

Modification history

Release	Comments
Release 1	This version released with SFI Seafood Industry Training Package Version 2.0.

SFIAQU4X2	Maintain aquabotic technology
Application	<p>This unit of competency describes the skills and knowledge required to operate aquabotic technology.</p> <p>The unit applies to individuals who are responsible for the maintenance of aquabotic technology for fisheries or aquaculture processes. It also includes the maintenance of new and emerging aquabotic technology.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
Use Prerequisite Unit	Nil
Unit Sector	Aquaculture

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Undertake routine checks of aquabotic technology	1.1 Inspect aquabotic technology prior to use and in accordance with workplace maintenance schedules 1.2 Conduct safety checks according to manufacturer specifications and safety requirements 1.3 Interpret and record results of routine aquabotic technology checks 1.4 Document the condition of aquabotic equipment in accordance with workplace processes 1.5 Identify faults and irregularities and report to appropriate personnel
2. Complete minor maintenance and repairs	2.1 Diagnose maintenance and repair requirements following aquabotic technology inspection 2.2 Select tools and resources required to complete the maintenance requirements in accordance with manufacturer specifications 2.3 Conduct the maintenance and repair work following manufacturer specifications, work health and safety (WHS) standards and workplace policies 2.4 Report faults outside scope of own expertise to appropriate personnel
3. Document maintenance and report activity	3.1 Record maintenance and repair activities in the required workplace format 3.2 Notify appropriate personnel of faults rectified

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	<ul style="list-style-type: none"> Identifies and interprets relevant manufacturer specifications
Writing	<ul style="list-style-type: none"> Records aquabotic technology performance with appropriate technical detail
Navigate the world of work	<ul style="list-style-type: none"> Interprets and follows workplace requirements, and seeks clarification or other assistance when required Uses initiative to diagnose issues relating to aquabotic technology
Get the work done	<ul style="list-style-type: none"> Plans and organises own work activities and resources

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
SFIAQU4X2 Maintain aquabotic technology	N/A		New unit
Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273		

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TITLE	Assessment requirements for SFIAQU4X2 Maintain aquabotic technology
Performance Evidence	
<p>An individual demonstrating competency must satisfy all of the elements, performance criteria and foundation skills in this unit.</p> <p>There must be evidence that the individual has conducted maintenance and repairs of aquabotic technology on at least two occasions.</p> <p>In doing the above, evidence must also include:</p> <ul style="list-style-type: none">• observing and identifying hazards• diagnosing technical issues• observing manufacturer specifications, WHS standards and workplace policies• fault finding/trouble shooting• ensure aquabotic technology features operate effectively, including:<ul style="list-style-type: none">• video cameras• lights• sonar systems	
Knowledge Evidence	

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An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements, performance criteria and foundation skills of this unit. This includes knowledge of:

- operational processes in fisheries or aquaculture:
 - underwater survey missions
 - environmental and compliance monitoring
 - marine growth survey
 - stock location
 - observational studies
 - zooplankton patches inspection
 - scour and debris survey
 - seabed survey
 - offshore structure cleaning
 - vessel hull inspections
 - net inspection and repair
 - net cleaning
- equipment and vehicles associated with aquabotic technology:
 - autonomous underwater vehicle (AUV)
 - remotely operated vehicle (ROV)
 - new and emerging aquabotic technology
- the operational features and capabilities of aquabotic technology, including:
 - video cameras
 - sonar systems
 - articulating robotic arms
 - high-torque motors
 - live remote control and data sharing
 - configurable sensor suite to measure depth, temperature, orientation and GPS
 - battery life
 - lighting
 - computer systems
- relevant manufacturer specifications
- fishery or aquaculture WHS standards
- aquaculture risk and hazards associated with the use of aquabotic technology
- fault and irregularity reporting processes
- maintenance recording processes
- safety apparatus used for aquabotic technology
- resources required for the maintenance of aquabotic technology:
 - tools
 - cleaning material
 - spare parts
 - cables

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a fisheries or aquaculture setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - access to aquabotic technology
- specifications:
 - access to relevant manufacturer specifications
- relationships:
 - evidence of interactions with relevant personnel.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77->

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