Premium Online Studies - Made in Germany

Stay in your Job and Study on Top!

Learn more

In a Nutshell

Key facts about the Programs

Experts
Learn from World Leading Experts in Renewables

Career
Boost your career with a Master of Science next to your Job

Network
Meet your peers and start networking

Knowledge
Gain a general understanding of Renewable Energies, or focus on Wind or Solar
## Who we are

### Fraunhofer Academy
- **Jutta Haubenreich**
  - Education Management
  - Fraunhofer Academy

### Master Renewable Energy Online
- **Andreas Günther**
  - Program Coordinator
  - University of Oldenburg

### Online M.Sc. Wind Energy Systems
- **Dr. André Bisevic**
  - Program Coordinator
  - Fraunhofer IWES Kassel

### Online M.Sc. Wind Energy Systems
- **Julia Mergner**
  - Course Management
  - University of Kassel

### M.Sc. Solar Energy Engineering
- **Philipp Bucher**
  - Program Coordinator
  - University of Freiburg
  - In cooperation with Fraunhofer ISE

**Freiburg**
Fraunhofer: the largest organization for applied research in Europe

The Fraunhofer-Gesellschaft undertakes applied research of direct utility to private and public enterprise and of wide benefit to society.

24,500 staff

69 institutes and research units
Research and development on behalf of industry and state

mp3 music format, white LED, high-resolution thermal camera

Research volume: approx. €2.1 billion annually
The Fraunhofer Academy is Fraunhofer’s specialist provider of advanced training.
Fraunhofer Academy – Advanced Training with Fraunhofer

• Part-time study programs, certificate courses and multi-day seminars

• Courses in 5 different areas of Fraunhofer expertise

http://www.academy.fraunhofer.de/en
OVERVIEW

Presenters
- Online M.Sc. Solar Energy Engineering, University of Freiburg & Fraunhofer ISE
- Online M.Sc. Wind Energy Systems, University of Kassel & Fraunhofer IEE
- M.Sc. Renewable Energy Online, University of Oldenburg

Target Group: Students...
- ...who want to study independent from time and location
- ...who are already working as engineers
- ...who want to study besides job and family
C3LLO - ONLINE LEARNING MANAGEMENT SYSTEM

Virtual Campus:
- Study Materials
- Assignments
- Self Tests
- Scores
- Forums
- Blogs
- Etherpads
- Virtual Classroom
VIRTUAL CLASSROOM – ADOBE CONNECT
(VOLUNTARY) ON CAMPUS PHASES
Study Online
Learn from the best German solar experts

Boost your Career
Become Part of the Solar Community

Solar Energy Engineering
Continuing Education

In scientific cooperation with:
Fraunhofer ISE

DAAD Webinar
30.10.2018
Philipp Bucher
Introduction

Prof. Stefan Glunz, Head of the Program

Philipp Bucher
Program manager
Who we are

One of the leading Universities in Germany

University of Freiburg

The largest solar energy research institute in Europe

Fraunhofer Institute for Solar Energy Systems (ISE)
Growth of global solar energy market

Renewable electricity capacity growth by technology

Market growth globally: companies need qualified workforce
→ MSc in solar energy engineering

Renewables Report (OECD/IEA, 2017)
MSc. Solar Energy Engineering

Study Online - next to your job
From all around the world

Voluntary Campus Phases
In Freiburg

E-Lectures
Online Meetings

Networking
Lab Internships
## Curriculum

<table>
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<tr>
<th>1st year</th>
<th>2nd year</th>
<th>3rd year</th>
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<tbody>
<tr>
<td>Preparatory Modules</td>
<td>Mandatory Modules</td>
<td>Electives</td>
</tr>
<tr>
<td>Research Projects</td>
<td></td>
<td>Thesis</td>
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</table>

Exams: From all around the world – close to your residency!
Application and Eligibility

You need

• Bachelor in Math, Engineering, Science or any related field.
• English language skills (level B2)
• Professional Experience of at least one year

Apply until July 31st each year

• Start date: mid October each year
• Program fee: approx. 3800 Euro per Semester
• Exams in study centers close to your residency or online
Interested?

“What I liked best was the quality of the e-lectures. I found it extremely well structured! It is the first time that I’ve worked with e-lectures, so it’s a new experience.”

“The solution lies in renewable energies and photovoltaics. Some of the concepts we are studying are completely new to me and they are amazing.”

Ronald, Entrepreneur

Contact us

www.studysolar.uni-freiburg.de
Online M.Sc. Wind Energy Systems

Info Session on October 2018
Why to study Wind Energy?

Global Wind Energy Industry

- above 50 GW in 2017, with Europe, India and the offshore sector having record years
- 3.7% of electricity consumption is covered by wind industry
Environmental University

- Founded in 1971
- Current enrollment: ca. 23,696 students
- Practically orientated learning and research
- Environmental profile:
  - Responsibilities and challenges of balancing the needs of mankind with the preservation of the environment
  - Environmental study and research programs.

Environmental topics of science, e.g.:

- Sustainable materials flow systems
- Biomass as a material and an energy source
- Environmentally-conscious planning
- Integrated water management
- Regenerative energy systems and energy efficiency
- Wind energy systems

→ Online M.Sc. Wind Energy Systems
FRAUNHOFER INSTITUTE FOR ENERGY ECONOMICS AND ENERGY SYSTEM TECHNOLOGY

The Institute

- The Fraunhofer IEE in Kassel researches for the national and international transformation of energy supply systems.
  - Personal: approx. 350
  - Annual budget: approx. 22 Mio EUR
  - Director: Prof. Dr. Clemens Hoffmann

Business Areas

- **Energy Economics**
  - Analysis and consulting for energy economics
  - Energy meteorology information systems
  - Virtual power plants
  - Wind resource assessment with LiDAR
  - Training and knowledge transfer

- **Energy System Technology**
  - Grid planning and operation
  - Power electronics and device technology
  - Hardware in the loop systems
  - Dezentralized energy management
  - Systems engineering
  - Measuring and testing
Lecturer of the Master’s Program

University

- University of Kassel
- Cologne University of Applied Sciences

Research Institutes

- Fraunhofer Institute for Energy Economics and Energy System Technology (IEE)
- Fraunhofer Institute for Wind Energy and Energy System Technology (IWES)

Industry

- SMA Technology
- Vortex Energy
- GLS Bank
- Dikei Abogados
A study program of

CURRICULUM

Online M.Sc. Wind Energy Systems
120 ECTS-Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Master-Thesis</td>
<td>30 ECTS-Credits</td>
</tr>
<tr>
<td>Specializations / Additive Key-Competences</td>
<td>60 ECTS-Credits</td>
</tr>
<tr>
<td>Fundamentals of Mathematics and Engineering for Wind Energy Systems</td>
<td>30 ECTS-Credits</td>
</tr>
</tbody>
</table>

Degree:
Master of Science

Master-Thesis:
University/Research Institute/Industry

Entitle to do a
PHD

Accredited Degree Programme
ASIIN 2015-2019
PRACTICAL PHASES

### Practical week

- 1-week stay in Germany
- connecting with fellow students from around the world
- meet teachers of University of Kassel, Fraunhofer IEE and Fraunhofer IWES
- explore the most important native places of the Online M.Sc. Wind Energy Systems
- visit different companies in the wind energy sector
- visit of the Global Wind Summit
- create a career plan
- earn 3 credit points (key competencies)

### Project phases

- to give students the opportunity to gain practical insights into the German wind energy industry
- working in projects at the University of Kassel, the Fraunhofer Institutes IEE and IWES or German firms in the wind energy sector
- earn 6 or 12 credit points
A study program of

ADMISSION REQUIREMENTS AND COSTS OF THE MASTER’S PROGRAM

1. Bachelor's degree, diploma or equivalent degree with at least 180 Credits in the subject fields
   • civil and environmental engineering, mechanical engineering, electrical engineering, physics (or a comparable study program)
2. (Or) in another program with basic subjects from the fields of
   • Mathematics, natural sciences, and achieved at least 60 credits, of which at least 18 credits are in the field of mathematics
3. Letter of motivation (max. two pages)
4. One year of professional experience after finishing the first course of higher education
5. Language skills of level B2 in English.

Study the complete Online M.Sc. Wind Energy Systems (120 Credits)
• Overall €14,000 (each semester €2,000)
  + Enrollment fees of University of Kassel (currently €140.70 per semester)
WES.ONLINE CERTIFICATES

Certificates of Advanced Studies

Credits: each 30 ECTS-Credits
Costs: each €6,000
Admission criteria: Bachelor’s Degree in a technical or scientific course, e.g. Mechanical Engineering, Electrical Engineering
  - Job experience and English language proof is not required!
Website: http://www.uni-kassel.de/uni/studium/wind-energy-system/wesonline-certificates.html
Online M.Sc. Wind Energy Systems

- Capacity building in the field of wind energy
- For natural scientist and engineers
- Combine study and work
  - Part time-work and study simultaneously and balance your studying and family time
  - International master’s degree program with 100% online learning program
- Student oriented teaching
- Become an expert in the field of wind energy:

Use this knowledge for a career in a company for wind park planning or in a public entity or become an expert for a single component at the development department of one of the worldwide leading producers.
THANK YOU FOR YOUR ATTENTION

Online Application for Master Program (until July 15)

www.uni-kassel.de/wes

For further questions after this Online Session contact:

<table>
<thead>
<tr>
<th>Course Management</th>
<th>Messenger</th>
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<tbody>
<tr>
<td><strong>Dr. André Bisevic</strong></td>
<td></td>
</tr>
<tr>
<td>Fraunhofer IEE</td>
<td></td>
</tr>
<tr>
<td><a href="mailto:wes@ieee.fraunhofer.de">wes@ieee.fraunhofer.de</a></td>
<td></td>
</tr>
<tr>
<td>0049-561-7294451</td>
<td></td>
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</tbody>
</table>

| Julia Mergner                            |                         |
| University of Kassel                     |                         |
| wes@uni-kassel.de                        |                         |
| 0049-561-8043446                         |                         |
| 0049 15120016078                         |                         |
DAAD Webinar USA/Canada

October 30, 2018
Andreas Günther
University of Oldenburg

- ~15,000 students
- Located in Northwest Germany
- More than 30 years of experience in Renewable Energy research and teaching.
- ~500 graduates from Renewable Energy master programmes
- Energy research groups: wind energy, photovoltaics, energy meteorology
- Cooperation with research institutes, e.g. DLR Institute for Networked Energy Systems, Fraunhofer IWES
• **Topics**: Renewable Energy Technologies, Energy Systems, Sustainability

• **Target group**: engineers and natural scientists with bachelor degree

• **Blended learning**: Mainly online, two compulsory on-campus phases

• **7 semesters, part-time** (120 ECTS credits)

• **Modular design**: flexibly adaptable to your individual life situation

• Courses start **every October**

• **Application** procedure currently under revision
Curriculum

1st Semester 18 ECTS
- Renewable Energy Basics
- Renewable Energy Laboratories & Excursion
- Introduction to Energy Resources & Systems

2nd Semester 18 ECTS
- Basics of Photovoltaics
- Wind Energy Fundamentals & Wind Farm Design
- Energy Storage

3rd Semester 18 ECTS
- Selected RE Technologies
- Elective Module
- Grid-Connected & Off-Grid RE Systems

4th Semester 18 ECTS
- Energy & Society
- Simulation & Laboratory
- Elective Module

5th Semester 18 ECTS
- Renewable Energy & Sustainability
- Elective Module
- Elective Module

6th + 7th Semester 30 ECTS
- Master Thesis

Key:
- Core Modules
- Technology Orientation
- System Orientation
- Social Science Orientation
- Master Thesis Module

Renewable Energy Online
Instructional Design

Concepts of Active and Cooperative Learning

Key feature: Close supervision by lecturers and mentors
Tuition Fees:
• 1,250 EUR per module
• 16 modules -> 20,000 EUR total
• Allowances for module packages: up to 20% -> 16,000 EUR total

Further Expenses:
• Semester Fee (~170 EUR)
• Travel cost for on-campus phases (2 times, two weeks each)
Admission Requirements

- First academic degree (bachelor or adequate degree) from a university
- Minimum one year of professional experience
- English language level B2 according to the Common European Framework of Reference for Languages (or equivalent)

Application

- Application process currently under revision
- Information will be available at [https://www.uol.de/reo/application](https://www.uol.de/reo/application)
Thank you for your attention!

www.uol.de/reo
# Overview

## Key Facts of the Programs

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<th>Master of Science Wind Energy Systems Online</th>
<th>Master of Science Solar Energy Engineering Online</th>
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</thead>
<tbody>
<tr>
<td><strong>University of Oldenburg</strong></td>
<td><strong>University of Kassel and Fraunhofer IEE</strong></td>
<td><strong>University of Freiburg and Fraunhofer ISE</strong></td>
</tr>
<tr>
<td>Apply until August 31st</td>
<td>Apply until July 15th</td>
<td>Apply until August 31st</td>
</tr>
<tr>
<td>Seven semesters part-time</td>
<td>Seven semesters part-time</td>
<td>Six semesters part-time</td>
</tr>
<tr>
<td><strong>€ 20,000</strong></td>
<td><strong>€ 14,000</strong></td>
<td><strong>€ 22,000</strong></td>
</tr>
<tr>
<td>whole program</td>
<td>whole program</td>
<td>whole program</td>
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