



ENGINEERS
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Subsea engineering

Area of Practice

Subsea engineering deals with the design, construction, installation, operation, maintenance and decommissioning of equipment in the ocean or on the seabed. Subsea engineers are engaged in managing activities throughout the asset lifecycle within various industries such as upstream oil and gas, marine/maritime and renewables.

Some of the activities that may be undertaken when practising as a subsea engineer include:

- design of process, structural, corrosion, mechanical, controls or transmission elements
- designing subsea gathering facilities for hydrocarbon recovery or renewables
- manufacture and fabrication of subsea equipment and hardware
- installation engineering for different types of subsea equipment
- management or support of marine operations
- intervention and repair operations by ROV or divers
- asset integrity management of subsea equipment
- support of subsea well intervention operations
- decommissioning of facilities.

These activities could take place in any of the following subsea engineering domains, subsea engineers will have achieved competency in one or more areas, including:

- field development planning/concept selection
- corrosion and materials engineering
- flexible flowlines and risers, umbilicals and cables
- geotechnical design
- subsea structural engineering
- subsea mechanical engineering
- subsea control systems
- dynamic systems design and analysis
- construction engineering and construction spread management
- pre-commissioning and commissioning
- subsea asset management
- renewable energy
- environmental engineering
- new technology development and qualification
- safety and risk engineering
- subsea well intervention
- project management

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- decommissioning.

To learn more about subsea engineering visit the [Society for Underwater Technology](#).

How to apply

Subsea engineering is an area of practice available to those who want to become Chartered and is available to all occupational categories. Learn more about becoming [Chartered](#) and how to apply.

If you want to add subsea engineering as an additional area of practice, [email](#) us to enquire about the process.