



Educating Experts and Executives: Continuing Studies Programme Offshore Wind Energy

Christoph Schwarzer (ForWind)

22. Windenergietage, 14. November 2013, Rheinsberg



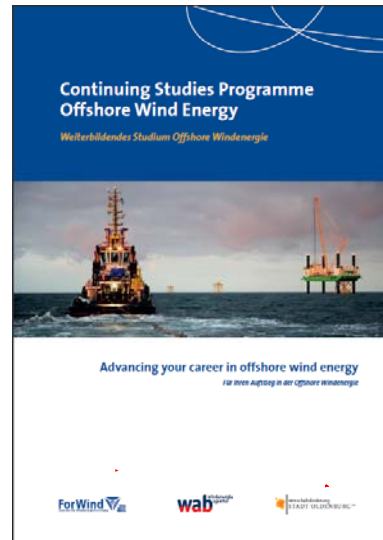
New industry calls for new education that brings together the wind and offshore worlds

- Large scale OWE projects challenge ...
 - the wind-world: offshore environment, project dimensions
 - the offshore-world: logistics of serial installations, cost pressure
- Innovation and technology transfer
 - Skills and their standardization are important,
 - BUT: Do we have competent people with heads & minds ready to lead and invent?
- Experts and executives ...
 - need to learn the overview and gain understanding of the whole system
 - move in from various traditional (engineering, business,..) disciplines

→ Traditional programmes slow to develop

→ Innovative forms of academic education needed

Academic Education Goes Offshore: Continuing education for professionals



- ✓ part-time
- ✓ interdisciplinary
- ✓ provide up-to-date knowledge
- ✓ address needs of industry and businesses
- ✓ support building of networks



: Research and teaching since early 1980ies



: Industry and business network since 2003

ForWind and Wind Energy Research in Germany

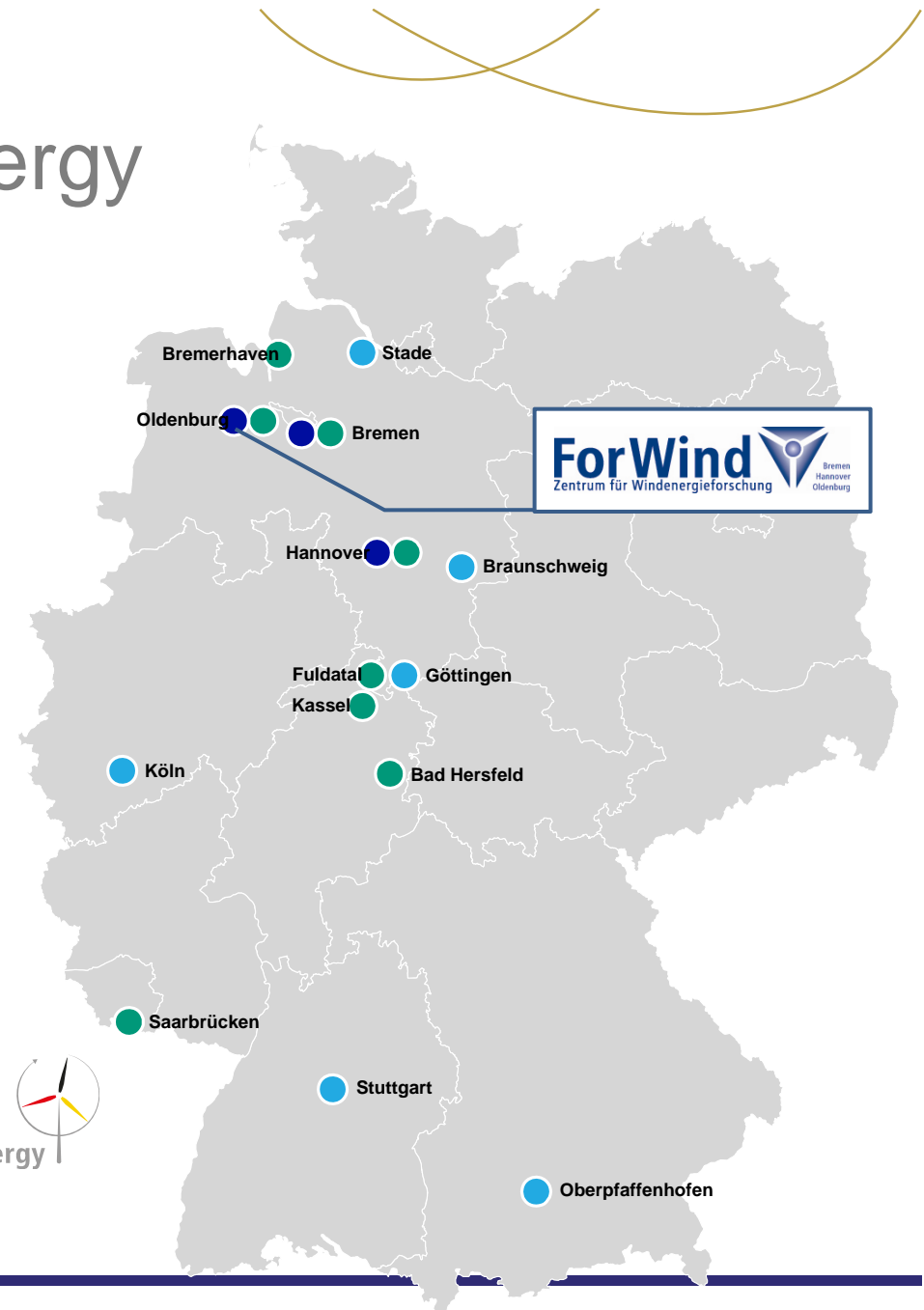
- ForWind – Center for Wind Energy Research of the Universities of Oldenburg, Hannover, Bremen: 26 institutes

Research Alliance with:

- German Aerospace Center DLR : 6 institutes
- Fraunhofer IWES: (10 departments)

Together

- 14 locations in
- 7 states of Germany
- Approx. 600 staff



Offshore Wind Industry Network: Wind Energy Agency - WAB



Industry Association since 2002

- Members: approx. 390
- Financing: membership fees, partly government funded
- Headquarter: Bremerhaven (14 employees)

Activities

- Public relations and lobbying for OWE
- Conferences, workshops, and fairs like → WINDFORCE2013
- Member services
- Working committees (e.g. foundations, O&M)
- Representing the German offshore industry abroad

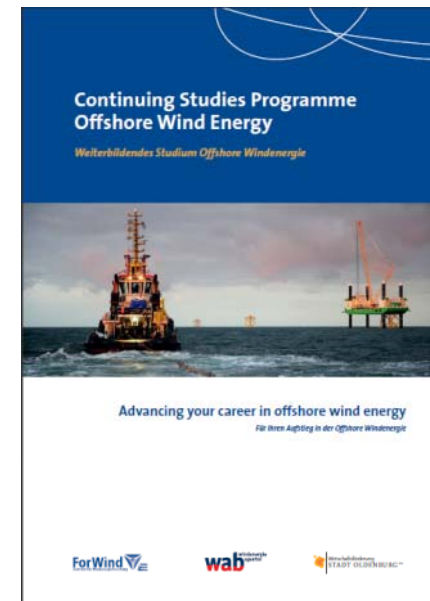
Members cover full OWE value chain



Continuing Studies Programme Offshore Wind Energy

Project history :

- Development project by ForWind and WAB
- Public and industry funded
- First part-time study programme in offshore wind
- First run: Oct 2012 – May 2013
- Second run: Sep 2013 – May 2014
- Next run: Sep 2014 – May 2015



Project Partners

Initiators:



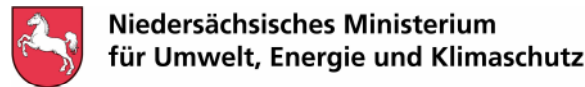
Sponsors:



Public support:



Bremerhavener Gesellschaft für Investitionsförderung und Stadtentwicklung mbH



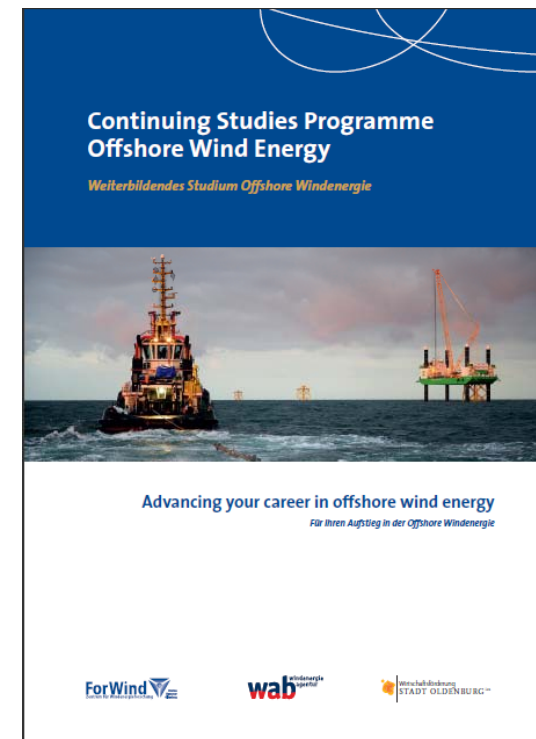
Der Senator für Wirtschaft, Arbeit und Häfen



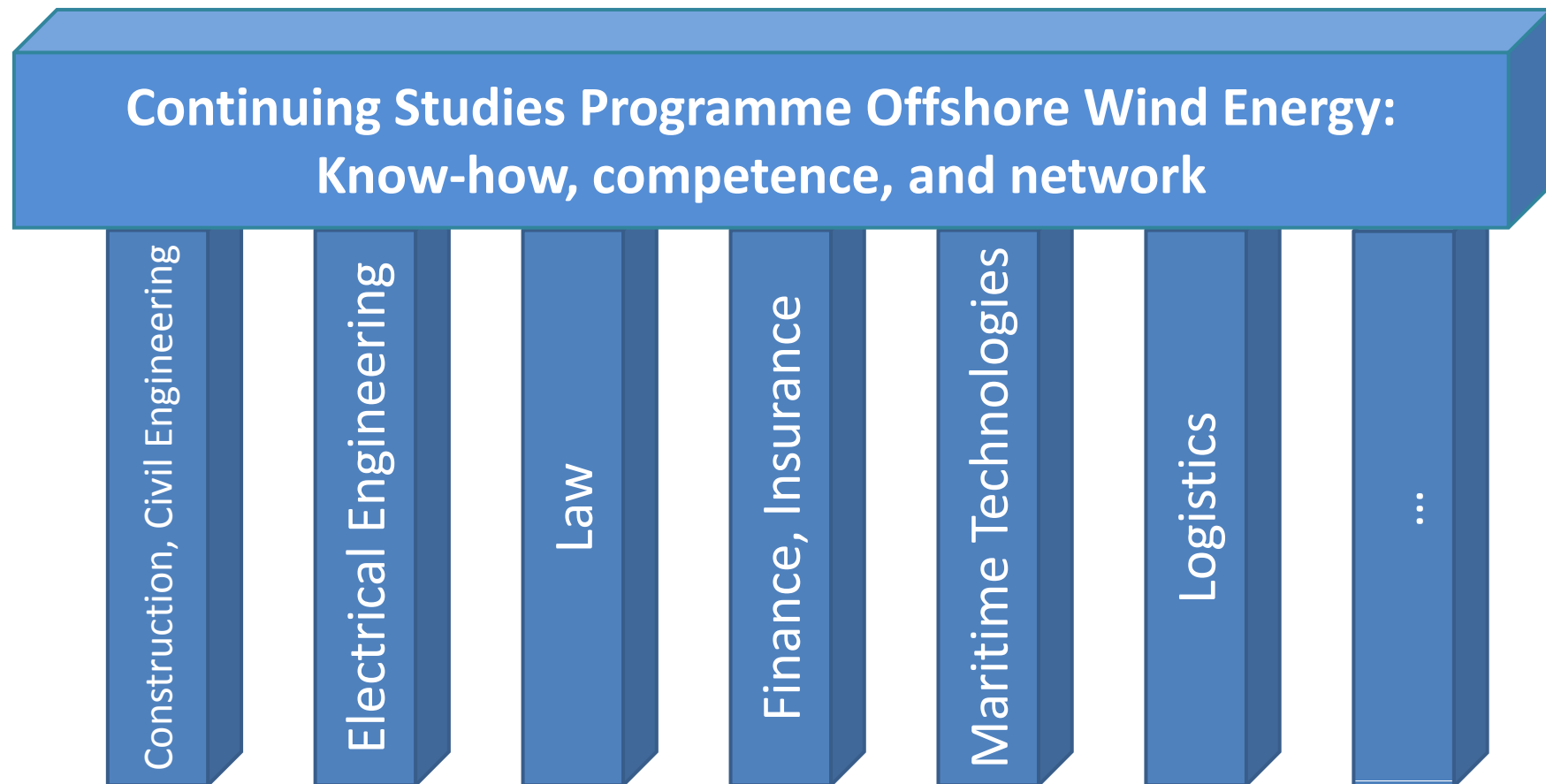
Continuing Studies Programme Offshore Wind Energy

Key aims and features:

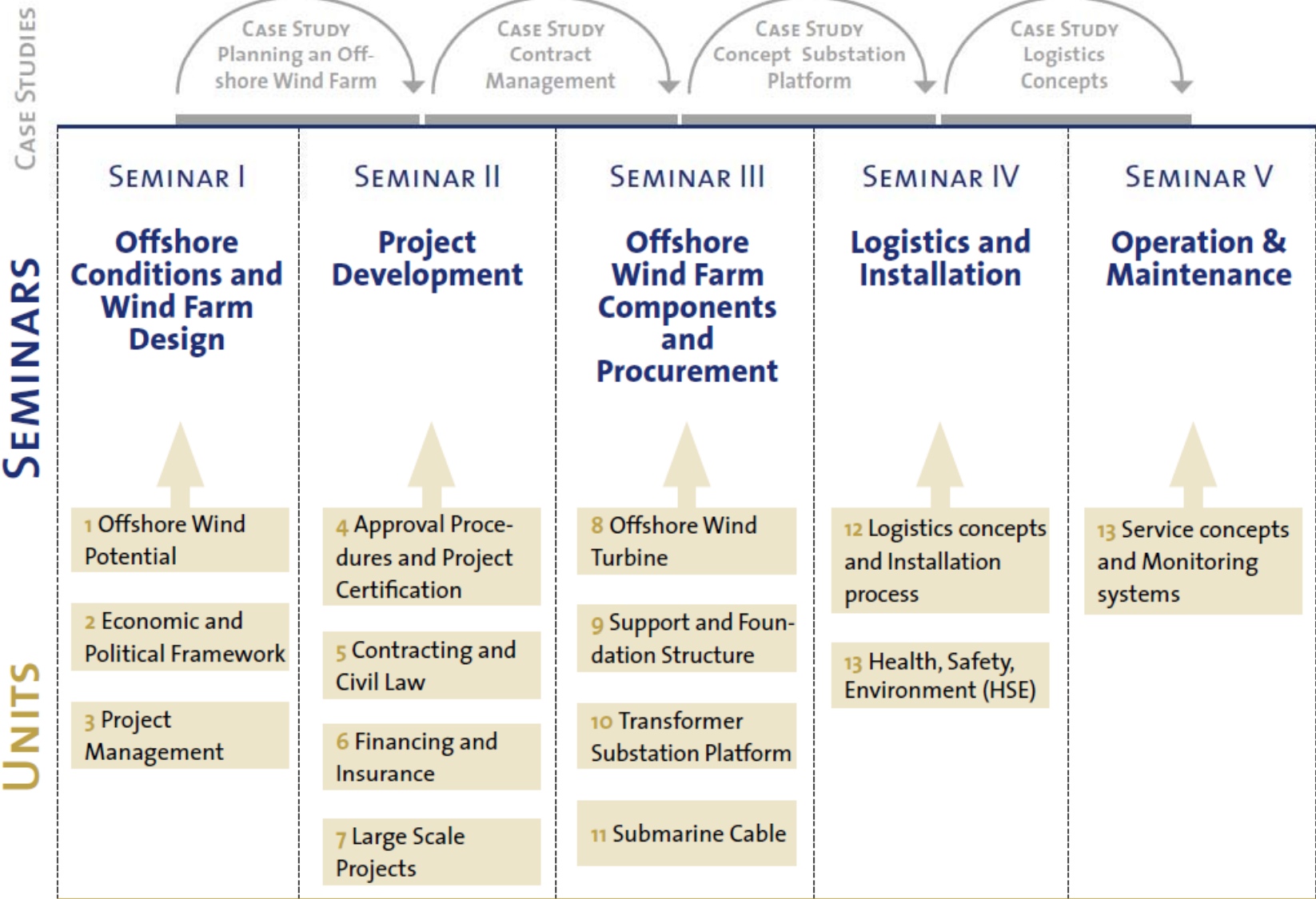
- Know-how transfer between wind and maritime worlds
- Multi-disciplinary target group
- Share experiences
- Build network of experts
- Short and intensive programme (9 months)
- Advanced level & practical use
- University certificate (30 ECTS)



Knowledge Transfer: Bridging the Gaps Between Disciplines



Modules & Contents



Case Studies

4 Case Studies und ein Business Game – Fallbeispiele aus der Praxis für die Praxis –

Fallstudien zu den Modulthemen

1. Planning an Offshore Wind Farm
– A First Presentation to Investors
2. Project Management Plan:
Concept for a Large Scale Project
3. Contract Management
– Negotiations for a Construction Contract
4. From a Wind Turbine to a Transported Object:
Logistics Concepts

Business Game: Operation & Maintenance

- Vorstellung und Bearbeitung während und zwischen den Präsenzseminaren
- Erstellung und Betreuung durch erfahrene Experten



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Blended Learning Mix: Project Learning & Networking

- Lecturers from research and industry
- Exclusively written reading material
- Seminars: 4 days every two months
 - Lectures and guest talks
 - Field trips (manufacturer, harbour,...)
- Learning in projects (case studies)
- Work in mixed teams
- Web-based work space
- Language: English

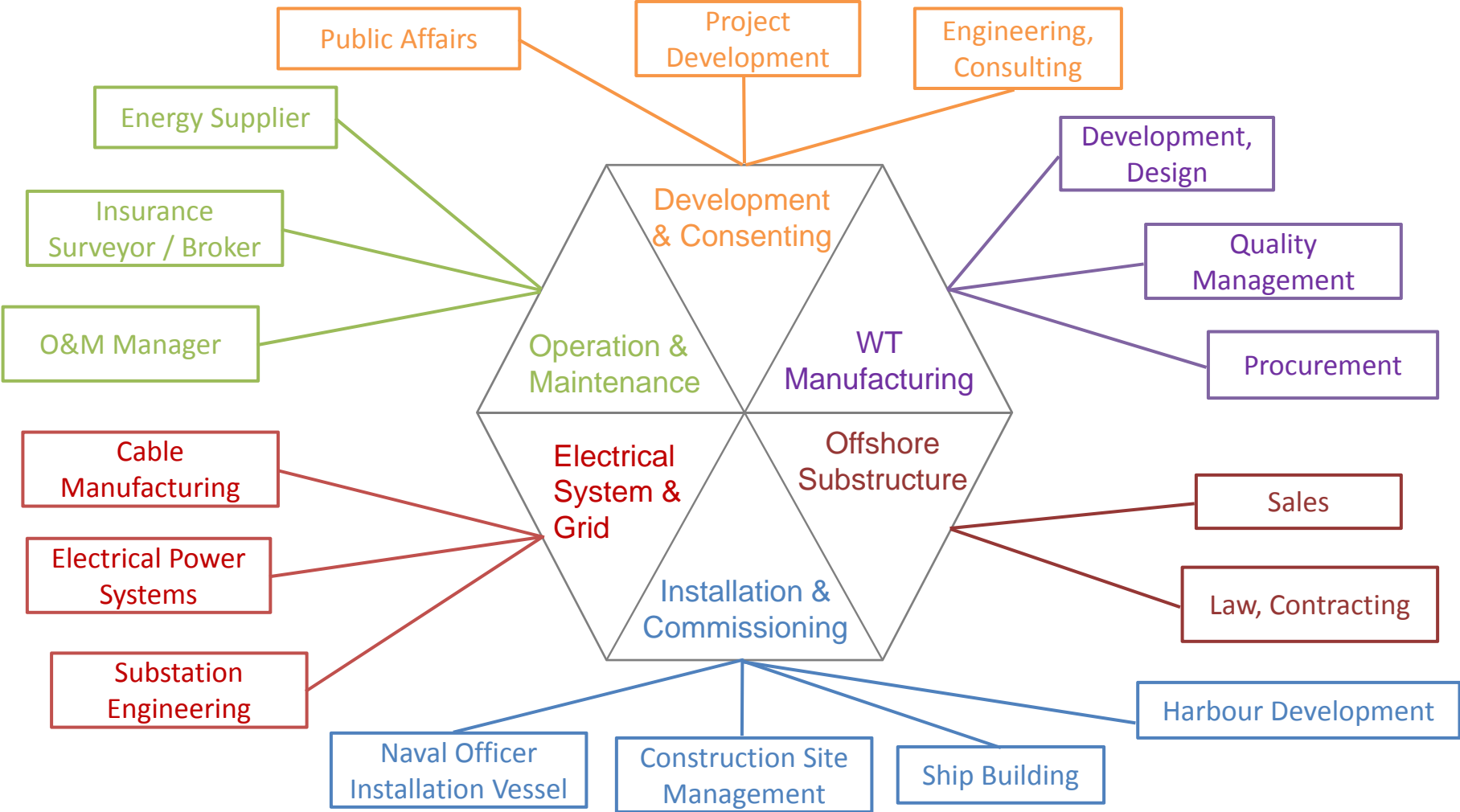


Siemens AG, Energy Sector, Division Wind

Lecturers

- Frank Wiersma ecofys, Utrecht
- Marco Penk ecofys, Utrecht
- Dr. Silvia Pestke Global Tech One, Hamburg
- Sabine Goeden Global Tech One, Hamburg
- Jörg Asmussen Hochtief, Hamburg
- Tim BrunertInros & Lackner, Bremen
- Dr. Jörg Buddenberg EWE AG, Oldenburg
- Lars Engelmann Vattenfall Hamburg
- Frank Fischer frankfischer & friends,
Wangerland
- Tim FischerRamboll, Hamburg
- Peter Frohböse GL Garrad Hassan,
Hamburg
- Markus Klose GL Group, Hamburg
- Sven Höpfner Alstom Grid, Dresden
- Bernd Horstmann EnBW, Hamburg
- Stefan Kansy EnBW, Hamburg
- Kreso Perinic EnBW, Stuttgart
- Prof. Dr. Martin Kühn Universität Oldenburg
- Prof. Dr. P. Schaumann Universität Hannover
- Prof. Dr. M. Achmus Universität Hannover
- Thomas Haukje Nordwest Assekuranzmakler
Bremen
- Falko Fähndrich Blanke Meyer Evers,
Rechtsanwälte, Bremen
- Dr. Jörg Böttcher HSH Nordbank, Kiel
- Dr. Falk Lüddecke Technologie Kontor,
Bremerhaven
- Jürgen Mackeprang Deutsche Offshore Consult,
Bremerhaven
- Jörg Engicht Deutsche Offshore Consult,
Bremerhaven
- Dr. Hans-Peter Waldl Overspeed GmbH, Oldenburg
- Thomas Pahlke Overspeed Oldenburg
- Ronny Meyer WAB, Bremerhaven
- Charlotta Noren Norqual, Zeebrugge
- Philippe Schönefeld German Renewable
Shipbrokers, Hamburg

Participants by Areas of Supply Chain





Application & Requirements:

- ✓ High motivation
- ✓ Very good English language proficiency
- ✓ University education and degree
- ✓ Professional experience in wind energy or maritime sector
- ✓ Written application with full portfolio and:
 - + motivation letter
 - + recommendation letter (when applicable)
- ✓ 24 participants selected by directors of study

Facts & Figures: First Year Cohort 2011/13

- 38 Applications
- 33 male & 5 (13%) female
- 25 selected
- 22 with technical education
- 16 with non-technical education
- 15 company supported applications
- 8 with other background (newcomers to OWE)





In Brief:

Continuing Studies Programme Offshore Wind Energy

History	7 years of successful experience with onshore „Windstudium“
Concept	Support Offshore Wind Industry by: Know-how / competences / Sharing of experiences / network of experts
Target Group	Interdisciplinary: technicians / engineers / bankers / lawyers / managers,...
Format	Part-time study / blended-learning: exclusive material, case studies, lecturers from industry and research / project learning
Duration	9 months / 20 seminar days
Degree	Certificate from University of Oldenburg
Costs	EUR 9.800
Contact	www.offshore-wind-studies.com

Conclusion:

Continuing Studies Programme Offshore Wind Energy

- ✓ Continuing education for professionals from various disciplines
- ✓ Experts and executives need competences to lead innovation
- ✓ Programme supports sharing know-how and experiences
- ✓ and building of network of experts



Find out more :
www.offshore-wind-studies.com