



Australian Government

SFI50111 Diploma of Aquaculture

Release 4

SFI50111 Diploma of Aquaculture

Modification History

Release	TP Version	Comments
4	SFI11v2.2	<i>BSBPMG510A Manage projects</i> replaced with <i>BSBPMG522A Undertake project work</i> <i>BSBWRK509A Manage industrial relations</i> replaced with <i>BSBWRK510A Manage employee relations</i>
3	SFI11v2	<i>SFIAQUA412A Develop emergency procedures for on-land operations</i> replaced with <i>SFIAQUA413A Develop emergency procedures for an aquaculture enterprise</i>
2	SFI11v1.1	Equivalent imported units updated
1	SFI11	Initial release

Description

This qualification represents the competencies relevant to people working in the aquaculture sector of the seafood industry at a management level.

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
- for companies providing consultancy, advisory, equipment sales or other services.

Job role

A person operating at this level will have a wide range of technical skills and/or managerial, coordination and planning responsibilities which may include:

- complying with a wide range of local, state, territory and federal government regulations and restrictions, including human resources, aquaculture operations, occupational health and safety (OHS), environment, animal welfare and food safety
- designing and planning culture and holding systems and other structures
- developing policies and procedures ensuring continual improvement throughout the business
- implementing new technologies and ideas
- managing risk and implementation of effective controls and corrective actions
- managing the production system
- sourcing external contractors and services.

Work may vary between aquaculture and aquatic holding enterprises.

Job role titles may include:

- owner/manager
- farm manager
- hatchery manager
- production manager
- quality manager
- compliance manager
- marketing manager
- new technology/automation specialist.

Pathways Information

Pathways into the qualification

Pathways for candidates considering this qualification include:

- direct entry with prior aquaculture or related experience
- SFI30111 Certificate III in Aquaculture
- SFI30211 Certificate III in Fishing Operations
- SFI30311 Certificate III in Seafood Industry (Environmental Management Support)
- SFI40111 Certificate IV in Aquaculture
- SFI40311 Certificate IV in Seafood Industry (Environmental Management)
- vocational and tertiary studies related to environmental sustainability or aquaculture.

Pathways from the qualification

After achieving this qualification, candidates may undertake professional development activities in areas of benefit to their workplace and their personal aspirations.

Licensing/Regulatory Information

Licensing, legislative, regulatory or certification considerations

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

Entry Requirements

Not Applicable

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

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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"> calculating design criteria for culture and holding structures comparing data to determine energy and water efficiency consulting with industry representatives and experts drawing up and monitoring budgets interpreting legislation and regulations interpreting plans and work specifications negotiating with contractors and suppliers researching new technological equipment or processes.
Teamwork	<ul style="list-style-type: none"> leading work teams sharing information with work team on emergency procedures, sustainable aquaculture practices and production objectives working with diverse individuals and groups.
Problem solving	<ul style="list-style-type: none"> applying analytical thinking to solve problems in the workplace developing strategies in response to water quality and stock health issues solving problems individually or in teams.
Initiative and enterprise	<ul style="list-style-type: none"> evaluating options for improvement identifying potential improvements recognising and taking advantage of market opportunities.
Planning and organising	<ul style="list-style-type: none"> applying risk management approaches coordinating production and harvest activities with market requirements, and culture or holding species requirements planning for production, stock health, construction and finance setting up and implementing systems, such as quality assurance, food safety, OHS and ecologically sustainable development (ESD).
Self-management	<ul style="list-style-type: none"> following through on commitments modelling professional behaviour to others taking responsibility and being accountable for planning and production outcomes.
Learning	<ul style="list-style-type: none"> being open to learning, new ideas and techniques

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	<ul style="list-style-type: none"> • creating a systematic approach to learning within an enterprise • contributing to the learning of others • learning in order to take up new opportunities • participating in ongoing learning.
Technology	<ul style="list-style-type: none"> • applying technology as a production management and monitoring tool • using technology and related workplace equipment • using technology to present information, such as graphs and tables • using technology to manage finances, cash flows and monitor expenses.

Packaging Rules

Packaging Rules

A total of twenty one (21) units of competency must be achieved.

- four (4) core units *plus*
- six (6) aquaculture specialist elective units (Group A) *plus*
- eleven (11) 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 three (3) of those units must be aligned to Certificate IV or Diploma level. Units must be relevant to aquaculture operations and not duplicate units 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

Unit code	Unit title
SFIAQUA501C	Develop a stock nutrition program
SFIAQUA502C	Develop and implement an aquaculture breeding strategy
SFIAQUA503C	Establish an aquacultural enterprise
SFIAQUA504C	Plan environmentally sustainable aquacultural practices
SFIAQUA505C	Plan stock health management
SFIAQUA507C	Plan and design water supply and disposal systems
SFIAQUA508C	Plan and design stock culture or holding systems and structures
SFIAQUA509B	Develop stock production plan
SFIAQUA510B	Select, plan or design a system or facility utilising high technology water treatment components
SFIDIST501C	Export product
SFIDIST502C	Import product
SFIEMS501B	Develop workplace policy for sustainability
SFIOHS501C	Establish and maintain the enterprise OHS program
AHCAGB603A	Manage the production system
AHCBUS505A	Develop a marketing plan
AHCBUS506A	Develop and review a business plan
BSBRISK501B	Manage risk

Group B: Other elective units

Aquaculture operations

Unit code	Unit title
SFIAQUA407C	Coordinate sustainable aquacultural practices
SFIAQUA408C	Supervise harvest and post-harvest activities
SFIAQUA413A	Develop emergency procedures for an aquaculture enterprise

Farm operations

Unit code	Unit title
AHCAGB502A	Plan and manage infrastructure requirements
AHCAGB503A	Plan and monitor production processes
AHCAGB505A	Develop a whole farm plan
AHCAGB601A	Develop export markets for produce
AHCAGB602A	Manage estate planning
AHCAGB604A	Analyse business performance
AHCAGB605A	Manage business capital
AHCBUS501A	Manage staff
AHCBUS507A	Monitor and review business performance
AHCBUS601A	Manage capital works
AHCBUS603A	Develop and review a strategic plan
AHCCHM501A	Develop and manage a chemical use strategy
AHCMOM501A	Manage machinery and equipment
AHCMOM502A	Implement a machinery management system
AHCMOM601A	Analyse machinery options
AHCWRK501A	Plan, implement and review a quality assurance program
AHCWRK502A	Collect and manage data

Unit code	Unit title
AHCWRK603A	Design and conduct a field-based research trial

Ornamental operations

Unit code	Unit title
SIRXINV005A	Control inventory

Quality assurance and food safety

Unit code	Unit title
MTMPS5603B	Develop, manage and maintain quality systems
MTMPSR5601B	Design and manage the food safety system

Business services

Unit code	Unit title
BSBADM502B	Manage meetings
BSBADM504B	Plan or review administrative systems
BSBFIM501A	Manage budgets and financial plans
BSBFIM502A	Manage payroll
BSBMGT515A	Manage operational plan
BSBHRM506A	Manage recruitment selection and induction processes
BSBINM601A	Manage knowledge and information
BSBMGT617A	Develop and implement a business plan
BSBPMG522A	Undertake project work
BSBPUR501C	Develop, implement and review purchasing strategies
BSBPUR502B	Manage supplier relationships

Unit code	Unit title
BSBPUR504B	Manage a supply chain
BSBWRK510A	Manage employee relations
FNSORG604A	Establish outsourced services and monitor performance
TAADEL502B	Facilitate action learning projects

Community management

Unit code	Unit title
SFIPROC611C	Participate in a media interview or presentation
AHCCCF502A	Facilitate development of group goals and projects
AHCCCF503A	Promote group formation and development
AHCCCF504A	Support group and community changes in resource management
AHCCCF505A	Contribute to regional planning process
AHCCCF506A	Manage the incorporation of a group
AHCCCF601A	Map regional issues and stakeholders
AHCILM506A	Operate within community cultures and goals
AHCILM508A	Propose a negotiated outcome for a given area of country
AHCLPW601A	Coordinate the preparation of a regional resource management plan
AHCWRK503A	Prepare reports
CHCCD404E	Develop and implement community programs
LGACOM502B	Devise and conduct community consultations
TLIR4003A	Negotiate a contract

Industry leadership Focus C - Strategic development

Unit code	Unit title
SFILEAD501C	Develop and promote industry knowledge
SFILEAD502C	Shape strategic thinking
SFILEAD503C	Cultivate productive working relationships
SFILEAD504C	Plan and achieve change and results
SFILEAD505C	Communicate with influence
SFILEAD506C	Demonstrate personal drive and integrity
SFILEAD507C	Provide corporate leadership

Strategic management

Unit code	Unit title
BSBATSIC411C	Communicate with the community
BSBEBU501A	Investigate and design e-business solutions
BSBMGT516C	Facilitate continuous improvement
BSBLED501A	Develop a workplace learning environment
BSBINM501A	Manage an information or knowledge management system
BSBINN502A	Build and sustain an innovative work environment
BSBMGT502B	Manage people performance
BSBMGT605B	Provide leadership across the organisation
BSBMGT616A	Develop and implement strategic plans
BSBSUS501A	Develop workplace policy and procedures for sustainability
BSBWOR501B	Manage personal work priorities and professional development
PSPPOL501A	Develop organisation policy