Modules for Offshore Wind Energy MBA

Date 27/04/29

studienbegleitende Leistungen

OWEMBA Module 01 - Future Scenarios in Strategy Development

OWEMBA Module 01	5 CP
Module label	Future Scenarios in Strategy Development
Module code	OWEMBA Module 01
Semester of first implementation	
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Responsible person for this module	Østergaard, Flemming (module responsibility)
	Kühne, Admin (Module counselling)
	Bang, Michael (Examination)
	Steffensen, Henrik (Examination)
Prerequisites	
	Examination:
	To be able to pass the course, the participants must show understanding of the theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is a portfolio, which will consist of: ? Active involvement during physical workshops
	Oral and written presentation of assignments (including eventual updates) Reflection over the course and feedback
	: Iteliection over the course and reedback

Skills to be acquired in this module

General learning outcomes

The following general learning outcomes are covered by this module. Students will be able to..:

- ? Autonomously read on new theories and methods (LO1)
- ? Apply new theories and methods to practical challenges (LO2)
- ? Identify risks and challenges by analyzing data gathered and use them for decision making (LO5)
- ? Integrate business knowledge, analytical skills and management techniques for planning and controlling (LO6) $\,$
- ? Evaluate consequences of solutions (LO7)
- ? Communicate challenges and solutions to relevant stakeholders (LO9)

Aim & module specific learning outcomes

This module provides participants with new insights regarding long term development options, thereby identifying opportunities for strategic development of their business. The course provides opportunities for exchange of experiences and inspiration as well as space for thoughts, which there rarely is a time for in daily management activities. The module integrates methods and data management processes to develop strategic choices of the future, thereby adding a new dimension to strategy development. As opposed to traditional strategic thinking, this course expands into future studies and appropriate applications of new theories and methods.

Module specific learning outcomes: Students will be able to...

- ? Develop ideas and future development potential for own business $% \left(1\right) =\left(1\right) \left(1\right) \left$
- ? Apply information and methods in analyzing mega trends to foresee future challenges in the industry $\,$
- ? Create, validate and evaluate the potential of future business opportunities
- ? Link business opportunities to systematic realization paths
- ? apply methods of creative thinking within the framework of strategy development, in both personal capacity and within a team
- ? identify business potentials within and beyond current business activities

Module contents

Examples of unexpected innovations as well as missed opportunities in the

OWEMBA Module 01 5 CP

development of technologies and markets will be given. Methods for creative thinking and prognosis, that address both classical opportunities and risk evaluation as well as out-of-the-box methodologies will be taught. The assumption behind forecasting is that the future can be generally - if not precisely - known. With more information, particularly more timely information, decision-makers can make more effective choices. Having more information is especially important, since the rate of technological change has dramatically increased. However, the need for information, as in the past, is necessitated by a fear of the future, which then provokes a feeling of impotence in the face of forces we cannot understand and which seem larger than us. The unconscious assumption is that through better forecasting, the world and its future, can be more effectively controlled, leading to increasing profits or hegemony. Futures studies have often been criticized for lacking a conceptual framework and a foresight process, rightfully so. However, during the last decade several frameworks that include solid theory and practice have been developed. These include Voros' generic foresight process framework (2003) and the Six Pillars approach, which is a derivative from Dator's Manoa school. The course for instance relies on "The Six Pillars Approach", which is developed through praxis, provides a theory of future thinking that is linked to methods and tools. The pillars are: mapping, anticipation, timing, deepening, creating alternatives

In summary, participants will find time and acquire methods, which can be used as the foundation for further strategic initiatives for their current or future professional activities within the field of offshore wind energy.

Form of instruction	Lecture, seminar or introductory course
Language of instruction	English
Duration (semesters)	1 Semester
Module frequency	Every 18 months
Module capacity	15
Time of examination	
Credit points	5 CP
Share on module final degree	Course 1: 0%.
Share of module grade on the course of study's final grade	1

Reference text

Course theme

The fast development of the offshore wind energy technology and the daily challenges require most of the managerial capacities. The "S"-shaped curve of the branch is currently moving into an industrialized phase, however further developments within capacities, technology and internationality show huge potential and are therefore to be discovered and utilized.

- ? Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- ? Self-study: We expect the participants to hold a high degree of self-discipline and show up well prepared to class, being motivated to share their knowledge. ? Live cases: Business cases will be analysed to prepare the participants for future leadership requirements within wind energy.
- ? Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms.
- ? Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Examination	Exam prerequisites	Type of examination	
Course			
Final exam of module			
Exam repetition information			
Form of instruction	Lecture, seminar or introductory course		
Course name	Learning/teaching form Lecture, seminar of	or introductory events	
sws			

Workload of compulsory attendance	30
Workload of preparation / homework etc	0
Workload of independent learning	120
Workload (examination and preparation)	0
Workload total	150
Type of examination	
Frequency	Summer or winter semester
Capacity	unlimited

OWEMBA Module 02 - Operational Leadership

OWEMBA Module 02	5 CP
Module label	Operational Leadership
Module code	OWEMBA Module 02
Semester of first implementation	
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Responsible person for this module	Østergaard, Flemming (module responsibility)
	Bang, Michael (module responsibility)
	Kühne, Admin (Module counselling)
	Steffensen, Henrik (Examination)
Prerequisites	
	Examination:
	To be able to pass the course, the participants must show understanding of the theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is a portfolio, which will consist of:
	 Active involvement during physical workshops Oral and written presentation of assignments (including eventual updates) Reflection over the course and feedback

Skills to be acquired in this module

General learning outcomes

The following general learning outcomes are covered by this module. Students will be able to ..

- Autonomously read on new theories and methods (LO1)
- Apply new theories and methods to practical challenges (LO2)
- Manage complex situations in offshore wind energy business (LO4)
- Integrate business knowledge, analytical skills and management techniques for planning and controlling (LO6)
- Evaluate consequences of solutions (LO7)
- Show leadership capacity and teamwork skills (LO8)
 Communicate challenges and solutions to relevant stakeholders (LO9)

Module-specific learning outcomes

Students will be able to...

- analyze leadership in organisations
- describe and assess leadership practice and challenges in different management situations within the wind energy sector
- Combine leadership understanding with the skills of negotiation
- lead, guide and govern people in organizations in various challenging situations and to evaluate them

Module contents

- · Leadership concepts and theories
- Power and influence strategies
- Maintaining ethics & personal integrity
- How leaders use networking
- Developing a personal leadership plan
- Focus on the "operational" and "practical" and "executing" and "reflective" elements of leadership.
- · Development of operational leadership through learning and through careful practice coupled to feedback and reflection
- Use negotiation skills as a part of leadership to free resource potentials

OWEMBA Module 02 5 CP

in the company and its relationship with suppliers

Form of instruction	Lecture, seminar or introductory course
Language of instruction	English
Duration (semesters)	1 Semester
Module frequency	Every 18 months
Module capacity	15
Time of examination	
Credit points	5 CP
Share on module final degree	Course 1: 0%.
Share of module grade on the course of study's final grade	1

Reference text

Course theme

Anyone can claim to be a leader but this claim only works if someone is prepared to follow a leader. This will happen if followers sense that a leader possesses leadership skills. These skills are never or very rarely present in any given individual but can be developed through systematic practice and study. In addition, there are social, moral and ethical limits to how a leader can behave and any aspiring leader must know these.

The present course is aimed at developing individual leadership skills for leading the self, others, teams and organizations. It also places leadership in the context in which it is executed and emphasizes existing research on what leaders actually do, which leadership practices seem to work and the implications of personality upon leader behavior. It is the aim to develop leaders in a wind industry environment drawing upon practical cases and problems and integrating the use of tools as negotiation strategy as a part of the operational leadership context.

- Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- Self-study: We expect the participants to hold a high degree of selfdiscipline and show up well prepared to class, being motivated to share their knowledge.
- Live cases: Business cases will be analysed to prepare the participants for future leadership requirements within wind energy.
- Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms.
- Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Examination	Exam prerequisites	Type of examination
Course		
Final exam of module		
Exam repetition information		
Form of instruction	Lecture, seminar or introductory course	
Course name	Learning/teaching form Lecture, seminar of	or introductory events
sws		
Workload of compulsory attendance	30	
Workload of preparation / homework etc	0	
Workload of independent learning	120	
Workload (examination and preparation)	0	
Workload total	150	
Workload self-arranged work (module- oriented	120	

Workload exam including preparation (module-oriented)	30
Total module workload	300
Type of examination	
Frequency	Summer or winter semester
Capacity	15

OWEMBA Module 04 - Innovative Project Management

5 CP
Innovative Project Management
OWEMBA Module 04
 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Kühne, Admin (Module counselling)
Fagerström,, Björn (Examination)
Bjært,, Niels (Examination)
Flak, Kriegers (Examination)
Examination: To be able to pass the course, the participants must show understanding of the theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is a portfolio, which will consist of:
 Active involvement during physical workshops Oral and written presentation of assignments (including eventual updates) Reflection over the course and feedback

Skills to be acquired in this module

General learning outcomes

The following general learning outcomes are covered by this module. Students will be able to..:

- Autonomously read on new theories and methods (LO1)
- Apply new theories and methods to practical challenges (LO2)
- Evaluate upon application of theory and methods (LO3)
- Manage complex situations in offshore wind energy business (LO4)
- Identify risks and challenges by analyzing data gathered and use them for decision making (LO5)
- Integrate business knowledge, analytical skills and management techniques for planning and controlling (LO6)
- Evaluate consequences of solutions (LO7)
- Show leadership capacity and teamwork skills (LO8)
- Communicate challenges and solutions to relevant stakeholders (LO9)

Aim & module specific learning outcomes

The aim is to develop a tailored project management model, which is evolved around the challenges and processes in a specific firm, including among others:

- Project management theory; Including tools and methods
- Project management standards; Including Agile and Lean principles
- Life cycle aspects to be managed; From design to decommissioning
- Norms and regulation; Including third party approval
- HRM in a project environment; Including leadership and knowledge management
- The course will also to some extent include other critical parts for project management; Change Management, Risk Management, Contract Management, HSE/QA, Close-out and hand over, lessons learned, Decision Making, etc.

Module specific learning outcomes: Students will be able to...

- analyze project management requirements within own company
- Design project models for specific industrial conditions
- plan a project including governance, progress monitoring and visible planning

OWEMBA Module 04 5 CP

- · manage human resources in a project environment
- Manage innovation processes
- Understand the role of communication in project management

Module contents

The course content is primarily designed through the study of standards, industry needs, how to tailor project models to specific challenges, innovation exercises in design of project standards. The Course includes the basic elements for future certification according to PMI and the content in PMBOK (6th edition), with the agile practise guide.

Form of instruction	Lecture, seminar or introductory course
Language of instruction	English
Duration (semesters)	1 Semester
Module frequency	Every 18 months
Module capacity	15
Time of examination	
Credit points	5 CP
Share on module final degree	Course 1: 0%.
Share of module grade on the course of study's final grade	1

Reference text

Course theme

Traditional project management courses teach systematic approaches to project planning. This is a strength but also a disadvantage. The course aims at giving the students the ability to adapt project planning to a specific environment. By bringing in innovative thinking in project planning a project model tailored for the firm can be established between the outer ends of the traditional project management theory: Water fall models and adaptive project management. The module combines the aspects of innovation and HRM to make project management a leadership tool.

Due to the current challenges within the wind industry the course will focus on designing the project management models necessary to cope with all phases in an industrial project, including all life cycle phases of an offshore installation, from design, to installation, testing and later decommissioning.

- Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- Self-study: We expect the participants to hold a high degree of selfdiscipline and show up well prepared to class, being motivated to share their knowledge.
- Live cases: Business cases will be analysed to prepare the participants for future leadership requirements within wind energy.
- Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms.
- Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Examination	Exam prerequisites	Type of examination	
Course			
Final exam of module			
Exam repetition information			
Form of instruction	Lecture, seminar or introductory course		
Course name	Learning/teaching form Lecture, seminar or introductory events		
sws			
Workload of compulsory attendance	30		

Workload of preparation / homework etc	0
Workload of independent learning	120
Workload (examination and preparation)	0
Workload total	150
Workload self-arranged work (module- oriented	120
Total module workload	270
Type of examination	
Frequency	Winter semester
Capacity	unlimited

OWEMBA Module 03 - Operational Risk and Safety Management

5 CP
Operational Risk and Safety Management
OWEMBA Module 03
 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Kühne, Admin (Module counselling)
Examination: To be able to pass the course, the participants must show understanding of the theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is presentation of a dedicated scenario, either for the operational risks, or for the emergency preparedness

Skills to be acquired in this module

Aim & module specific learning outcomes

This module aims to enable the participants to access the occupational health & safety risks for the Offshore Industry, to apply the principles of health & safety based on the European regulatory framework, to enable to search for good practices across borders and industries, and to translate all of this into internal rules for the company.

This interactive lecture is split into two phases.

- ? The first phase addresses the operational risks for the workers going Offshore, based on a generic Offshore wind-farm located in the North sea 100nm from shore. The course provides methods and tools that could be applied to defined internal rules and guidelines based on the current legal framework.
- ? The second phase will focus on emergency preparedness. Due to the environmental conditions and the long distance to shore, any small accident could lead to a very severe accident in case the appropriated measures have not been implemented.

Module specific learning outcomes: Students will be able to..

- ? access the occupational health and safety risks for the offshore industry
- ? apply the principles of health & safety based on the European regulatory framework
- ? search for good practices across borders and industries
- ? translate new knowledge into internal rules for the company
- ? prepare for emergencies

General learning outcomes

The following general learning outcomes are covered by this module. Students will be able to..:

- ? Autonomously read on new theories and methods (LO1)
- ? Apply new theories and methods to practical challenges (LO2)
- ? Evaluate upon application of theory and methods (LO3)
- ? Manage complex situations in offshore wind energy business (LO4)
- ? Identify risks and challenges by analyzing data gathered and use them for decision making (LO5) $\,$
- ? Integrate business knowledge, analytical skills and management techniques for planning and controlling (LO6)
- ? Evaluate consequences of solutions (LO7)
- ? Communicate challenges and solutions to relevant stakeholders (LO9)

Module contents

- ? Preparation Phase:
- o Legal issues directive 2006/42 EC, directive 2009/104/EC; Directive 89/391/EEC, ISO 12100, ISO 31000
- ? Workshop 1 (2 days) -
- o Risk assessment to obtain occupational health and safety in offshore wind farms (working system, measures, introduction in case study, case work, presenting results)
- o Risk assessment to obtain business continuity in offshore wind farms

OWEMBA Module 03 5 CP

(security events, tools and methods (e. g. HAZOP, ETA), case work, discussing results)

- ? Workshop 2 (2 days)
- o Emergency management in offshore wind farms (theory related to emergency and crisis, management, case work)

Form of instruction	Lecture, seminar or introductory course
Language of instruction	English
Duration (semesters)	1 Semester
Module frequency	Alle 18 Monate
Module capacity	15
Time of examination	
Credit points	5 CP
Share on module final degree	Course 1: 0%.
Share of module grade on the course of study's final grade	1

Reference text

Course theme

The Offshore Wind-Industry is a new emerging and fast developing industry. Due to the dimension of the machinery (Windturbine) itself, and the also challenging conditions of the Offshore environment, the technicians working in such an environment are facing special risks that needs to be addressed properly to ensure that they come home safely without any harm. From the regulatory perspective the offshore wind sector is widely seen as a grey area, and only some general guidelines, even diverse by country, are in place. So, it becomes highly important for each company working for this emerging industry and working across countries to make themselves comfortable with the requirements and to define the rules based on the principles of operational risk and safety management, to be legally compliant and to ensure workers health and safety. Due to the extraordinary financial impact of any delays caused by rule breaking and accidents, good health and safety becomes a major contributor for the success of each Offshore Wind project, during installation and service.

- ? Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- ? Self-study: We expect the participants to hold a high degree of self-discipline and show up well prepared to class, being motivated to share their knowledge. ? Live cases: Business cases will be analysed to prepare the participants for future leadership requirements within wind energy.
- ? Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms.
- ? Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Examination	Exam prerequisites	Type of examination	
Course			
Final exam of module			
Exam repetition information			
Form of instruction	Lecture, seminar or introductory course		
Course name	Learning/teaching form Lecture, seminar or introductory events		
sws			
Workload of compulsory attendance	30		
Workload of preparation / homework etc	0		
Workload of independent learning	120		
Workload (examination and preparation)	0		
Workload total	150		
Workload self-arranged work (module-	120		

oriented

Total module workload	270
Type of examination	
Frequency	Winter semester
Capacity	unlimited

OWEMBA Module 07 - Economics of Offshore Wind Farms

OWEMBA Module 07	5 CP
Module label	Economics of Offshore Wind Farms
Module code	OWEMBA Module 07
Semester of first implementation	
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Responsible person for this module	Kühne, Admin (Module counselling)
	Martinez-Neri, Ivan F. (Examination)
	van Baarsen, Tobias (Examination)
Prerequisites	
	To be able to pass the course, the participants must show understanding of the theory, be able to put the theory into a practical context and create good solutions for the study cases. They will create models to simulate different scenarios along the lifecycle of an offshore wind farm, and will present recommendations of strategies to be followed by "the Board of Directors". They will also have individually feedback, where their solution, role in the team and teamwork will be discussed and evaluated. The form of evaluation is a portfolio, which will consist of:
	 Active involvement during physical workshops Oral and written presentation of assignments (including eventual updates) Reflection over the course and feedback

Skills to be acquired in this module

General learning outcomes

The following general learning outcomes are covered by this module. Students will be able to..:

- Autonomously read on new theories and methods (LO1)
- Apply new theories and methods to practical challenges (LO2)
- Evaluate upon application of theory and methods (LO3)
- Identify risks and challenges by analyzing data gathered and use them for decision making (LO5)
- Integrate business knowledge, analytical skills and management techniques for planning and controlling (LO6)
- Evaluate consequences of solutions (LO7)
- Communicate challenges and solutions to relevant stakeholders (LO9)

Module specific learning outcomes Students will be able to...

- financially and strategically model different scenarios, taking most of the variables affecting the lifecycle of offshore wind projects into consideration
- increase the predictability in the economic effect of a decision on the overall lifecycle of a project
- provide support in the evaluation of new technologies or in evaluating new methods to speed up harbor and vessel operations
- determine whether investments make economic sense

Module contents

During this module, the students will learn how to:

- Translate offshore wind specific situations into measurable requirements and model systems to create and evaluate different scenarios.
- Learn the fundamentals of finance and financial modelling to analyse economic risks over the lifecycle of offshore wind farms.

OWEMBA Module 07 5 CP

- Calculate the impact of changing parameters in the different scenarios and provide estimations of the time and costs to be incurred in each of them
- Explain how the different components of an offshore wind farm system interrelates with each other
- Approach different stakeholders to understand their needs and examine feasible alternatives before selecting a solution.
- Participate in multidisciplinary teams to produce models that are robust, high quality and responsive.

Lecture, seminar or introductory course	
1 Semester	
Every 18 months	
15	
5 CP	
Course 1: 0%.	
1	
	1 Semester Every 18 months 15

Reference text

Course theme

Most of the factors affecting the costs associated with the different phases of the lifecycle of offshore wind projects are site-specific, complex, interrelated, and dynamic. This situation complicates the decision making process when trying to compare among various alternatives for a given situation. Systems thinking is an interdisciplinary field focusing on how the interaction of subsystems in complex projects, such as offshore wind farms, affect the overall performance over their lifecycles, including design, development, testing, construction, operation and decommissioning.

- Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- Self-study: We expect the participants to hold a high degree of selfdiscipline and show up well prepared to class, being motivated to share their knowledge.
- Live cases: Business cases will be analysed to prepare the participants for future leadership requirements within wind energy.
- Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms.
- Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Examination	Exam prerequisites	Type of examination
Course		
Final exam of module		
Exam repetition information		
Form of instruction	Lecture, seminar or introductory course	
Course name	Learning/teaching form Lecture, seminar or introductory events	
sws		
Workload of compulsory attendance	30	
Workload of preparation / homework etc	0	
Workload of independent learning	120	
Workload (examination and preparation)	0	
Workload total	150	
Workload self-arranged work (module- oriented	120	

Total module workload	270
Type of examination	
Frequency	Winter semester
Capacity	unlimited

OWEMBA Module 05 - People Management

Module label	People Management
Module code	OWEMBA Module 05
Semester of first implementation	
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 : studienbegleitende Leistungen
Responsible person for this module	Østergaard, Flemming (module responsibility)
	Kühne, Admin (Module counselling)
	Psychogios, Alexandros (Examination)
	Mulhall, Wayne (Examination)
Prerequisites	
	Examination: To be able to pass the course, the participants must show understanding of t theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is a portfolio, which will consist of: ? Active involvement during physical workshops ? Oral and written presentation of assignments (including eventual updates) ? Reflection over the course and feedback
Skills to be acquired in this module	
	General learning outcomes The following general learning outcomes are covered by this module. Studer will be able to: ? Autonomously read on new theories and methods (LO1) ? Apply new theories and methods to practical challenges (LO2) ? Manage complex situations in offshore wind energy business (LO4) ? Evaluate consequences of solutions (LO7) ? Show leadership capacity and teamwork skills (LO8) ? Communicate challenges and solutions to relevant stakeholders (LO9) Aim & module specific learning outcomes
	Aims of the module: ? Develop students' understanding of managing people in organisations. ? Show that leadership is a balance between meeting needs for organisation integration and adapting to the organisational, local national, international contexts.
	 ? Make students aware of a series of new ideas, concepts, and practices of people management based on scientific insights from complexity science, behavioural science and neuroscience. Module specific learning outcomes: Students will be able to ? realize the aspects of effective leadership and performance management opeople and organizations ? understand in-depth the inner dynamics of human brain enabling organizational decisions and boosting leadership capabilities targeting at hig performance levels of individuals and teams ? understand how to manage people in organisations ? evaluate own competences in leadership
Module contents	
	The Brain Adaptive Leadership approach will be utilized that relates to the intellectual mindset about leadership as well as to underlying emotional dynamics and brain automations. Moreover, the Complex Adaptive Leadersh approach will be used to explain complexity and change in modern organizations, providing with insightful ideas and practices of how managers can deal with challenging situations. Special, emphasis will be given on leadership style and specific change management practices that enhance te

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leadership style and specific change management practices that enhance team

and organizational performance.

OWEMBA Module 05 5 CP

Form of instruction	Lecture, seminar or introductory course
Language of instruction	English
Duration (semesters)	1 Semester
Module frequency	Every 18 months
Module capacity	15
Time of examination	
Credit points	5 CP
Share on module final degree	Course 1: 0%.
Share of module grade on the course of study's final grade	1

Reference text

Course theme

In order to cope with optimization and industrialization requirements on the one side and with still challenging risks on the other side the competences of every staff member as well as the leadership capabilities of managerial staff will play a crucial role in order to achieve success. Whereas a typical participant has a strong technical background and yet quite some experience in management and leadership this module offers a further development of leadership competencies based on cognitive insights and practical application.

- ? Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- ? Exercises & Behavioral Experiments: through specific exercises and behavioral experiments students will be able to make sense of issues related to the study of people management within organisations as well as to apply theoretical frameworks in practice.
- ? Short Clinic Cases: particular short case-studies associated with aspects of people management will be analyzed and discussed through the contribution of lectures. This method will help students to develop a particular awareness and understanding of the module's topic as well as a critical thinking.
- ? Self-study: We expect the participants to hold a high degree of self-discipline and show up well prepared to class, being motivated to share their knowledge. ? Live cases: Business cases will be analysed to prepare the participants for future leadership requirements within wind energy.
- ? Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms.
- ? Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Examination	Exam prerequisites	Type of examination
Course		
Final exam of module		
Exam repetition information		
Form of instruction	Lecture, seminar or introductory course	
Course name	Learning/teaching form Lecture, seminar	or introductory events
sws		
Workload of compulsory attendance	30	
Workload of preparation / homework etc	0	
Workload of independent learning	120	
Workload (examination and preparation)	0	
Workload total	150	
Workload self-arranged work (module- oriented	120	
Total module workload	270	
Type of examination		
Frequency	Winter semester	
Capacity	unlimited	

OWEMBA Module 06 - Innovation through Collaboration

Form of instruction

OWEMBA Module 06	5 CF
Module label	Innovation through Collaboration
Module code	OWEMBA Module 06
Semester of first implementation	
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Responsible person for this module	Østergaard, Flemming (module responsibility)
	Kühne, Admin (Module counselling)
	Brink, Tove (Examination)
	Roszonda, Adrian (Examination)
rerequisites	
	Examination:
	To be able to pass the course, the participants must show understanding of th theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is a portfolio, which will
	consist of: ? Active involvement during physical workshops
	? Oral and written presentation of assignments (including eventual updates)? Reflection over the course and feedback
Skills to be acquired in this module	
	General learning outcomes
	The following general learning outcomes are covered by this module. Students will be able to:
	? Autonomously read on new theories and methods (LO1)
	? Apply new theories and methods to practical challenges (LO2)? Evaluate upon application of theory and methods (LO3)
	? Evaluate open application of theory and methods (EGS) ? Evaluate consequences of solutions (LO7)
	? Show leadership capacity and teamwork skills (LO8)? Communicate challenges and solutions to relevant stakeholders (LO9)
	Aim & module specific learning outcomes
	The course aims at providing a set of advanced insights into the field of management of innovation spanning from foundational themes to the most recent developments of the field: design-driven innovation and collaboration
	innovation such as co-creation. Module specific learning outcomes: The students will be able to
	? apply design thinking approaches and methods for idea generation, product and service development
	? overcome barriers to creativity? manage innovation within the firm and through partnerships, networks and alliances
	? take care of the challenges and opportunities that small and large firms face in relation to innovative collaboration ? apply new knowledge collaboratively with other professionals
	: apply new knowledge collaboratively with other professionals
Module contents	
	Delivering new ideas and technologies as successful products to market is at utmost importance for firms in the offshore wind industry. This requires not only creative idea generation, but also management of these creative ideas toward successful innovation and market implementation. Different tools for managing this process, such as stage-gate model. Focus will be given to internal managerial processes and practices. As companies increasingly collaborate with external partners such as users, customers, universities and competitors throughout their innovation processes, the course also addresses the opportunities, challenges and implications for successful collaboration innovation.
form of instruction	Lecture comings or introductory course

Lecture, seminar or introductory course

OWEMBA Module 06 5 CP

Languages of instruction	
Duration (semesters)	1 Semester
Module frequency	Every 18 months
Module capacity	15
Time of examination	
Credit points	5 CP
Share on module final degree	Course 1: 0%.
Share of module grade on the course of study's final grade	1

Reference text

Course theme

The competitiveness of companies depends highly on the ability to introduce new innovative products, processes and services. Management of Innovation has traditionally been focused on the company-internal aspects of innovation processes, for instance, how interaction between internal specialized professionals take place in the creation of innovation. In the recent years the focus has shift towards how companies source their inputs for innovation external through interorganizational collaboration. One of the recent developments in the field of innovation management is the rise of a design-driven approach to innovation.

- ? Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- ? Self-study: We expect the participants to hold a high degree of self-discipline and show up well prepared to class, being motivated to share their knowledge. ? Live cases: will be analyzed in order to tailor future project management models for decommissioning tasks.
- ? Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms.
- ? Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Examination	Exam prerequisites	Type of examination
Course		
Final exam of module		
Exam repetition information		
Form of instruction	Lecture, seminar or introductory course	
Course name	Learning/teaching form Lecture, seminar	or introductory events
sws		
Workload of compulsory attendance	30	
Workload of preparation / homework etc	0	
Workload of independent learning	120	
Workload (examination and preparation)	0	
Workload total	150	
Workload self-arranged work (module- oriented	120	
Total module workload	270	
Type of examination		
Frequency	Winter semester	
Capacity	unlimited	

OWEMBA Module 08 - Logistics and Supply Chain Management

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Module label	Logistics and Supply Chain Management
Module code	OWEMBA Module 08
Semester of first implementation	
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Responsible person for this module	Østergaard, Flemming (module responsibility)
	Schreiber, Thore (module responsibility)
	Kühne, Admin (Module counselling)
	Engelmann , Lars (Examination)
Prerequisites	
	Examination: To be able to pass the course, the participants must show understanding of th theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is a portfolio, which will consist of: Active involvement during physical workshops Oral and written presentation of assignments (including eventual updates) Reflection over the course and feedback
Skills to be acquired in this module	
	General learning outcomes The following general learning outcomes are covered by this module. Student will be able to: ? Autonomously read on new theories and methods (LO1) ? Apply new theories and methods to practical challenges (LO2) ? Manage complex situations in offshore wind energy business (LO4) ? Identify risks and challenges by analyzing data gathered and use them for decision making (LO5) ? Integrate business knowledge, analytical skills and management techniques for planning and controlling (LO6) ? Evaluate consequences of solutions (LO7) ? Communicate challenges and solutions to relevant stakeholders (LO9) Module specific learning outcomes The students will be able to ? understand and analyse the diverse requirements of offshore logistics ? cope with the associated complexity, even under different conditions ? recognise the connection between technical, process-related and economic aspects of offshore logistics ? derive, communicate and implement management decisions from this
Module contents	
	This course aims at providing a consistent background of how companies in the offshore wind energy sector plan, organize and execute their logistics and manage complex, manifold industry supply chains. Several logistics and suppl chain risk management measures have to be considered and implemented especially for Offshore heavy lift operations and transport of project cargo. In parallel, new market developments with growing technical requirements are demanding innovative solutions and equipment for bottom-fixed & floating win farms. Based on industry examples this module will introduce participants to concepts, methods and tools to improve their capacity to manage relevant logistics activities from a successful early project development stage to the operations phase.
Form of instruction	Lecture, seminar or introductory course
	English

OWEMBA Module 08 5 CP

Duration (semesters)	1 Semester
Module frequency	Every 18 months
Module capacity	15
Time of examination	
Credit points	5 CP
Share on module final degree	Course 1: 0%.
Share of module grade on the course of study's final grade	1

Reference text

Course theme

Both for the installation and the maintenance of wind farms offshore logistic processes are very challenging and a critical successfactor. Due to long and expensive transportation to the offshore location and accordingly to any warehousing the planning requirements are very high.

Reliability and perfection of the process as well as managing complexity due to various suppliers lead to extremely high demands on the management of logistics.

- ? Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- ? Self-study: We expect the participants to hold a high degree of self-discipline and show up well prepared to class, being motivated to share their knowledge. ? Live cases: Business cases will be analysed to prepare the participants for future leadership requirements within wind energy.
- ? Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms.
- ? Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Examination	Exam prerequisites	Type of examination
Course		
Final exam of module		
Exam repetition information		
Form of instruction	Lecture, seminar or introductory course	
Course name	Learning/teaching form Lecture, seminar of	or introductory events
sws		
Workload of compulsory attendance	30	
Workload of preparation / homework etc	0	
Workload of independent learning	120	
Workload (examination and preparation)	0	
Workload total	150	
Workload self-arranged work (module- oriented	120	
Total module workload	270	
Type of examination		
Frequency	Winter semester	
Capacity	unlimited	

OWEMBA Module 09 - Global Business

OWEMBA Module 09	5 CP
Module label	Global Business
Module code	OWEMBA Module 09
Semester of first implementation	
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Responsible person for this module	Østergaard, Flemming (module responsibility)
	Kühne, Admin (Module counselling)
	Østergaard, Flemming (Examination)
	Blöndal, Sigurd (Examination)
	Christiansen, Ole (Examination)
Prerequisites	
	Examination To be able to pass the course, the participants must show understanding of the theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is a portfolio, which will consist of: ? Active involvement during physical workshops ? Oral and written presentation of assignments (including eventual updates) ? Reflection over the course and feedback

Skills to be acquired in this module

General learning outcomes

Students will be able to:

- ? Autonomously read on new theories and methods
- ? Apply new theories and methods to practical challenges
- ? Evaluate upon application of theory and methods
- ? Manage complex situations in offshore wind energy & PtX industry
- ? Identify risks and challenges by analyzing data gathered and use them for decision making.
- ? Integrate business knowledge, analytical skills and management techniques for planning and controlling $\,$
- ? Evaluate consequences of solutions
- ? Show leadership capacity and teamwork skills
- ? Communicate challenges and solutions to relevant stakeholders Business case description:

A concrete case provided by a company representative, where participants will describe the business environment for PtX products, analyze potential business opportunities in a defined market, suggest strategies for market entrance including alternatives, provide exact action plan and evaluate advantage and potential pitfalls.

Aim & module specific learning outcomes:

The key learning of this module is to enable the students to analyze the energy market with specific focus on wind energy and PtX in order to develop a business model for a specific firm represented by an actual case taking the value chain into consideration.

The students will be able to:

- 1. Understand the basics of PtX technology (electrolyzer, carbon capture)
- 2. Understand the complexity of the market dynamics and the value chains within the wind-PtX industry.
- 3. Evaluate the framework conditions, i.e., legal framework, safety etc. for establishing PtX solutions
- 4. From an economic perspective understand the funding possibilities and revenue streams
- 5. Develop an understanding of the competency and resource requirements necessary for firms competing in the market.
- 6. Apply a framework for analysis, development and implementation within Power-to-X Business Canvas Development from theory.
- 7. Develop a decisional brief on market entry based on the Business Model Canvas
- 8. Stimulate the students 'abilities to analyze a complex problem and present it

OWEMBA Module 09 5 CP

in a clear, precise, and logical manner.

Module contents

This module offers a framework for analysis, development and implementation of Power-to-X – Business Development. The main topics focus on:

- 1. Challenges with new technologies from a business perspective
- a. Electrolyzing technologies, Capture Capture, challenge in system integration and infrastructure
- b. Synergies and symbiose (eg. excess of heat and oxygen)
- 2. Market complexity
- a. Explorative understanding of the global economic and financial energy trends (oil/gas, VE vs. PtX fuels)
- b. Market analysis
- c. Explorative Value Chain creation
- 3. Framework conditions
- a. Legal conditions, such as the regulatory environment for green hydrogen and PtX products, processes and policies.
- b. Regulation at EU and national levels
- 4. Financial dimension
- a. Funding & investments
- b. Prices of hydrogen in the future
- c. Financial business case behind "X"
- 5. Organizational
- a. Internal resources & competencies
- b. The concept of sustainable competitive advantages
- 6. The concept of the Business Model Canvas
- a. The idea and concept of a business model
- b. Selecting Nine building blocks as the business model
- 7. Management Decision model
- a. From a decisional perspective integration of arguments into practical decision making and preparation of management decisions.

Form of instruction	Lecture, seminar or introductory course	
Languages of instruction		
Duration (semesters)	1 Semester	
Module frequency	Every 18 months	
Module capacity	15	
Time of examination		
Credit points	5 CP	
Share on module final degree	Course 1: 0%.	
Share of module grade on the course of study's final grade	1	

Reference text

Course theme

ECTS/weighting: 5 ECTS / 0.083 Full-time equivalent Self-Study: 120 hours Offered in: Esbjerg, Denmark

The offshore wind industry plays a huge role in the development of the Power-to-X industry but not only as a supplier of renewable energy but also in the development of new "offshore wind to hydrogen concepts". The aim of the course is to develop an understanding of future technological wind power solutions and thereby contribute to the further innovation and implementation of relevant PtX solutions in a business context.

- ? Innovative teaching methods: We strive for real-life competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- ? Self-study: We expect the participants to hold a high degree of self-discipline and show up well prepared to class, being motivated to share their knowledge. ? Live cases: Business cases will be analyzed to prepare the participants for future leadership requirements within wind energy.
- ? Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms.
- ? Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

OWEMBA Module 09 5 CP

Examination	Exam prerequisites	Type of examination
Course		
Final exam of module		
Exam repetition information		
Form of instruction	Lecture, seminar or introductory course	
Course name	Learning/teaching form Lecture, seminar or introductory events	
sws		
Workload of compulsory attendance	30	
Workload of preparation / homework etc	0	
Workload of independent learning	120	
Workload (examination and preparation)	0	
Workload total	150	
Workload self-arranged work (module- oriented	120	
Total module workload	270	
Type of examination		
Frequency	Winter semester	
Capacity	unlimited	

OWEMBA Module 10 - Power-to-X Business Development

OWEMBA Module 10	5 CP
Module label	Power-to-X Business Development
Module code	OWEMBA Module 10
Semester of first implementation	
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Responsible person for this module	Østergaard, Flemming (module responsibility)
	Kühne, Admin (Module counselling)
Prerequisites	
	Examination: To be able to pass the course, the participants must show understanding of the theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is a portfolio, which will consist of: ? Active involvement during physical workshops ? Oral and written presentation of assignments (including eventual updates) ? Reflection over the course and feedback

Skills to be acquired in this module

General learning outcomes

Students will be able to:

- ? Autonomously read on new theories and methods
- ? Apply new theories and methods to practical challenges
- ? Evaluate upon application of theory and methods
- ? Manage complex situations in offshore wind energy $\&\ PtX$ industry
- ? Identify risks and challenges by analyzing data gathered and use them for decision making.
- ? Integrate business knowledge, analytical skills and management techniques for planning and controlling $\,$
- ? Evaluate consequences of solutions
- ? Show leadership capacity and teamwork skills
- ? Communicate challenges and solutions to relevant stakeholders Business case description:

A concrete case provided by a company representative, where participants will describe the business environment for PtX products, analyze potential business opportunities in a defined market, suggest strategies for market entrance including alternatives, provide exact action plan and evaluate advantage and potential pitfalls.

Aim & module specific learning outcomes:

The key learning of this module is to enable the students to analyze the energy market with specific focus on wind energy and PtX in order to develop a business model for a specific firm represented by an actual case taking the value chain into consideration.

The students will be able to:

- 1. Understand the basics of PtX technology (electrolyzer, carbon capture)
- 2. Understand the complexity of the market dynamics and the value chains within the wind-PtX industry.
- 3. Evaluate the framework conditions, i.e., legal framework, safety etc. for establishing PtX solutions
- 4. From an economic perspective understand the funding possibilities and revenue streams
- 5. Develop an understanding of the competency and resource requirements necessary for firms competing in the market.
- 6. Apply a framework for analysis, development and implementation within Power-to-X Business Canvas Development from theory.
- 7. Develop a decisional brief on market entry based on the Business Model Canvas
- 8. Stimulate the students 'abilities to analyze a complex problem and present it in a clear, precise, and logical manner.

Module contents

OWEMBA Module 10 5 CP

This module offers a framework for analysis, development and implementation of Power-to-X – Business Development. The main topics focus on:

- Challenges with new technologies from a business perspective
- a. Electrolyzing technologies, Capture Capture, challenge in system integration and infrastructure
- b. Synergies and symbiose (eg. excess of heat and oxygen)
- 2. Market complexity
- a. Explorative understanding of the global economic and financial energy trends (oil/gas, VE vs. PtX fuels)
- b. Market analysis
- c. Explorative Value Chain creation
- 3. Framework conditions
- a. Legal conditions, such as the regulatory environment for green hydrogen and PtX products, processes and policies.
- b. Regulation at EU and national levels
- 4. Financial dimension
- a. Funding & investments
- b. Prices of hydrogen in the future
- c. Financial business case behind "X"
- 5. Organizational
- a. Internal resources & competencies
- b. The concept of sustainable competitive advantages
- 6. The concept of the Business Model Canvas
- a. The idea and concept of a business model
- b. Selecting Nine building blocks as the business model
- 7. Management Decision model
- a. From a decisional perspective integration of arguments into practical decision making and preparation of management decisions.

Form of instruction	Lecture, seminar or introductory course	
Languages of instruction		
Duration (semesters)	1 Semester	
Module frequency	Every 18 months	
Module capacity	15	
Time of examination		
Credit points	5 CP	
Share on module final degree	Course 1: 0%.	
Share of module grade on the course of study's final grade	1	

Reference text

ECTS/weighting: 5 ECTS / 0.083 Full-time equivalent Self-Study: 120 hours Offered in: Esbjerg, Denmark

The offshore wind industry plays a huge role in the development of the Power-to-X industry but not only as a supplier of renewable energy but also in the development of new "offshore wind to hydrogen concepts". The aim of the course is to develop an understanding of future technological wind power solutions and thereby contribute to the further innovation and implementation of relevant PtX solutions in a business context.

- ? Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- ? Self-study: We expect the participants to hold a high degree of self-discipline and show up well prepared to class, being motivated to share their knowledge. ? Live cases: will be analyzed in order to tailor future project management models for decommissioning tasks.
- ? Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms.
- ? Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Examination	Exam prerequisites	Type of examination
Course		
Final exam of module		

Examination	Exam prerequisites	Type of examination	
Exam repetition information			
Form of instruction	Lecture, seminar or introductory course		
Course name	Learning/teaching form Lecture, seminar or introductory events		
sws			
Workload of compulsory attendance	30		
Workload of preparation / homework etc	0		
Workload of independent learning	120		
Workload (examination and preparation)	0		
Workload total	150		
Workload self-arranged work (module- oriented	120		
Total module workload	270		
Type of examination			
Frequency	Winter semester		
Capacity	unlimited		

OWEMBA Module XY - Energy Policy

OWEMBA Module XY	5 CP
Module label	Energy Policy
Module code	OWEMBA Module XY
Semester of first implementation	
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Responsible person for this module	Kühne, Admin (Module counselling)
Prerequisites	
	Examination: To be able to pass the course, the participants must show understanding of the theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is a portfolio, which will consist of: ? Active involvement during physical workshops ? Oral and written presentation of assignments (including eventual updates) ? Reflection over the course and feedback

Skills to be acquired in this module

Aim & Learning Outcome

To be developed in collaboration with our Advisory Boards.

Module contents		
Form of instruction	Lecture, seminar or introductory course	
Languages of instruction		
Duration (semesters)	1 Semester	
Module frequency	Every 18 months	
<u> </u>	15	
Module capacity	15	
Time of examination		
Credit points	5 CP	
Share on module final degree	Course 1: 0%.	
Share of module grade on the course of study's final grade	1	

Reference text

Course theme

To be developed in collaboration with our Advisory Boards.

- ? Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- ? Self-study: We expect the participants to hold a high degree of self-discipline and show up well prepared to class, being motivated to share their knowledge. ? Live cases: will be analyzed in order to tailor future project management models for decommissioning tasks.
- ? Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms.
- ? Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Examination	Exam prerequisites	Type of examination
Course		

Examination	Exam prerequisites	Type of examination
Final exam of module		7,600 0.000
Exam repetition information		
Form of instruction	Lecture, seminar or introductory course	
Course name	Learning/teaching form Lecture, seminar or intro	ductory events
sws		
Workload of compulsory attendance	30	
Workload of preparation / homework etc	0	
Workload of independent learning	120	
Workload (examination and preparation)	0	
Workload total	150	
Workload self-arranged work (module- oriented	120	
Total module workload	270	
Type of examination		
Frequency	Winter semester	
Capacity	unlimited	

OWEMBA Module XZ - Managing Business Risks

Module label	Managing Business Risks	
Module code	OWEMBA Module XZ	
Semester of first implementation		
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 studienbegleitende Leistungen 	
Responsible person for this module	Kühne, Admin (Module counselling)	
Prerequisites		
	Prüfung: Um den Kurs bestehen zu können, müssen die Teilnehmer Verständnis für die Theorie zeigen, die Theorie in einen praktischen Kontext umsetzen und gute Lösungen für die Studienfälle erstellen können. Die Form der Bewertung ist ein Portfolio, das aus Folgendem besteht: ? Aktive Beteiligung bei physischen Workshops ? Mündliche und schriftliche Präsentation der Aufgaben (einschließlich eventueller Aktualisierungen) ? Reflexion über den Kurs und Feedback	
Skills to be acquired in this module		
	Aim & Learning Outcome To be developed in collaboration with our Advisory Boards.	
Module contents		
Form of instruction	Lecture, seminar or introductory course	
Languages of instruction		
Duration (semesters)	1 Semester	
Module frequency	Every 18 months	
Module capacity	15	
Time of examination		
Credit points	5 CP	
Share on module final degree	Course 1: 0%.	
Share of module grade on the course of study's final grade	1	
Reference text	Course theme	
	To be developed in collaboration with our Advisory Boards.	
	Teaching methods ? Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms. ? Self-study: We expect the participants to hold a high degree of self-discipline and show up well prepared to class, being motivated to share their knowledge? Live cases: will be analyzed in order to tailor future project management models for decommissioning tasks. ? Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms. ? Forum, chat and messaging: All students can get in contact with their lecture and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.	

Exam prerequisites

Examination

Course

Type of examination

Examination	Exam prerequisites	Type of examination
Final exam of module		
Exam repetition information		
Form of instruction	Lecture, seminar or introductory course	
Course name	Learning/teaching form Lecture, semina	r or introductory events
sws		
Workload of compulsory attendance	30	
Workload of preparation / homework etc	0	
Workload of independent learning	120	
Workload (examination and preparation)	0	
Workload total	150	
Workload self-arranged work (module- oriented	120	
Total module workload	270	
Type of examination		
Frequency	Winter semester	
Capacity	unlimited	

OWEMBA Module 99 - MBA Thesis

Module label	MBA Thesis
Module code	OWEMBA Module 99
Semester of first implementation Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Responsible person for this module	Kühne, Admin (Module counselling)
Prerequisites	
	Prerequisites Achievement of at least 35 credit points in the Offshore Wind Energy MBA-program so far. An application for approval of the proposed topic must be submitted by each candidate to the study board. The application must contain? a description of the subject,? the written consent of the lecturer who has provided the topic,? the scheduled start,? an indication of whether the work is to be done individually or in a group; the other group members must be named.
Skills to be acquired in this module	
	Aim & Learning Outcome The Master's thesis should show that the candidate is able to independently work on a problem scientifically and methodically within a given period of time and to classify it in interdisciplinary contexts. The students demonstrate with a master thesis tha t they are able to systematically work on and solve a complex and specific management problem at Master's level, supported by scientific findings and using scientific methodology.
Module contents	
	Topic The topic has to be within the scope of the Offshore Wind Energy MBA. It may be provided by any or all lecturers of the Offshore Wind Energy MBA. The person to be examined must be given the opportunity to submit proposals for the topic. The Master thesis consists of a written paper (maximum of 150.000 strokes pe student) and a colloquium. The master thesis can be an experimental or empirical part, it must contain a written part.
Form of instruction	Lecture, seminar or introductory course
Languages of instruction	
Duration (semesters)	1 Semester
Module frequency	An application for approval of the proposed topic may be submitted at any time
Module capacity	unlimited
Time of examination	
Credit points	5 CP
Share on module final degree	Course 1: 0%.
	Examiner The Master thesis is supervised by the 1st examiner, who is a MBA lecturer with academical background and by the 2nd examiner, who is involved in the MBA, but does not come from the same company as the MBA candidate.

OWEMBA Module 99 5 CP

Share of module grade on the course of study's final grade

1

Reference text

Process

The master's thesis can also be written as a group work with up to three students. In the case of a group work, the contribution of each member of the group must be clearly identifiable.

The study board shall determine the date on which work on the thesis is to commence and the final date for completion. The topic will be announced to the examinee.

The colloquium on the Master's thesis should take place at the next possible date, at the latest six weeks after submission of the thesis. It will not take place until the Master's thesis has been graded at least "adequate".

In the colloquium, the candidate shall prove that he or she is able to independently represent the solutions developed in a discussion on the subject area of the Master's thesis in an interdisciplinary and problem-related manner on a scientific basis. The colloquium should take place at the next possible date, at the latest six weeks after submission of the thesis. The colloquium shall be conducted jointly by the examiners of the Master's thesis as an individual examination or, in the case of a group thesis, as a group examination. The duration of the colloquium is usually 30 to 60 minutes for each examinee. A failed colloquium can be repeated once within a period of two months.

Minutes of the colloquium shall be taken for each person to be examined and shall be included in the examination files. They shall contain information on the examiners, the members of the examination board present, the subject, the duration and the course of the examination, the assessments made and the examination grade awarded and, if necessary, mention any special events that occurred during the colloquium. The minutes shall be signed by the examiners.

Examination	Exam prerequisites	Type of examination
Course		

Final exam of module

Evaluation

The master thesis will be examined by the 1st and a 2nd examiner. The grade of the thesis is determined by the average of the examiners' assessments. If the difference in grades between two examiners is two or more full grades, the examination board will appoint a third examiner or a third examiner for the final assessment. The grade is then calculated from the average of the grades of the three examiners.

Exam repetition information		
Form of instruction	Lecture, seminar or introductory course	
Course name	Learning/teaching form Lecture, seminar or introductory events	
sws		
Workload of compulsory attendance	0	
Workload of preparation / homework etc	0	
Workload of independent learning	450	
Workload (examination and preparation)	0	
Workload total	450	
Workload self-arranged work (module- oriented	120	
Total module workload	570	
Type of examination		
Frequency	Winter semester	
Capacity	unlimited	

OWEMBA Module XX - Environmental Management

OWEMBA Module XX	5 CP
Module label	Environmental Management
Module code	OWEMBA Module XX
Semester of first implementation	
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 > studienbegleitende Leistungen
Responsible person for this module	Østergaard, Flemming (module responsibility)
Prerequisites	Kühne, Admin (module responsibility)
	Examination: To be able to pass the course, the participants must show understanding of the theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is a portfolio, which will consist of: ? Active involvement during physical workshops ? Oral and written presentation of assignments (including eventual updates) ? Reflection over the course and feedback
Skills to be acquired in this module	Aim & Learning Outcome To be developed in collaboration with our Advisory Boards.
Module contents)
Form of instruction	Lecture, seminar or introductory course
Language of instruction	English
Duration (semesters)	1 Semester
Module frequency	Every 18 months
Module capacity	15
Time of examination	
Credit points	5 CP
Share on module final degree	Course 1: 0%.
Share of module grade on the course of study's final grade	1
Reference text	Course theme To be developed in collaboration with our Advisory Boards. Teaching methods ? Innovative teaching methods: We strive for actual competencies needed in the industry. During class, actual consultancy tasks and problems will be presented and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms. ? Self-study: We expect the participants to hold a high degree of self-discipline and show up well prepared to class, being motivated to share their knowledge. ? Live cases: will be analyzed in order to tailor future project management models for decommissioning tasks. ? Workshops: Students will meet up physically two times during the module, to solve actual problems raised by partner firms. ? Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Exam prerequisites	Type of examination	
Lecture, seminar or introductory course		
Learning/teaching form Lecture, semina	or introductory events	
30		
0		
120		
0		
150		
120		
270		
Winter semester		
unlimited		
	Lecture, seminar or introductory course Learning/teaching form Lecture, seminar 30 0 120 0 150 120 270 Winter semester	Lecture, seminar or introductory course Learning/teaching form Lecture, seminar or introductory events 30 0 120 0 150 120 Vinter semester

OWEMBA Module 11 - Digitalisierung in der Offshore-Windenergie

Module label	Digitalisierung in der Offshore-Windenergie	
Module code	OWEMBA Module 11	
Semester of first implementation		
Module used in courses of study / semesters	 Offshore Wind Energy MBA (Master-Abschlüsse) > Offshore Wind Energy MBA 0 CP Offshore Wind Energy. valid from WS 2023/2024 studienbegleitende Leistungen 	
Responsible person for this module	Østergaard, Flemming (module responsibility)	
	Dovnborg Frederiksen, Rasmus (Examination)	
	Bjerrum, Michael (Examination)	
	Kühne, Admin (Module counselling)	
Prerequisites		
	Self-assessment questions: The student will assess her/his knowledge of the subject, study the provided literature, consider other sources of knowledge and consider own ideas of opportunities and challenges digitalization. ? What do I know about digitalization (related to the OW industry)? ? What does the provided literature tell me? ? Wich platforms or forums might be of interest for further knowledge gain?	

Examination

To be able to pass the course, the participants must show understanding of the theory, be able to put the theory into a practical context and create good solutions for the study cases. The form of evaluation is a portfolio, which will consist of:

- ? Active involvement during physical workshops
- ? Oral and written presentation of assignments (including eventual updates)
- ? Reflection over the course and feedback

? Wich critical elements should I consider?

? Do I see an opportunity for me or the company I work for? ? How could businesses collaborate and leverage the opportunities?

Skills to be acquired in this module

OWEMBA Module 11

General learning outcomes

Students will be able to...

- ? Autonomously read on new theories and methods (LO1)
- ? Apply new theories and methods to practical challenges (LO2)
- ? Evaluate upon application of theory and methods (LO3)
- ? Manage complex situations in offshore wind energy industry (LO4)
- ? Identify risks and challenges by analyzing data gathered and use them for decision making (LO5)
- ? Integrate business knowledge, analytical skills and management techniques for planning and controlling (LO6)
- ? Evaluate consequences of solutions (LO7)
- ? Show leadership capacity and teamwork skills (LO8)
- ? Communicate challenges and solutions to relevant stakeholders (LO9)

Aim and content:

Learning outcome:

Based on industry examples this module will introduce participants to concepts, methods and tools to improve their understanding and application of digital thinking in the OWE. This will take place throughout the full lifecycle of offshore wind infrastructure - from surveying, planning, design, logistics, operational support, training and decommissioning. Furthermore, this module also presents the use of generic technologies enabling many of the previous digital applications i.e. big data analytics, 5G technology, AI, cloud computing, blockchain and IoT. Potential benefits and challenges of these technologies will be presented, and participants will get opportunities to discuss, compare and contrast applications and potential implications.

Module contents

5 CP

OWEMBA Module 11 5 CP

Business case description:

A concrete case provided by co-lecturer, where students will focus is on HOW digitalization can help the organization to develop effective digital strategies that create business value for employees, customers, stakeholders, and society. Ideally this should include an assessment of the problem followed by potential solutions and their implications and consequences.

Content

The availability of large amounts of data has a profound impact the wind energy industry. From turbine design to plant layout, construction, commissioning and O&M, new processes and business models are emerging. As seen in numerous other industries and businesses, digitalization leads to improved efficiencies and greater insight, ultimately leading to enhanced energy capture and savings for wind energy resulting in energy cost reductions. Digitization also helps drive collaboration both in terms of speed, ease, and accessibility. However, digitization also faces major challenges: ? A need to create reusable data frameworks. It is often required to combine and use data from many different sources and disciplines. Siloed data is the

- biggest obstacle to operational efficiency as data is the underlying factor for all other digitalization elements to build upon.

 ? A need to connect people to data to foster innovation. Regardless of form
- ? A need to connect people to data to foster innovation. Regardless of form data tells a story. It can identify cost savings and efficiencies, new connections and opportunities as well as an improved understanding of the past to shape a better future
- ? A need to enable collaboration and competition between organizations. The major challenges thus include a combination of technical and cultural aspects, which will require strong cooperation between companies, the academic world and the public sector to solve.

Working to mitigate these will position wind energy as an essential part of a global clean energy future.

- This module offers a framework for digital thinking within the offshore wind industry. The main topics centers around:
- ? Digital transformation: Enables a connected process between plant, supply chain, OEMs, customers, and other stakeholders to ensure quality, availability of products, a proper feedback system, and customization of products, ensuring continuity and a sustainable process.
- ? Cybersecurity: Ensure safe platforms with continuously upgraded strong security standards
- ? Industry 4.0 (connectivity through cyber-physical systems) vs. Industry 5.0 (integrated relationship between "man and machine")
- ? Adopting new technologies to help adapt products to changing requirements ? Digital twins: Simulation and testing before actual implementation to ensure product precision and faster execution without bottlenecks
- ? Asset performance management by using real-time diagnosis to predict and plan maintenance schedules
- ? Product life cycle management by integrating and simulating the compatibility of all components of a new product in real-time, and to plan for a successful launch
- ? IIoT-driven automation that integrates plant, logistics, and supply chain management $\,$
- ? Man/machine collaboration for better precision, faster execution, personification of products, and minimization of waste

Form of instruction	Course or seminar	
Language of instruction	English	
Duration (semesters)	1 Semester	
Module frequency	Every 18 months	
Module capacity	15 (
	xxx	
)	
Time of examination		
Credit points	5 CP	
Share on module final degree	Course 1: 0%.	
Share of module grade on the course of study's final grade	1	

Reference text

OWEMBA Module 11 5 CP

Course theme

While the fossil fuels industries have had more than 100 years to perfect their ways of operation and production, the offshore wind energy industry is still relatively new, which means that there are still significant room for the industry to increase both effectiveness and efficiency through use of digitalization. Digitalization is revolutionizing the energy sector by improving productivity, safety, accessibility, and sustainability of energy systems. New, smarter ways of modeling, monitoring, analyzing, and forecasting various facets of energy development, production and consumption are key in this green energy transition that has helped to gain multiple environmental benefits.

This transformation has also affected the entire wind energy supply chain from

This transformation has also affected the entire wind energy supply chain, from wind turbine manufacturing to wind farm operation and decommissioning. Moreover, digitalization will also help fostering new processes, networking opportunities and business models.

Going forward further digitalization of wind farm construction, operation and maintenance will be a major driver for improving performance and reducing costs and financial risks.

Top priorities for further digitalization in the offshore wind industry: (DNV report 2019)

- ? Improving operational efficiency (identified by 52% of respondents)
- ? decision making (42%)
- ? cost efficiency (40%)

The module will focus on HOW digitalization can help organizations to develop effective digital strategies that create business value for employees, customers, stakeholders, and society.

- ? Innovative teaching methods: We strive for real-life competencies needed in the industry. During class, actual consultancy tasks and problems will be presented, and the MBA students will then apply theory in a real-time scenario and solve actual problems for the partner firms.
- ? Self-study: We expect the participants to hold a high degree of self-discipline and show up well prepared for class, being motivated to share their knowledge. ? Live cases: Business cases will be analyzed to prepare the participants for future leadership requirements within wind energy.
- ? Workshops: Students will meet up physically twice for two days during the module to solve actual problems raised by partner firms.
- ? Forum, chat and messaging: All students can get in contact with their lecturer and fellow students to discuss, elaborate and clarify issues, ask questions and exchange views.

Examination	Exam prerequisites	Type of examination
Course		
Final exam of module		
Exam repetition information		
Form of instruction	Course or seminar	
Course name		
sws		
Workload of compulsory attendance	30	
Workload of preparation / homework etc	120	
Workload of independent learning	0	
Workload (examination and preparation)	0	
Workload total	150	
Workload self-arranged work (module- oriented	120	
Total module workload	270	
Type of examination		
Frequency	Summer or winter semester	
Capacity	15	