



Ostfalia
University of
Applied Sciences

Faculty of Electrical Engineering and
Information Technology

International Summer University



Salzgitter · Suderburg · **Wolfenbüttel** · Wolfsburg

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 participant 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 student trips to historic and modern sites. The regional industry like Volkswagen, a wind farm, power plants, a solar energy technology company and mining aspects are presented in parallel to the course program. City tours through the home town of the Ostfalia Wolfenbüttel, Berlin and Bremen 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 student trip 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", "Geothermics" and "Solar Thermal and Heat Pumps" as well as "Building Energy Management". The second week's program offers several special examples and applications of the topic "Energy". Topics are "Climate Change", "Energy Renovation of Buildings". Also the discussion of electric vehicle charging and energy efficiency of electrical drives will be covered as well as the "Energy Efficiency of Power Transformers".

International Summer University 2025 - Schedule Week 1 - preliminary

Sunday 11.05.2025	Monday 12.05.2025	Tuesday 13.05.2025	Wednesday 14.05.2025	Thursday 15.05.2025	Friday 16.05.2025	Saturday 17.05.2025
Arrival	Arrival	Geography, History and Economy	Solar Thermal and Heat Pumps	Klimahaus Bremerhaven	Photovoltaics	Geography, History and Economy
		Wind Energy	Building Energy Management	Citytour Bremen	Photovoltaics	Examination Part 1
		Lunch	Lunch		Lunch	free
		Wind Energy	Hydropower		Geothermics	
	Guided city tour Wolfenbüttel	Wind Farm Dardesheim	Solvis Solar Energy Technology Braunschweig		free	
	Welcome Dinner				BBQ Party	

Guest lecturers from abroad and Professors from the Faculty of Electrical Engineering and Information Technology and other Faculties of Ostfalia University will assure an interesting and up to date course program, easy to understand and convenient also students from other programs of study.

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 extensive preparation time during the course can be expected

The Technical Staff

The courses are taught mainly by Professors of Electrical Engineering and Information Technology from Ostfalia, University of Applied Sciences, Wolfenbüttel, Germany and a guest lecturer from Finland as well as from the Purdue University in English language.

International Summer University 2025 - Schedule Week 2 - preliminary

Sunday 18.05.2025	Monday 19.05.2025	Tuesday 20.05.2025	Wednesday 21.05.2025	Thursday 22.05.2025	Friday 23.05.2025	Saturday 24.05.2025
individual student trip to Berlin	Climate Change and Energy Storage	Factory Tour Airbus Hamburg	Energy Efficiency of Power Transformers	Electric Vehicle Charging Technology	free	departure
	Energy Renovation of Buildings		Energy Efficiency of Power Transformers	Electric Vehicle Charging Technology	Examination Part 2	
	Lunch		Lunch	Lunch	free	
	Energy Eff. of El. Drives		free	free		
	Energy Eff. of El. Drives		Factory tour Volkswagen and/or Autostadt Wolfsburg	Old Silver Mine Rammelsberg Goslar		
	free				Farewell Party	

Lecturers from Ostfalia

Prof. Hamann: "Geography, History and Economy"

Prof. Könemund: "Wind Energy", "Photovoltaics", "Hydropower"

Prof. Siaenen: "Electric Vehicle Charging Technology"

Prof. Tepper: "Lightning Protection of Wind Turbines"

Prof. Ott: "Geothermics"

Guest lecturers

Prof. Kulatunga, Purdue University: "Energy Efficiency of Electrical Drives"

Dr. Paronen, Finninvent, Finland: "Climate Change and Energy Storage", "Energy Renovation of Buildings"

Prof. Hutzal, Purdue University: "Solar Thermal and Heat Pumps", "Building Energy Management"

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.



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, 52000 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 engineering study programs, e.g. electrical engineering and information technology, mechanical engineering or computer science; more than 10.500 students total (all campuses); more than 600 in the Faculty of Electrical Engineering and Information Technology.

General Information

Admission Requirements

- registered student in a university-level institution
- basic background knowledge in electrical or mechanical engineering is helpful but not a precondition. The course should be interesting also for students from other programs of study
- language capability: courses held in English language

Course Duration

- two weeks starting Monday, May 12th (arrival Sunday May 11th, and ending Friday, May 23rd (departure Saturday May 24th).
- 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. 1st, 2024 until Feb. 28th, 2025 at the local representative.

Prices

Course fee is 1150 Euro. It includes accommodations, most meals, transportation, entrance fees and full day excursions.

Contacts

Deans Office Faculty of Electrical Engineering
and Information Technology

Ostfalia University of Applied Sciences

Salzdahlumer Str. 46/48

D-38302 Wolfenbüttel, Germany

phone + 49 5331 / 939 42000

fax + 49 5331 / 939 42004

email mail@isu-wf.com

Internet www.isu-wf.com