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				
Animal Science	Compliance Officer				
Coastal Environmental Science	Environmental Technicians				
Conservation Scientist	Surveying and Mapping Technician				
Ecological Restoration	Wastewater Distribution Operator				
Environmental Geology	Wastewater Treatment Operator				
Environmental Engineer	Water Distribution Operator				
Environmental Science and Research	Water Treatment Operator				
Geographic Environmental Science					
Plant and Soil Systems					
Wetland Science					
Wildlife Ecology					
Wildlife Habitat Conservation					

CREDENTIALS INCLUDED

Water Production Operator – LA Gov, Water Treatment Operator – LA Gov, Water Distribution Operator – LA Gov, Environmental Systems Research Institute (ESRI) User

STEM PATHWAY









Required Courses (4)							
Course Title	Course Code	Carnegie Credits	CTE 6%	CDF 6%	5-Point Scale		
Louisiana Wetlands Ecology	312090	1	✓	✓			
Intro to Maritime Careers & Opportunities	312091	1	✓	✓			
Introduction to History of Water Management	312092	1	✓	✓			
*Environmental Science: DE - CEVS 1103	150914	1	✓	✓	✓		
Additional Courses (choose 4)							
Course Title	Course Code(s)	Carnegie Credits	CTE 6%	CDF 6%	5-Point Scale		
Physical Geography 8	010100	1			✓		
Probability and Statistics: DE - CMAT 1303 Introductory Statistics	160356	1			✓		
Elementary Surveying Measurements	010102	1					
Biology II: AP Biology Sci	150307	1			✓		
Probability and Statistics: AP Statistics	160352	1			✓		
AP Human Geography	220310	1			✓		
GIS Entry Level 1	010103	1					
GIS Level 2	010104	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

For full Pathway information, visit the <u>JumpStart graduation pathway page</u>.