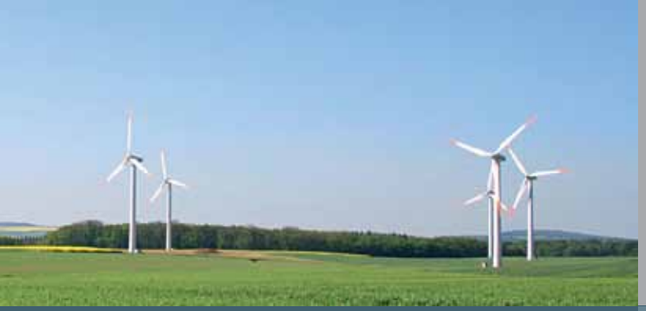
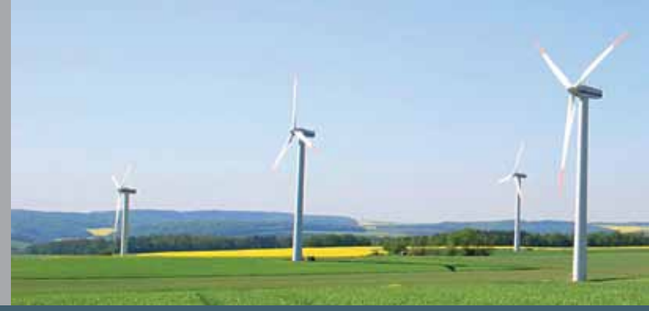


Fraunhofer
ACADEMY



AN OVERVIEW OF YOUR BENEFITS

- Part time study and distance learning
- Time and location independent study
- Minimal absences during working time through low presence phases
- Extensive experience of both institutions in education and training in the field of renewable energies
- A unique insight into the research on wind energy
- Childcare during the presence phases
- Flexible learning periods
- Professional support
- Teaching by leading experts in the field of wind energy
- New job opportunities through a hands-on engineering education in a booming professional field

www.academy.fraunhofer.de www.uni-kassel.de/wes

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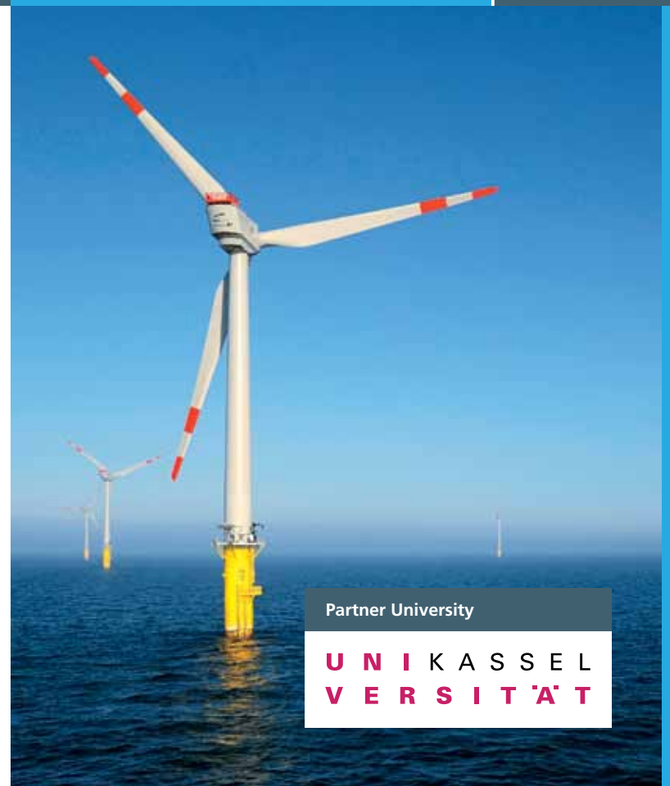
ONLINE M.SC. WIND ENERGY SYSTEMS

Part Time Course of Study



Partner University

UNIKASSEL VERSITÄT

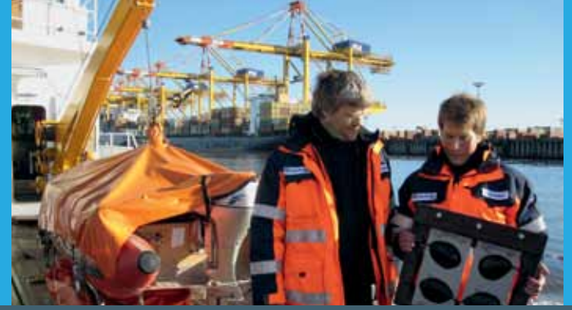
MAKE USE OF OUR KNOWLEDGE ABOUT WIND ENERGY

The main objective of the master program for Wind Energy Systems is capacity building in the field of wind energy for research and industry. Methods and technology innovations will be developed in learning alliances with the industry within the framework of master theses and doctoral dissertations. Prospective target groups for the Master program are natural scientists and engineers. Our students are offered on-job training to complete a whole master program or individual specialization modules.

Due to our advanced high level training, it is possible to provide students with excellent job perspectives.

Yours sincerly
Prof. Dr. Clemens Hoffmann
Head of Fraunhofer Institute for Wind Energy and Energy System Technology (IWES)

Prof. Dr.-Ing. habil. Detlef Kuhl
Head of Institute of Mechanics and Dynamics (IBSD), University of Kassel



EDUCATING WIND ENERGY ENGINEERS ONLINE

A modular course structure
The study program consists of a selection of 31 modules. The modules are temporary and closed learning units. All modules are taught primarily online. This enables career changers and professionals the academic training in the young research and business field Wind Energy Systems.

An interdisciplinary team of teachers
The group of participating teachers have a high level of interdisciplinary. All teachers in the specializations are internationally recognized experts in their field of knowledge. Through membership in various networks (including DERlab, EUREC, EERA, EAWE), the Fraunhofer IWES has an exceptional network. This enables the master graduates a seamless continuity qualification in the field of Wind Energy Systems at European level.

The learning platform Moodle
The learning units are provided through the learning platform Moodle. These learning materials are thus available independent of location and time. A professional support is provided during the online-based self-learning phases.

PROGRAM STRUCTURE

Curriculum
A total number of **120 ECTS** must be achieved in the master program. It is taught in English and primarily online. The achieved qualification is a Master of Science (M.Sc.).

Master-Thesis (University, IWES or Industry)	**30 ECTS**
Specializations / Additive Key-Competences	**60 ECTS**
Specializations: (1) Energy System Technology; (2) Simulation and structural technology. Minimum **30 ECTS** must be selected in one of the specializations	Additive Key-Competences
Fundamentals of mathematic and engineering for wind energy	**30 ECTS**

Bundesministerium für Bildung und Forschung

ESF Europäischer Sozialfonds für Deutschland

EUROPÄISCHE UNION

ENTRY REQUIREMENTS

The participants: Potential target groups for the Master's program are scientists and engineers from research and industry who are looking for professionals training in the scope of a whole Masters or single specialization modules.

Degree: The participants receive a Master of Science (M.Sc.) degree from the University of Kassel. The degree title given to successful students at the end of the course is "M.Sc. in Wind Energy Systems". This degree qualifies for further post graduate work towards PhD.

Accreditation: Accreditation is granted by the agency ASIIN. Accreditation is planed by the agency ASIIN in 2013.

Entry Requierements: The minimum entry requierements are a Bachelor in relevant natural and engineering sciences and a 1-year work experience.

Study Period: The study duration is typically five to seven semesters of study.

Application: The application procedure is described on the M.Sc. Wind Energy System website: **www.uni-kassel.de/wes**

"A need of educated engineers is be noted on all levels of the high growing on- and offshore sector. We would like to educate qualified engineers for the growing job market of the Wind Energy Sector."
Dr. Kurt Rohrig, Deputy director of Fraunhofer Institute for Wind Energy and Energy System Technology (IWES)

Knowledge from research into education
As a result of the technical cooperation between Fraunhofer Institute for Wind Energy and Energy System Technology (IWES) and the Institute of Structural Mechanics of the Kassel University, the latest research findings are integrated into the teaching of the Online M.Sc. Wind Energy Systems.

The research activities of the **Fraunhofer Institute for Wind Energy and Energy System Technology (IWES)** cover wind energy and the integration of renewable energies into energy supply structures. The main areas of research are: Technology and operational management of wind turbines and wind farms; Component development for rotors, drive trains, and foundations; Test and evaluation methods for wind turbines and Components; Environmental analysis of wind, sea, and seabed for utilization of wind energy and marine energy; Control and system integration of decentralized energy; converters and storage systems; Energy management and grid operation; Energy supply structures and system analysis.

The **Institute of Mechanics and Dynamics** represents in education and research the department of analytical, numerical and experimental mechanics. Its research topics are the extended continuum mechanical modelling, the numerical simulation and experimental verification of models as well as simulation strategies.