

Santa Monica College Aquaculture Technician I Certificate of Achievement

Effective Fall 2026

This certificate prepares students for entry- and middle-skill work for the burgeoning Blue Economy in Southern California, including the aquaculture industry. The program emphasizes workforce preparation at the interface of global climate change and sustainability. With consideration for environmental change, additionally, this program addresses conservation and restoration practices for endangered species.

Program Learning Outcomes:

Analyze and evaluate the history, ecology, and sustainability of local and global aquaculture systems. Special attention will be paid to indigenous and modern practices, environmental and human health impacts, as well as endangered species.

Create, design, construct, monitor, and maintain aquaculture systems for a variety of aquatic species.

Apply their understanding of SCUBA and/or First Aid / CPR knowledge to establish safe practices in their future career in aquaculture or a related field.

Required Courses

Units: 8.0-10.0

AQUA 1 Introduction to Aquaculture: History, Ecology and Sustainability	3.0
AQUA 2 Applications in Aquaculture - System Design, Monitoring and Maintenance	4.0

AQUA 88B Independent Studies in Aquaculture	2.0
OR	
AQUA 90A Aquaculture Internship	1.0
OR	
AQUA 90B Aquaculture Internship	2.0
OR	
AQUA 90C Aquaculture Internship	3.0

Aquaculture Focused Electives

Units: 4.0-6.0

It is highly recommended that students complete BIOL 15.

BIOL 15 Marine Biology with Laboratory	4.0
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OR

Two classes, one from each group

Group 1

BIOL 9 Environmental Biology	3.0
BIOL 10 Applied Ecology and Conservation Biology	4.0
BUS 55 Southern California's International Connections and Blue/Ocean Economy	3.0
ENGR 11 Engineering Graphics and Design	3.0

AND

Group 2

BIOL 15N Marine Biology (Non-Laboratory)	3.0
GEOL 31 Introduction to Physical Oceanography	3.0

Scuba Diving/First Aid Course:

Units: 2.0-3.0

**Note: AQUA 10A or industry equivalent. Credit for prior learning may be granted for students who hold recognized industry certifications. Acceptable documentation includes: NAUI Master Diver or equivalent; or NAUI Advanced Diver plus Rescue Diver certifications; or any dive certification combined with AAUS certification or equivalent; or First Aid/CPR certification equivalent to those issued by the American Heart Association, Red Cross, or comparable agencies. Please contact the life sciences department or counseling for more information.*

AQUA 10A SCUBA (same as: KIN PE 49D)	2.0
OR	
HEALTH 11 First Aid and Cardio-Pulmonary Resuscitation	3.0

Total Units: 14.0-19.0