



Germany (Deutschland)

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

Wolfenbüttel

historic town in northern Germany, 50000 citizens, historic castle and library, south of the city of Braunschweig, west of Berlin.

Ostfalia, University of Applied Sciences

local campus of the regional university, here mainly technical studies (mechanical- and electrical engineering, computer science), more than 13.000 students total (all campuses); more than 600 in the Faculty of Electrical 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 language

Course Duration

- two weeks starting Monday, May 6th (arrival Sunday May 5th) and ending Friday, May 17th (departure Saturday May 18th).
- 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. 3rd, 2018 until Mar. 1st, 2019 at the local representative.

Prices

Course fee includes accommodations, most meals, local transportation and entrance fees including two full day excursions (Bremerhaven, Hamburg) plus free train tickets to Berlin on weekend.

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International Summer University



**Sustainable
Energy
Technologies**

May 6th – May 17th, 2019
in Wolfenbüttel, Germany

International Summer University on Sustainable Energy Technologies Wolfenbüttel

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 participants 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 28 nations including Caesar, Luther, Napoleon, Bismarck. The World Wars are reviewed, the Iron Curtain and developments since the reunification 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 a bio energy village are presented in parallel to the course program. City tours through the home town of the Ostfalia Wolfenbüttel and Hamburg 200 km north will be part of the schedule.

Lectures on Sustainable Energy Technologies

The technical program starts with the introduction of "Wind Energy". Later on the first big excursion starts to Bremerhaven and Bremen in northern Germany near the coast of the North Sea and a visit to the Climate House (Klimahaus). The topic "Wind Energy" will be followed by the equally important focus of "Photovoltaics".

The program of the first week will be completed by the discussion of "Hydropower" and the limitation of fossil energy. The second week's program offers several special examples and applications of the topic "Energy" like "Fuel Cells", "Geothermics" and "Resource Technology in Production". Also the very typical discussion of energy consumption in vehicles will be covered by the introduction of "Energy Efficiency of Electrical Drives".

International Summer University 2019 - Schedule Week 1

Sunday 05.05.2019	Monday 06.05.2019	Tuesday 07.05.2019	Wednesday 08.05.2019	Thursday 09.05.2019	Friday 10.05.2019	Saturday 11.05.2019
Arrival	Arrival	Geography, History and Economy Hamann	Geography, History and Economy Hamann	Klimahaus Bremerhaven	Hydropower Könemund	Finiteness of Fossil Fuels Bleckwedel
		Wind Energy Könemund	Photovoltaics Könemund	Citytour Bremen	Renewable Energy in Germany / The EEG Bleckwedel	Examination Part 1
		Lunch	Lunch		Lunch	free
		Wind Energy Könemund	Photovoltaics Könemund		Bioenergy Village Jührde	
	Guided city tour Wolfenbüttel	Wind Farm Dardesheim	Resource Efficiency in Production Brüggemann		BBQ Party	
	Welcome Dinner Forsthaus		free			

International Summer University 2019 - Schedule Week 2

Sunday 12.05.2019	Monday 13.05.2019	Tuesday 14.05.2019	Wednesday 15.05.2019	Thursday 16.05.2019	Friday 17.05.2019	Saturday 18.05.2019
Individual student trip to Berlin	Fuel Cells - Basics Bleckwedel	Factory Tour Airbus Hamburg	Solar Age Survival Kulatunga	Energy Eff. of EL Drives Kulatunga	free	departure
	Climate Change and Energy Storage Paronen		Solar Age Survival Kulatunga	Energy Eff. of EL Drives Kulatunga	Examination Part 2	
	Lunch		Lunch	Lunch	Lunch at Park Hotel	
	Energy Renovation of Buildings Paronen		free	Geography, History and Economy Hamann	free	
	Sohis Solar Energy Technology Braunschweig		Old Silver Mine Rammelsberg Goslar	Factory tour Volkswagen Autostadt Wolfenbüttel		
					Farewell Party	

Several guest lecturers from USA, Finland and Professors from the Faculty of Electrical Engineering and other Faculties of Ostfalia University 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 weeks 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. Only a very limited additional individual learning in the evenings is necessary, mostly no preparation time during the course can be expected.

The Technical Staff

The courses are taught mainly by Professors of Electrical Engineering from Ostfalia, University of Applied Sciences, Wolfenbüttel, Germany and several guest lecturers in English language.

Lecturers from Ostfalia

Prof. Bleckwedel: "Fuel Cells", "Finiteness of Fossil Fuels"
 Prof. Brüggemann: "Resource Efficiency in Production"
 Prof. Hamann: "Geography, History and Economy"
 Prof. Könemund: "Wind Energy", "Hydropower", "Photovoltaics"
 Prof. Ott: "Geothermics" (Campus Suderburg)

Guest lecturers

Prof. Kulatunga, Purdue Univ., USA: "Energy Efficiency of Electrical Drives", "Solar Age Survival"
 Dr. Paronen, Arcada, Finland: "Fuel Cells", "Energy Renovation of Buildings"

The whole program is finalized with the mentioned two written tests to achieve a certificate of completion. Please contact your home university about the acceptance as course credits.