

COASTAL STUDIES AND GIS TECHNOLOGY

The **Coastal Studies and GIS Technology** program prepares students for coastal focused careers with a focus on GIS technology skills and instruction in coastal and environmental science. The program blends instruction in technical skills, regulatory information, and science to produce completers who have valuable skills to apply to the sector and have a thorough understanding of the complicated problems of the environment to be informed advocates for coastal stewardship and be a part of innovative solutions.

The Student Learning Outcomes for this program are:

- a. Demonstrate knowledge of physical setting of Louisiana's coastal zone, its resources, ecosystems, biodiversity, nature and human-induced environmental and geomorphological changes, environmental sustainability and stewardship, relevant federal, state, and local laws and regulations.
- b. Demonstrate an understanding of fundamental theoretical concepts, methods, techniques, and applications of geospatial technologies (RS/GIS).
- c. Demonstrate an ability to compile, organize, process, analyze, and present geospatial data using a variety of RS/GIS software for a variety of coastal-focused applications and problem solving.

The program has three levels:

- **Career and Technical Certificate** in Wastewater Plant Operator.
- **Career and Technical Certificate** in Water Plant Operator.
- **Career and Technical Certificate** in Coastal Surveying Skills
- **Certificate of Technical Studies** in Coastal Geospatial Information Science focuses on GIS technology and the ability to apply it in the coastal related jobs. Students completing this certificate have an in-demand skill and are employable as survey and mapping technicians.
- **Certificate of Technical Studies** in Coastal Restoration
- **Certificate of Technical Studies** in GIS and Facilities Planning
- **Technical Diploma** in Coastal Studies and GIS Technology adds coursework in coastal science and regulation important to understanding the permitting process. A block of approved electives allows students to choose training in both technical and construction skills.
- **Associate of Applied Science Degree** in Coastal Studies and GIS Technology adds 15 hours of related general education courses in Math, Composition, History, and Social Sciences.

Students at each level of award will have the skills and knowledge to gain entry-level employment, as well as an incident-based event, and ongoing projects in coastal restoration projects supported by Louisiana's Coastal Master Plan.

According to the Bureau of Labor Statistics, the national outlook for this position is an increase of 11% which is higher than the national average of 7%.

According to Projections Central the increase in employment is 14.2% with an average of 160 job openings annually in the state of Louisiana.

In Louisiana, the mean hourly wage is \$19.88 and the annual mean salary is \$41,560.

Also, in Louisiana, the New Orleans – Metairie urban area in which St. Bernard Parish is located has an average salary of \$44,180 which is the highest within the state.

Certificates and Degrees

- GIS Technology, Certificate of Technical Studies
- Coastal Restoration, Certificate of Technical Studies
- GIS & Facilities Planning Program, Certificate of Technical Studies
- Coastal Studies and GIS Technology, Technical Diploma
- Coastal Studies and GIS Technology, Associate of Applied Science
- Water Plant Operator, Career and Technical Certificate
- Wastewater Plant Operator, Career and Technical Certificate
- Coastal Surveying Skills, Career and Technical Certificate