

# Course: Coastal Engineering

credits: 3

Course code BVVH19DECOAST
Name Coastal Engineering

**Study year** 2019-2020

ECTS credits 3
Language English
Coordinator S. Deegmulder

Modes of delivery Guest lecture

Lecture

**Assessments** Coastal Eng assign - Assignment

Coastal Eng test - Written, organised by

STAD examinations

### Learning outcomes

- The student knows and understands past processes that have influenced the features of the coast.
- The student can calculate wave characteristics caused by windgenerated waves in a simplified situation (linear wave theory)methods for flow measuring and the hydraulic background of the methods.
- The student knows and understands the factors effecting the water level in coastal areas like tidal processes, wave and wind setup, currents etc.
- The student can apply some basic wave statistics on irregular waves.
- The student understands the basic processes of longshore and cross-shore sand transport in the coastal zone and can make some simple estimations.

## Content

'Coastal Engineering' gives an introduction in processes affecting the coast in delta's like wind –generated waves and tidal waves. We also pay attention to the method used to determine the design wave height and period. Another important process is the morphology (sand transport) in the coastline zone which has a huge influence on the shape of the coast.

### Included in programme(s)

Minor Delta Engineering Built Environment Exchange Delta Engineering (spring)

#### School(s)

School of Architecture & Built Environment