SFI30111 Certificate III in Aquaculture

Modification History
Not Applicable
Description
This qualification specifies the competencies relevant to an individual working in the aquaculture sector of the seafood industry in the capacity of a skilled worker or leading hand.

The qualification will have application for people working:

- for companies providing contract specialist services for aquaculture 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
- on aquaculture farms or fish-out/put-and-take operations.

Job roles
An individual operating at this level will have a broad range of well-developed skills and the ability to adapt and transfer skills to new activities. That person will have some responsibility for decision making and may coordinate some team activities. Their duties may include:

- installing or constructing stock culture or holding structures and other allied structures
- maintaining the culture or holding environment by:
  - treating and disposing of effluent and wastes
  - monitoring environmental conditions
  - maintaining water quality
- overseeing stock-related activities, such as:
  - feeding, handling, harvesting and controlling predators, pests and diseases
- responsibility for:
  - operating high technology water treatment components
  - implementing emergency procedures
  - implementing occupational health and safety policies and guidelines.

Duties may vary between aquaculture and aquatic holding enterprises.

Job role titles may include:
- autonomous farm attendant
- junior technician
- leading hand
- senior shop hand
- shift or team leader
- supervisor
- work foreman.

Pathways Information
Pathways into the qualification
Entry into this qualification may be:
• by direct entry
• after completion of the SFI20111 Certificate II in Aquaculture.

This qualification is suited to Australian Apprenticeship pathways.

Pathways from the qualification
After achieving this qualification, candidates may undertake:

• SFI40111 Certificate IV in Aquaculture
• SFI40311 Certificate IV in Seafood Industry (Environmental Management).

Licensing/Regulatory Information

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

Entry Requirements

Not Applicable
### Employability Skills Summary

#### EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

**SFI30111 Certificate III 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.

<table>
<thead>
<tr>
<th>Employability Skill</th>
<th>Industry/enterprise requirements for this qualification include:</th>
</tr>
</thead>
</table>
| Communication               | • counting stock numbers  
• estimating percentage of feed consumed  
• estimating the duration of tasks  
• reading and interpreting standard operating procedures (SOPs) and equipment manufacturer guidelines or instructions  
• reading meters or test kits when making adjustments to culture or holding environment or calibrating equipment  
• reading schedules relating to feeding, grading or harvesting  
• recording and reporting data  
• summarising oral reports of team members on work activities, problems and abnormal stock behaviour for a supervisor.                                                                 |
| Teamwork                    | • contributing to participative OHS arrangements  
• overseeing or coordinating work of other team members  
• respecting people from diverse backgrounds  
• sharing information relevant to work with co-workers  
• undertaking duties in a positive manner to promote cooperation.                                                                                                                                 |
| Problem solving             | • developing practical and creative solutions to workplace problems either individually or in teams  
• recognising and resolving problems and conflicts that may arise in the workplace  
• recording and reviewing water quality data or environmental conditions  
• reporting problems to supervisor.                                                                                                                                                        |
| Initiative and enterprise   | • adapting to new situations  
• being creative in response to workplace challenges  
• identifying opportunities that might not be obvious to others  
• identifying, assessing and managing environmental, OHS and food safety hazards  
• monitoring and responding to changing weather conditions  
• monitoring stock and responding to abnormal activity  
• recognising and reporting faulty equipment and following OHS procedures.                                                                                                                     |
EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

| Planning and organising | • applying continuous improvement processes  
|                         | • coordinating labour, equipment and other resources to ensure that work is carried out according to timelines and priorities  
|                         | • establishing and communicating clear goals and deliverables for self and team members  
|                         | • identifying hazards prior to commencing a job  
|                         | • planning for self and work team to complete work within an allocated timeframe.  
| Self-management          | • maintaining own knowledge of the job role, reviewing own performance and actively seeking and acting upon advice and guidance  
|                         | • prioritising work and completing delegated tasks  
|                         | • taking responsibility at the appropriate level.  
| Learning                 | • being open to learning, new ideas and techniques  
|                         | • identifying own learning needs for future work requirements and career aspirations  
|                         | • learning in a range of settings, including informal learning  
|                         | • sharing knowledge and skills with other team members.  
| Technology               | • examining options for automation, mechanisation or other technology to reduce risks and improve efficiencies  
|                         | • using automated equipment, such as feeders and data loggers.  

Packaging Rules

A total of eighteen (18) units must be achieved.

- four (4) core units **plus**
- five (5) aquaculture specialist elective units (Group A) **plus**
- nine (9) 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 four (4) units can be imported, however, at least two (2) of those units must be aligned to Certificate III or IV level. Units must be relevant to aquaculture operations and not duplicate units already selected.

Core units of competency
<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFICORE101C*</td>
<td>Apply basic food handling and safety practices</td>
</tr>
<tr>
<td>SFICORE103C</td>
<td>Communicate in the seafood industry</td>
</tr>
<tr>
<td>SFICORE105B</td>
<td>Work effectively in the seafood industry</td>
</tr>
<tr>
<td>SFICORE106B</td>
<td>Meet workplace OHS requirements</td>
</tr>
</tbody>
</table>

*Note: SFICORE101C is not a required unit for aquaculture operations that are growing or holding 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**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHCCHM303A</td>
<td>Prepare and apply chemicals</td>
</tr>
<tr>
<td>AHCLSK319A</td>
<td>Slaughter livestock</td>
</tr>
<tr>
<td>SFIAQUA301C</td>
<td>Oversee and undertake effluent and waste treatment and disposal</td>
</tr>
<tr>
<td>SFIAQUA302C</td>
<td>Construct or install stock culture, holding and farm structures</td>
</tr>
<tr>
<td>SFIAQUA303C</td>
<td>Coordinate stock handling activities</td>
</tr>
<tr>
<td>SFIAQUA308C</td>
<td>Maintain water quality and environmental monitoring</td>
</tr>
<tr>
<td>SFIAQUA309C</td>
<td>Oversee harvest and post-harvest activities</td>
</tr>
<tr>
<td>SFIAQUA311B</td>
<td>Oversee production and maintain algal or live-feed cultures</td>
</tr>
<tr>
<td>SFIAQUA313B</td>
<td>Oversee operations of high technology water treatment components</td>
</tr>
<tr>
<td>SFIAQUA314A</td>
<td>Support hatchery operations</td>
</tr>
<tr>
<td>SFIAQUA315A</td>
<td>Oversee emergency procedures for on-land operations</td>
</tr>
<tr>
<td>SFIAQUA316A</td>
<td>Oversee the control of predators and pests</td>
</tr>
<tr>
<td>SFIAQUA317A</td>
<td>Oversee the control of diseases</td>
</tr>
<tr>
<td>Unit code</td>
<td>Unit title</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------</td>
</tr>
<tr>
<td>SFIAQUA318A</td>
<td>Coordinate feed activities</td>
</tr>
<tr>
<td>SFIEMS301B</td>
<td>Implement and monitor environmentally sustainable work practices</td>
</tr>
<tr>
<td>SFIEMS302B</td>
<td>Act to prevent interaction with protected species</td>
</tr>
<tr>
<td>SFIOHS301C</td>
<td>Implement OHS policies and guidelines</td>
</tr>
</tbody>
</table>

**Group B: Other elective units**

**Aquaculture operations**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHCWRK305A</td>
<td>Coordinate work site activities</td>
</tr>
<tr>
<td>FDFOP2063A</td>
<td>Apply quality systems and procedures</td>
</tr>
<tr>
<td>SFIAQUA209C</td>
<td>Manipulate stock culture environment</td>
</tr>
<tr>
<td>SFIAQUA213C</td>
<td>Monitor stock and environmental conditions</td>
</tr>
<tr>
<td>SFIAQUA217B</td>
<td>Maintain stock culture, holding and other farm structures</td>
</tr>
<tr>
<td>SFIAQUA220A</td>
<td>Use waders</td>
</tr>
<tr>
<td>SFIFISH209C</td>
<td>Maintain the temperature of seafood</td>
</tr>
<tr>
<td>SFISTOR202C</td>
<td>Receive and distribute product</td>
</tr>
<tr>
<td>SFISTOR204A</td>
<td>Prepare, pack and dispatch stock for live transport</td>
</tr>
<tr>
<td>SFISTOR205A</td>
<td>Prepare, pack and dispatch non-live product</td>
</tr>
</tbody>
</table>

**Crane operations**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLID3033A</td>
<td>Operate a vehicle-mounted loading crane</td>
</tr>
<tr>
<td>TLILIC3006A</td>
<td>Licence to operate a non-slewing mobile crane (greater than 3 tonnes capacity)</td>
</tr>
<tr>
<td>Unit code</td>
<td>Unit title</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TLILIC3008A</td>
<td>Licence to operate a slewing mobile crane (up to 20 tonnes)</td>
</tr>
</tbody>
</table>

**Diving operations**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFIDIVE301B</td>
<td>Work effectively as a diver in the seafood industry</td>
</tr>
<tr>
<td>SFIDIVE302B</td>
<td>Perform diving operations using surface-supplied breathing apparatus</td>
</tr>
<tr>
<td>SFIDIVE303B</td>
<td>Perform diving operations using self-contained underwater breathing apparatus</td>
</tr>
<tr>
<td>SFIDIVE304B</td>
<td>Undertake emergency procedures in diving operations using surface-supplied breathing apparatus</td>
</tr>
<tr>
<td>SFIDIVE305B</td>
<td>Undertake emergency procedures in diving operations using self-contained underwater breathing apparatus</td>
</tr>
<tr>
<td>SFIDIVE306B</td>
<td>Perform compression chamber diving operations</td>
</tr>
<tr>
<td>SFIDIVE307B</td>
<td>Perform underwater work in the aquaculture sector</td>
</tr>
<tr>
<td>SFIDIVE308B</td>
<td>Perform underwater work in the wild catch sector</td>
</tr>
<tr>
<td>SROSCB001A</td>
<td>SCUBA dive in open water to a maximum depth of 18 metres</td>
</tr>
<tr>
<td>SROOPS002B</td>
<td>Plan for minimal environmental impact</td>
</tr>
<tr>
<td>Unit code</td>
<td>Unit title</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>SROODR002A</td>
<td>Plan outdoor recreation activities</td>
</tr>
</tbody>
</table>

**Farm operations**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHCAGB301A</td>
<td>Keep records for a primary production business</td>
</tr>
<tr>
<td>AHCARB205A</td>
<td>Operate and maintain chainsaws</td>
</tr>
<tr>
<td>AHCBIO202A</td>
<td>Follow site quarantine procedures</td>
</tr>
<tr>
<td>AHCCCHM201A</td>
<td>Apply chemicals under supervision</td>
</tr>
<tr>
<td>AHCCCHM304A</td>
<td>Transport, handle and store chemicals</td>
</tr>
<tr>
<td>AHCMOM305A</td>
<td>Operate specialised machinery and equipment</td>
</tr>
</tbody>
</table>

**Fishing operations**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFIFISH309B</td>
<td>Construct nets and customise design</td>
</tr>
<tr>
<td>SFIFISH210C</td>
<td>Assemble and repair damaged netting</td>
</tr>
<tr>
<td>SFIFISH310A</td>
<td>Adjust and position fishing gear</td>
</tr>
<tr>
<td>SFIFISH311A</td>
<td>Operate vessel deck machinery and lifting appliance</td>
</tr>
</tbody>
</table>

**Maintenance and operations support**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHCINF303A</td>
<td>Plan and construct conventional fencing</td>
</tr>
<tr>
<td>Unit code</td>
<td>Unit title</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>AHCLSC302A</td>
<td>Construct landscape features using concrete</td>
</tr>
<tr>
<td>AHCLSC303A</td>
<td>Construct brick and/or block structures and features</td>
</tr>
<tr>
<td>AHCLSC304A</td>
<td>Erect timber structures and features</td>
</tr>
<tr>
<td>AHCLSK321A</td>
<td>Service and repair bores and windmills</td>
</tr>
</tbody>
</table>

**Maritime operations**

The units in this group comprise the remaining TDM units required to achieve TDM20307 Certificate II in Transport & Distribution (Coastal Maritime Operations - Coxswain). TDM units equivalent to the former Elements of Shipboard Safety are also available in SFI20111 Certificate II in Aquaculture.

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDMMMB4507A</td>
<td>Monitor condition and seaworthiness of a small vessel up to 24 metres</td>
</tr>
<tr>
<td>TDMMC707C</td>
<td>Apply seamanship skills and techniques when operating a small vessel within limits of responsibility of a Coxswain</td>
</tr>
<tr>
<td>TDMMC907C</td>
<td>Manoeuvre a domestic vessel within limits of responsibility of a Coxswain</td>
</tr>
<tr>
<td>TDME1107A</td>
<td>Contribute to effective communications and teamwork on a coastal vessel</td>
</tr>
<tr>
<td>TDME507B</td>
<td>Transmit and receive information by marine radio or telephone</td>
</tr>
<tr>
<td>TDMMF1007B</td>
<td>Provide elementary first aid</td>
</tr>
<tr>
<td>TDMMF1107B</td>
<td>Survive at sea in the event of vessel abandonment</td>
</tr>
<tr>
<td>TDMMF3207C</td>
<td>Apply domestic regulations and industry practices when operating a small coastal vessel</td>
</tr>
<tr>
<td>TDMMF5407A</td>
<td>Observe safety and emergency procedures on a coastal vessel</td>
</tr>
<tr>
<td>TDMMF5507A</td>
<td>Fight and extinguish fires on board a coastal vessel</td>
</tr>
<tr>
<td>TDMMH1207B</td>
<td>Plan and navigate a short voyage within inshore limits.</td>
</tr>
<tr>
<td>TDMMR3007B</td>
<td>Operate and carry out basic service checks on small vessel marine propulsion systems</td>
</tr>
</tbody>
</table>
### Aquaculture Units

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDMMR3107B</td>
<td>Operate and carry out basic servicing on auxiliary systems</td>
</tr>
<tr>
<td>TDMMR3207B</td>
<td>Operate and carry out basic routine servicing of marine extra low and low voltage electrical systems</td>
</tr>
<tr>
<td>TDMMR5407B</td>
<td>Carry out refuelling and fuel transfer operations</td>
</tr>
<tr>
<td>TDMMU507B</td>
<td>Ensure compliance with environmental considerations in a small domestic vessel</td>
</tr>
</tbody>
</table>

### Occupational health and safety

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTFA301B</td>
<td>Apply first aid</td>
</tr>
</tbody>
</table>

### Ornamental operations

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACMCAS305A</td>
<td>Maintain aquascapes and aquatic animals</td>
</tr>
<tr>
<td>SIRXICT003A</td>
<td>Operate retail information technology systems</td>
</tr>
<tr>
<td>SIRXMER002A</td>
<td>Coordinate merchandise presentation</td>
</tr>
</tbody>
</table>

### Quality assurance, food safety and environmental management

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBRSK401A</td>
<td>Identify risk and apply risk management processes</td>
</tr>
<tr>
<td>FDFFS3001A</td>
<td>Monitor the implementation of quality and food safety programs</td>
</tr>
<tr>
<td>FDFFS2001A</td>
<td>Implement the food safety program and procedures</td>
</tr>
<tr>
<td>FDFTEC3001A</td>
<td>Participate in a HACCP team</td>
</tr>
<tr>
<td>Unit code</td>
<td>Unit title</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------</td>
</tr>
<tr>
<td>FDFOP2013A</td>
<td>Apply sampling procedures</td>
</tr>
<tr>
<td>SFIEMS401B</td>
<td>Conduct an internal audit of an environmental management system</td>
</tr>
</tbody>
</table>

**Seafood processing**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTMS38C</td>
<td>Smoke product</td>
</tr>
<tr>
<td>SFIPROC302C</td>
<td>Handle and pack sashimi-grade fish</td>
</tr>
<tr>
<td>SFIPROC304B</td>
<td>Boil and pack crustaceans</td>
</tr>
</tbody>
</table>

**Seafood transport and storage**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFISTOR301C</td>
<td>Operate refrigerated storerooms</td>
</tr>
<tr>
<td>SITXINV002A</td>
<td>Control and order stock</td>
</tr>
<tr>
<td>SITXINV001A</td>
<td>Receive and store stock</td>
</tr>
<tr>
<td>SITHCCC003B</td>
<td>Receive and store kitchen supplies</td>
</tr>
<tr>
<td>TLID2010A</td>
<td>Operate a forklift</td>
</tr>
</tbody>
</table>

**Vessel operations**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFIFISH215B</td>
<td>Apply deckhand skills aboard a fishing vessel</td>
</tr>
<tr>
<td>SFISHIP202C</td>
<td>Contribute to safe navigation</td>
</tr>
<tr>
<td>SFISHIP206C</td>
<td>Operate a small vessel</td>
</tr>
</tbody>
</table>
### Unit code | Unit title
--- | ---
SFISHIP207C | Operate and maintain outboard motors
SFISHIP211C | Prepare for maintenance

**Business services**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBADM311A</td>
<td>Maintain business resources</td>
</tr>
<tr>
<td>BSBCUS301A</td>
<td>Deliver and monitor a service to customers</td>
</tr>
<tr>
<td>BSBFIA301A</td>
<td>Maintain financial records</td>
</tr>
<tr>
<td>BSBFIA302A</td>
<td>Process payroll</td>
</tr>
<tr>
<td>BSBFIA303A</td>
<td>Process accounts payable and receivable</td>
</tr>
<tr>
<td>BSBFIA401A</td>
<td>Prepare financial reports</td>
</tr>
<tr>
<td>BSBINM301A</td>
<td>Organise workplace information</td>
</tr>
<tr>
<td>BSBITU306A</td>
<td>Design and produce business documents</td>
</tr>
<tr>
<td>BSBITU307A</td>
<td>Develop keyboarding speed and accuracy</td>
</tr>
<tr>
<td>BSBITU309A</td>
<td>Produce desktop published documents</td>
</tr>
<tr>
<td>BSBRKG304B</td>
<td>Maintain business records</td>
</tr>
<tr>
<td>BSBSUS201A</td>
<td>Participate in environmentally sustainable work practices</td>
</tr>
</tbody>
</table>

**Corporate management**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBFLM303C</td>
<td>Contribute to effective workplace relationships</td>
</tr>
<tr>
<td>BSBFLM306C</td>
<td>Provide workplace information and resourcing plans</td>
</tr>
<tr>
<td>BSBFLM309C</td>
<td>Support continuous improvement systems and processes</td>
</tr>
<tr>
<td>BSBFLM311C</td>
<td>Support a workplace learning environment</td>
</tr>
<tr>
<td>Unit code</td>
<td>Unit title</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>BSBFLM312C</td>
<td>Contribute to team effectiveness</td>
</tr>
<tr>
<td>BSBINN301A</td>
<td>Promote innovation in a team environment</td>
</tr>
<tr>
<td>BSBWOR301A</td>
<td>Organise personal work priorities and development</td>
</tr>
</tbody>
</table>

**E-business**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBITU305A</td>
<td>Conduct online transactions</td>
</tr>
<tr>
<td>BSBRES401A</td>
<td>Analyse and present research information</td>
</tr>
<tr>
<td>BSRK402B</td>
<td>Provide information from and about records</td>
</tr>
</tbody>
</table>

**Training and assessment**

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAEASS301A</td>
<td>Contribute to assessment</td>
</tr>
<tr>
<td>TAEDEL301A</td>
<td>Provide work skill instruction</td>
</tr>
</tbody>
</table>