Welcome to the TAMUCC Coastal and Marine System Science Program

Highly interdisciplinary, this degree is designed to serve graduate students with diverse backgrounds in the natural and computational sciences. Ideal candidates will have backgrounds in some combination of biology, chemistry, computer science, geology, oceanography, engineering, and geographic information science. If you want a degree that will allow you to make a difference, consider being part of this unique Ph.D. program in Coastal and Marine Systems Science.

Coastal and Marine System Science focuses on integrative concepts that have emerged in recent years, linking biogeochemistry, geographic information science, ecosystem dynamics, and quantitative modeling. The CMSS program also promotes interdisciplinary studies of the coastal zone that integrates natural science with socio-economic sciences. Graduates of the CMSS program will demonstrate proficiency in understanding and applying the concepts and principles of all of the natural sciences as well as a working competence in mathematical modeling and geospatial analysis.

As part of their progression through the Coastal and Marine System Science program the students will:

- acquire the skills required for system science studies applied to coastal and marine topics such that they are prepared to conduct CMSS original research
- perform original and hypothesis-driven quantitative analyses that will lead to comprehensive verifiable models of natural systems
- develop statistical, mathematical, and analytical skills to analyze observations, critically evaluate models describing the dynamics of natural systems, and answer environmental "what if" questions by providing comprehensive interpretation
- develop the skills necessary to present and publish their work at national and international venues
- develop the skills necessary to teach effectively a college level class in the area of Sciences and Technology
- develop a skill set and research record such that they can secure employment in Universities, Federal Agencies, Private Companies or Non Governmental Organizations where they can apply the skills and knowledge acquired during the program