

Master of Marine Engineering

1 Duration of program

Except with the permission of the Faculty, the Master of Marine Engineering shall be completed in a minimum of three semesters or a maximum of twelve semesters.

2 Admission

2.1 Except as provided for in 2.2 below, an applicant for admission to the program of study for the Master of Marine Engineering shall:

a have qualified for a four-year degree with Honours in a relevant engineering discipline from the University of Adelaide, or a degree from another institution accepted for the purpose by the Faculty as equivalent

or

b have qualified for a four-year degree in a relevant engineering discipline of the University of Adelaide or a degree of another institution accepted for the purpose by the Faculty as equivalent, and have not less than two years full-time (or part-time equivalent) work experience in a relevant field

or

c have qualified for a Graduate Diploma in Marine Engineering.

2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Master of Marine Engineering, a person who does not qualify for admission under rule 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

2.3 Status, exemption and credit transfer

A candidate may not present for credit towards the degree any course which has been presented for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course. Such a candidate will be required to undertake an alternative course as approved by the Faculty.

A candidate who has passed courses in this or other educational institutions and who has not presented these courses towards an award may, on written application to the Faculty, be granted such exemption from the requirements of these Rules as the Faculty shall determine. Subject to the conditions specified in Clause 4.1 (c), status may be granted for a maximum of 9 units under Clause 4.2 of the Academic Program Rules.

2.4 Articulation with other awards

2.4.1 A candidate who has been enrolled for the Graduate Certificate or Graduate Diploma in Marine Engineering at the University of Adelaide and who has not been awarded the Graduate Certificate or Graduate Diploma shall, on written application, be permitted to transfer all equivalent courses towards the Masters degree.

2.4.2 A candidate who holds the Graduate Certificate or Graduate Diploma in Marine Engineering from the University of Adelaide shall surrender the Graduate Certificate or Graduate Diploma before being awarded the Masters degree.

3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Master Marine Engineering: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. Courses passed with a Conceded Pass classification may not be counted towards the requirements for the degree of Master of Marine Engineering.

3.2 A candidate shall not be eligible to attend for examination unless any prescribed coursework has been completed to the satisfaction of the teaching staff concerned.

3.3 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.

3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.

3.5 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Faculty fails to attend all or part of the assessment, shall be deemed to have failed that course.

4 Qualification requirements

4.1 To qualify for the Master of Marine Engineering, a candidate shall satisfactorily complete courses to the value of 36 units including:

a core courses to the value of 9 units from 4.2.1 (a) or (b)

b elective courses to the value of 27 units from 4.2.2 and 4.2.3. No more than 9 units of courses denoted with an asterisk may be presented

c at least 21 units of study must be taken from courses taught by the University of Adelaide.

4.2 Academic program

4.2.1 Core Courses

a Submarine

University of Adelaide

MECH ENG 7042 Introduction to Submarine Design	3
MECH ENG 7046 Submarine Design.....	3
University of South Australia	
Systems Engineering for Complex Problem Solving	3
<i>or</i>	
TECH COMM 5013 Systems Engineering I+	3
*(Only with the permission of the Faculty—Non-ASC students only)	

b Naval Ships

University of Adelaide	
MECH ENG 7048 Introduction to Naval Ship Design.....	3
MECH ENG 7065 Naval Ship Engineering.....	3
University of South Australia	
Systems Engineering for Complex Problem Solving	3
<i>or</i>	
TECH COMM 5013 Systems Engineering I+	3
*(Only with the permission of the Faculty—Non-ASC students only)	

4.2.2 Elective courses

University of Adelaide

CHEM ENG 7047 Composites and Multiphase Polymers	3
COMP SCI 7076 Distributed Systems	3
ELEC ENG 7015 Adaptive Signal Processing	3
ELEC ENG 7017 Beamforming and Array Processing.....	3
ELEC ENG 7033 Principles of RF Engineering	3
ELEC ENG 7046 Power Quality & Fault Diagnosis.....	3
ELEC ENG 7048 Principles of Control Systems.....	3
ELEC ENG 7049 Power Electronics Systems.....	3
ELEC ENG 7054 Detection, Estimation and Classification.....	3
ELEC ENG 7055 Antennas and Propagation.....	3
ELEC ENG 7065 Sonar Sensors & Systems.....	3
ELEC ENG 7069 Electrical Energy Systems.....	3
MECH ENG 7020 Materials Selection & Failure Analysis	3
MECH ENG 7023 Fracture Mechanics	3
MECH ENG 7025 Topics in Welded Structures	3
MECH ENG 7026 Advanced Topics in Fluid Mechanics	3
MECH ENG 7027 Engineering Acoustics.....	3
MECH ENG 7029 Air Conditioning.....	3
MECH ENG 7030 Advanced Vibrations	3
MECH ENG 7034 Advanced Digital Control.....	3
MECH ENG 7043 Stresses in Plates and Shells.....	3
MECH ENG 7045 CFD for Engineering Applications	3
MECH ENG 7047 Dynamics and Control	3
MECH ENG 7059 Finite Element Analysis of Structures	3
MECH ENG 7061 Corrosion: Principles and Prevention	3
ELEC ENG 7023 Satellite Communications	3
MECH ENG 7072 Special Studies in Marine Engineering	3
MECH ENG 7049 Marine Engineering Research Project A&B.....	12
APP MTH 7075 Fluid Mechanics III* ..	3
TECHCOMM 5021 Applied Project Management I**	3
TECHCOMM 7024 Complex Project Management 1*	3
TECHCOMM 7029 Systems Engineering II*	3
TECHCOMM 7030 Logistics and Supply Chain Management*	3

4.2.3 Other approved elective courses

ACA

Coatings Engineering*	3
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Australian Maritime College

Design of Marine Machinery Systems.....3

Curtin University

Physical and Acoustical Oceanography3

Marine Acoustics.....3

RMIT

Risk and Technology Decisions*#3

UniSA

Electromagnetic Compatibility.....3

Military Systems—Operational and Technological Integration*3

Requirements Engineering*3

Principles of Test Evaluation N*3

*Students may present no more than 9 units of courses denoted with an asterisk

*Students can undertake one of either Applied Project Management I or Risk and Technology Decisions

4.2.4 The availability of courses is conditional on the availability of staff and facilities and sufficient enrolments.

4.3 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Attributes

Postgraduate Programs in Marine Engineering

- Knowledge and understanding of the content and techniques of Marine Engineering at advanced levels that are internationally recognised
- The ability to locate, analyse, evaluate and synthesise information from a wide variety of sources in a planned and timely manner
- An ability to apply effective, creative and innovative solutions, both independently and cooperatively, to current and future problems
- Skills of a high order in interpersonal understanding, teamwork and communication
- A proficiency in the appropriate use of contemporary technologies
- A commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life
- A commitment to the highest standards of professional endeavour and the ability to take a leadership role in the community
- An awareness of ethical, social and cultural issues and their importance in the exercise of professional skills and responsibilities.