



**Australian Government**

# **SFI20111 Certificate II in Aquaculture**

**Release 2**

## SFI20111 Certificate II in Aquaculture

### Modification History

Release	TP Version	Comments
2	SFI11v1.1	<i>TLID2010A Operate a forklift</i> replaced with <i>TLILIC2001A Licence to operate a forklift truck</i> in response to regulatory changes Equivalent imported units updated
1	SFI11	Initial release

## Description

This qualification represents the base entry point into this sector of the seafood industry and provides people with a range of core and underpinning skills and knowledge relevant to work as a field hand in the aquaculture sector. It is particularly applicable to school-based studies.

The qualification will have application for people working:

- on aquaculture farms or fishout/put-and-take operations
- in hatcheries and nurseries
- in live post-harvest holding facilities, such as processing plants, wholesalers or transporters
- in pet shops, public aquaria, zoos or other facilities with aquatic animals
- for companies providing contract specialist services for aquaculture operations.

### Job roles

Individuals operating at this level undertake a sequence of routine tasks under direction caring for stock which may be at varying stages of development. Duties may include:

- harvesting stock, carrying out post-harvest operations and preparing stock for transport
- maintaining the quality of stock culture environment or holding facility, including water quality, temperature and flow
- maintaining and constructing stock culture structures and other farm structures.

Work may vary between enterprises.

Job role titles may include:

- farm hand
- general hand
- shop hand
- feeder
- pond worker
- farm labourer
- hatchery or nursery assistant.

## Pathways Information

### Pathways into the qualification

Entry into this qualification may be:

- by direct entry and without prior aquaculture skills or knowledge
- through a school vocational studies program combined with work experience.

This qualification is suited to Australian Apprenticeship pathways.

### Pathways from the qualification

After achieving this qualification, candidates may undertake a:

- SFI30111 Certificate III in Aquaculture
- SFI30311 Certificate III in Seafood Industry (Environmental Management Support).

Maritime competencies gained through SFI20111 Certificate II In Aquaculture may be counted towards a Coxswain maritime certification.

## Licensing/Regulatory Information

### Licensing, legislative, regulatory or certification considerations

Licences for operating motor vehicles, tractors, forklifts, vessels and other plant apply for some competencies. Occupational health and safety (OHS), food safety, and environmental protection regulations apply to aquaculture enterprises.

This qualification contains SFISHIP units for basic vessel operation skills. If a Coxswain certification is required then consider undertaking some or all of the units found in the electives, in the functional grouping, Maritime operations. The remaining competencies required to achieve the Coxswain certification can be gained in the SFI30111 Certificate III in Aquaculture.

## Entry Requirements

Not Applicable

## Employability Skills Summary

### EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

#### SFI20111 Certificate II in Aquaculture

The following table contains a summary of the employability skills as identified by the aquaculture sector for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements and may vary from one agency to another.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	<ul style="list-style-type: none"> <li>• counting stock numbers</li> <li>• estimating percentage of feed consumed</li> <li>• estimating the duration of tasks</li> <li>• oral reporting on work activities, problems and abnormal stock behaviour to a supervisor</li> <li>• reading and interpreting standard operating procedures (SOPs) and equipment manufacturer guidelines</li> <li>• reading meters or test kits when making adjustments to culture environment or calibrating equipment</li> <li>• reading schedules relating to feeding, grading or harvesting</li> <li>• recording and reporting data.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• contributing to participative OHS arrangements</li> <li>• respecting people from diverse backgrounds</li> <li>• sharing information relevant to work with co-workers</li> <li>• undertaking duties in a positive manner to promote cooperation.</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• assisting in solving problems</li> <li>• recognising and resolving problems and conflicts that may arise in the workplace</li> <li>• reporting problems to supervisor</li> <li>• recording and reviewing water quality data or environmental condition.</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• adapting to new situations</li> <li>• identifying environmental, OHS and food safety hazards</li> <li>• monitoring and responding to changing weather conditions</li> <li>• monitoring stock and responding to abnormal activity.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• collecting and checking equipment before beginning work activities</li> <li>• identifying hazards prior to commencing a job</li> <li>• moving equipment into position in readiness for work activities</li> <li>• planning to complete work within an allocated time frame.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• prioritising work</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"> <li>• seeking support to improve own performance.</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• identifying own learning needs for future work requirements and career aspirations.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• using automated equipment, such as feeders and data loggers.</li> </ul>

## Packaging Rules

### Packaging Rules

A total of fifteen (15) units of competency must be achieved.

- four (4) core units *plus*
- four (4) aquaculture specialist elective units (Group A) *plus*
- seven (7) elective units that may be selected from a combination of:
  - Group A aquaculture specialist units not yet selected for this qualification
  - Group B elective units
  - imported units from this Training Package or from any other nationally endorsed Training Package or accredited course. A maximum of three (3) units can be imported, however, at least 2 of those units must be aligned to Certificate II or III level. Units must be relevant to aquaculture operations and not duplicate skills already selected.

### Core units of competency

Unit code	Unit title
SFICORE101C*	Apply basic food handling and safety practices
SFICORE103C	Communicate in the seafood industry
SFICORE105B	Work effectively in the seafood industry
SFICORE106B	Meet workplace OHS requirements

\* *Note: SFICORE101C is not a required unit for operations that are growing or holding species not destined for human consumption. This includes ornamental or display species, stock for pearls, and stockers for conservation purposes. The unit FDFOP2063A Apply quality systems and procedures, is to be used in its place.*

### Elective units of competency

#### Group A: Aquaculture specialist units

<b>Unit code</b>	<b>Unit title</b>
SFIAQUA201C	Collect broodstock and seedstock
SFIAQUA205C	Feed stock
SFIAQUA206C	Handle stock
SFIAQUA209C	Manipulate stock culture environment
SFIAQUA211C	Undertake routine maintenance of water supply and disposal systems and structures
SFIAQUA212C	Work with crocodiles
SFIAQUA213C	Monitor stock and environmental conditions
SFIAQUA214B	Produce algal or live-feed cultures
SFIAQUA215B	Carry out on-farm post-harvest operations
SFIAQUA216B	Harvest cultured or held stock
SFIAQUA217B	Maintain stock culture, holding and other farm structures
SFIAQUA219B	Operate and maintain high technology water treatment components
SFIAQUA221A	Control predators and pests
SFIAQUA222A	Control diseases
AHCMOM304A	Operate machinery and equipment
MTMP2002C	Prepare animals for slaughter

### **Group B: Other elective units**

#### **Aquaculture operations**

<b>Unit code</b>	<b>Unit title</b>
SFIAQUA220A	Use waders
SFIEMS201B	Participate in environmentally sustainable work practices
SFIFISH209C	Maintain the temperature of seafood

Unit code	Unit title
SFIFISH210C	Assemble and repair damaged netting
SFISTOR202C	Receive and distribute product
SFISTOR204A	Prepare, pack and dispatch stock for live transport
SFISTOR205A	Prepare, pack and dispatch non-live product

### Diving operations

Unit code	Unit title
SFIFISH201C	Provide support for diving operations* <i>HLTFA301B Apply first aid</i>
SFIFISH307C	Perform breath-hold diving operations* <i>HLTFA301B Apply first aid</i>
SISOOPS304A	Plan for minimal environmental impact
SROODR002A	Plan outdoor recreation activities
SROSCB001A	SCUBA dive in open water to a maximum depth of 18 metres

### Farm operations

Unit code	Unit title
AHCBIO202A	Follow site quarantine procedures
AHCCHM201A	Apply chemicals under supervision
AHCCHM304A	Transport, handle and store chemicals
AHCMOM202A	Operate tractors
AHCMOM205A	Operate vehicles
AHCPMG201A	Treat weeds

### Fishing operations



Unit code	Unit title
SFIFISH208C	Maintain, prepare, deploy and retrieve purse seines to land catch

### Maintenance and operations support

Unit code	Unit title
AHCARB205A	Operate and maintain chainsaws
AHCINF204A	Fabricate and repair metal or plastic structures
AHCMOM204A	Undertake operational maintenance of machinery
RIICCM205A	Carry out manual excavation
RIICCM208A	Carry out basic levelling
RIICCM211A	Erect and dismantle temporary fencing and gates
RIICRC208A	Lay pipes
RIISAM201A	Handle resources and infrastructure materials and safely dispose of non-toxic materials
RIISAM203B	Use hand and power tools
RIISAM204B	Operate small plant and equipment
SITHACS101	Clean premises and equipment

### Maritime operations

*The units in this group can contribute towards a TDM20307 Certificate II in Transport&Distribution (Coastal Maritime Operations - Coxswain) Additional TDM units from this qualification are listed in Certificate III in Aquaculture.*

*The units below are equivalent to the former Elements of Shipboard Safety.*

Unit code	Unit title
TDMME507B	Transmit and receive information by marine radio or telephone
TDMMF1007B	Provide elementary first aid
TDMMF1107B	Survive at sea in the event of vessel abandonment

Unit code	Unit title
TDMMF5407A	Observe safety and emergency procedures on a coastal vessel
TDMMF5507A	Fight and extinguish fires on board a coastal vessel

### Occupational health and safety

Unit code	Unit title
HLTFA301B	Apply first aid

### Ornamental operations

Unit code	Unit title
SIRXCCS201	Apply point-of-sale handling procedures
SIRXINV001A	Perform stock control procedures

### Quality assurance and food safety

Unit code	Unit title
FDFOP2063A	Apply quality systems and procedures
FDFFS2001A	Implement the food safety program and procedures

### Seafood processing

Unit code	Unit title
SFIPROC101C	Clean fish* <i>SFIPROC106B Work with knives</i>
SFIPROC102C	Clean work area
SFIPROC105B	Fillet fish and prepare portions* <i>SFIPROC106B Work with knives</i>
SFIPROC106B	Work with knives

Unit code	Unit title
SFIPROC201C	Head and peel crustaceans
SFIPROC203C	Shuck molluscs
FDFOP2056A	Operate a freezing process

### Seafood sales, distribution and marketing

Unit code	Unit title
SFIDIST202C	Retail fresh, frozen and live seafood
SIRXICT001A	Operate retail technology
SIRXCCS202	Interact with customers
SIRXFIN201	Balance and secure point-of-sale terminal

### Seafood transport and storage

Unit code	Unit title
SFISTOR203C	Assemble and load refrigerated product
TLID1001A	Shift materials safely using manual handling methods
TLID2004A	Load and unload goods/cargo
TLILIC2001A	Licence to operate a forklift truck

### Vessel operations

Unit code	Unit title
SFIFISH215B	Apply deckhand skills aboard a fishing vessel
SFISHIP201C	Comply with organisational and legislative requirements
SFISHIP205C	Maintain marine plant
SFISHIP206C	Operate a small vessel

<b>Unit code</b>	<b>Unit title</b>
SFISHIP207C	Operate and maintain outboard motors
SFISHIP208C	Operate low powered diesel engines

**Business services**

<b>Unit code</b>	<b>Unit title</b>
BSBCUS201B	Deliver a service to customers
BSBINM201A	Process and maintain workplace information
BSBWOR204A	Use business technology
FNSACC301A	Process financial transactions and extract interim reports