What is Aquaculture?

Aquaculture is the farming of aquatic organisms, including fish, molluscs, crustaceans and aquatic plants. This agribusiness sector produces food and food additives, pharmaceuticals, cosmetics and nutraceuticals for the world’s consumers. Farming implies individual or corporate ownership of the stock being cultivated and distinguishes aquaculture from the wild harvest fishery.

The Program

The primary purpose of this unique and exciting program is to provide an advanced, interdisciplinary, field of study leading to a M.Sc. degree in Aquaculture. The M.Sc. (Aquaculture) degree is characterized by:

- A non-thesis, coursework plus major research project-based curriculum (12 courses) in an array of disciplines encompassing aquaculture-related topics including: Nutrition, Fisheries & Aquatic Sciences, Disease Management & Fish Husbandry, Business & Economics and Extension Studies.
- Integration of hands-on practical experiences at state-of-the-art research facilities.
- A special research project, meeting the student’s particular research interests, in any of the vast number of issues related to aquaculture.

Students enjoy the flexibility of choosing courses offered by a large number of academic departments on the University of Guelph campus. In addition, the following specialized courses are designed specifically for the M.Sc. (Aquaculture) program:

**AQUA 6000: Special Project in Aquaculture**
An intensive learning opportunity focusing on an applied problem in the aquaculture industry. Completion of a literature review and project in concert with hand-on experience with live animals, in either a research project or commercial setting. Completion of a final report and oral presentation.

**AQUA 6100: Science & Technology in Aquaculture**
A formal lecture, student seminar and essay course designed to examine the role of science and technology in the aquaculture industry.

**AQUA 6200: Practicum in Aquaculture: Culture of Salmonids**
Using a problem-solving approach, students will complete a series of modules at the Alma Aquaculture Research Station covering topics in water management, hatchery operations, propagation techniques, feeding and nutrition, health and disease, economics and regulatory issues.

The Goal

The ultimate goal of the M.Sc. (Aquaculture) program is to produce students who have an integrated knowledge of the concepts of animal production, and an understanding of the key issues surrounding aquaculture, including advanced scientific technology. It is the objective of this program to provide graduates with the knowledge and skills to enter the industry as team leaders.