

Semester	Study track: Ship Operations	ECTS
	Students start: Aalto	
	Prerequisite: BSc Mechanical Engineering or Naval Architecture	
1 Autumn Aalto (2020)	MEC-E1004 Principles of naval architecture, Period I-II	5
	MEC-E2001 Ship hydrodynamics, Period II	5
	MEC-E2002 Ship buoyancy and stability, Period II	5
	MEC-E2011 Ship design portfolio, Period I-V	5
	*Language studies/Scientific methodology	5
	Electives (check pre-requisites for each course):	10-15
	MEC-E2009 Marine risks and safety, Period I	(5)
	MEC-E1030 Random loads and processes, Period I	(5)
	MEC-E1020 Fluid dynamics, Period I	(5)
	MEC-E2010 Computational fluid modelling, Period I**	(5)
	MEC-E4003 Ice mechanics, Period I	(5)
	MEC-E8004 Fatigue and fracture of structures, Period I	(5)
	MEC-E8005 Thin-walled structures, Period I**	(5)
	MEC-E1050 Finite element method in solids, Period II***	(5)
MEC-E1040 Dynamics of structures, Period II	(5)	
MEC-E4004 Model-scale testing in ice, Period II**	(5)	
MEC-E2003 Passenger ships, Period II, V	(5)	
MEC-E2012 Computational marine hydrodynamics, Period II**	(5)	
2 Spring Aalto (2021)	MEC-E2004 Ship dynamics, Period IV	5 (10)
	MEC-E2005 Ship systems, Period III	5
	MEC-E2007 Ship structures and construction, Period IV	5
	MEC-E2011 Ship design portfolio, Period I-V	5
	*Language studies/Scientific methodology	5
	Electives (check pre-requisites for each course):	5-10
MEC-E8001 Finite element analysis, Period III**	(5)	
MEC-E4001 Winter navigation, Period III	(5)	
MEC-E4002 Ice Loads on structures, Period IV**	(5)	
3 Autumn DTU (2020/ 2021)	41216 Structural assessment of ships	5
	41221 Ship propulsion and manoeuvring	10
	41222 Wave loads on ships and offshore structures	5
	41275 Ship operations	5
	- Ship operations project work	5
4 Spring DTU (2021/2)	Master Thesis, DTU	30

* Courses “Kie-98.1500 Thesis writing”, “Kie-98.1503 Conference talk”, “Kie-98.1700 Integrated course in English” should be taken either during the autumn or spring semester.

** Prerequisites must be checked based on earlier studies.

5 August 2020

Note: Modifications and corrections to this table may be issued without prior notice.