

# College of Marine Sciences and Aquatic Biology

## Bachelor of Science in Marine Biology

### **Program Mission**

To provide a transformative education in marine sciences that empowers students with knowledge, skills, and ethical values to address critical challenges in marine sustainability, conservation, and innovation. We are committed to fostering research excellence, interdisciplinary collaboration, and leadership development to advance the health and resilience of marine ecosystems locally and globally.

### **Program Vision**

To be a leading center of excellence in marine science education and research, shaping the future of sustainable marine resource management, conservation, and innovation in the UAE and beyond. Our vision is to inspire and equip the next generation of marine scientists and professionals to create impactful solutions for global marine environmental challenges.

### **Program Goals**

The goals for this program are to:

1. Graduate students with a strong understanding of marine biology and oceanography, that contributes to solving environmental problems in the local and regional marine environment and promotes marine sustainability by conserving and managing marine habitats and resources through research, innovation, and policy.
2. Equip students with the necessary skills and tools for effectively and clearly communicating their knowledge, findings and conclusions to a diverse audience including professionals, decision-makers as well as the public.
3. Educate students capable of critical thinking and problem solving regarding marine sustainability and innovation, relevant to the UAE National agenda and the global community.
4. Graduate students with skills and expertise that are well aligned with job market needs, and that have the credentials to continue with further post-graduate studies locally or internationally.
5. Produce graduates that are excellent team workers, with high professional and ethical standards, that can become leaders in their field as well as in their position.

### **Program Learning Outcomes**

By the end of completion of this program, the student will be able to:

1. Demonstrate strong knowledge and practical skills in Marine Biology, Oceanography, General Biology and Basic Chemistry.
2. Effectively communicate their scientific knowledge, interdisciplinary training, and research findings to peers, professionals, decision-makers, and the public in both oral and written formats.
3. Apply critical thinking and problem-solving skills in their field of study while designing, carrying out, and interpreting the results of experiments or surveys, while evaluating peer reviewed literature, or creating and innovating.
4. Analyse contemporary marine-related environmental issues at both local, regional, and global scales, and incorporating socio-cultural norms while taking on professional responsibility for the stewardship of the marine environment.
5. Critically evaluate and use scientific methods and approaches to collect and analyse scientific data and applying scientific tools and innovative techniques during practical field and laboratory exercises. Develop skills to operate professionally, ethically, and autonomously in the workplace, whether as individuals, as part of a larger team, or as the leader of a team.

### **Career Opportunities**

The possible career opportunities and pathways for Marine Biologists:

- Governmental agencies and ministries
- Academic research and education
- Environmental consulting
- Industry/applied research
- Non-governmental organisations
- Aquaculture sector
- Tourism sector
- Marine biotechnology
- Marine policy