

**CoMEM**  
**Erasmus Mundus MSC Coastal and Marine Engineering and Management**

**Duration:** 24 months

**Course description:**

Recent coastal disasters are evidence of the massive risks due to present coastal hazards. These risks are growing due to factors such as expanding coastal settlements and associated expanding economies and climate change. Collectively, this could result in unprecedented losses of many kinds in coming decades. To prevent such impacts, it is imperative that informed and sustainable coastal planning and management strategies are developed and implemented immediately. Thus, the proposal for CoMEM, a 2 year master programme, is timely and necessary. CoMEM provides a unique curriculum offering courses in a combination not found in a single EU member state. It is designed to give students a broad, relevant and high quality education that will allow them to solve the complex challenges present in the vast field of Coastal and Marine Engineering and Management. The main learning outcomes are: a) in-depth knowledge concerning sustainable, environmentally friendly, legal and economically acceptable solutions to challenges in Coastal and Marine Engineering and Management; b) understanding relevant ethical and integrity issues; c) research skills and competence suitable for employment or further academic study, and continuous professional development; d) a European and global perspective on CoMEM issues.

The consortium involves five top ranked European universities: NTNU (Norway); TU Delft (Netherlands); UPC (Spain); University of Southampton (UK); and City University London (UK). Each partner brings specific strengths in engineering and management in coastal and marine areas. All partners have extensive experience in hosting international students, including efficient supporting administrative systems. The consortium has a well-established educational and research background embracing the theoretical underpinning, numerical simulations, physical model testing, field methods and their application. This expertise, together with long-standing and extensive resource networks will be offered to the students. Program structure: Year 1, semester 1, all students go to NTNU.

Thereafter five different tracks are followed: Arctic Marine Coastal Engineering (co-ord.: NTNU); Marine Operations and Management (co-ord.: City); Environment and Management (co-ord.: SOTON); Coastal Engineering (co-ord.: TUD); Engineering and Environment (co-ord.: UPC). Experienced and outstanding scientists and engineers with specific expertise relevant to CoMEM are selected to visit one or more of the CoMEM consortium partners to enhance the programme. CoMEM student candidates must possess a university BSc degree or equivalent with a minimum of 180 ECTS relevant to the programme, typically in Civil or Environmental Engineering. A thorough proficiency in English is also required to participate in the programme. Upon completion, the students will receive a multiple degree from each university visited. (The partnership will issue joint degrees as soon as we are able).

**Website:** <http://www.ntnu.edu/studies/mscomem>

**Partners:**

NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET, Norway (Co-ordinating Institution)  
TECHNISCHE UNIVERSITEIT DELFT, Netherlands  
UNIVERSITAT POLITÈCNICA DE CATALUNYA, Spain  
CITY UNIVERSITY LONDON, United Kingdom  
UNIVERSITY OF SOUTHAMPTON, United Kingdom

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