

SAEON Elwandle Node

Want to be a

Marine Scientist?

Possible Careers:

As human impact on the marine environment continues to increase, so does interest in the health of our world's coastal areas, estuaries and oceans. This ensures a strong future for studies in the marine sciences. Employment opportunities within the field of marine science are very interesting and extremely diverse.

Biological Oceanography (Marine Biology)

Study plants and animals that live in the ocean, their behaviour and adaptations, their roles in the food chain, and anthropogenic (human) effects on them. A biological oceanographer may focus more on exploring the open ocean environment, while a marine biologist may concentrate on the specific organisms of coastal and estuarine habitats. Professions include: Ecologist, fisheries biologist, marine educator, mammalogist, aquaculturist, aquarist, algologist, behaviourist, pathologist, parasitologist, biotechnologist, toxicologist and macrobiologist.

Physical Oceanography

Study the physical properties of the ocean as it interacts with boundaries of land, seafloor and atmosphere. Study movement of the ocean caused by wind, waves, currents and tides and the relationship between the sea, weather and climate. Professions include: Ocean modeler, hurricane forecaster, meteorologist.

Chemical Oceanography

Study the elements of seawater and seafloor sediments and how the chemical make-up of the ocean interacts with biological, geological and physical factors, as well as the effects of both natural and man-made chemicals on the ocean environment. Professions include: Environmental research scientist, aquatic chemist, biochemist.

Geological Oceanography

Study the make-up of the sea floor, its movement and the nature of the minerals found there as well as sand erosion and deposition on coastal beaches. Professions include: Seismologist, geophysicist, paleontologist, marine archaeologist, petroleum geologist.

Ocean Engineering

Create and design research instruments and tools, such as remotely operated vehicles, depth sounders and submarines.

Environmental Science

Environmental issues are becoming more and more important. With increased stresses on our planet from human influences, scientists with a strong understanding of the effects humans have on ecological systems are more in demand than ever before. Career opportunities include: Environmental biology, environmental chemistry, analytical, physical and organic chemistry, biochemistry and toxicology, fisheries science, resource management and marine policy.

Start NOW!

Becoming a scientist is a long-term commitment and you can start preparing for it right now! Study hard and gain experience.

Environmental monitoring projects you can do

- Monitoring of resource use in rocky shores
- Monitoring of coastal birds (eg Black Oystercatcher population)
- Water quality in estuaries
- Weather monitoring in home and in school yard

Scientific skills you will apply:

Identify the issue; Decide on your methods; Design your database; Collect and record the data; Analyse the data; Track changes over time / space; Interpret and report your findings.

**Speak to the Education Officer
at SAEON's Elwandle Node ☎ 046 622 9899**