

## **MSC-PROGRAMME IN COASTAL AND MARINE CIVIL ENGINEERING**

This Master of Science degree programme in Coastal and Marine Civil Engineering is an integrated, two year study programme for Norwegian and foreign students. Thus the programme is designed according to the current framework for engineering graduate studies at NTNU.

The first year of the study consists of basic compulsory and optional courses on graduate level. The second year provides a specialization in Marine Civil Engineering through a specialization project and subject. In addition one supplementary subject must be chosen. The specialization is supplemented by a non-technical course.

Norwegian students can enrol in the full M.Sc programme, or select individual courses from the programme in their study curriculum.

Foreign students could be admitted through the Quota Programme, with participants from developing countries and from Central and Eastern Europe. Students with other sources of financing might also be admitted to the full M.Sc programme.

Foreign exchange students could select individual courses from the programme, provided they have the necessary qualifications for the course.

Students aiming a specialization in Arctic Marine Civil Engineering may in agreement with professor in charge replace compulsory or other subjects with subjects in Arctic technology given at UNIS, Svalbard or elsewhere. The specialization semester and/or the master thesis may be taken at UNIS.

## FACULTY OF ENGINEERING SCIENCE AND TECHNOLOGY

### MSC-PROGRAMME IN COASTAL AND MARINE CIVIL ENGINEERING (MSCOASTMAR)

Term 1, 2, 3 and 4

Ex	Subject no	Subject title	Note	Cr
		<b>Compulsory courses</b>		
1h	TBA4265	MARINE PHYS ENV		7,5
1h	TBA4325	SPREAD OF POLLUTION		7,5
1v	-	EXP IN TEAM INT PROJ		7,5
1v	TBA4145	PORT/COAST FACILITI		7,5
1v	TBA4270	COASTAL ENGINEERING		7,5
		<b>Optional courses</b>	1	
1h	TBA4275	DYNAMIC RESPONSE		7,5
1h	TBA4305	FREIGHT TRANSP SYST		7,5
1h	TBA5100	THEORETICAL SOIL MEC		7,5
1h	TFY4300	ENERGY/ENV PHYSICS		7,5
1h	TPK4120	SAFETY/RELIAB ANALYS		7,5
		<b>Optional courses</b>	2	
1v	TBA4115	FINITE ELEM GEOTECH		7,5
1v	TKT4225	CONCRETE TECHN 2	3	7,5
1v	TMR4225	MARINE OPERATIONS		7,5
		<b>Specialization</b>		
2h	TBA4550	MARINE CIV ENG SP		7,5
2h	TBA4551	MARINE CIV ENG SP	4	15,0
2h	TBA4555	MARINE CIV ENG SC		7,5
		<b>Supplementary courses</b>	5	
2h	TBA4275	DYNAMIC RESPONSE		7,5
2h	TBA4305	FREIGHT TRANS SYST		7,5
2h	TBA5100	THEORETICAL SOIL MEC		7,5
2h	TEP4240	SYSTEM SIMULATION		7,5
2h	TFY4300	ENERGY/ENV PHYSICS		7,5
2h	TMR4130	RISK SAFETY MAR TRAN		7,5
2h	AT301	INFRA CHANGING CLIM	6	10,0
2h	AT323	THERM-MECH ICE SNOW	6	10,0
2h	AT327	ARCTIC OFFSHORE ENG	7	10,0
		<b>Non-technical courses</b>	8	
2h	GEOG3506	GEO HEALTH AND DEV		7,5
		<b>Master Thesis</b>	9	
2v	TBA4920	COAST MAR CIV ENG		30,0

Ex 1h = Term 1, Exam Autumn

Ex 2h = Term 3, Exam Autumn

Ex 1v = Term 2, Exam Spring

Ex 2v = Term 4, Master Thesis Spring

- 1) Select two of the subjects.
- 2) Select one of the subjects.
- 3) Check the recommended previous knowledge.
- 4) Specialization project of 15 credits is a special need for studentes aiming at a specialization in Arctic Engineering in cooperation with UNIS and who are not at NTNU during the specialization semester.
- 5) One supplementary subject shall be chosen from the list. Check dates of exam. The courses are not considered when planning the teaching and examination schedules.
- 6) These subjects requires that the student is at UNIS the whole semester. Special agreement with professor in charge is required.
- 7) Two-week intensive course at UNIS, Svalbard. In agreement with the supervising professor. Check date of exam. Number of participants might be restricted.
- 8) Other available subjects might be chosen provided approval by professor in charge. Check date of exam.
- 9) Master thesis should if possible be taken in co-operation with partner institutions. Students aiming a specialization in Arctic Marine Civil Engineering might in agreement with the supervising professor take the Master thesis at UNIS, Svalbard. Parts of the studies can be taken at UNIS, Svalbard. Check supplementary regulations. Studies at UNIS must be approved by the faculty.