

Learning Unit: IMM0704 – Human Factors in Shipping

Semester	Frequency	Duration	Type	ECTS points	Student workload
3	Semesterly	1 Sem.	Elective	6	150 hours, comprising contact hours: 6 h self study: 144 h

Prerequisites for participation	Utility	Examination type and duration (Prerequisite for transferal of ECTS)	Teaching and learning methods	Unit coordinator
-	M.Sc. IMM	Course achievement (Studienleistung): computer test; Examination (Prüfungsleistung): home assignment	Course book, self study, discussion in bulletin board	Dr. Benjamin P. Brooks

Learning objectives

Upon completion of this learning unit, students are able to ...

- identify human factors issues in the marine environment and assess an appropriate response.
- complete a task analysis for a complex task.
- examine a marine accident and disseminate the causes using a theoretical model of accident causation.
- identify a human factors issue in the shipping industry, explore the scope of the problem from the perspective of the socio-technical system that shipping occurs within and devise a solution.

Unit contents

- Introduction to Human Factors
- History of Human Factors in the maritime world
- Accident Investigation
- Beyond Accident Investigation – Engineering resilience
- The Individual Part 1 – Physiology, Anthropometry and Cognition
- The Individual Part 2 – Error, Stress and Performance
- The Team – Teamwork, Leadership, Communication & Shared Mental Models
- The Organisation Part 1 – Organisational and Safety Culture.
- The Organisation Part 2 – Risk Management & Safety Management Systems

Lectures

Lecturer(s)	Name of learning unit	Weekly lessons
Dr. Benjamin P. Brooks	Human Factors in Shipping	-