

CAREER OPPORTUNITIES

National Research Foundation – South African Institute for Aquatic Biodiversity

ABOUT US

The South African Institute for Aquatic Biodiversity (NRF-SAIAB) is a national research facility supported by the National Research Foundation (NRF). We study the full range of aquatic environments, from deep ocean waters to inland freshwater systems.

Our research focuses on ecology and conservation, exploring how biodiversity at the genetic and species levels connects with the environment. The NRF-SAIAB also contributes to South Africa's *Operation Phakisa* programs, which aim to grow the country's Biodiversity Economy and Blue Economy.

Strong support from the Department of Science, Technology and Innovation and the NRF has enabled NRF-SAIAB to develop advanced research platforms that allow us to work in a wide range of environments and made us a leader in aquatic biodiversity research.

'All our work supports High Education in training and development of the next generation of aquatic scientists and environmental managers

Coastal and Ocean Sciences Research

WHAT IT IS AND WHY IT MATTERS

Do you care about nature and love the ocean? Are you curious about how animals live and survive along our coast? Then a career in coastal and ocean science might be for you! Coastal ecosystems like rocky shores, mangroves, and beaches are home to a rich variety of marine plants and animals. Our research team studies how environmental and biological factors affect coastal animals, how they function, and how their ecosystems work. We help understand how coastal life is impacted by climate change, pollution, and human activities. To protect these ecosystems, we use exciting tools like coastal ecological engineering to find real-world solutions. This means combining ideas from engineering and ecology to design and build natural solutions that fix damaged coastlines and make them better for people and nature.

We also work closely with scientists, practitioners, and communities

to ensure our work makes a difference and we are always training new young scientists to be future leaders in ocean conservation.

SUBJECTS TO TAKE IN HIGH SCHOOL

- Life Sciences
- Physical Sciences
- Mathematics
- Geography

WHAT TO STUDY AT UNIVERSITY

- Bachelor of Science (BSc), majoring in:
 - Zoology (best option)
 - Ichthyology
 - Marine Science
 - Botany



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– Environmental Science

If interested in continuing to study enrol for postgraduate studies:

- BSc Honours (1 year): Zoology, Marine Science, Ichthyology, Environmental Sciences
- Master of Science (MSc) (2 years): Zoology, Marine Science
- PhD (3+ years): for those wanting to continue working in research (academia)

CAREER PATHS

- Researcher: studies marine animals, plants, and ecosystems; solves problems like pollution, habitat loss, and climate change, using science to inform decisions and policies.
- Conservation scientist: designs and restores natural habitats (like wetlands or shorelines); works with governments and communities

to protect the coast and sustainable use of marine resources.

- Environmental consultant: advises companies and organisations on how to reduce their impact on the environment, especially in coastal developments and use of resources.
- Science communicator/teacher (marine science subject as part of curriculum): teaches others about marine science through schools, museums, aquariums, social media, or public programs.

People working on coastal ecology have continued with careers as:

- Researchers at universities and government research institutes
- Post-doctoral researchers
- National parks and conservation agencies
- Environmental consulting firms
- International organisations (e.g., UNEP, UNESCO, IUCN)





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