

	Study track: Ship Design	
	Students start: Aalto	
Semester	Prerequisite: BSc Mechanical Engineering or Naval Architecture	ECTS
1 Autumn Aalto (2019)	MEC-E1003 Principles of Naval Architecture, Period I-II	5
	MEC-E1001 Mechanical engineering in society, Period I-II	5
	MEC-E1002 Mechanical engineering project (Mar. tech. track), P. I-IV	5
	MEC-E2001 Ship hydrodynamics, Period II	5
	MEC-E2002 Ship buoyancy and stability, Period II	5
	*Language studies/Scientific methodology	
	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)
	Kul-24.4710 Analysis of large complex structures, Period II**	(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	(5)	
MEC-E2012 Computational marine hydrodynamics, Period II**	(5)	
2 Spring Aalto (2020)	MEC-E1002 Mechanical engineering project (Mar. tech. track), P. I-IV	5 (10)
	MEC-E2004 Ship dynamics, Period III	5
	MEC-E2007 Ship structures and construction, Period IV	5
	MEC-E2005 Ship systems, Period IV	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 Chalmers (2019/ 2020)	MMA151 Marine design project	15
	TME260 Fatigue and fractures	7.5
	Electives (choose one):	7.5
	IBB136 Project management	(7.5)
	MTT100 Mechanical performance of engineering materials	(7.5)
MTF072 Computational fluid dynamics	(7.5)	
4 Spring Chalmers (2020/1)	Master Thesis, Chalmers	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 2019

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