



SUSTAINABLE BLUE ECONOMY PROFESSIONAL

Acoustic Engineer

As a Marine Acoustic Engineer, you apply the science of sound to study its impact on aquatic life and develop technologies for sound detection and monitoring. Your expertise drives the design and analysis of acoustic equipment for environmental monitoring, sonar systems, and noise pollution control. By advancing sustainable maritime practices, your work enhances our understanding of marine ecosystems while reducing human impact on ocean habitats.



JOB DUTIES

- Develop acoustic devices and systems;
- Conduct acoustic testing and analysis;
- Monitor underwater noise levels and assess noise pollution;
- Ensure accurate calibration of acoustic equipment;
- Collaborate with researchers to plan research projects;
- Develop noise control solutions and technologies that minimize sound disturbances from human activities;
- Use software and simulation tools to model sound behaviour; and
- Document research findings, prepare technical reports, and present results to stakeholders.



TECHNICAL SKILLS

- Acoustic Equipment Design & Calibration;
- Knowledge of Sound Propagation and Underwater Acoustics;
- Data Collection and Analysis;
- Familiarity with Environmental Noise Regulations and Impact Assessment;
- Experience with Modeling Software;
- Competency in Operating Hydrophones and Sonar Systems; and
- Ability to Interpret Acoustic Data.



EDUCATION

- Bachelor's Degree:
 - Acoustical Engineering, Marine Technology, Physics, Mechanical Engineering, or a related field.
- Advanced Degrees:
 - For more specialized or research-focused roles, a master's or doctoral degree can be advantageous.
- Additional Training:
 - Institute of Acoustics Certificate of Competence in Environmental Noise Measurement.



PERSONAL & PROFESSIONAL SKILLS

- Attention to Detail
- Problem-Solving
- Communication Skills
- Team Collaboration
- Adaptability
- Strong Organizational Skills
- Effective Time Management
- Creativity



WHERE TO WORK

Acoustic Engineers can work with organizations specializing in underwater sound research, environmental conservation, and marine technology innovation, including:

Environmental Research Organizations | Government Agencies
Marine Technology and Engineering Firms | Offshore Oil and Gas Companies
Universities and Research Institutions | Environmental Consulting Firms
Defense and Naval Organizations



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