

Use applied genetics to  
**solve**  
big social problems.

## Master of Applied Genetics by Research (Aquaculture)

### About the program

Genetics play a crucial role in addressing major societal challenges such as medical mysteries and feeding the world's growing populations. The Master of Applied Genetics by Research (Aquaculture) will prepare you, as a future leader in aquaculture breeding, genetics, and reproduction, to tackle these complex issues.

This is the only program in Australia in applied genetics and aquaculture breeding that emphasises industry relevant training. In this program you'll undertake a coursework component and a research thesis in applied genetics (in quantitative genetics, pedigree management, reproduction biotechnology, mono-sex production, omics and bioinformatics).

You'll gain advanced knowledge and skills in a wide range of new generation methods and fields of application. In addition, you'll get comprehensive and multidisciplinary training in genetics, genomics, bioinformatics, biotechnologies and applied statistics.

At USC, immerse yourself in genetic research in aquaculture that is nationally recognised as above world standard. You'll conduct new cutting-edge research with experienced scientists, from fields such as molecular biology, biotechnology, genetics, functional genomics and bioinformatics. You'll have the opportunity to gain both laboratory and computer experience, and work closely with agricultural and aquaculture enterprises or with industry sectors.

### Professional membership / Accreditation

Graduates will be eligible to register for membership of professional organisations in the field of genetics, agriculture or aquaculture, such as the Association for the Advancement of Animal Breeding and Genetics or World Aquaculture Society.

### Career opportunities

Roles in universities, research institutions, governments and industry in the fields of aquaculture breeding, genetics, and reproduction dealing.

### Admission requirements

To be eligible for admission to Master of Applied Genetics by Research (Aquaculture) candidature, applicants are normally required to hold either:

- a Bachelor degree in biological sciences (AQF Level 7-three year degree or equivalent) with a minimum Grade Point Average (GPA) of 5 (on a 7 point scale) or equivalent

or

- a Bachelor of Science degree (AQF Level 7-three year degree or equivalent) with a major in one of the following areas: Biotechnology, Agriculture, Aquaculture, Applied Statistics and Genetics from a recognised higher education institution with a minimum Grade Point Average (GPA) of 5 (on a 7 point scale) or equivalent

### DURATION

2 years full-time; 4 years part-time.

### COMMENCE

Semester 1

### More information

Contact Student Central  
information@usc.edu.au  
+61 7 5430 2890



Applicants who hold a Bachelor degree in another discipline area but have extensive work experience in the areas of life sciences will be considered on individual case basis by the Head of School, Science and Engineering.

If the prior study has not included sufficient research training, the candidate will be required to undertake an appropriate research methodology course, as specified by the relevant Associate Dean (Research) or nominee, as part of their candidature.

Refer also to the University's English language requirements.