The Offshore Summer School is conducted by experts from the following institutions:

Bildungs- und Trainingszentrum für Windenergie-technik(bfw) DE, www.windzentrum.de
Bildungszentrum für erneuerbare Energien e.V. (BZEE) DE, www.bzee.de
Delft - University of Technology NL ,www.tudelft.nl
Den Helder Training Centrum (DHTC) NL, www.dhtc.nl
Echelon Institute of Management Development (EIMD) NL, www.eimd.com
Forschungs- und Koordinierungsstelle Windenergie (fk-wind) DE, www.fk-wind.de
ForWind - Center for WindEnergy Research DE , www.forwind.de
Gesellschaft für Angewandten Umweltschutz und Sicherheit im Seeverkehr DE, www.gauss.org
Gewerbliche Lehranstalten Bremerhaven (GLA) DE, www.gla-bremerhaven.de
New and Renewable Energy Centre (NaREC) UK, www.narec.co.uk.
Offshore Center Denmark (OCD) DK, www.offshorecenter.dk
Survival Training Maritime Safety (STMS) DK, www.stms.dk
University of Applied Sciences Bremen DE, www.hs-bremen.de
University of Applied Sciences Bremerhaven DE, www.hs-bremerhaven.de
Wirtschaftsakademie Schleswig-Holstein DE, www.wak-sh.de

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The Offshore Summer School is part of the skills development in the project „Pushing Offshore Wind Energy Regions“ (POWER)

Application until 15. July 2006:

Course fee:

100€ including course materials and refreshments

Application procedure and travel information:

www.forwind.de
www.fk-wind.de

P·O·W·E·R
Pushing Offshore Wind Energy Regions

Offshore Summer School 2006

Wind Energy in Theory and Practice

www.offshore-power.net

4 - 9 September 2006

Bremen
Bremerhaven
Germany

Interreg North Sea Region

Concept:

The Offshore Summer School 2006 offers specific offshore wind energy related courses and practical training.
The concept is based on an international exchange between engineers and technicians and the ambition to harmonise different national guidelines.
The lecturers and coaches are experts from four North Sea Regions.

Further information:

www.offshore-power.net
www.fk-wind.de
www.forwind.de

The course language is English

Aims

Prepare technical personnel for offshore wind energy:

- Technical issues of offshore wind farms
- Interaction between engineers and technicians
- Work in international and interdisciplinary teams
- Technical English
- Safety and rescue procedures

Target groups:

- Students of science and engineering
- Trainees and technicians
- Professionals from wind energy industry

Offshore Summer School 2006

Programme

Start: 4 September 2006 11:00
End: 9 September 2006 15:00
Programme update:
www.fk-wind.de
www.forwind.de

Monday, Sept. 4

Welcome

Introduction to the POWER project

Team training

- Communication
- Motivation
- Cooperation
- Problem solving
  in intercultural and international teams
- Experience orientated learning approach
- Exercises in real team situations

Tuesday, Sept. 5

Technical English

- Understand instructions in manuals
- Use of control software
- Conduct technical discussion in English
- Practical exercises

Mechanics of wind turbines

Function of mechanical components of wind turbines:

- Main shaft, gearbox,brake system, yaw mechanism
- Hydraulic system
- Practical training in workshops

Introduction to risk assessment

- Threats, vulnerabilities, controls

Evening programme

Get Together

Wednesday, Sept. 6

Safety and rescue training I

- Introduction to: Life saving appliances & emergency signals
- Training: Knots
- Team training: Life saving appliances

Thursday, Sept. 7

Safety and rescue training II

- Repetition and exercises: Knots
- Introduction to: Small boats, how do they work?
- Training:
  - Manoeuvring with small boats
  - Rescue of people floating in the water

The safety and rescue training I + II is provided by certified institutions with professional equipment.

Friday, Sept. 8

Offhore wind farms I

Offshore environment and loads

- Wind and waves
- Mechanical loads

Power generation

- Electrical systems
- Grid integration

Excursion to MW - wind turbines

Saturday, Sept. 9

Offshore wind farms II

Installation, operation and maintenance

- Foundations
- Installation techniques and logistics
- Environmental impacts
- Operation and maintenance
- Failure Mode and Effect Analysis (FMEA)