The field of ocean engineering provides an important link between the other oceanographic disciplines such as marine biology, chemical and physical oceanography, and marine geology and geophysics. Just as the interests of oceanographers have driven the demand for the design skills and technical expertise of ocean engineers, the innovations in instrumentation and equipment design made by ocean engineers have revolutionized the field of oceanography. This is especially true within the last three decades.

Ocean engineering is based in five areas of concentration: coastal engineering, hydrographic engineering, marine vehicles (naval architecture), marine materials and corrosion, and underwater technology. A few careers in this field are Coastal Engineer, Marine Engineer, Naval Architects, Ocean Engineer, Offshore Engineer, Port Engineer and Marine Surveyor. Most find themselves employed as research scientists and coastal and oceanographic engineers for government and private companies.

The invention of thousands of oceanographic instruments and devices has changed the way oceanographers study the oceans and coasts. Examples include: computer- and satellite-linked buoys and floats, sediment traps, ocean seismometers (instruments that measure seafloor movement in a manner similar to the way seismographs measure earthquake activity on land), underwater video equipment, acoustic measuring devices (instruments that make it possible to "sense" underwater objects and seafloor formations), and underwater vehicles, including submersibles and remotely operated vehicles (ROVs).

Engineers typically enter the occupation with a bachelor’s degree in an engineering specialty, but some basic research positions may require a graduate degree. Engineers offering their services directly to the public must be licensed. Continuing education to keep current with rapidly changing technology is important for engineers.

Engineers who are licensed are called professional engineers (PE). This licensure generally requires a degree from an ABET-accredited engineering program, 4 years of relevant work experience, and successful completion of a State examination. The initial Fundamentals of Engineering (FE) examination can be taken upon graduation. Engineers who pass this examination commonly are called engineers in training (EIT) or engineer interns (EI).

The average salary offer for new graduates with a bachelor’s degree in Ocean Engineering is: $50,000.

For more information on a career in Ocean Engineering contact the Career Management Services Office or your academic advisor.