BIOENGINEERING, B. Sc.

COURSE SCHEDULE OF FULL TIME STUDY PROGRAMME

1th Semester

- Cell Biology and Microbiology
- Fundamentals of Chemistry
- Bioengineering Physics I
- Mathematics
- International Project Management
- Basics of Economic Sciences and Law

2nd Semester

- Genetics and Molecular Biology
- Applied Chemistry
- Biochemistry
- Bioengineering Physics II
- Applied Microbiology
- Applied Mathematics

3rd Semester

- Physical Chemistry
- Instrumental Analytics
- Measurement and Control Engineering
- Process Engineering
- Current Topics in Biology
- Data Analysis and Applied Statistics

4th Semester

- Bioprocess Engineering
- Enzyme Engineering
- Project
- Bioinformatics
- Elective modules 1

5th Semester

- Downstream Processing
- Industrial Biotechnology
- Integrated Management Systems and Quality Management
- Elective Modules 2

6th Semester

Internship or study abroad (mind. 20 weeks)

7th Semester

- Academic Methods and Principles
- Elective Modules 3
- Bachelor Thesis
- Colloquium

Elective Modules 1:

- Technical Enzymology and Biocatalysis
- Agricultural Biotechnology and Biofuels
- Nanobiotechnology
- Fluid Mechanics and Systems Dynamics
- Module from any Bachelor Study Course of Faculty of Life Sciences at Rhine-Waal University of Applied Sciences

Elective Modules 2:

- Metabolic Engineering
- Biological Physics
- Environmental Biotechnology and Microalgae
- Pharmaceutical Biotechnology and Immunology
- Biopolymers
- Module from any Bachelor Study Course of Faculty of Life Sciences at Rhine-Waal University of Applied Sciences

Elective Modules 3:

- Project reg. Academic Principles and Methods in Preparation of Bachelor Thesis
- Language Course
- Module from Catalogue 1 and 2 of study programme
- Module from any Bachelor Study Course at Rhine-Waal University of Applied Sciences

Contact:

Rhein-Waal University of Applied Sciences Faculty of Life Sciences

Marie-Curie-Straße 1, 47533 Kleve, Germany Email: life-sciences@hochschule-rhein-waal.de

Heads of study programme: Prof. Dr. Joachim Fensterle Prof. Dr. Björn Neu