



Australian Government

UEG40221 Certificate IV in Gas Supply Industry Operations

Release 1

UEG40221 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 \perp .

Core units

Weighting Points

BSBLDR414 Lead team effectiveness

50

BSBOPS402	Coordinate business operational plans	40
BSBPEF402	Develop personal work priorities	40
UEECD0024	Implement and monitor energy sector WHS policies and procedures	20
UEGNSG005	Prepare to work in the gas industry	20
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

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

BSBHRM413	Support the learning and development of teams and individuals	40
BSBINS402	Coordinate workplace information systems	40
BSBLDR301	Support effective workplace relationships	40
BSBLDR413	Lead effective workplace relationships	50
BSBOPS301	Maintain business resources	40
BSBOPS404	Implement customer service strategies	40
BSBPEF301	Organise personal work priorities	40
BSBST301	Contribute to continuous improvement	40
BSBST401	Promote innovation in team environments	40
BSBST402	Implement continuous improvement	40
BSBWHS308	Participate in WHS hazard identification, risk assessment and risk control processes	50
BSBWHS311	Assist with maintaining workplace safety	40

BSBXTW301	Work in a team	40
CPCCLDG3001	Licence to perform dogging	30
CPCCLRG3001	Licence to perform rigging basic level └ CPCCLDG3001 Licence to perform dogging	40
CPCCLRG3002	Licence to perform rigging intermediate level └ CPCCLRG3001 Licence to perform rigging basic level	40
CPCCWHS1001	Prepare to work safely in the construction industry	10
CPCPCM4012	Estimate and cost work	40
CPPFES2005	Demonstrate first attack firefighting equipment	15
HLTAID009	Provide cardiopulmonary resuscitation	10
HLTAID011	Provide First Aid	10
HLTAID013	Provide First Aid in remote or isolated site	10
HLTWHS005	Conduct manual tasks safely	20
ICTICT214	Operate application software packages	20
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 └ MSMWHS201 Conduct hazard analysis	20
MSMPER400	Coordinate permit process └ MSMPER300 Issue work permits	30
MSMPMC400	Carry out stock control	20
MSMSUP210	Process and record information	30

MSMSUP240	Undertake minor maintenance	30
MSMSUP303	Identify equipment faults	40
MSMWHS110	Follow emergency response procedures	20
MSMWHS201	Conduct hazard analysis	20
MSMWHS205	Control minor incidents	30
MSMWHS216	Operate breathing apparatus	20
MSMWHS217	Gas test atmospheres	30
MSS402061	Use SCADA systems in operations	30
MSS402080	Undertake root cause analysis	50
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
PMAOPS223	Operate and monitor valve systems	40
PMAOPS317	Undertake ship transfer operations	40
PMAOPS346	Operate and troubleshoot liquefaction process	60
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
PMAWHS211	Prepare equipment for emergency response	20
PMAWHS310	Investigate incidents	30
PMAWHS311	Lead emergency teams	20
PMBWELD301 E	Join polyethylene plastic pipelines using butt welding	20
PMBWELD302 E	Join polyethylene plastic pipelines using electrofusion welding	20
RIICCM205F	Carry out manual excavation	10
RIICCM206E	Support plant operations	10
RIICCM207E	Spread and compact materials manually	10
RIICCM208E	Carry out basic levelling	10
RIICCM210E	Install trench support	15
RIICRC208E	Lay pipes	40
RIIHAN309F	Conduct telescopic materials handler operations	80
RIIMPO304E	Conduct wheel loader operations	40
RIIMPO308F	Conduct tracked dozer operations	40
RIIMPO309F	Conduct wheeled dozer operations	40
RIIMPO318F	Conduct civil construction skid steer loader operations	70
RIIMPO319E	Conduct backhoe/loader operations	50
RIIMPO320F	Conduct civil construction excavator operations	80
RIIRIS301E	Apply risk management processes	40

RIISAM201E	Handle resources and infrastructure materials and safely dispose of nontoxic materials	15
RIIWHS202E	Enter and work in confined spaces	30
RIIWHS204E	Work safely at heights	20
RIIWHS205E	Control traffic with stop-slow bat	10
RIIWHS302E	Implement traffic management plans	20
RIIWMG203E	Drain and dewater civil construction sites	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
TLID0012	Operate a vehicle-mounted loading crane	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

TLID3036	Lift and move load using a mobile crane	40
TLIF0012	Implement and coordinate accident-emergency procedures	40
TLIF0014	Monitor the safety of transport activities (Chain of Responsibility)	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
TLIF3096	Carry out emergency response to a dangerous goods incident	40
TLIF4065	Ensure compliance with Australian Dangerous Goods Code	70
TLIF4066	Implement and supervise transport regulations compliance systems	80
TLIL4059	Implement asset management systems	40
TLILIC0001	Licence to transport dangerous goods by road	50
TLILIC0002	Licence to operate a vehicle loading crane (capacity 10 metre tonnes and above)	40
TLILIC0003	Licence to operate a forklift truck	40
TLILIC0008	Licence to operate a non-slewing mobile crane (greater than 3 tonnes capacity)	60
TLILIC0010	Licence to operate a slewing mobile crane (up to 20 tonnes)	70
TLILIC0013	Licence to operate a slewing mobile crane (up to 60 tonnes)	70
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
TLILIC3017	Licence to drive a heavy combination vehicle	60
TLILIC3018	Licence to drive a multi-combination vehicle	60
UEECO0002	Maintain documentation	20

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

UEECD0007	Apply work health and safety regulations, codes and practices in the workplace	20
UEECD0019	Fabricate, assemble and dismantle utilities industry components └ UEECD0007 Apply work health and safety regulations, codes and practices in the workplace	40
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications └ UEECD0007 Apply work health and safety regulations, codes and practices in the workplace	40
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
UEGNSG140	Apply environmental policies and procedures in the utilities industry	20
UEGNSG203	Evaluate and extinguish gas fire	20
UEGNSG206	Construct and lay copper and stainless steel gas distribution pipelines	60
UEGNSG219	Conduct excavations in the utilities industry	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	40

distribution mains

UEGNSG230	First on site response to gas pipeline emergencies └ CPPFES2005 Demonstrate first attack firefighting equipment └ HLTAID011 Provide First Aid └ UEGNSG141 Apply workplace health and safety regulations, codes and practices in the gas supply industry	90
UEGNSG303	Carry out transmission pipeline construction work activities	60
UEGNSG316	Work in proximity of transmission pipeline construction plant and equipment	40
UEGNSG330	Coat metallic pipelines	80
UEGNSG331	Establish right of way access for transmission pipeline construction	60
UEGNSG342	Maintain pipeline easements	40
UEGNSG615	Fill LPG cylinders	80
UEGNSG616	Refurbish gas cylinders	80
UEGNSG701	Disconnect and reconnect data logging equipment	40
UEGNSG702	Disconnect and reconnect small capacity gas meters	40
UEGNSG703	Fault find and repair data logging equipment	100
UEGNSG704	Install and commission data logging equipment	80
UEGNSG707	Process data logging information	60
UEGNSG708	Pressure test residential and small commercial gas installations	40
UEGNSG709	Process meter reading information using appropriate technology	40
UEGNSG710	Read and record meter readings	40

UEGNSG714	Relight Type A gas appliances	60
UEGNSG715	Use data logging equipment	60
UEGNSG804	Maintain single stage and single run gas flow and pressure control and measuring devices	80
UEPOPS203	Operate and monitor communications system	20
UEPOPS205	Conduct minor mechanical maintenance	30
UETTDREL14	Working safely near live electrical apparatus as a non-electrical worker	40

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

UEECD0050	Use and maintain the integrity of a portable gas detection device └ UEECD0007 Apply work health and safety regulations, codes and practices in the workplace	20
UEGNSG103	Install and commission stationary gas fuelled turbine engines └ CPCCWHS1001 Prepare to work safely in the construction industry └ HLTAID009 Provide cardiopulmonary resuscitation	60
UEGNSG135	Monitor and control gas odourisation	100
UEGNSG137	Operate and maintain gas station water bath heaters	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
UEGNSG201	Conduct distribution pipeline emergency repair └ UEGNSG225 Perform routine maintenance on distribution pipeline facilities and equipment	100

UEGNSG202	Conduct emergency site control on gas distribution assets	100
UEGNSG205	Commission or decommission gas distribution pipelines	100
UEGNSG208	Construct and lay large copper gas distribution pipelines	60
UEGNSG209	Construct and lay polyethylene gas distribution mains	60
UEGNSG211	Construct and lay steel gas distribution pipelines	60
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
UEGNSG217	Launch and recover PIGs in a gas distribution pipeline	100
UEGNSG218	Carry out surveillance on gas distribution assets	90
UEGNSG222	Construct and lay nylon or PVC gas distribution mains	60
UEGNSG225	Perform routine maintenance on distribution pipeline facilities and equipment	100
UEGNSG229	Prepare simple drawings of as laid gas mains and services	40
UEGNSG301	Conduct emergency site control on gas transmission assets	120
UEGNSG304	Commission or decommission gas transmission pipelines	120
UEGNSG306	Control gas processing, storage or regasification operations in an LNG storage facility	100
UEGNSG312	Inject gas into underground storage	100
UEGNSG313	Monitor and operate flow control, pressure measuring and regulating devices for gas transmission └ UEGNSG006 Use a portable gas detector to locate escape	100
UEGNSG315	Withdraw gas from underground storage	100
UEGNSG317	First response to a gas facility event	60

	<ul style="list-style-type: none"> └ CPPFES2005 Demonstrate first attack firefighting equipment └ HLTAID011 Provide First Aid └ UEGNSG141 Apply workplace health and safety regulations, codes and practices in the gas supply industry 	
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
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
UEGNSG411	Maintain cathodic protection systems	100
UEGNSG412	Install cathodic protection systems	110
UEGNSG506	Respond to gas infrastructure emergencies	80
UEGNSG509	Remotely monitor and operate gas transmission flow and pressure measuring and regulating devices └ MSS402061 Use SCADA systems in operations	90
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
UEGNSG902	Commission, operate and maintain electrolysers	90
UEGNSG903	Fault find and repair hydrogen storage equipment	110
UEGNSG904	Inject hydrogen gas into distribution networks	110
UEPMNT367	Install and commission stationary gas fuelled reciprocating engines └ CPCCWHS1001 Prepare to work safely in the construction industry └ HLTAID001 Provide cardiopulmonary resuscitation	60
UEPMNT368	Repair and maintain stationary gas fuelled reciprocating engines └ CPCCWHS1001 Prepare to work safely in the construction industry └ HLTAID001 Provide cardiopulmonary resuscitation	60

UEPOPS317	Operate and monitor fixed fire protection systems	30
UEPOPS336	Manage, operate and monitor a gas turbine unit	60
UEPOPS347	Operate and monitor supervisory, control and data acquisition systems	40

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

MSL974019	Perform chemical tests and procedures	100
MSL975040	Apply routine chromatographic techniques	100
	└ MSL974019 Perform chemical tests and procedures	
MSL975047	Apply complex instrumental techniques	80
	└ MSL974019 Perform chemical tests and procedures	
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
UEGNSG131	Compile a gas industry technical report	20
UEGNSG210	Supervise and monitor contract staff for work on distribution pipelines	120
UEGNSG214	Coordinate and conduct gas distribution pipeline repair and modifications	110
UEGNSG215	Coordinate construction, laying and testing of gas distribution pipelines	110
UEGNSG302	Conduct transmission pipeline emergency repair	120
UEGNSG305	Coordinate gas transmission pipeline repairs and modifications	110
UEGNSG307	Coordinate the operation of relevant plant and equipment for transmission pipeline construction	80
UEGNSG309	Coordinate transmission pipeline construction operations	60

UEGNSG310	Supervise and monitor contract work	60
UEGNSG314	Liaise with third party and the community to maintain pipeline integrity and community safety	40
UEGNSG326	Coordinate and monitor staff and contractors	60
UEGNSG501	Communicate with gas industry stakeholders to meet operational requirements	110
UEGNSG503	Monitor and control field activities	110
UEGNSG504	Monitor and control gas infrastructure using Control Centre systems	110
UEGNSG505	Operate and monitor gas infrastructure to meet nominated demand └ MSS402061 Use SCADA systems in operations	120
UEGNSG806	Maintain SCADA controlled flow and pressure equipment 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 UEG40220 Certificate IV in Gas Supply Industry Operations

Links

Companion Volume Implementation Guides are found in VETNet -

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