



Kentucky State University

Division of Aquaculture

Minor and Master's Degree in Aquaculture & Aquatic Sciences

www.ksuaquaculture.org

(502) 597.8104

The Division of Aquaculture at Kentucky State University offers a Master of Science degree in Aquaculture and Aquatic Sciences. Aquaculture is the rearing of aquatic organisms under controlled or semi-controlled conditions. Interest in Aquaculture has increased worldwide as fish consumption has increased concurrently with decreasing catches of wild fish. In Kentucky and the southern United States, aquaculture production focuses on raising freshwater species commercially.

This program is designed to provide students with the training and experience required for immediate employment. However, the program is also designed to provide the academic foundation for further graduate studies. As a thesis-based degree program, it requires each student to have a graduate committee. This committee will be responsible for evaluating the student's competencies based on comprehensive evaluation, and thesis presentation and defense.

Upon completion of the program, students should have knowledge of production and reproduction of primary aquaculture species, basic genetics, physiology and nutrition of aquatic vertebrate and invertebrate culture species, mechanics and operation of primary production methods, causes and controls of pathogenic organisms, the function and manipulation of biological and chemical cycles in ponds, the design and analysis of experiments, and basic economics and marketing in aquaculture.



GRADUATE STUDENT ASSISTANTSHIPS

Graduate Research Assistantships provide student assistance for the Aquaculture Program. Students holding these positions work 20 hours per week and receive stipends and waivers of tuition. Assistantships are awarded on the basis of need and high academic achievement.

DEGREE COMPLETION REQUIREMENTS

Required Courses

- AQU 507: Fish Genetics 3
 - AQU 509: Biostatistics 4
 - AQU 511: Fish Diseases 4
 - AQU 512: Fish Morphology & Physiology 4
 - AQU 521: Fish Nutrition 3
 - AQU 522: Principles of Aquaculture 3
 - AQU 525: Aquaculture Economics and Marketing 4
 - AQU 527: Fish Reproduction & Spawning Techniques 4
 - AQU 551: Survey of Production Methods 3
 - AQU 560: Water Quality Management 4
 - AQU 601: Thesis 1
- 37 hours

Elective Courses

- AQU 591: Internship: Aquaculture 1/4
- AQU 600: Research Aquaculture 1/9
- AQU 699: Completion of Research & Thesis 1/9

AQUACULTURE MINOR

Courses in the minor are taught by faculty who are active researchers in the University's aquaculture program. The minor provides training sufficient to support further study at the graduate level and enough practical aspects for the student who plans to enter the work force immediately upon graduation. A minor in Aquaculture requires the completion of 19 semester credit hours. Specific course requirements include AQU 411, 421, 422, 460 and at least 1 semester credit hour of AQU 491. The remaining 1–4 semester credit hours required for a minor in Aquaculture must be satisfied by completing one or more additional Aquaculture courses.

