



## **Division of Science, Technology, Engineering and Mathematics**

### **Associate in Science in Biotechnology: Marine Biotechnology**

The program prepares students for entry-level technical positions in marine biology or the pursuit of advanced degrees in the marine sciences. Students engage in ongoing marine research projects on the islands of Puerto Rico and Montserrat, obtain PADI SCUBA certification, and receive extensive training in marine craft operation. Graduates may gain employment in state and federal marine laboratories as well as private marine companies and aquariums. Successful completion of this program provides students with extensive underwater and field research abilities coupled with synergistic molecular bench skills. Students graduating from the Associate in Science in Marine Biotechnology program will achieve proficiency in the college-wide learning outcomes.

Successful graduates of the program will be able to:

1. Conduct underwater research such as transects, coral reef analysis, and organismal sample collection;
2. Conduct molecular analysis of marine samples collected in the field;
3. Generate and analyze habitat data of marine organisms;
4. Establish and analyze genomes of marine organisms;
5. Obtain PADI and SCUBA certification;
6. Operate and maintain powered and unpowered marine crafts;
7. Use marine and land radio communications including emergency response procedures;
8. Maintain an orderly, well-formatted research laboratory notebook from which data analysis, project decisions, project presentations, and successive experimental designs are readily and speedily derived or achieved;
9. Communicate project information with colleagues and collaborators from varying disciplines including the presentation of data and findings;
10. Devise experimental strategies to effectively conduct field research in isolated and challenging environs and climatic conditions;
11. Provide transport and maintenance of marine samples;
12. Work effectively with diverse collaborators in the field and in the laboratory by sharing ideas, and soliciting input.