

# STEM PATHWAY BRIEF

## ENVIRONMENTAL PROTECTION AND SUSTAINABILITY



### OVERVIEW

It is estimated that Louisiana lost nearly 1868 square miles of coastal land between 1932 and 2010. In the next five decades, the Louisiana coast is expected to lose another 700 square miles. The rapidly eroding coast line poses a threat to major LA industries such as oil and gas as well as fishing.







The Environmental Protection and Sustainability Pathway has been established to provide students with the knowledge and skills necessary to provide solutions to combat coastal erosion as well as to prepare them for the workforce that will be tasked with implementing these solutions. High demand jobs associated with this pathway include Environmental Engineers that can create plans for sediment diversion as well as the Environmental Technicians who would be monitoring diversion projects for compliance. The ultimate goal of this pathway is to allow students the opportunity to understand the geology and ecology that is specific to our coastline in order to prepare for the future of our state.

College Ready	Career Ready
<ul style="list-style-type: none"><li>• Agricultural Pest Management</li><li>• Animal Science</li><li>• Biology</li><li>• Coastal Environmental Science</li><li>• Conservation Biology</li><li>• Ecological Restoration</li><li>• Education (Sciences)</li><li>• Environmental Geology</li><li>• Environmental Science</li><li>• Environmental Science and Research</li><li>• Fisheries and Aquaculture</li><li>• Forestry</li><li>• Geographic Environmental Science</li><li>• Marine Biology</li><li>• Plant and Soil Systems</li><li>• Rural Development</li><li>• Wetland Science</li><li>• Wildlife Ecology</li><li>• Wildlife Habitat Conservation</li></ul>	<ul style="list-style-type: none"><li>• Compliance Officer</li><li>• Conservation Scientist</li><li>• Environmental Engineer</li><li>• Environmental Technicians</li><li>• Wastewater Engineer</li><li>• Surveying and Mapping Technician</li></ul>

### CREDENTIALS INCLUDED

Water Production Operator – LA Gov, Water Treatment Operator – LA Gov, Water Distribution Operator – LA Gov, GIS Technician Level 1 – STARS GIS, Safety and Pollution Prevention Certificate, Basic Safety Orientation – Association of Reciprocal Safety Councils, CTS General Marine Transportation Technology

# STEM PATHWAY

Required Courses (4)					
Course Title	Course Code	Carnegie Credits	CTE 6%	CDF 6%	5-Point Scale
*Louisiana Wetlands Ecology – CBIO 2313	312090	1	✓	✓	
*Intro to Maritime Careers & Opportunities – IMTV 1500	312091	1	✓	✓	
*Introduction to History of Water Management – HIST 2000	312092	1	✓	✓	
* <b>Environmental Awareness – CEVS 1103</b> 	150914	1	✓	✓	✓
Additional Courses (choose 4)					
Course Title	Course Code(s)	Carnegie Credits	CTE 6%	CDF 6%	5-Point Scale
* <b>Physical Geography – CGRG 2213</b> 	010100	1			✓
* <b>Introductory Statistics – CMAT 1303</b> 	160356	1			✓
*Elementary Surveying Measurements – ENCE 2310	010102	1			
<b>AP Biology</b> 	150307	1			✓
<b>AP Statistics</b> 	160352	1			✓
<b>AP Human Geography</b> 	220310	1			✓
GIS Entry Level 1	010103	1			
Water Production Operator	110500	1			
Water Treatment Operator	110501	1			
Water Distribution Operator	110502	1			
CDF-Qualifying CTE Internship I (1 CREDIT)	080202	1	✓	✓	

\*Dual Enrollment

**CORE COURSES:**  MATH  SOCIAL STUDIES  SCIENCE

For full Pathway information, visit the [JumpStart graduation pathway page](#).