MSc Sustainable Aquaculture
MSc Aquatic Pathobiology
MSc Aquatic Veterinary Studies
Our postgraduate degrees teach students about all subjects relevant to global aquaculture, including many different species and culture systems.

Our teaching will provide an excellent foundation for a successful career in aquaculture, aquatic animal health and related fields, or will upgrade your knowledge and skills if you are more experienced and looking to move forward from your current position or transition to a new area.

We use our research and expertise to ensure our teaching is at the forefront of new sciences in aquaculture, so a Master’s Degree is also an excellent pathway to a more research-based career.

We work closely with the aquaculture industry in more than 20 countries, including every major company in Scotland, giving many of our students an opportunity to carry out industry-based research projects.

During the course you will have the opportunity to visit various companies such as farms, hatcheries, processors, feed companies, equipment suppliers and research laboratories. Lectures and workshops in a number of modules are delivered by aquaculture professionals from all around Scotland.

## WHY STUDY AN AQUACULTURE DEGREE AT STIRLING?

### COURSE OFFERINGS

We offer MSc modular courses in the following areas:
- Sustainable Aquaculture
- Aquatic Veterinary Studies
- Aquatic Pathobiology

These highly flexible courses are built from a series of modules, most of which are further sub-divided into two topics. Each course comprises three sections:

1. **Foundation modules** – Each course starts with a common core of two modules. The first considers the foundations of aquatic production including aquatic animal biology and health, environments, nutrition, genetics and production systems. The second focuses on aquaculture in practice including business, governance and industry practice.

2. **Advanced modules** – There are four advanced modules (with options for Sustainable Aquaculture students) which allow students to specialise towards their specific outcome.

3. **Research project** – A four month research project on a subject relevant to the students’ interest and their particular degree outcome. This can be based within industry or development studies overseas.

All modules are credit-bearing under the Scottish Qualifications Framework and this modular structure allows a variety of flexible study modes.

Depending on the number of modules studied, you can be awarded a: Master of Science, Postgraduate Diploma or Postgraduate Certificate.

Courses can be followed either full time or by discontinuous study (part time) over a period of up to 5 years, or by a combination of these study modes.

[FOR MORE INFO ABOUT THESE COURSES, VISIT: stir.ac.uk/2f]

[stir.ac.uk/9]

[stir.ac.uk/b]
Currently the only Masters degree of its kind in the world, Stirling’s course gives you a unique opportunity to study the prevention, diagnosis and treatment of aquatic animal diseases in cultured organisms at the Institute of Aquaculture, one of the top institutions in this field.

It combines high-quality, practical work and field visits with classbased training in aquatic disease diagnosis and health management challenges drawn from real situations. You will also gain an understanding of the biology, husbandry and environment of farmed aquatic species. It is also an ideal preparation for students who plan to pursue a PhD or further research.

The course is built up in three phases (this includes a project module):

**Two Foundation Modules** providing the core skills and knowledge:
- Foundations of Aquatic Production
- Aquaculture in Practice

**Four Advanced Modules:**
- Aquaculture Diagnosis Skills 1
- Aquaculture Diagnosis Skills 2
- Parasites and Treatments
- Aquaculture Health Control

**ENTRY REQUIREMENTS**
A minimum of a second class honours degree or equivalent in a relevant subject. Applicants without these formal qualifications but with significant appropriate/relevant work/life experience are encouraged to apply.

For more information about the course visit: stir.ac.uk/9

Our Aquatic Veterinary Studies course is specifically aimed at students who already have a veterinary science qualification. With wild catches of seafood declining in many places, the rise of aquaculture is playing an increasing role as an alternative source of high-quality, nutritious food. The aquaculture industry is becoming a larger employer and important contributor to economic development in many areas.

Controlling disease is very important to the ongoing success of this industry. This course provides you with training in the wide range of disciplines and skills you need for the investigation, prevention and control of aquatic animal diseases. You will gain an understanding of the biology, husbandry and environment of farmed aquatic species, as well as specialist expertise in aquatic animal diseases.

The course is built up in three phases (this includes a project module):

**Two Foundation Modules** providing the core skills and knowledge:
- Foundations of Aquatic Production
- Aquaculture in Practice

**Four Advanced Modules:**
- Aquaculture Diagnosis Skills 1
- Aquaculture Diagnosis Skills 2
- Parasites and Treatments
- Aquaculture Health Control

**ENTRY REQUIREMENTS**
A minimum of a second class Honours degree or equivalent in Veterinary Medicine.

For more information about the course visit: stir.ac.uk/b
This course is highly modular, and has been designed to offer considerable flexibility for learning while maintaining a high standard of training. This structure lets you make more subject choices which will benefit your future career.

There are a number of degree pathways available. These differ primarily in their defined path of required modules - you can choose to follow a named pathway or exercise maximum flexibility of module choice with just the Sustainable Aquaculture degree. The more specialised degree pathways are:

- Master of Science/Postgraduate Diploma in Sustainable Aquaculture (Environmental Management)
- Master of Science/Postgraduate Diploma in Sustainable Aquaculture (Breeding and Genetics)
- Master of Science/Postgraduate Diploma in Sustainable Aquaculture (Governance, Development and Food Security)
- Master of Science/Postgraduate Diploma in Sustainable Aquaculture (Aquaculture Nutrition)

Two Foundation Modules providing the core skills and knowledge:
- Foundation of Aquatic Production
- Aquaculture in Practice

Four Advanced Modules with two or three options for each:

- **First Advanced Module**
  - Aquaculture Nutrition, or
  - Non-fish Aquaculture

- **Second Advanced Module**
  - Aquaculture Engineering, or
  - Environmental Systems, or
  - Aquaculture Diagnostic Skills 2

- **Third Advanced Module**
  - Hatchery Science, or
  - Business and Sector Management

- **Fourth Advanced Module**
  - Aquaculture Health Control, or
  - Aquaculture and Society

**Research Project and Dissertation**
The research project is an opportunity for students to engage with a topic of particular interest and is often linked with ongoing research projects at the Institute of Aquaculture and may involve working with other external partner organisations including industry. It develops skills in the conduct of research, critical analysis of results and presentation and communication of findings.

**ENTRY REQUIREMENTS**
A minimum of a second class honours degree or equivalent in a relevant subject. Applicants without these formal qualifications but with significant appropriate/relevant work/life experience are encouraged to apply.

For more information about the course visit: stir.ac.uk/2f

**LANGUAGE REQUIREMENTS**
If English is not your first language you must have one of the following qualifications as evidence of your English language skills:
- IELTS: 6.0 with 5.5 minimum in each skill
- IBT TOEFL: 80 with no subtest less than 17
- Cambridge Certificate of Advanced English (CAE): Grade C or above
- Pearson Test of English (Academic): 54 with 51 in each component.
Five Reasons
YOU SHOULD CHOOSE THIS COURSE

1. Well established and recognised international centre of excellence in aquaculture research and teaching

2. Flexible degrees allowing graduation from a variety of pathways

3. Excellent aquaculture and aquatic animal health laboratories

4. Field, laboratory or case study work based on a current topic in aquaculture, either in the UK or abroad

5. Links and partnerships with over 50 countries around the world
FACILITIES

INSTITUTE FACILITIES
Our laboratories provide facilities to conduct pioneering and commercially relevant research in partnership with leading aquaculture companies.

We’ve four research facilities providing a range of environmental conditions: marine, freshwater, temperate and tropical. Our systems include recirculating aquaculture systems, challenge unit, constant temperature rooms, hatchery and facilities for invertebrates.

ON-CAMPUS FACILITIES
- Stirling Analytical Platforms
- Stirling Experimental Aquatic Facilities

OFF-CAMPUS FACILITIES
- Niall Bromage Freshwater Research Unit (NBFRU): Buckieburn, Denny
- Machrihanish Marine Environmental Research Laboratory (MMERL): Machrihanish, Campbeltown

CAREERS

Studying aquaculture or aquatic animal health can open up a wide range of career opportunities in one of the world’s youngest and fastest-growing food production sectors. An MSc will open up routes into industry including production, the supply sector (feed, health, equipment and systems), or postharvest (processing and marketing), e.g.:

- Scientist, e.g. Analytical Researcher in R&D projects
- Fisheries Technologists, e.g. Hatcheries
- Nutrition Technologists (fish feed)
- Trainee Fish Farm Manager
- Commercial Fish Farm Operator
- Agriculture Manager (Food Supply)
- Fish Pathologist / Fish Vet

FOR MORE INFO ABOUT SCHOLARSHIPS AND FUNDING VISIT: stir.ac.uk/1j5

CONTACT INFORMATION

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stir.ac.uk/1o4

Photography: For a list of photographers who have contributed to the University of Stirling photo library, contact: marketingtools@stir.ac.uk

This publication can be made available in different formats. Please contact Student Recruitment and Admissions for further information: recruitment@stir.ac.uk

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