

Ostfalia University of Applied Sciences in Wolfenbuettel, Germany, invites you to the International Summer University (ISU 2016).

Meet German and international students, study Bioremediation and Modeling, Robotics / Automated sampling, visit Germany and have fun.



Location: Ostfalia University of Applied Sciences  
Am Exer, Wolfenbüttel  
Germany

Date: May 16<sup>th</sup> – May 27<sup>th</sup>, 2016 (mandatory)

Registration: [www.isu-cs.ostfalia.de](http://www.isu-cs.ostfalia.de)  
until April 18<sup>th</sup>, 2016  
“Early bird” until March 1<sup>st</sup>, 2016

Course fees: 450 €, including accommodation,  
breakfast, lunch and excursions  
“Early bird”: 400,- €  
Ostfalia students please contact  
[n.jensen@ostfalia.de](mailto:n.jensen@ostfalia.de) or  
[h.sander@ostfalia.de](mailto:h.sander@ostfalia.de)

Contact: Dr. H. Sander (Dept. of Suppl. Eng.)  
Prof. N. Jensen (Dept. of Comp. Sc.)

E-mail: [h.sander@ostfalia.de](mailto:h.sander@ostfalia.de)  
[n.jensen@ostfalia.de](mailto:n.jensen@ostfalia.de)

This ISU is part of a two series ISU in 2016. **ISU 2 will be hosted by University of Wisconsin at Parkside, WI, USA, in 15<sup>th</sup> – 28<sup>th</sup> of August 2016 (course fees there on request).** Both ISU will be credited with 10 CP(EU) together or 5 CP (EU) separately for each. Ostfalia Students can apply for financial aid to participate in ISU 2 (Information on course fees there on request).

Ostfalia University of Applied Sciences  
Prof. H. Sander / Prof. N. Jensen  
Am Exer 4 / Am Exer 2  
D-38302 Wolfenbüttel  
Germany

Web [www.isu-cs.ostfalia.de](http://www.isu-cs.ostfalia.de)  
Phone +49(0) 5331 939 39380 or  
+49(0) 5331 939 31005

## International Summer University 2016

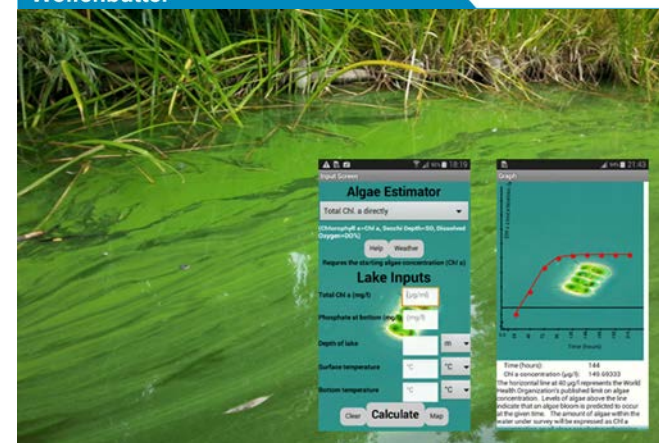
Study

### Bioremediation and Modeling, Robotics / Automated Sampling

and visit **Germany**

May 16<sup>th</sup> - May 27<sup>th</sup> 2016  
Ostfalia University of Applied Sciences,  
Wolfenbüttel, Germany

#### Wolfenbüttel



#### Salzgitter

#### Suderburg

#### Wolfsburg

## BIOREMEDIATION CONCEPTS AND EUTROPHICATION

Bioremediation concepts are becoming increasingly important as industrial wastes from industrialization, urbanization, use of pesticides, fertilizer and mining of metals create a source of pollution in terrestrial and aquatic systems leading to land and water pollution and lake eutrophication.

Two courses are offered jointly by the University of Wisconsin-Parkside and Ostfalia University of Applied Sciences:

**Biosystem Behaviour: Microalgae (Course ES I / II);**  
*Dr. Sander (Ostfalia), Prof Preuss / Prof. Skalbeck (UWP)*

The course will provide an overview on typical microorganism behaviour, environmental needs and culture development, techniques to collect and evaluate data sets, geosystems.

The course includes a hands-on lab session where examples of data collection techniques will lead to a better understanding of robotic requirements for data collection and difficulties in collecting and evaluating data sets for modelling approaches.

**Robotics and Biosystem Modeling (Course CS I / II);**  
*Prof. Gerndt (Ostfalia), Prof. Riley (UWP)*

A course on biosystem modelling and application in smartphone app will be provided including a computer lab experience where algorithms taught in class can be applied to real-world data sets in order to better understand the advantages and drawbacks of different approaches. Subject of smartphone app: prediction of HABs (Harmful Algal Blooms) in eutrophic environments.

The course will also get involved with robotics in environmental engineering. Participants will get acquainted with robotics in environmental measurement techniques in a hands-on approach.

## EXCURSIONS AND FIELD TRIPS



Copyright: Andreas Praefcke (CC-BY 3.0)

125 years ago German pioneers invented the automobile. Today Europe's largest car manufacturer Volkswagen is located in the region of Ostfalia. Meet workers and engineers at the assembly lines and inspect the latest models of Volkswagen.

- Wolfsburg:** Volkswagen Factory Tour and Autostadt
- Berlin:** Sight Seeing Tour Berlin and Potsdam
- Wolfenbüttel:** Town walk and Duke August Library  
Visit Jägermeister
- Braunschweig:** Town walk, Birth place of Carl-Friedrich Gauss
- Explore the mines:**  
Radioactive waste repository mine ASSE II (optional)  
World Heritage Site Rammelsberg

## CULTURE AND LANGUAGE

Visit Germany and get an insight view into German history, culture and language.

The region Braunschweig / Wolfenbuettel will lead you back to the Middle Ages. In Berlin, Germany's capital, you will come in touch with the former border line between East and West.

### German Language, History and Culture (Course GL)

(Prof. PhD. S. Christoph, University of Wisconsin-Parkside)

### Berlin, capital of Germany

City tour, Reichstag - Parliament Building, Chancellery, and former line of the Iron Curtain

