



Courses

offered in

English Language

within the
Course of Studies

Energy Systems Engineering
(Energiesystemtechnik)
Master of Engineering (M. Eng.)
at the

Faculty of Supply Engineering

Ostfalia – University of Applied Sciences
(Formerly Technological University of Applied Sciences Braunschweig / Wolfenbüttel)

Wolfenbüttel April 2017

1 Courses Offered in Winter Semester (March – July)

Reactor Technology

- Part of Module M71
- 3. Semester
- Responsibility/Lecturer: Dr. Sander
- 3 SWS
- 4,5 CP
- **Course Contents:** Background knowledge: Homogenous and heterogeneous reactions, experimental techniques, reaction kinetics, scale-up methods, balance of materials; reactor design, catalyzed and non-catalyzed reactions; Applications in biotechnology: Microbiological reactions, Michaelis Menten kinetics, Inhibition, Aspects of Fermentation; Project Presentation.

Special Aspects of Environmental and Biotechnology

- Part of Module M83
- 3. Semester: 3
- Responsibility/Lecturer: Dr. Sander
- 2 SWS
- 3 CP
- **Course Contents:** Processing of current problems associated with bio- and environmental technologies, introductory lectures offer problem related aspects in bio- and environmental technologies and opportunities for discussion prior to working on a specific project topic leading to a project paper and presentation.

2 Courses Offered in Summer Semester (September – January)

Project Management

- Part of Module M32
- 2. Semester
- Responsibility/Lecturer: Dr. Sander
- 2 SWS
- 3 CP
- **Course Contents:** Project management background knowledge: Definition, objectives and criteria of a project, aims of project management, management of conflict, controlling, rendering of services, project processing (project planning, tasks, budgeting (staff, labor, material expenses), time management, realization and risk management, lessons learned; Project presentation.

Project Work

- Module M91
- 4. Semester (or 3. Semester)
- Responsibility/Lecturer: Dr. Sander
- 0,2 SWS
- 10 CP
- **Course Contents:** Project based module: Transfer of theoretical knowledge in practical application, reality based decisions, balance between cost and effort, self-reflection, Project paper and presentation.