



**Australian Government**

**Assessment Requirements for SFIAQU502  
Develop and implement an aquaculture  
breeding strategy**

**Release: 1**

# Assessment Requirements for SFIAQU502 Develop and implement an aquaculture breeding strategy

## Modification History

Release	Comments
Release 1	This version released with SFI Seafood Industry Training Package Version 1.0.

## Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has developed and implemented an aquaculture breeding strategy on at least one occasion, including:

- establishing the breeding objectives based on a review of facility records and plans
- designing, trialling and documenting breeding programs, including:
  - selecting desired traits and genetic material
  - selecting suitable female and male broodstock
- developing a plan to implement the program
- assessing effectiveness of strategy
- reporting outcomes to a range of personnel.

## Knowledge Evidence

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

- assessment criteria to determine the effectiveness of breeding processes
- basic principles of genetics relevant to breeding program
- breeding and lifecycle biology of cultured or held stock
- breeding strategy, techniques and programs that maximise genetic gain
- economic assessment techniques of production characteristics
- genetic development in stock
- risks associated with breeding program
- options for mechanisation or automation of process or activity
- options for use of specialised contract services.

## Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
  - skills must be demonstrated in an aquaculture workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - broodstock handling facility
  - broodstock and genetic material
  - technology for researching, recording and documenting information
- specifications:
  - data relating to breeding program
- relationships:
  - evidence of interactions with senior personnel.

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

## Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273>