40
TLID2003	Handle dangerous goods/hazardous substances	40
TLID2010	Operate a forklift	40
TLID2016	Load and unload explosives/dangerous goods	30
TLID3015	Identify and label explosives/dangerous goods	20
TLID3023	Use specialised liquid bulk gas transfer equipment	40
TLID3027	Prepare for transport of dangerous goods	50
TLID3033	Operate a vehicle-mounted loading crane	40
TLID3036	Lift and move load using a mobile crane	40
TLIF2006	Apply accident-emergency procedures	20
TLIF2010	Apply fatigue management strategies	30
TLIF2012	Apply safe procedures when handling/transporting dangerous goods or explosives	30
TLIF3063	Administer the implementation of fatigue management strategies	50
TLIF0002	Administer chain of responsibility policies and procedures	30
TLIF3096	Carry out emergency response to a dangerous goods incident	40
TLIF4007	Implement and coordinate accident-emergency procedures	40
TLIF4065	Ensure compliance with Australian Dangerous Goods Code	70



TLIF4066	Implement and supervise transport regulations compliance systems	80
TLIF0003	Develop and implement policies and procedures to ensure chain of responsibility compliance	40
TLIL4059	Implement asset management systems	40
TLILIC0012	Licence to operate a vehicle loading crane (capacity 10 metre tonnes and above)	40
TLILIC2001	Licence to operate a forklift truck	40
TLILIC2014	Licence to drive a light rigid vehicle	40
TLILIC2015	Licence to drive a medium rigid vehicle	40
TLILIC2016	Licence to drive a heavy rigid vehicle	50
TLILIC3006	Licence to operate a non-slewing mobile crane (greater than 3 tonnes capacity)	60
TLILIC3008	Licence to operate a slewing mobile crane (up to 20 tonnes)	70
TLILIC0001	License to transport dangerous goods by road	50
TLILIC3017	Licence to drive a heavy combination vehicle	60
TLILIC3018	Licence to drive a multi combination vehicle	60
TLILIC4009	Licence to operate a slewing mobile crane (up to 60 tonnes)	70
UEENEEC001B	Maintain documentation	20
UEENEE101A	Use computer applications relevant to a workplace └ UEENEEE101A Apply Occupational Health Safety regulations, codes and practices in the workplace	20

**Group B: General elective units.****Weighting Points**

UEENEEE102A	Fabricate, assemble and dismantle utilities industry components └ UEENEEE101A Apply Occupational Health Safety regulations, codes and practices in the workplace	40
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UEENEEE107A	Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEE101A Apply Occupational Health Safety regulations, codes and practices in the workplace	40
UEENEEM080A	Report on the integrity of explosion-protected equipment in a hazardous area └ UEENEEG105A Verify compliance and functionality of general electrical installations └ UEENEEI112A Verify compliance and functionality of process control installations └ MEM07001B Perform operational maintenance of machines/equipment └ PMAOPS201B Operate fluid flow equipment	20
UEGNSG004	Locate, prove and protect utility assets	60
UEGNSG006	Use a portable gas detector to locate escape	40
UEGNSG134	Establish a utilities infrastructure work site	60
UEGNSG136	Carry out transmission pipeline construction work activities	60
UEGNSG140	Apply environmental policies and procedures in the utilities industry	20
UEGNSG219	Conduct excavations in the utilities industry	60
UEGNSG221	First on site response to gas pipeline emergencies └ CPPFES2005A Demonstrate first attack firefighting equipment └ HLTAID003 Provide first aid └ UEGNSG141 Apply workplace health and safety regulations, codes and practices in the gas supply industry	90
UEGNSG224	Construct and lay copper and stainless steel gas distribution pipelines	60
UEGNSG226	Assist with the construction, laying and connection of gas distribution services to mains	40
UEGNSG227	Assist with the construction and laying of gas distribution mains	40
UEGNSG330	Coat metallic pipelines	80

UEGNSG331	Establish right of way access for transmission pipeline construction	60
UEGNSG332	Undertake hydro-testing for transmission pipeline construction	60
UEGNSG333	Work in proximity of transmission pipeline construction plant and equipment	40
UEGNSG342	Maintain pipeline easements	40
UEGNSG615	Fill LPG cylinders	80
UEGNSG616	Refurbish gas cylinders	80
UEGNSG705	Disconnect and reconnect small capacity gas meters	40
UEGNSG708	Pressure test residential and small commercial gas installations	40
UEGNSG711	Process meter reading information using appropriate technology	40
UEGNSG712	Read and record meter readings	40
UEGNSG714	Relight Type A gas appliances	60
UEGNSG804	Maintain single stage and single run gas flow and pressure control and measuring devices	80
UEPOPS203B	Operate and monitor communications system	20
UEPOPS205B	Conduct minor mechanical maintenance	30
UETTDREL14A	Working safely near live electrical apparatus as a non-electrical worker	40

**Group C: General elective units****Weighting Points**

UEENEEM020A	Attend to breakdowns in hazardous areas — gas atmospheres └ UEENEEM080A Report on the integrity of explosion-protected equipment in a hazardous area	20
UEENEEM076A	Use and maintain the integrity of a portable gas detection device └ UEENEEM080A Report on the integrity of	20

	explosion-protected equipment in a hazardous area	
UEGNSG135	Monitor and control gas odourisation	100
UEGNSG137	Operate and maintain gas station water bath heaters	60
UEGNSG138	Install and commission stationary gas fuelled turbine engines └ CPCCWHS1001 Prepare to work safely in the construction industry └ HLTAID001 Provide cardiopulmonary resuscitation	60
UEGNSG139	Repair and maintain stationary gas fuelled turbine engines	60
UEGNSG142	Conduct isolations under the permit to work system for gas industry work sites └ MSMWHS217 Gas test atmospheres	80
UEGNSG200	Conduct butt fusion of large diameter polyethylene gas pipeline systems	20
UEGNSG212	Construct, lay and connect a gas distribution service to a plastic main	60
UEGNSG213	Construct, lay and connect a gas distribution service to a steel main	60
UEGNSG216	Commission or decommission gas distribution pipelines	100
UEGNSG217	Launch and recover PIGs in a gas distribution pipeline	100
UEGNSG218	Carry out surveillance on gas distribution assets	90
UEGNSG220	Construct and lay polyethylene gas distribution mains	60
UEGNSG222	Construct and lay nylon or PVC gas distribution mains	60
UEGNSG223	Construct and lay steel gas distribution pipelines	60
UEGNSG225	Perform routine maintenance on distribution pipeline facilities and equipment	100
UEGNSG228	Construct and lay large copper gas distribution pipelines └ UEGNSG134 Establish a utilities infrastructure work site	60

UEGNSG229	Prepare simple drawings of as laid gas mains and services	40
UEGNSG344	Commission or decommission gas transmission pipelines	120
UEGNSG346	Launch and recover PIGs in gas transmission pipelines	100
UEGNSG347	Perform routine maintenance on transmission pipeline facilities and equipment	110
UEGNSG348	Supervise the operation of plant and equipment for the construction of gas transmission pipelines	60
UEGNSG349	Carry out surveillance of gas transmission pipelines	110
UEGNSG350	First response to a gas facility event └ CPPFES2005A Demonstrate first attack firefighting equipment └ HLT AID003 Provide first aid └ UEGNSG141 Apply workplace health and safety regulations, codes and practices in the gas industry	60
UEGNSG352	Check and report on gas station conditions	40
UEGNSG353	Carry out aerial surveillance of gas transmission pipelines	60
UEGNSG354	Control excavations in the vicinity of gas transmission pipelines └ UEGNSG004 Locate, prove and protect utility assets	60
UEGNSG355	Monitor and report on cathodic protection systems	60
UEGNSG356	Monitor and operate flow control, pressure measuring and regulating devices for gas transmission └ UEGNSG006 Use a portable gas detector to locate escape	100
UEGNSG411	Maintain cathodic protection systems	100
UEGNSG412	Install cathodic protection systems	110
UEGNSG506	Respond to gas infrastructure emergencies	80
UEGNSG507	Remotely monitor and operate gas transmission flow and pressure measuring and regulating devices	90

└ MSS402061 Use SCADA systems in operations

UEGNSG508	Remotely check and report on gas station conditions └ MSS402061 Use SCADA systems in operations	40
UEGNSG614	Load, unload, exchange and connect LPG cylinders	80
UEGNSG617	Monitor and control the transfer of bulk LPG	100
UEGNSG618	Process liquefied petroleum gas (LPG)	100
UEGNSG619	Perform scheduled maintenance on gas processing or storage facilities and equipment	110
UEGNSG620	Organise the repair of faults in LPG processing or storage facilities and equipment	80
UEGNSG621	Control bulk storage of LPG	110
UEGNSG622	Assess the operational capability of gas safety equipment on a delivery vehicle	40
UEGNSG706	Test new residential and small commercial gas installations	60
UEGNSG713	Investigate billing exceptions-conditions	60
UEGNSG805	Maintain multi-stage and multi-run gas flow and pressure measuring and regulating devices └ UEGNSG006 Use a portable gas detector to locate escape └ UEGNSG804 Maintain single stage and single run gas flow and pressure control and measuring devices	80
UEGNSG807	Install gas flow, measuring and pressure regulating devices └ UEGNSG006 Use a portable gas detector to locate escape	80
UEGNSG811	Monitor and operate complex flow control, measuring and regulating devices for gas distribution	110
UEPMNT367A	Install and commission stationary gas fuelled reciprocating engines └ UEENEEE101A Apply Occupational Health Safety regulations, codes and practices in the workplace └ CPCCOHS1001A Work safely in the construction industry	60

└ HLTCPR201A Perform CPR

UEPMNT368A	Repair and maintain stationary gas fuelled reciprocating engines └ UEENEEE101A Apply Occupational Health Safety regulations, codes and practices in the workplace └ CPCCOHS1001A Work safely in the construction industry └ HLTCPR201A Perform CPR	60
UEPOPS317B	Operate and monitor fixed fire protection systems	30
UEPOPS336B	Manage, operate and monitor a gas turbine unit	60
UEPOPS347B	Operate and monitor supervisory, control and data acquisition systems	40

**Group D: General elective units**

**Weighting Points**

UEGNSG106	Coordinate repair of pipeline, facilities and equipment	110
UEGNSG108	Operate and monitor pipeline control systems	60
UEGNSG109	Control field pipeline operations	60
UEGNSG110	Supervise technical operations for gas distribution or transmission	60
UEGNSG111	Produce maintenance strategies and plans for a gas facility	80
UEGNSG131	Compile a gas industry technical report	20
UEGNSG204	Coordinate and conduct gas distribution pipeline repair and modifications	110
UEGNSG207	Coordinate construction, laying and testing of gas distribution pipelines	110
UEGNSG210	Supervise and monitor contract staff for work on distribution pipelines	120
UEGNSG305	Coordinate gas transmission pipeline repair and modifications	110
UEGNSG308	Identify, evaluate and control threats to transmission pipelines	40

UEGNSG310	Supervise and monitor contract work	60
UEGNSG311	Site control of third party works in the vicinity of a transmission pipeline	80
UEGNSG314	Liaise with third party and the community to maintain pipeline integrity and community safety	40
UEGNSG319	Custody transfer metering and gas quality analysis	80
UEGNSG324	Follow procedures to deal with incidents related to the abuse of drugs and alcohol	60
UEGNSG325	Coordinate the operation of relevant plant and equipment for transmission pipeline construction	80
UEGNSG326	Coordinate and monitor staff and contractors	60
UEGNSG327	Coordinate transmission pipeline construction operations	60
UEGNSG511	Operate gas infrastructure to meet nominated demand └ MSS402061 Use SCADA systems in operations	120
UEGNSG512	Control centre communication with gas industry stakeholders └ UEPOPS203B Operate and monitor communications system	110
UEGNSG514	Managing and controlling field activities └ UEPOPS203B Operate and monitor communications system	110
UEGNSG515	Use control centre systems to monitor and control gas infrastructure └ MSS402061 Use SCADA systems in operations	110
UEGNSG611	Control LPG storage/processing operations	110
UEGNSG612	Supervise technical operations for liquefied petroleum gas storage and processing	120
UEGNSG806	Maintain SCADA controlled gas flow and pressure and electronic gas measurement equipment └ UEGNSG006 Use a portable gas detector to locate escape	100



## Qualification Mapping Information

This qualification replaces and is equivalent to UEG40114 Certificate IV in Gas Supply Industry Operations

## Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=6a6c032e-ffcb-4f3d-8063-415efbd261e8>