

FACULTY OF ENGINEERING

DEPARTMENT OF NAVAL ARCHITECTURE, OCEAN AND MARINE ENGINEERING

SHIP AND OFFSHORE TECHNOLOGY

Master of Science in Ship and Offshore Technology

These regulations are to be read in conjunction with [General Academic Regulations - Postgraduate Taught Degree Programme Level](#).

ECTS = European Credit Transfer System

SCQF = Scottish Credit and Qualification Framework

1. The programme is offered jointly between the University of Strathclyde and Hamburg University of Technology, and the awards are made in the name of the two Universities. Students shall be subject to the programme regulations that have been adopted by both Universities and to any other General Regulations, etc. of the University at which they are studying.

Admission

2. Candidates will be admitted in the first instance to the MSc, and shall normally possess a bachelors degree or equivalent, at the equivalent of 2nd upper class level, in a marine or marine-related engineering subject.
3. In particular, candidates shall have sufficient knowledge on structural mechanics, hydrostatics, fluid dynamics, ship resistance and propulsion, ship design, etc.
4. Candidates shall be required to demonstrate an appropriate level of competence in the English language.

Duration of Study

5. The normal duration of study for the degree of MSc by full-time study will be 2 years (4 semesters).

Place of Study

6. The programme will be taught at the University of Strathclyde in the first year, and Hamburg University of Technology for the second year.

Mode of Study

7. The programme is available by full-time study only.

Curriculum

8. **First Year** - All students shall spend the first year at the University of Strathclyde and undertake modules amounting to no fewer than 120 credits (60 ECTS, European Credit Transfer System) as follows:

Compulsory Modules

| Module Code | Module Title | Level | Credits (UoS/ECTS) |
|-------------|--------------------------|-------|--------------------|
| NM958 | Risers and Mooring Lines | 5 | 10/5 |
| NM966 | Marine Pipelines | 5 | 10/5 |

| | | | |
|-------|---|---|-------|
| NM959 | Dynamics of Floating Offshore Inst. | 5 | 10/5 |
| NM950 | Maritime Safety and Risk | 5 | 10/5 |
| NM960 | Finite Element Analysis of Floating Structures | 5 | 10/5 |
| NM961 | Design and Construction of FPSOs | 5 | 10/5 |
| NM963 | Theory and Practice of Marine CFD | 5 | 10/5 |
| NM842 | Offshore Structural Integrity | 5 | 10/5 |
| NM983 | MSc Group Project – NAME (Ship and Offshore Technology) | 5 | 20/10 |
| NM982 | Research Project – Ship and Offshore Technology | 5 | 20/10 |

Students may be permitted to substitute one approved module from other postgraduate modules offered, including modern languages, subject to approval by the Programme Leader at University of Strathclyde or the Examination Board at Hamburg University of Technology.

Optional Modules

Between First and Second Year, (optional, no credits): Intensive German language course.

9. **Second Year** - Students shall spend their second year at Hamburg University of Technology and undertake modules amounting to no fewer than 60 ECTS (120 credits) as follows:

Compulsory Modules

| Module Code | Module Title | Level | Credits (UoS/ECTS) |
|--------------------|--|--------------|---------------------------|
| NM811 | Structural Analysis of Ships & Offshore Structures | 5 | 12/6 |
| NM810 | Ship Design | 5 | 12/6 |
| NM815 | Ship Vibration | 5 | 12/6 |
| NM989 | Master Thesis | 5 | 60/30 |

Optional Modules

No fewer than 24 credits (12 ECTS) chosen from:

| Module Code | Module Title | Level | Credits |
|--------------------|---|--------------|----------------|
| NM809 | Nonlinear Structural Analysis | 5 | 12/6 |
| NM812 | Fatigue Strength of Ships and Offshore Structures | 5 | 12/6 |

| | | | |
|-------|---|---|------|
| NM808 | Innovative CFD Approaches | 5 | 12/6 |
| NM807 | Arctic Technology | 5 | 12/6 |
| NM813 | Manoeuvrability and Shallow Water Ship Hydrodynamics | 5 | 12/6 |
| NM814 | Sea-keeping of Ships and Laboratory On Naval Architecture | 5 | 12/6 |

With the approval of the Programme Leader, students may be permitted to substitute one approved module from other postgraduate programmes offered.

Examination, Progress and Final Assessment

10. For the degree award of MSc, candidates are required to pass all module examinations and to perform to the satisfaction of the Board of Examiners in the coursework and in the Master Thesis.
11. In order to progress to the second year of the programme, a student must normally have accumulated no fewer than 120 credits from the agreed curriculum in the first year.
12. Candidates who fail to satisfy the Board of Examiners in any taught module shall, at the discretion of the Board of Examiners, be permitted one further attempt to pass the relevant module(s) at the earliest opportunity and no longer than two years after the initial attempt, the number of attempts permitted depending on the regulations at the University of Strathclyde or Hamburg University of Technology, respectively.
13. The final assessment and degree award will be based the results of the first attempt in the examinations, coursework and the Master Thesis. The results of resits are used for accumulation of credits only.

Award

14. **Degree of MSc:** In order to qualify for the award of the joint degree of MSc in Ship and Offshore Technology, a candidate must have performed to the satisfaction of the Board of Examiners and must have accumulated no fewer than 120 SCQF credits (60 ECTS) at the University of Strathclyde and 60 ECTS (120 SCQF credits) at the University of Hamburg, of which 30 ECTS (60 SCQF credits) must have been awarded in respect the Master thesis NM 989.

Transfer

15. Students who do not perform at MSc level may be considered for a Postgraduate Diploma or a Postgraduate Certificate in Ship and Offshore Technology, to be awarded by the University of Strathclyde only.