

Give your career wings

If you choose to follow the DTU Wind Energy MSc program, you will acquire scientific and advanced technological skills enabling you to meet future challenges in a wide range of international companies in rapid development such as wind turbine manufacturers, energy companies, consultancies and research companies.

DTU Career Center

The DTU Career Center provides counseling service to help you choose between job possibilities in Denmark. The companies are very eager to welcome you.

Contact: karriere@dtu.dk

Risø DTU is the National Laboratory for Sustainable Energy with world-leading experience in wind energy. Risø DTU offers courses, laboratory work and projects within the MSc program.

www.risoe.dtu.dk

www.dtu.dk/wind

Wind power

Wind energy is a very successful technology of steadily increasing importance. The technology utilized throughout the world generates electricity corresponding to the electricity consumption of 47 million Europeans. And this is just the beginning. In 2020, wind power can deliver 12% of the global electricity demand, create 2.3 million jobs and make a substantial contribution to the reduction of CO₂ emissions.

The partnership Megavind was founded in 2007 on the initiative of the Danish government. Megavind will contribute to the government's vision of wind power as the leading energy form in Denmark.

The partnership consists of research institutions and industrial companies in Denmark, and it represents the whole Danish wind power industry. DTU plays a key role in the partnership.

Program coordinators

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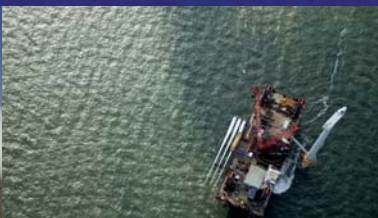


Wind Energy

MSc program

DTU has been involved in wind energy since the 1970's, and the university has a world-leading position in the field.

ARTCOME March 2009. Photos: www.siemens.com and POLIFOTO



MSc in Wind Energy

DTU's Wind Energy master's program is based on world-leading competences in the heart of the global wind power development. The program is built on up-front knowledge and scientific research carried out at the Technical University of Denmark including Risø DTU.

The aim of the MSc program in Wind Energy is to give you a general understanding of wind energy. You will acquire a deep insight into and knowledge of technologies related to wind power production qualifying you to analyze, design, develop and operate wind energy systems.

The wind energy industry is actively involved in the program, and numerous associated experts and researchers from industry take part in the teaching. When you draw up your master's thesis, you often cooperate with one or more external partners.

Scholarships and sponsorships

DTU and the Danish wind power industry offer a number of full scholarships to non-EU students and several student sponsorships to EU students.
Contact: Hans Henrik Saxild, Vice-dean, International Affairs
e-mail: hhs@adm.dtu.dk

www.dtu.dk/wind

Study program

The program focuses on electrical and mechanical aspects of wind power and power system integration. You have the opportunity to acquire interdisciplinary knowledge about a wide range of wind power technologies.

Program characteristics

- The program covers a wide range of wind power technologies.
- We teach all courses in English on an advanced technical level.
- Our teaching is based on and integrated with world-leading research in wind energy.
- You have a high degree of freedom to compound your own individual academic profile.

Prerequisites

The prerequisite for admission to the DTU Wind Energy MSc program is a BSc degree in electrical engineering, mechanical engineering or other relevant academic background.

Program provisions

To obtain an MSc degree in Wind Energy, you must have fulfilled the following requirements:

- **General competence courses** adding up to 30 ECTS points
- **Technological specialization courses** adding up to at least 30 ECTS points
- **Master's thesis** of at least 30 ECTS points in Wind Energy
- Sufficient number of **Elective courses** to bring the total number of ECTS points of the entire study up to 120.

Courses

General competence courses

Design of Wind Turbine • Wind Turbine Measurement Technique • Wind Turbine Technology and Aerodynamics • Planning and Development of Wind Farms • Technology, Economics, Management and Organization.

Technological specialization courses

The technological courses focus on either electrical or mechanical aspects of wind power and power system integration. You have to select courses in either **electrical** or **mechanical** engineering:

Electrical engineering

Connection of Wind Turbines to the Grid • High Power Electronics • Electric Machines in Wind Turbine Systems • Power System Networks • Stability and Control in Electric Power Systems • Computational Electric Energy Systems

Mechanical engineering

Projects in Wind Turbine Aeroelasticity • Computational Fluid Dynamics • FEM Heavy • Experimental Methods in Fluid Mechanics • Wind Resources and Loads on Wind Turbines

Elective courses

You may choose your elective courses within the following fields:

Aerodynamics and Fluid Mechanics • Structural Mechanics • Wind Turbine Construction and Materials • Offshore Technology and Foundation • Electrical Design, Grid Connection and Power System Integration • Control and Regulation • Wind Energy Prognosis and Optimization.

Find information about all courses on www.dtu.dk/wind

