



Australian Government

DEF41412 Certificate IV in Defence Diving

Release: 1

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Modification History

Release	TP version	Comments
2	DEF12 V2	Layout adjusted. No changes to content.
1	DEF12 V1	First release.

Description

Not applicable.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

Employability Skills are part of a unit of competency.

Employability Skills statements from a selection of units of competency from the DEF41412 Certificate IV in Defence Diving have been reproduced in the table below.

This table provides an example of Employability Skills for the qualification because Employability Skills within a qualification will vary depending on the qualification packaging options.

Defence qualifications have core units (which must be achieved) and elective units (where there is a choice of units which must be achieved) so different Employability Skills Summaries are possible within the one qualification, depending on the package of core units and chosen elective units.

Employability Skill	Employability Skills Statement
Communication	<ul style="list-style-type: none"> • communicate (verbally by radio and non-verbally through signalling methods) • communicate non-verbally with other divers • communicate through underwater radio devices • compile briefs and clear messages • compile reports on equity and diversity issues • discuss and clear dive plan • identify and communicate equity and diversity strategies to team members • interpret and respond to all line signals between diver and supervisor • interpret signals and read gauges • maintain communications • provide feedback on equity and diversity strategies to managers • report regularly and accurately to the supervisor on a diver's condition, position and progress • quarantine any unserviceable equipment and report defects • transmit and receive messages • use diver-to-diver hand signals • use the phonetic alphabet • use words twice procedures • use written and diagrammatic communications on underwater writing boards
Teamwork	<ul style="list-style-type: none"> • apply techniques to support others • assist a diver in fitting and inspecting dive equipment prior to undertaking the dive • assist diver in the removal and stowage of equipment • assist other divers • attend to a SCUBA (air) diver from the surface • confirm diver's equipment

	<ul style="list-style-type: none"> • control the diver from the surface during a poor visibility search • ensure all aspects of assistance is given in dive preparation • foster and promote equity and diversity practices • independently check fit and function of equipment • maintain diver's safety line throughout the dive • manage irrecoverable malfunctions through buddy breathing • provide assistance during diver's entry into, and exit from, the water • provide assistance to maximise individual contribution to the attainment of the team objectives • react to individual and group contingencies/emergencies • recognise signs and symptoms of compression related problems (in self and others) • supervise and monitor equity and diversity processes within the workplace • understand team dynamics, aims and objectives • understand the composition, roles and responsibilities of team members • work within a team environment
Problem solving	<ul style="list-style-type: none"> • analyse and solve problems • avoid or manage posed threats • clear and refit flooded face mask and/or blocked mouthpiece • conduct an in-water leak test at the surface to ensure the integrity and functionality of the equipment • conduct unplanned decompression procedures • consider and manage the effects of open water environment • deal with minor incidents • deploy lazy shot, cordage and bail-out cylinder, and set at required depth for the decompression stop • determine and manage constraints and risks relevant to the task • ensure recovery when lost and/or separated • ensure subsequent decompression stops are consistent with the dive plan • estimate and maintain distance • estimate distance travelled using a watch • identify and manage dive-specific medical problems • manage significant systemic failures • manage the range of surface and sub-surface hazards inherent to diving • navigate by day and night, vehicle and foot • navigate underwater and maintain compass bearing • react to, and manage a range of, individual and group contingencies/emergencies • recover spatial awareness when balance is lost under conditions of

	<p>zero visibility</p> <ul style="list-style-type: none"> • resolve grievances and complaints without bias • take action to correct inappropriate behaviour • take necessary corrective action/s • understand marine animal threats and marine hazards • use decompression tables
Initiative and enterprise	<ul style="list-style-type: none"> • act independently • be incisive in a fluid and demanding environment • lead by example
Planning and organising	<ul style="list-style-type: none"> • apply processes to resolve grievance and complaints • construct the dive plan using decompression tables • determine and manage the constraints and risks relevant to the task • identify sources of information on equity and diversity in accordance with legislative requirements, and organisational policies and practices • plan the dive • prepare and rig lazy shot and bail-out cylinder • provide advice to stakeholders within resource constraints and operational requirements • understand and apply throughout the operation, occupational health and safety requirements and recognised safety precautions, including those contained in Australian Defence Force procedures
Self-management	<ul style="list-style-type: none"> • act independently and ensure that the individual decision making process is conducted in accordance with standard procedures • demonstrate situational awareness • maintain measured and controlled breathing • maintain measured and controlled finning
Learning	<ul style="list-style-type: none"> • develop an understanding of research and analysis techniques
Technology	<ul style="list-style-type: none"> • assemble equipment • dive using self-contained underwater breathing apparatus • inspect and prepare lazy shot, cordage and bail-out cylinder • inspect electronic communications device and accessories for serviceability and ensure correct fit • maintain attention to the diver throughout the dives • maintain equipment during the dive • select and inspect equipment for serviceability and if required fit and test equipment

Packaging Rules

15 units of competency are required for this qualification including:

- 5 core units
- 10 elective units

Choose a minimum of 8 elective units from the elective list below.

Choose the remaining 2 elective units from either the elective lists below, **or** elsewhere within this training package, **or** another endorsed training package, **or** accredited course.

Where a pre-requisite unit is attached to an elective unit it is identified by this symbol ⊥ .

The pre-requisite units attached to any of the elective units must be undertaken and are additional to the number of elective units required for the qualification.

The elective units should be selected from the units that most closely align to an individual's occupational outcomes. Electives selected must not duplicate outcomes of other units.

Elective units selected must not duplicate content already covered by other units in this qualification.

Code	Core Units
DEFDV001B	Dive using self-contained underwater breathing apparatus in open water to 30 metres ⊥ HLTF311A Apply first aid
DEFDV002B	Support SCUBA diving operations from the surface ⊥ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres
DEFEQ001C	Work with equity and diversity
BSBOHS201A	Participate in OHS processes
HLTF311A	Apply first aid
Code	Group A Elective Units (Specialisation)
Specialist Diving Field	
DEFDV003B	Act as a standby diver ⊥ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres
DEFDV004B	Dive using surface-supplied breathing apparatus in open water to 30

	metres <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres
DEFDV005B	Dive using closed-circuit breathing apparatus (N ₂ O ₂) in open water to a maximum depth of 40 metres <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres └ SISOSCB307A Inspect and fill SCUBA cylinders
DEFDV006B	Dive using closed-circuit breathing apparatus (O ₂) in open water to a maximum depth of 10 metres <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres └ SISOSCB307A Inspect and fill SCUBA cylinders
DEFDV007B	Dive using closed-circuit breathing apparatus (HeO ₂) in open water to a maximum depth of 60 metres <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres └ SISOSCB307A Inspect and fill SCUBA cylinders
SISOSCB307A	Inspect and fill SCUBA cylinders
Work Diving Field	
DEFDV008B	Employ hand tools in an underwater environment <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres
DEFDV009B	Conduct an underwater search of a ship's hull <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres
DEFDV010B	Employ power tools in an underwater environment <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres └ DEFDV008B Employ hand tools in an underwater environment
DEFDV011B	Perform non-technical structural inspections underwater <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing

	apparatus in open water to 30 metres
DEFDV012B	Perform underwater beach and waterway surveys <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres
DEFDV013B	Employ air-lift devices underwater <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres └ DEFDV016B Perform underwater rigging work
DEFDV014B	Perform concreting in an underwater environment <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres
DEFDV015B	Employ explosive power tools in an underwater environment
DEFDV016B	Perform underwater rigging work <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres
DEFDV017B	Employ thermal cutting and welding tools (non-load bearing) in an underwater environment <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres └ DEFDV008B Employ hand tools in an underwater environment
DEFEO714C	Conduct underwater explosive demolitions <ul style="list-style-type: none"> └ DEFDV001B Dive using self-contained underwater breathing apparatus in open water to 30 metres └ DEFEO711C Conduct military demolition operations
Emergency Field	
PUAEME003C	Administer oxygen in an emergency situation <ul style="list-style-type: none"> └ PUAEME001B Provide emergency care
HLTFA412A	Apply advanced first aid <ul style="list-style-type: none"> └ HLTFA311A Apply first aid
HLTHY401D	Prepare multi-place hyperbaric chamber
HLTHY402D	Operate multi-place hyperbaric chamber

HLTHY403D	Conduct post compression routines
HLTHY404D	Implement emergency procedures for hyperbaric chamber
Code	Group B Elective Units (General)
BSBCM311B	Maintain workplace safety
BSBLED401A	Develop teams and individuals
BSBFLM305C	Support operational plan
BSBMGT401A	Show leadership in the workplace
BSBSUS301A	Implement and monitor environmentally sustainable work practices
PMASUP220A	Monitor and control environmental hazards
PSPGOV307B	Organise workplace information
PSPGOV403B	Use resources to achieve work unit goals
PSPGOV404B	Develop and implement work unit plans
PSPPROC406B	Procure goods and services
PUACOM007B	Liaise with other organisations
PUATEA002B	Work autonomously