Faculty of Technology

ENGLISH lectures & projects
Academic Year 2025/26
Subject to change/Status: April 2025

MECHANICAL ENGINEERING **(required language level B1)** **BACHELOR LEVEL**	**Description**	**Lecturer**	**CP / ECTS**	**Term (Semester)**
LECTURE: **Soft Skills**	Communicating and presenting basics of communication psychology, leading conversations and negotiations, leading teams and working groups (including motivations and tools, meeting management, creativity in teams, discussion situations, mastering appraisal interviews, leadership role, task and instruments, skills, learning and implementing conversation.	Mr Schmidt	5	fall
LECTURE: **Quality Management & Quality Assurance**	Introduction to quality management; QM philosophies; QM standards: general QM methods and tools; problem solving tools; management tools; quality costs; quality and law. Basics of statistics; acceptance sampling inspection; capability studies and characteristics; control charts; CAQ; supplier selection and evaluation; quality costs.	Mrs Blattmeier	5	fall
LECTURE: **Logistic & Supply Chain Management**	Knowledge of the role and activities of supply chain and logistics management as key elements for the successful management of companies; understanding the importance of customer thoughts in the entire chain; understanding of entire value-added networks, their planning and control techniques; understanding of the many instruments for analysis and problem solving in logistics chains.	Mr Schleuter	5	fall
LECTURE: **Int. Project Management**	Fundamentals of Project Management, Work Breakdown Structures, Project Scheduling and Budgeting, Earned Value Method, Risk Analysis in Projects, Project Organisations, Project Closure and Audit, PCSimulation	Mr. Passenheim	5	fall
SEMINAR: Digital Marketing **Prerequisites:Sufficient knowledge of English and basic knowledge of marketing is required**	International marketing activities are explored; international market research, strategic issues, international marketing mix; additional aspects such as generic internationalization strategies, methods of evaluating and selecting countries as target markets, and market entry modes extend the scope of contents to entirely new fields; exercises and case studies are used to apply learned contents to real-life scenarios.	Mr. Hummels	5	fall
LECTURE: **Advanced Project Management for Engineers**	Master level (available upon request)	Mr Haja	5	fall

SUSTAINABLE ENERGY SYSTEMS **Interdisciplinary programme from departments of MECHANICAL ENGINEERING and NATURAL SCIENCES BACHELOR LEVEL** **(required language level B2)**	**Description**	**Lecturer**	**CP / ECTS**	**Term (Semester)**
LECTURE: **Intoduction to modelling and simulation**	Types of numerical models, scientific computing, programming of simple models in Matlab.	Mr Herráez	5	fall
LECTURE: **Simulation of energy systems** **Prerequisites: basic knowledge of programming. Only open to limited no. of students**	Modelling, simulation and analisys of local energy systems with producers, consumers and prosumers	Ms Pechmann	5	fall
LECTURE: **Energy storage**, **only open to limited no. of students**	Storage of thermal, chemical, electrical and kinetic energy, as well as potential energy. Fuel cell and hydrogen storage.	Mr Illing	5	fall
LECTURE: **Wind turbines**	Design of wind turbines and wind farms, aerodynamics, structural dynamics, wind ressource and site assesment.**Knowledge of fluid dynamics needed.**	Mr. Herráez	5	spring
PROJECT: **Wind challenge**	Design and production of a small wind turbine in cooperation with a group of students from different backgrounds for participating in an international wind energy contest.	Mr. Herráez	2	fall and spring
LECTURE: **Solar Thermal Energy**	Solar resource, design of solar thermal systems, performance analysis. **Knowledge of thermodynamics needed.**	Mr Herráez	2,5	spring
LECTURE: **Photovoltaics**	Physical principles of the use of photovoltaic energy, components of photovoltaic installations, design of photovoltaics systems. **Basic knowledge of electrotechnics needed.**	Mr. Herráez	2,5	spring
LECTURE: **Sustainable Production** **Prerequisites: Basic knowledge of programming. Only open for limited no. of students**	Globalization and climate change, production systems and production management systems, requirements for sustainable production	Mrs Pechmann	5	spring
LECTURE: **Thermal Power Plants**	Types of Thermal Power Plants, heat sources, power machines, efficiency, emissions, power density	Mr. Jakiel	5	spring
LECTURE: **Energy Process Technology**	Optimization of energy-relevant process, analysis of thermodynamics, chemical and biological aspects	Mr Paul	5	spring
LECTURE: **Process modelling and energy optimization**	Modeling of chemical and environmental processes, commercial process simulators, development and optimization of energy processes	Mr Steinigeweg	4	spring
LECTURE: **Sustainable energy generation**	Energy supply chains and their technical, enviromental and economic dimensions	Mr. Paul	2	spring
LECTURE: **Laboratory Course Solar Energy**	The theory of the lectures Solar Thermal Energy and Photovoltaics will be applied to perform and evaluate different experiments in the field of solar energy.	Mr Herráez	2	spring

PROJECT: **Technical Project**	**Technical Project (wide range of topics possible).**	**Mr Herráez and others**	**5**	**fall and spring**
PROJECT: **Sustainable energy project**	**Technical Project (focus on sustainable energy).**	**Mr Herráez and others**	**7**	**fall and spring**

INDUSTRIAL INFORMATICS (required language level B2) MASTER LEVEL	MASTER LEVEL Description	Lecturer	CP / ECTS	Term
PROJECT : Digitalization with Industry 4.0	Project description will follow soon/only 1 project per semester is possible	Mr Colombo	10	fall and spring
PROJECT: Industrial Internet of Things	Project description will follow soon/only 1 project per semester is possible	Mr Colombo	10	fall and spring
PROJECT: Artifical Intelligence and Digitalization	Project description will follow soon/only 1 project per semester is possible	Mr Colombo	10	fall and spring
LECTURE/LAB: Blockchain and the XRP Ledger	The ultimate goal of the course is to carry out a project in the field of "Web3"/Finternet.You can actively shape the project's topic yourself. Here is a brief overview of the key topics we will cover at the beginning: •Fundamentals of Blockchain and Crypto: oThe basics of cryptocurrencies, blockchain technology, and Web3. Covers topics such as blockchain, transactions, smart contracts, and current trends like NFTs and gaming. •Introduction to XRPL: oThe XRP Ledger, its history, functionality, and key features. •XRPL and DeFi: oTopics related to decentralized finance (DeFi) on the XRPL, including auto-bridging, pathfinding, and liquidity pools. •Programming with XRPL and JavaScript: oHow to program on the XRPL using JavaScript, set up accounts, send XRP, and create trustlines. •Development with XRPL and React.js: oUsing React.js to interact with the XRPL, including account creation and XRP transactions. For more information, visit the XRPL Learning Portal: https://learn.xrpl.org/	Mr. Veltink	5	fall term

NATURAL SCIENCES (required language level B2) MASTER LEVEL Master of 'Applied Life Sciences' and Master of Technology of Circular Economy	MASTER LEVEL Description	Lecturer	CP / ECTS	Term
LECTURE: Recovery of Recyclable Materials	The students learn about processes for recovering valuable materials from industrial and other material streams as well as the application and optimization of these processes.In the form of a project, the students deepen what they have learned using an example process.	Mr. Hüppmeier	6	fall
LECTURE: Water Reuse	Module description will follow soon	Mr. Illing	6	fall
LECTURE: Site Remediation	Students receive information about typical chemical contamination of soil at industrial contaminated sites (e.g. PAHs, heavy metals, mineral oils). Soil samples are taken from former industrial sites, analyzed and evaluated	Mr. Walker	6	fall
LECTURE: Energies and Materials in Biotechnology	Students receive information about biotechnological process with focus on the used material and energy sources. Projects and/or practical work with yeast and bacteria will be done in a lab environment.	Mr. de Vries	6	fall
LECTURE: Solid Waste and Recycling	Module description will follow soon	Mr. Habermann	6	spring
LECTURE + LAB: Biopolymers	The module consists of a lecture and a lab course. Students will learn to prepare, process and analyse biopolymers and understand their role in polymer industry.	Mr. Rüsch gen. Klaas	6	spring
LECTURE: Biodegradability and Environmental Impact Limited number of participants: max. 2 students	The module consists of a lecture on "Evnironmental Assessments" (EIA, EA, ESIA) and Environmental Ethics and a seminar in which independent topics on teh biodegradability of various "components" are developed and presented.	Mrs. Gallert	6	spring
LECTURE Introduction to Circular Economy	Module description will follow soon	Mr. Steinigeweg	6	spring
PROJECT: Circular Economy Project	Students are working in small groups on an interdisciplinary project in the field of Circular Economy Technology.	all lecturers	6	spring
LECTURE: **Soft skills**	Module description will follow soon	all lecturers	5	fall and spring
LECTURE: **Soil Remediation**	Module description will follow soon	Mr Walker	5	fall
LECTURE: **Modelling and Simulation**	Introduction to the fields of scientific computing, modelling and simulation, programming with Matlab/Octave, implementation of numerical models from the fields of natural sciences and technology.	Mr. Herráez	5	spring

BUSINESS STUDIES (required language level B2) **BACHELOR LEVEL**	Lecturer	CP / ECTS	Term (Semester)
LECTURE: **ERP – Systems** (Enterprise-50:60Resource-Planning Systems e.g. SAP)*	Mr Ihnen	5	fall
LECTURE: **International Management for SMEs***	Ms Alvares-Wegner	5	fall
SEMINAR: **Digital Marketing*** **Prerequisites:Sufficient knowledge of English and basic knowledge of marketing is required**	Mr Hummels	5	fall
LECTURE: **International Project Management***	Mr. Passenheim	5	fall
BLOCK SEMINAR: **Green Economy & Digital Innovation**	Mr. Bruns	5	fall
LECTURE: **Financial Instrument Accouting**	Mr. Henkel	5	fall
LECTURE: **Logistics and Supply Chain Managemen**	Mr. Wessels	5	fall
LECTURE: **International Business Communications**	nn	5	fall
LECTURE: **Communication & Presentation Skills***	Ms Alvares- Wegner	5	spring
BLOCK SEMINAR: **Sustainability Management***	Mrs Wolf	5	spring
LECTURE: **Crisis Management in International Mergers and Acquisitions*** **Prerequisites: Sufficient knowledge of English and good basis in general management theory required**	Ms Alvares-Wegner	5	spring
LECTURE: **International Marketing**	Mr. Hummels	5	spring
LECTURE: **Production and Logistics**	Mr. Schleuter	5	spring
LECTURE: **Innovation and Service Management**	nn	5	spring
LECTURE: **Management Control Systems (Master)**	Mr. Wilken	5	spring
LECTURE: **International Human Ressource Management*** **Prerequisites: sufficient knowledge of English; good written and oral communication skills and basic knowledge of management required**	Ms Alvares-Wegner	5	spring

* **Please check language and knowledge prerequisites for the *marked business lectures in cooperation with the Faculty of Business Studies here:** https://www.hs-emden-leer.de/en/faculties/wirtschaft/studies/international-faculty-office-for-business-studies/english-programme/

Faculty of Social Work and Health

ENGLISH lectures & projects
Academic Year 2025/26

SOCIAL WORK (required language level B2) BACHELOR LEVEL	Description	Lecturer	CP / ECTS	Term (Semester)
LECTURE: Pros and Cons of a foster care system with non-professionals or lay persons	The workshop will start with an input about the legal context of the youth care system in Germany. We will take a closer look on fostering as substantial part of the social services for child protection. We will examine the (dis-) advantages of foster care by non-professionals and reflect the support possibilities on the part of the social work professionals.	Mrs. Mejia	3	spring
LECTURE: **Genorgram & Co - visual methods of case understanding in counselling and support of families**	Visual methods support the development of an appreciative working relationship in the context of clarify-ing the assignment and action planning in the area of family counselling and socio-educational family sup-port. They support the conduct of conversations in direct contact with adults and children and clarify and appreciate the roles and functions of clients within their families.	Mrs Henn	2	spring
LECTURE: **Press and Public Relations in Social , Education and Health Sectors** (onlinr)	Press and publish relations work is an important element in order to be visible as a social institution and to be perceived with one`s own profile. The course provides basic knowledge of effective public relations in the social sector. This seminar will be offered online.	Mrs. Segebade-Mittmann	2	spring
LECTURE: **International Compact Week**	You have the opportunity either to participate in the IUW 2025 or in another international week either in emden or outside Germany	Mrs. Hübner	3	spring
LECTURE / PROJECT: **Project development and practice**	Short introduction into the system of social services in Germany. Short introduction into project management. Weekly practice day in a social service. If applicable: Development and implementation of a project offered in the social service.	Mr. Bunk	4	spring
LECTURE: **Potential traumatic life events and health across the life course**	Potential traumatic life events (PTE) have an impact on (mental) health. The specific aims of this course are: 1) to define potentially traumatic life events and get to know ways of describing PTEs; 2) identify the impact of PTEs on different population groups and identify vulnera-ble groups; 3) recognize and iden-tify trajectories of health impacts; 4) get to know inter-vention models to mit-igate the impact of traumatic life events on health of the popu-lation in general and on health of vulnera-ble groups.	Mrs. Jutta Lindert	2	spring

LECTURE: **Creative Writing in Social and Educational Work**	**„Fiction gives us empathy: it puts us inside the minds of other people, gives us the gifts of see-ing the world through their eyes. Fiction is a lie that tells us true things, over and over“, said Neil Gaiman and explains at the same time why creative writing is a good companion if you work in a so-cial institution (and if you want to do something good for yourself). You will learn on a practice-based method how writing works and how and why writing can be used in social work. The course is offered online.**	**Mrs. Segebade-Mittmann**	**2**	**spring**
LECTURE: **Conversational Skills and Counselling Techniques**	**This course is an introduction to basic principles of counselling practice. You will learn to develop a repertoire of key counselling skills and qualities, such as active listening, empathy, genuineness and acceptance. First counselling sessions will be trained and reflected in small groups.**	**Mrs Henn**	**2**	**spring**
LECTURE: **German Language Course**	**German language courses incl. Grammar | Level: Beginner and Advanced level**	**N.N. (IO)**	**5**	**spring**

Faculty of Maritime Sciences (location: Leer)

ENGLISH lectures **& projects**

Academic Year 2025/26

MARITIME SCIENCES (required language level B2) BACHELOR LEVEL	Study course	Lecturer	CP / ECTS	Term (Semester)
LECTURE: **Basics of Nautical Science: Part 1 (Professional Practice), Part 2 (Maritime Project), Part 3 (Public Shipping Law)**	Nautical Science and Maritime Transport (NSMT)	Ms Beelmann/Mr Vahs/Ms Woltron	10	spring
LECTURE: **Mathematics 1 (Linear Algebra)**	Nautical Science and Maritime Transport (NSMT)	Mr Bentin	5	spring
LECTURE: **Physics**	Nautical Science and Maritime Transport (NSMT)	Mr. Meyer	5	spring
LECTURE: **Navigation 1 (Classical Navigation)**	Nautical Science and Maritime Transport (NSMT)	Ms Knoop	5	spring
LECTURE: **Meteorology**	Nautical Science and Maritime Transport (NSMT)	Mr Göken	5	spring
LECTURE: **Ship Theory**	Nautical Science and Maritime Transport (NSMT)	Mr. Plawenn - Salwini	5	spring
LECTURE: **System Monitoring**	Nautical Science and Maritime Transport (NSMT)	Mr Meyer	5	spring
LECTURE: **Computer Science**	Nautical Science and Maritime Transport (NSMT)	Mr. Ostrowitzki	5	spring
LECTURE: **Business Administration**	Nautical Science and Maritime Transport (NSMT)	Mr Heilmann	5	spring
LECTURE: **Mathematics 2 (Analysis)**	Nautical Science and Maritime Transport (NSMT)	Mr Bentin	5	spring
LECTURE: **Navigation 2 (I) Techn. Navigation 1 + Radar Technology***	Nautical Science and Maritime Transport (NSMT)	Ms Knoop/Mr. Plawenn-Salvini	5	fall
LECTURE: **Watchkeeping***	Nautical Science and Maritime Transport (NSMT)	Mr. Tomaschek	5	fall
LECTURE: **Human Resource Management**	Nautical Science and Maritime Transport (NSMT)	Ms Beelmann	5	fall
LECTURE: **Maritime English**	Nautical Science and Maritime Transport (NSMT)	Ms. Walden	5	fall
LECTURE: **Medical Care**	Nautical Science and Maritime Transport (NSMT)	Ms Winther	5	fall
LECTURE: **Navigation 2 (II) Astro Navigation + Techn. Nav. 2 + ECDIS***	Nautical Science and Maritime Transport (NSMT)	Ms Knoop/Mr. Plawenn-Salvini	10	spring
LECTURE: **Astronomical Navigation***	Nautical Science and Maritime Transport (NSMT)	Mr. Plawenn - Salwini	5	spring
LECTURE: **Dangerous Goods***	Nautical Science and Maritime Transport (NSMT)	Mr. Kreutzer	5	spring

LECTURE: **Cargo Operations/Loading Technology***	**Nautical Science and Maritime Transport (NSMT)**	**Mr. Plawenn - Salwini**	**5**	**spring**
LECTURE: **Energy Efficient Maritime Handling**	**Nautical Science and Maritime Transport (NSMT)**	**Mr. Vahs**	**5**	**spring**
LECTURE: **GMDSS***	**Nautical Science and Maritime Transport (NSMT)**	**Ms Woltron**	**6**	**fall**
LECTURE: **Manoeuvring ***	**Nautical Science and Maritime Transport (NSMT)**	**Mr. Vahs**	**5**	**fall**
LECTURE: **Emergency Management ***	**Nautical Science and Maritime Transport (NSMT)**	**Ms Woltron**	**7**	**fall**
LECTURE: **Cargo Care ***	**Nautical Science and Maritime Transport (NSMT)**	**Mr. Kreutzer**	**5**	**fall**
*Prerequisite: 6 months on board training prior to exchange semester				

Faculty of Maritime Sciences (location: Leer)

ENGLISH lectures **& projects**

Academic Year 2025/26

MARITIME SCIENCES (required language level B2) **BACHELOR LEVEL**	Study course	Lecturer	CP / ECTS	Term (Semester)
LECTURE: **Ship Steel Design and Strength Calculations**	Martime Technology and Shipping Management (MTSM)	Mr. Bentin	5	spring term
LECTURE: **Ship Design**	Martime Technology and Shipping Management (MTSM)	Mr. bentin	5	spring term
LECTURE: **Business Communication**	Martime Technology and Shipping Management (MTSM)	Ms Walden	5	fall term
LECTURE: **Ocean and Hydraulic Engineering**	Martime Technology and Shipping Management (MTSM)	Mr. Strybny	5	fall term
LECTURE: **Applied Finite Elements**	Martime Technology and Shipping Management (MTSM)	Mr. Bentin	5	fall term
LECTURE: **Applied Ship Hydrodynamics**	Martime Technology and Shipping Management (MTSM)	Mr. Bentin	5	fall term
LECTURE:**Strategic Shipping Company Management**	Martime Technology and Shipping Management (MTSM)	Mr. Heilmann	5	fall term

Courses open for Students of ALL FACULTIES

ENGLISH lectures **& projects**

Academic Year 2025/26

	Course Description	Lecturer	CP / ECTS	Term (Semester)
LECTURE: International Management of Small and Medium-Sized Companies	course description will follow soon	Mrs Alvares-Wegner	5	fall term
LECTURE: Managing Across Cultures	course description will follow soon	Mrs Alvares-Wegner	5	fall term
LECTURES: International Business Communication	course description will follow soon	Mrs Alvares-Wegner	5	fall term
LECTURE: Crisis Management	course description will follow soon	Mrs Alvares-Wegner	5	fall term
ONLINE LECTURE: Our World Our Future	The course consists of: the function and understanding of our world; the impact on environment due to humans; the main problems: climate change and biodiversity; human behavior and economy; sustainability policy	Mr. Schlaak	2,5	fall and spring term
BLOCK SEMINAR: Sustainability Consulting	Students from different universities will work together in projects to discuss, understand and develop their ideas for any SDGs. It will be also recognized for our sustainability certificates	Mrs. Wolf	5	fall term
LECTURE: International Strategic Leadership	course description will follow soon	Mrs Alvares-Wegner	5	fall term