FACULTY OF ENGINEERING SCIENCE AND TECHNOLOGY

MSC-PROGRAMME IN MARINE TECHNOLOGY (MSN1)

Term 1, 2, 3 and 4

Ex	Subject no.	Subject title	Note	Cr	Specialization						
					MS	MC	MH	ME	MO	MD	MR
		Compulsory and optional courses	1								
1h	TEP4156	VISCOUS FLOWS		7,5	-	-	v	-	-	-	-
1h	TEP4165	COMP HEAT/FLUID FLOW		7,5	-	-	-	v	-	-	-
1h	TEP4185	NATURAL GAS TECHN		7,5	-	-	-	v	-	-	-
1h	TMM4112	MACHINE ELEMENTS		7,5	-	-	-	v	-	-	-
1h	TMR4115	DESIGN METHODS		7,5	-	-	v	v	v	o	v
1h	TMR4130	RISK ANALYSIS		7,5	v	-	-	-	o	o	v
1h	TMR4137	SUST UTIL MAR RES		7,5	-	-	-	-	-	v	o
1h	TMR4190	FINITE ELEM METH		7,5	o	-	o	-	-	v	-
1h	TMR4200	FATIGUE/FRACTURE		7,5	v1	-	-	-	-	-	-
1h	TMR4215	SEA LOADS		7,5	o	o	o	-	-	-	v
1h	TMR4235	STOCK THEORY SEALOADS		7,5	v	-	v	-	-	-	-
1h	TMR4240	MARINE CONTROL SYST 1		7,5	-	o	-	v	-	-	-
1h	TMR4260	SAFE OPER/MAINTEN		7,5	-	-	-	o	o	o	v
1h	TMR4275	MOD/SIM/AN DYN SYS		7,5	-	o	v	o	v	v	v
1h	TMR4320	SIM BASED DESIGN		7,5	o	v3	o	-	-	-	-
1h	TPK4120	SAFETY/RELIA ANALYSIS		7,5	-	-	-	-	o	v	-
1h	TTK4115	LINEAR SYST THEORY		7,5	-	v3	-	-	-	-	-
1v	-	EXP IN TEAM INT PRO		7,5	o	o	o	o	o	o	o
1v	TEP4170	HEAT AND COMB TECH		7,5	-	-	-	v	-	-	-
1v	TEP4215	ENERGY UTIL		7,5	-	-	-	v	-	-	-
1v	TMR4120	UNDERWATER ENG BC		7,5	-	-	-	-	-	v	-
1v	TMR4125	SHIP BUILDING		7,5	v	-	-	-	v	v	v
1v	TMR4135	MAR DES ADV VES/MET		7,5	-	-	-	-	v	o	o
1v	TMR4140	DES MAR PROD PLANS		7,5	-	-	-	-	-	-	o
1v	TMR4170	MARINE STRUCTURES		7,5	v2	-	-	-	-	-	-
1v	TMR4182	MARINE DYNAMICS		7,5	o	o	o	-	-	-	v
1v	TMR4195	DESIGN OFFSHOR STRUC		7,5	o	-	v	-	-	-	-
1v	TMR4205	BUCKLING/COLLAPS STR		7,5	v1	-	-	-	-	-	-
1v	TMR4217	HYDRO HIGH-SPEED VEH		7,5	-	v	v	-	-	-	-
1v	TMR4220	NAVAL HYDRODYNAMICS		7,5	-	v	v	v	-	v	v
1v	TMR4222	MACH/MAINTEN		7,5	-	-	-	-	v	-	-
1v	TMR4225	MARINE OPERATIONS		7,5	v	v	v	-	v	v	-
1v	TMR4230	OCEANOGRAPHY		7,5	-	-	v	-	-	-	-
1v	TMR4243	MAR CONTR SYST II		7,5	-	o	-	-	-	-	-
1v	TMR4280	INT COMB ENGINES		7,5	-	-	-	o	v	-	-
1v	TMR4290	MAR ELECTR PROP SYST		7,5	-	v	-	o	-	v	v
1v	TMR4315	PIPE SYSTEM DESIGN		7,5	-	-	-	v	v	-	-
		Supplementary courses	1,2								
1h	BI3061	BIOL OCEAN		7,5	-	-	-	-	-	v	v
1h	TEP4185	NATURAL GAS TECHN		7,5	-	-	-	-	-	v	v
1h	TMM4112	MACHINE ELEMENTS		7,5	-	-	-	-	v	-	v
1h	TMR4200	FATIGUE/FRACTURE		7,5	-	-	v	-	v	-	-
1h	TMR4320	SIM BASED DESIGN		7,5	-	-	-	-	-	-	v
1h	TPK5100	PROJ PLAN/CONTR		7,5	-	-	-	-	-	-	v
1h	TTT4175	MARIN ACOUSTIC		7,5	-	-	-	-	-	v	v
1v	TEP4112	TURBULENT FLOWS		7,5	-	-	v	-	-	-	-
1v	TEP4220	ENERGY/ENVIRONMENT		7,5	-	-	-	-	-	-	v
1v	TMA4275	LIFETIME ANALYSIS		7,5	-	-	-	-	v	-	-
1v	TMR4120	UNDERWATER ENG BC		7,5	-	-	-	-	v	-	v
1v	TMR4220	NAVAL HYDRODYNAMICS		7,5	v	-	-	-	-	-	-
1v	TMR4230	OCEANOGRAPHY		7,5	-	v	-	-	-	-	v
1v	TMR4243	MAR CONTR SYST II		7,5	-	-	-	v	-	-	-
1v	TMR4280	INT COMB ENGINES		7,5	-	-	-	-	-	-	v
1v	TPG4200	SUBSEA PROD SYST		7,5	-	-	-	-	v	-	-
1v	TPK4110	QUAL/PERF MANAGEMENT		7,5	-	-	-	-	v	-	v
1v	TTK4135	OPTIMISATION/CONTROL		7,5	-	v	-	-	-	-	-

cont.

FACULTY OF ENGINEERING SCIENCE AND TECHNOLOGY

MSC-PROGRAMME IN MARINE TECHNOLOGY (MSN1)

Ex	Subject no.	Subject title	Note	Cr	Specialization						
					MS	MC	MH	ME	MO	MD	MR
		Specialization courses									
2h	TMR4505	MARINE STRUCTURE SC		7,5	o	-	-	-	-	-	-
2h	TMR4515	MAR CONTR SYST SC		7,5	-	o	-	-	-	-	-
2h	TMR4525	MARINE HYDRODYN SC		7,5	-	-	o	-	-	-	-
2h	TMR4535	MARINE ENGINEER SC		7,5	-	-	-	o	-	-	-
2h	TMR4555	OPERATION MAIN ENG SC		7,5	-	-	-	-	o	-	-
2h	TMR4565	MARINE SYS DESIGN SC		7,5	-	-	-	-	-	o	-
2h	TMR4575	MARINE RES/AQUA SC		7,5	-	-	-	-	-	-	o
		Specialization projects									
2h	TMR4500	MARINE STRUCTURE SP		7,5	o	-	-	-	-	-	-
2h	TMR4510	MAR CONTR SYST SP		7,5	-	o	-	-	-	-	-
2h	TMR4520	MARINE HYDRODYN SP		7,5	-	-	o	-	-	-	-
2h	TMR4530	MARINE ENGINEER SP		7,5	-	-	-	o	-	-	-
2h	TMR4550	OPERATION MAIN ENG SP		7,5	-	-	-	-	o	-	-
2h	TMR4560	MARINE SYS DESIGN SP		7,5	-	-	-	-	-	o	-
2h	TMR4570	MARINE RES/AQUA SP		7,5	-	-	-	-	-	-	o
		Supplementary courses	1,2								
2h	BI3061	BIO OCEANOGRAPHY		7,5	-	-	-	-	-	v	v
2h	TEP4156	VISCOUS FLOWS		7,5	-	-	v	-	-	-	-
2h	TEP4165	COMP HEAT/FLUID FLOW		7,5	-	-	-	v	-	-	-
2h	TEP4185	NATURAL GAS TECHN		7,5	-	-	-	v	-	v	v
2h	TEP4212	GAS CLEAN/EMISS CONTR		7,5	-	-	-	v	-	-	-
2h	TIØ4120	OP RESEARCH INTRO		7,5	-	-	-	-	v	-	v
2h	TIØ4130	OPT METHODS		7,5	-	-	-	-	-	v	-
2h	TMM4112	MACHINE ELEMENTS		7,5	-	-	-	v	v	-	-
2h	TMR4115	DESIGN METHODS		7,5	-	-	v	-	-	-	v
2h	TMR4130	RISK ANALYSIS		7,5	v	-	-	v	-	-	v
2h	TMR4137	SUST UTIL MAR RES		7,5	-	-	-	-	v	v	-
2h	TMR4190	FINITE ELEMENT METHOD		7,5	-	v	-	-	-	v	-
2h	TMR4200	FATIGUE/FRACTURE		7,5	v	-	v	-	v	v	-
2h	TMR4215	SEA LOADS		7,5	-	-	-	-	v	v	v
2h	TMR4235	STOCH THEORY SEALOAD		7,5	v	-	v	-	-	-	-
2h	TMR4260	SAFE OPER MAINT		7,5	-	-	-	-	-	-	v
2h	TMR4275	MOD/SIM/AN DYN SYS		7,5	-	-	v	-	v	v	v
2h	TMR4300	EXP/NUM HYDRODYN		7,5	-	-	v	-	-	-	-
2h	TMR4305	ADV ANALY MAR STRUCT		7,5	v	-	-	-	-	-	-
2h	TPK4160	VALUE CHAIN CONTROL		7,5	-	-	-	-	-	v	v
2h	TPK5100	PROJ PLAN/CONTR		7,5	-	-	-	-	v	v	v
2h	TTK4115	LINEAR SYST THEORY		7,5	-	v	-	v	-	-	-
2h	TTK4150	NONLINEAR CONTR SYST		7,5	-	v	-	-	-	-	-
2h	TTK4190	GUIDANCE/CONTROL		7,5	-	v	-	-	-	-	-
2h	TTT4175	MARINE ACOUSTICS		7,5	-	-	-	-	-	v	v
		Master Thesis									
2v	TMR4930	MARINE TECHNOLOGY		30,0	o	o	o	o	o	o	o

o = compulsory course
v = optional course

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

v1 - select one of the courses
v2 - compulsory course for students without equivalent background
v3 - select one of the two courses based on background

1) Courses should be selected so that the total weighting each term amounts to 30 credits (cr).
2) Supplementary courses are not considered when planning the teaching and examination schedules.

Specializations:
MS - Marine structures
MC - Marine cybernetics
MH - Marine hydrodynamics
ME - Marine engineering
MO - Marine operation and maintenance engineering
MD - Marine systems design
MR - Marine resources and aquaculture