

Nautical science

The discipline within nautical science enlightens operations -and floating structures on a general base, particularly in the Arctic, focusing on advanced and safe operations in the ocean space. This includes; ship stability, dynamic positioning, collision and grounding avoidance, weather routing and hydrodynamic aspects in marine operations in the ocean space. Navigational instruments such as; Global Navigation Satellite System (GNSS), inertial navigation, sub-sea navigation and the integration of such systems.

1H	TEK-3002 Reliability Engineering, 10 ECTS	TEK-3011 Ship stability 10 ECTS	Specialization/ optional course, 10 ECTS
1 V	TEK-3006 Cold climate engineering, 10 ECTS	TEK-3010 Marine operations in the Ocean Space 10 ECTS	Specialization/ optional course, 10 ECTS
2H	TEK-3004 Project paper, 10 ECTS	TEK-3014 Navigation Systems 10 ECTS	Specialization/ optional course, 10 ECTS
2V	TEK-3901 Master thesis in engineering 30 ECTS		

Compulsory courses in this discipline are:

- TEK-3010 Marine Operations in the Ocean Space, 10 ECTS
- TEK-3011 Ship Stability, 10 ECTS
- TEK-3014 Navigation Systems, 10 ECTS

Generally recommend optional courses are:

- TEK-3001 Operation and maintenance management, 10 ECTS
- TEK-3003 Specialization subject in technology, 10 ECTS
- TEK-3008 Marine engineering, 10 ECTS
- MAT-3200 Matematisal methods, 10 ECTS
- AUT-2005 Reguleringssteknikk, 10 ECTS
- AT-323 Thermo-mechanics of sea ice cover and loads on structures, 10 ECTS
- AT-327 Arctic Offshore Engineering, 10 ECTS

Note: AT-courses are given at UNIS, Svalbard