STAGES: SOCIETY-TARGETED APPROACH IN GRADUATE ENVIRONMENTAL SCIENCE, GRADUATE AND GRADUATE DOCTORAL CERTIFICATE

Program Description

The Certificate in STAGES: Society-Targeted Approach in Graduate Environmental Science is designed to provide students with a solid foundation in applied statistical and analytical methods in environmental and natural sciences that will prepare them to work in various fields related to environmental science. The STAGES certificate is also designed to integrate all community partners (federal, state, local, industry, non-profit, and grassroots organizations) into the student's research projects to encourage research products that are of immediate interest and use to the community. Candidates are required to complete 15 credit hours, including up to 12 hours of required courses that satisfy core and/or elective requirements in their respective degree programs and 3 project research hours guided by a community partner. All students admitted into the STAGES certificate program must meet the graduate admission requirements for TAMU-CC and must satisfy all prerequisites for courses in the certificate program. Students working toward a graduate degree in coastal and marine system science, marine biology, and environmental science may obtain this certificate while completing their MS or PhD degrees, but this may require completing more coursework than required for the graduate degree. Transfer credit for some required courses may be considered, as may credit for previous experience. Students are expected to meet all other academic standards. Students must apply for the certificate and complete a Certificate Plan approved by their faculty advisor, their program coordinator, and the CMSS program coordinator or a designee.

Admissions Requirements

Must have and maintain a GPA of 3.0 or better.

The STAGES certificate is open to:

1. All College of Science and College of Engineering and Computer Science graduate students, but it may be of particular interest to graduate students in coastal and marine system science, environmental science, and marine biology. With the application of courses toward core and elective degree requirements, coastal and marine system science, environmental science, and marine biology students will have at most 2 additional courses beyond their degree plans to obtain the STAGES certificate. For graduate students in chemistry, mathematics, and geographical information science the courses in addition to their degree plans would be much greater due to the prescribed nature of their degree plans.
2. TAMU-CC undergraduate students that are on a Fast Track BS to MS.
3. Students who have previously completed B.S. and/or M.S. degrees at TAMU-CC or elsewhere and who wish to obtain a certificate (post-baccalaureate).

Program Requirements

Code	Title	Hours
Required Courses (15 Semester Hours)		
CMSS 6321	Big Data Blitz	3
Pick two from the following (6 hours):		6
CMSS 6352	Environmental Forecasting	
CMSS 6360	Computer Programming in Earth System Sciences	
MATH 6315	Statistical Methods in Research I	
Pick one according to degree plan (3 hours):		3
CHEM 5993	Thesis Research	
CMSS 5940	Thesis Project Research	
CMSS 6940	Dissertation Project Research	
ESCI 5397	Directed Research	
ESCI 5940	Project Research	
MARB 5940	Master's Project Research	
MARB 6940	Dissertation Project Research	
Elective Course (3 hours) - Take one course outside of the primary research focus from the following or another approved course outside of primary research focus:		3
CHEM 5417		
or CHEM 641		
CHEM 5362	Chemical Oceanography	
or CHEM 6362	Chemical Oceanography	
CHEM 5375	Stable Isotope Biogeochemistry	
or CHEM 637	Stable Isotope Biogeochemistry	
CMSS 6307	Coastal and Marine Systems	
CMSS 6315	Environmental and Geological Applications of GIS	
or ESCI 6315	Environmental and Geological Applications of GIS	
or GEOL 631	Environmental and Geological Applications of GIS	
ESCI 5350	Fundamentals of Physical Oceanography	
GEOL 6422	Advanced Geophysics	
GEOL 6444	Advanced Hydrogeology	
MARB 6343	Oceans and Human Health	
MARB 6373	Biodiversity and Conservation	
Total Hours		**15**