



SD2707 Marine Innovation 5.0 credits

Marin innovation

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for SD2707 valid from Autumn 2010

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

Bachelors degree in mechanical engineering or the equivalent with working knowledge in linear algebra, calculus and rigid body mechanics.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After the course the student shall:

- be able to add value as active participant in marine development processes,
- be able to define and use the design spiral for the development of new technical systems,
- be able to perform the early modeling of the mechanical performance of a marine system,
- evaluate results from modeling and the implications of underlying assumptions and simplifications,
- master brainstorming methods,
- be able to precisely communicate the result of engineering work in a manner tailored to the level, needs and expectations of the receiver.

Course contents

Marine innovation addresses the need for students to gain integrated engineering skills used in the conception and early design of marine systems. The course contains lectures, teamwork and individual scheduled work on engineering modeling, concept generation, formulation and evaluation of functional and operational demands etc. The course focuses on techniques and processes that are especially useful in early design. Through a number of guest lectures students will meet representatives from the marine industry and get insight in authentic marine development processes.

Course literature

Not yet decided

Examination

- ÖVN1 - Assignment, 5.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

ÖVN1 - Exercises, 5.0 credits, grade scale: A, B, C, D, E, FX, F

Other requirements for final grade

Project work (ÖVN1).

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.