GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2025-2026

Ships and Marine Industry (E055550)

Course size *(nominal values; actual values may depend on programme)*

Credits 6.0 **Study time 180 h**

Course offerings in academic year 2026-2027

A (Year)	English	Gent
B (Year)	Dutch	Gent

Lecturers in academic year 2026-2027

Lataire, Evert	TW15	lecturer-in-charge

Offered in the following programmes in 2026-2027	**crdts**	**offering**
Master of Science in Electromechanical Engineering(main subject Maritime Engineering)	6	B
Master of Science in Engineering: Ships and Marine Technology	6	B
Master of Science in Engineering: Ships and Marine Technology	6	A

Teaching languages

English, Dutch

Keywords

Ships, shipping industry, offshore industry, maritime logistics, ship owners, offshore renewables

Position of the course

Key players of the Belgian and neighbouring shipping and marine industry give a general introduction to their organisation and explain a specific engineering topic in more detail.

Contents

The experienced speakers from the industry, research or government will show the students a deeper insight into:

- Peculiarities of the design and new building of Gas Carriers. Details on the insulation as well as on the new building.
- Impact of shipping and maritime logistics and the daily operations of a ship owner
- Specific peculiarities of the construction of dredging vessels, more specifically hoper dredgers.
- The layout of a modern shipyard and how a shipyards organizes it work starting from design to delivering of the vessel.
- Impact of how internation regulations (IMO) as well as national (Belgium) or regional (Flanders) regulations have an impact on ship design
- Details on the mooring systems of floating structures
- Use of full mission bridge simulators for the design of inland waterways.
- Explanation on how experimental facilities like a towing tank are run, including site visit.
- The use of glass as a load bearing component on board of a mega yacht.

Initial competences

- OR Introduction to Ships and Marine Technology
- OR Marine Hydrostatics and Stability, Ship Resistance and Propulsion and Ship Manoeuvring and Seakeeping Behaviour of Floating Structures

Final competences

1 Gain insight into the local (Belgium and neighbouring countries) ships and marine industry.
2 Understanding how shipping companies are run and have some insight on their point of view
3 Distinguish the different responsibilities of different stakeholders within the industry (Flagstate, ship owner, freighter,...)
4 Get acquinted with some peculiarties of specific ship types like dredging vessels and container carriers

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Lecture

Study material

None

References

Course content-related study coaching

Assessment moments

end-of-term assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment

Examination methods in case of periodic assessment during the second examination period

Written assessment

Examination methods in case of permanent assessment

Possibilities of retake in case of permanent assessment

not applicable

Calculation of the examination mark