



**KENTUCKY STATE  
UNIVERSITY**

# BACHELOR OF SCIENCE IN AQUATIC SCIENCES (PENDING CPE APPROVAL)

## Bachelor of Science (B.S.)

The College of Agriculture, Health, and Natural Resources, in Kentucky State University's Land Grant Program offers a baccalaureate degree program in Aquatic Science.

This B.S. degree will focus on fisheries, aquaculture, and a variety of biological, chemical, and physical dynamics important to aquatic systems. Students completing this degree will be qualified for both private and public sectors of work dealing with aquatic animal production, water remediation, conservation, or future academic endeavors. The B.S. degree in Aquatic Science will allow students pursuing the degree an opportunity to move forward in the M.S. program offered in the School of Aquaculture & Aquatic Science.

Aquatic Science is essential for developing the foundational knowledge and practical skills required to understand and manage aquatic ecosystems effectively. This field encompasses the study of freshwater and estuarine environments, integrating biology, chemistry, physics, and environmental science to address complex challenges such as water quality, water treatment, habitat conservation, climate change, and sustainable resource management.

Course	Title	Hours
<b>Year 1</b>		
<b>Fall</b>		
AQU 101	Intro to Aquatic Science	3
Select one of the following:		3
MAT 115	College Algebra	
ENG 101	English Comp I	3
EDU 118	Intro. to University Learning	3
Select one General Education Arts Course		3
ART 130	Introduction to Art	
ENG 211	Intro to Literature	
MUS 130	Introduction to Music	
THE 130	Introduction to Theatre	
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>15</b>

Course	Title	Hours
<b>Year 1</b>		
<b>Spring</b>		
BIO 111	Principles of Biology	4
ENG 102	English Comp II	3
COM 103	Interpersonal Communication	3

Elective Course	3-5
<b>Hours</b>	<b>13-15</b>
<b>Total Hours</b>	<b>13-15</b>

Course	Title	Hours
<b>Year 2</b>		
<b>Fall</b>		
BIO 212	General Botany	3
CHE 101	General Chemistry I	3
CHE 110	General Chem I Laboratory	1
MAT 131	Calculus/Analy Geom I	5
AQU 201	Fisheries & the Educ. Consumer	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>15</b>

Course	Title	Hours
<b>Year 2</b>		
<b>Spring</b>		
CHE 102	General Chemistry II	3
CHE 120	General Chemistry II Lab	1
Marine Biology or Pond Management Course		3
AQU 422	Princ of Aquaculture	3
Fisheries Management Course		3
Select one General Education Social Science Course		3
ECO 200	Survey of Economics	
FIN 101	Financial Literacy	
BIO 210	General Zoology	3
<b>Hours</b>		<b>19</b>
<b>Total Hours</b>		<b>19</b>

Course	Title	Hours
<b>Year 3</b>		
<b>Fall</b>		
ENG 216	Technical Writing	3
BIO 316	Ecology	4
PHY 207	Physics In Biological Sci I	4
CHE 200	Intro to Organic & Biochem	4
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>15</b>

Course	Title	Hours
<b>Year 3</b>		
<b>Spring</b>		
BIO 302	General Microbiology	4
Select one General Educational Global/Civic Course		3
AFE 117	Global Perspect Ag/Food/Env	
Select one General Education Humanities Course		3
HIS 103	Western Civilization	
HIS 108	Intro to African American Hist	
BUA 120	Business and Society	
Biology Elective 300+		3-5
<b>Hours</b>		<b>13-15</b>
<b>Total Hours</b>		<b>13-15</b>

Course	Title	Hours
<b>Year 4</b>		
<b>Fall</b>		
BIO 413	Aquatic Ecology	4
BIO 417	Ecological Field Meth	
AQU 412	Fish Morph and Physiology	4
BIO 307	Genetics	4

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MAT 200	Intro to Stat Reasoning & Ana.	4
<b>Hours</b>		<b>16</b>
<b>Total Hours</b>		<b>16</b>

Course	Title	Hours
<b>Year 4</b>		
<b>Spring</b>		
Select one General Education Behavioral Science Course		3
PSY 200	General Psychology	
SOC 203	Principles of Sociology	
BIO 408	Cell Biology	4
AQU 491	Internship Aquaculture	1-4
AQU 460	Water Quality Management	3
Aquatic Equipment & Maintenance Course		
<b>Hours</b>		<b>11-14</b>
<b>Total Hours</b>		<b>11-14</b>