



AU SUMMER UNIVERSITY 2015

WIND POWER SUMMER SCHOOL

IN COOPERATION WITH SIEMENS WIND POWER & VESTAS WIND SYSTEMS A/S

2-14 AUGUST 2015 IN DENMARK

WIND POWER SUMMER SCHOOL

Are you interested in getting an insight into the latest developments in wind power along with other international and Danish students during your summer vacation? In close cooperation with representatives from the wind turbine industry in Denmark, Aarhus University School of Engineering offers a summer course with focus on wind turbine technology in August 2015 in Denmark.

The purpose of the summer course is to enable participants to apply their engineering competences to wind turbine technology problems and gain an insight into the functioning of turbines and the interaction between the different sub-components and their demand profiles. The summer course's main focus is on mechanics and power engineering problems.

Having attended the course, you will be able to:

- Describe the working principle for a wind turbine on both component and system level.

- Gain understanding of the multi-disciplinary challenges of work with both aerodynamics, structural dynamic systems, control technology and power components in a coupled system.
 - Understand the basics of the total business case calculation for a complete wind turbine system.
 - Describe the main components, analyze the interactions and load transfer between the components.
 - Analyze design criteria for the different components due to normal operational dynamic loads and extreme load conditions (if Mechanical or Power background).
 - Analyze and describe principles for optimizing the operation of the turbine and the construction in relation to advanced control (if control background).
 - Gain experience from teamwork and case related problem solving.
 - Gain experience in procedures for professional problem solving in an industrial environment.
-



AU Summer University welcomes Danish and international full time students, exchange students and free movers.

APPLICATION

The online application system will open on the 1st of December 2014.

The application deadline is the 15th of March 2015.

Please visit:

au.dk/summeruniversity for more information on application procedures, housing, location and the social programme.

PARTICIPANT TESTIMONIAL

"Here I found both a strong educational and research environment and at the same time some of the world's leading companies within this sector. I will finish my engineering degree next month, and I dream about a job in the Danish wind turbine industry."- **Riccardo Delliatti, Italy**

In 2014 more than 1500 Danish and international students decided to spend part of their summer taking specialized, intensive courses at AU Summer University. More than 60 nationalities were represented.

WIND POWER SUMMER SHOOOL

Date: 2 August - 14 August
ECTS: 5
Level: Bachelor's

TARGET GROUP

Participation in this summer school programme requires a high level of technical and scientific competences. The target group is mechanical and power engineering students.

“Siemens Wind Power employs a great number of engineers every year. Therefore, we support education of engineering students who are heading for the competences that we are looking for.

I appreciate the direct dialogue with students at the summer school. Through workshops and discussions about the technology of modern wind turbines, we get to know each other, and I get an opportunity to tell about our high-tech industry and what this industry offers as well as requires from future graduates.”

- Per Hessellund Lauritsen, Research Manager, Siemens Wind Power A/S

“At Vestas where we are 100% focused on wind, our engineers work on tasks across the entire value chain from the initial contact with our customers over site layout and transportation to installation, operation and service.

It is of great relevance for Vestas and a pleasure for me personally to be a part of the Wind Summer School because it is a chance to meet talented young engineers from all over the world”.

- Anders Vedel, Chief Technology Officer, Vestas Wind Systems A/S