

## **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	TBA4145	PORT/COAST FACILITI		7,5
1h	TBA4265	MARINE PHYS ENV		7,5
1v	-	EXP IN TEAM INT PROJ		7,5
1v	TBA4270	COASTAL ENGINEERING		7,5
		<b>Optional courses</b>	1	
1h	TBA4275	DYNAMIC RESPONSE		7,5
1h	TBA4325	SPREAD OF POLLUTION		7,5
1h	TBA5100	THEORETICAL SOIL MEC		7,5
1h	TKT4220	CONCRETE STRUC 2 AC		7,5
1h	TPK4120	SAFETY/RELIAB ANALYS		7,5
1h	AT327	ARCTIC OFFSHORE	2	10,0
1v	TBA5155	FOUNDATIONS/SLOPES		7,5
1v	TKT4135	MEC OF MATERIALS		7,5
1v	TKT4201	STRUCTURAL DYNAMICS		7,5
1v	TKT4215	CONCRETE TECHNOLOGY		7,5
1v	TMR4225	MARINE OPERATIONS		7,5
1v	AT205	FROZEN GROUND ENG	3	15,0
1v	AT208	THERM MECH PROP MAT	3	15,0
		<b>Specialization</b>	4	
2h	TBA4510	GEOTECHN ENG SP	5	7,5
2h	TBA4516	GEOTECHN ENG SC	5	7,5
2h	TBA4550	MARINE CIV ENG SP		7,5
2h	TBA4551	MARINE CIV ENG SP	6	15,0
2h	TBA4556	MARINE CIV ENG SC		7,5
		<b>Supplementary courses</b>	7	
2h	TBA4110	GEOTECH FIELD/LAB IN		7,5
2h	TBA4116	GEOTECH ENG AC		7,5
2h	TBA4292	MARINE CIV ENG AC		7,5
2h	TKT4108	DYNAMICS AC		7,5
2h	TMR4130	RISK SAFETY MAR TRAN		7,5
2h	AT301	INFRA CHANGING CLIM	3	10,0
2h	AT323	THERM MECH ICE SNOW	3	10,0
2h	AT327	ARCTIC OFFSHORE	2	10,0
	-	<b>Non-technical courses</b>	8	7,5
		<b>Master Thesis</b>	9	
2v	TBA4900	GEOTECH ENGINEERING	5	30,0
2v	TBA4920	COAST MAR CIV ENG		30,0

Ex 1h = Term 1, Exam Autumn

Ex 1v = Term 2, Exam Spring

Ex 2h = Term 3, Exam Autumn

Ex 2v = Term 4, Master Thesis Spring

- 1) Select two of the courses each term.
- 2) Two-week intensive course at UNIS, Svalbard. In agreement with the supervising professor. Check date of exam. Number of participants might be restricted.
- 3) These subjects requires that the student is at UNIS the whole semester. Special agreement with professor in charge is required.
- 4) A specialization course with the associated specialization project must be chosen. Generally specialization Marine Civil Engineering should be selected.
- 5) Specialization Geotechnics is an option for those who aim to specialize in Marine Geotechnics.

cont.

- 6) Specialization project of 15 credits is a special need for students aiming at a specialization in Arctic Marine Engineering in cooperation with UNIS and who are not at NTNU during the specialization semester.
- 7) One supplementary course must be chosen so that the total load for the semester is at least 30 credits. It shall be chosen from the list or among the optional courses listed for term 1 (1h). Check dates of exam. The courses are not considered when planning the teaching and examination schedules.
- 8) A non-technical course shall be chosen. Check language of teaching and date of exam.
- 9) Master thesis must be chosen. 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.