

Germany (Deutschland)

in the heart of Europe, about 80 M citizens, about 500 miles from the North Sea to the Alps mountains.

Wolfenbüttel

historic town in northern Germany, 50 K citizens, historic castle and library, south of the city of Braunschweig, west of Berlin.



Fachhochschule Wolfenbüttel (FH) University of Applied Sciences

local campus of the regional university, here mainly technical studies (mechanical- and electrical engineering, computer science), 2400 out of 7000 students total; including the **Department of Electrical Engineering** and the **Department of Mechanical Engineering**

General Information

Admission Requirements

- registered student in a university-level institution
- basic background knowledge in electrical and/or mechanical engineering is helpful but not a precondition. The course should be interesting also for non-technical oriented students
- language capability: courses held in English lang.

Ask for further information at mail@isu-wf.com

Course Duration

- two weeks starting Monday, May 11th (latest arrival Sunday May 10th) and ending Saturday, May 23rd, 2009 (departure).
- full day program including lectures (90 min blocks), company visits, cultural program, local travel.

Course Qualification

The course program ends with written tests leading to a qualified certificate of completion. The home university may award credits. Please contact the local partners for details.

Deadlines for Applications

Registration starts Dec.12th, 2008 until Feb. 28th, 2009 at the local representative. Look at the project website for more information or ask at mail@isu-wf.com.

Prices

Course fee is 490 Euro. It includes accommodations, most meals, local transportation and entrance fees including a 2-day excursion (Aurich, Wilhelmshaven) with overnight stay and a full-day excursion to Hamburg.

Contacts

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Fachhochschule
Braunschweig/Wolfenbüttel
University of Applied Sciences

**Department of Electrical
Engineering**

**Department of Mechanical
Engineering**

**International
Summer University
Wolfenbüttel**

**on
Sustainable Energy Technologies**

**May 11th – May 23rd, 2009
in Wolfenbüttel, Germany**

International Summer University Wolfenbüttel on Sustainable Energy Technologies

This event is planned as an international student course covering an overview and applications of sustainable energy technologies mainly based on wind, sun and water. The attendents will also get an impression of Germany and the region by attending compact presentations on history, geography and culture as well as visits to companies and places of interest.

History, Culture, Industry

Where are we – some regional geography. A brief walk through 2000 years of European and German history from the Roman empire to the European Union of 27 nations including Caesar, Luther, Napoleon, Bismarck. The World Wars are reviewed, the Iron Curtain and developments since the reunion of Germany. This includes excursions to historic and modern sites. The regional industry like Volkswagen, a near Hamburg located branch of Airbus, wind farms, power plants and the Braunschweig Research Airport are presented in parallel to the course program. City tours through the home town of the Fachhochschule Wolfenbüttel and Hamburg 200km north as well a traditional brewery tour will be part of the schedule.

Lectures on Sustainable Energy Technologies

The technical program starts with the introduction of “Wind Energy”. In three blocks (90 minutes each) the attendees will be prepared for the first big excursion to wind farms in the area between Aurich and Wilhelmshaven in northern Germany near the coast of the North Sea. The topic “Wind Energy” will be followed by the equally important focus of “Photovoltaics”, also given in three blocks. The program of the first week will be completed by the discussion of two blocks “Hydropower” and a short survey of the idea to generate electrical energy from waste.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
11.05.2009 Geography, History and Economy Hamann	12.05.2009 Wind Energy Meyer Klinge	13.05.2009 2-day Excursion Wind Farm Aurich and Wilhelmshaven	14.05.2009 Photovoltaics Könemund	15.05.2009 Hydropower Klinge	16.05.2009 free	17.05.2009 Excursion to the Harz Mountains	18.05.2009 Geography, History and Economy Hamann	19.05.2009 1-day Excursion Factory Tour Airbus Hamburg	20.05.2009 Nuclear Energy An Overview Rademacher (E.ON)	21.05.2009 Energy in India Parishwad (COEP, India)	22.05.2009 Geography, History and Economy Hamann
Wind Energy Meyer Klinge	Photovoltaics Könemund		Photovoltaics Könemund	Hydropower Klinge			Limitation of Fossil Energy Bleckwedel		Battery Technology Kümpers (Johnson Controls)	Energy Eff. of El. Drives Kulatunga (Purdue, USA)	
Wind Energy Meyer Klinge	2-day Excursion Wind Farm Aurich and Wilhelmshaven		Factory Tour Power Plant	Energy from Waste			Fuel Cells Basics Bleckwedel		Geothermics Michael (Greenenergy)	Energy Eff. of El. Drives Kulatunga (Purdue, USA)	free
City Tour Wolfenbüttel				free			Fuel Cells Applications Paronen (Arcada, Finland)		Research Center VW Isenbüttel		Examination Part 2
Welcome Dinner	Brewery Tour			Examination Part 1			Braunschweig Research Airport				Farewell Party
				BBQ Party							

The second week's program offers several special examples and applications of the topic “Energy” like “Fuel Cells”, “Battery Technology” and “Geothermics”. Also the very topical discussion of energy consumption in vehicles will be covered by the introduction of “Energy Efficiency of Electrical Drives”. Last but not least the question of limitation of fossil energy and the worldwide used nuclear energy will be presented.

Several guest lecturers from USA, India, Finland and representatives of German industry as well as several professors from the Department of Electrical and Mechanical Engineering will assure an interesting and up to date course program, easy to understand and convenient also for non-technical oriented students.

The information content of first and the second week's course program will be examined by some basic questions in a written test at the end of each week. The attending students will be trained for this during the course program itself. Very limited or no additional individual learning in the evenings is necessary or expected.

The Technical Staff

The courses are taught by professors of electrical and mechanical engineering from the University of Applied Sciences, Wolfenbüttel, Germany and several guest lecturers in the English language.

Lecturers from Wolfenbüttel:

Prof. Meyer: “Wind Energy”
 Prof. Klinge: “Wind Energy”, “Hydropower”
 Prof. Könemund: “Photovoltaics”
 Prof. Bleckwedel: “Fuel Cells”
 Prof. Hamann on History and Geography

Guest lecturers:

Prof. Parishwad, COEP, India: “Energy in India”
 Prof. Kulatunga, Purdue Univ., USA: “Energy Efficiency of Electrical Drives”
 Mikael Paronen, Arcada, Finland: “Fuel Cells”
 Dr. Michael, Greenenergy: “Geothermics”
 Dr. Kümpers, Johnson Controls: “Battery Technology”
 Dr. Rademacher, E.ON: “Nuclear Energy”

Each course is finalized with a written test to achieve a certificate of completion. Please contact your home university about the acceptance as course credits.