

# Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w17)

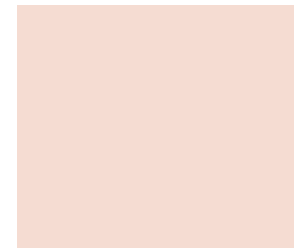
Sample course plan B Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))  
Specialisation Bioprocess Engineering

Legend:

|  |                                    |                           |                              |
|--|------------------------------------|---------------------------|------------------------------|
| Core qualification Compulsory          | Specialisation Compulsory          | Focus Compulsory          | Thesis Compulsory            |
| Core qualification Elective Compulsory | Specialisation Elective Compulsory | Focus Elective Compulsory | Interdisciplinary complement |

| LP | Semester 1  | Semester 2  | Semester 3  | Semester 4  | Semester 5  | Semester 6   | Semester 7                          |                        |      |      |      |      |      |      |
|----|---|---|---|---|---|--|-------------------------------------|------------------------|------|------|------|------|------|------|
| 1  | <b>Chemistry (GES)</b><br>Chemistry I<br>Chemistry II<br>Chemistry I<br>Chemistry II    | <b>Technical Thermodynamics I</b><br>Technical Thermodynamics I<br>Technical Thermodynamics I<br>Technical Thermodynamics I | <b>Technical Thermodynamics II</b><br>Technical Thermodynamics II<br>Technical Thermodynamics II<br>Technical Thermodynamics II | <b>Fundamentals of Fluid Mechanics</b><br>Fundamentals of Fluid Mechanics<br>Fluid Mechanics for Process Engineering                            | <b>Introduction to Control Systems</b><br>Introduction to Control Systems<br>Introduction to Control Systems                | <b>Foundations of Management</b><br>Introduction to Management<br>Management Tutorial  | <b>Advanced Internship AIW/ GES</b> |                        |      |      |      |      |      |      |
| 2  |   |   |   |   |   |  |                                     | VL 2                   | VL 2 | VL 2 | VL 2 | VL 2 | VL 3 |      |
| 3  |   |   |   |   |   |  |                                     | VL 2                   | VL 2 | VL 2 | VL 2 | VL 2 | VL 3 |      |
| 4  |   |   |   |   |   |  |                                     | HÜ 1                   | HÜ 1 | HÜ 1 | HÜ 2 | UE 2 | HÜ 2 |      |
| 5  |   |   |   |   |   |  |                                     | HÜ 1                   | HÜ 1 | HÜ 1 | HÜ 2 | UE 2 | HÜ 2 |      |
| 6  |   |   |   |   |   |  |                                     | HÜ 1                   | HÜ 1 | HÜ 1 | HÜ 2 | UE 2 | HÜ 2 |      |
| 7  | <b>Linear Algebra</b><br>Linear Algebra<br>Linear Algebra<br>Linear Algebra             | <b>Mathematical Analysis</b><br>Mathematical Analysis<br>Mathematical Analysis<br>Mathematical Analysis                     | <b>Mathematics III</b><br>Analysis III<br>Analysis III<br>Analysis III  | <b>Phase Equilibria Thermodynamics</b><br>Phase Equilibria Thermodynamics<br>Phase Equilibria Thermodynamics<br>Phase Equilibria Thermodynamics | <b>Heat and Mass Transfer</b><br>Heat and Mass Transfer<br>Heat and Mass Transfer<br>Heat and Mass Transfer                 | <b>Chemical Reaction Engineering (part 2)</b><br>Experimental Course Chemical Engineering<br><b>Process and Plant Engineering I</b><br>Process and Plant Engineering I |                                     | <b>Bachelor Thesis</b> |      |      |      |      |      |      |
| 8  |   |   |   |   |   |  |                                     |                        | VL 4 | VL 4 | VL 2 | VL 2 | VL 2 | PR 2 |
| 9  |   |   |   |   |   |  |                                     |                        | HÜ 2 | HÜ 2 | UE 1 | UE 1 | UE 1 | PR 2 |
| 10 |   |   |   |   |   |  |                                     |                        | UE 2 | UE 2 | HÜ 1 | UE 1 | HÜ 1 | PR 2 |
| 11 |   |   |   |   |   |  |                                     |                        | UE 2 | UE 2 | HÜ 1 | HÜ 1 | HÜ 1 | PR 2 |
| 12 |   |   |   |   |   |  |                                     |                        | UE 2 | UE 2 | HÜ 1 | HÜ 1 | HÜ 1 | PR 2 |
| 13 |   |   |   |   |   |  |                                     |                        | UE 2 | UE 2 | HÜ 1 | HÜ 1 | HÜ 1 | PR 2 |
| 14 |   |   |   |   |   |  |                                     |                        | UE 2 | UE 2 | HÜ 1 | HÜ 1 | HÜ 1 | PR 2 |
| 15 | <b>Electrical Engineering I</b><br>Electrical Engineering I<br>Electrical Engineering I | <b>Electrical Engineering II</b><br>Electrical Engineering II<br>Electrical Engineering II                                  | <b>Mechanics III (GES)</b><br>Mechanics III<br>Mechanics III<br>Mechanics III   | <b>Signals and Systems</b><br>Signals and Systems<br>Signals and Systems  | <b>Thermal Separation Processes</b><br>Thermal Separation Processes<br>Thermal Separation Processes<br>Separation Processes | <b>Particle Technology and Solids Process Engineering</b><br>Particle Technology I<br>Particle Technology I<br>Particle Technology I                                   |                                     |                        |      |      |      |      |      |      |
| 16 |   |   |   |   |   |  | VL 3                                |                        | VL 3 | HÜ 1 | UE 2 | VL 2 |      |      |
| 17 |   |   |   |   |   |  | VL 3                                |                        | VL 3 | HÜ 1 | HÜ 1 | UE 1 |      |      |
| 18 | UE 2  | UE 2  | VL 3  | UE 2  | PR 1  | UE 1   |                                     |                        |      |      |      |      |      |      |
| 19 | <b>Mechanics I (GES)</b><br>Mechanics I<br>Mechanics I                                  | <b>Mechanics II (GES)</b><br>Mechanics II<br>Mechanics II   | <b>Computer Engineering</b><br>Computer Engineering<br>Computer Engineering   | <b>Biochemistry and Microbiology</b><br>Biochemistry<br>Biochemistry<br>Microbiology<br>Microbiology  | <b>Chemical Reaction Engineering (part 1)</b><br>Chemical Reaction Engineering<br>Chemical Reaction Engineering             | <b>Environmental Technology (part 2)</b><br>Practical Exercise Environmental Technology  |                                     |                        |      |      |      |      |      |      |
| 20 |   |   |   |   |   |  | VL 2                                |                        | VL 2 | VL 2 | VL 2 | PR 2 |      |      |
| 21 |   |   |   |   |   |  | VL 2                                | VL 2                   | VL 3 | PBL1 | HÜ 2 | PR 1 |      |      |
| 22 |   |   |   |   |   |  | HÜ 3                                | HÜ 2                   | UE 1 | VL 2 | HÜ 2 | PR 1 |      |      |
| 23 |   |   |   |   |   |  | HÜ 3                                | HÜ 2                   | UE 1 | PBL1 | HÜ 2 | PR 1 |      |      |
| 24 |   |   |   |   |   |  | HÜ 3                                | HÜ 2                   | UE 1 | PBL1 | HÜ 2 | PR 1 |      |      |
| 25 |   |   |   |   |   |  | HÜ 3                                | HÜ 2                   | UE 1 | PBL1 | HÜ 2 | PR 1 |      |      |
| 26 | HÜ 3  | HÜ 2  | UE 1  | PBL1  | HÜ 2  | PR 1   |                                     |                        |      |      |      |      |      |      |
| 27 | <b>Programming in C</b>   | <b>Fundamentals of</b>  | <b>Fundamentals of Process</b>  | Bioprocess  | Advanced  |  |                                     |                        |      |      |      |      |      |      |

|    |  |  |  |  |                      |  |              |
|----|--|--|--|--|----------------------|--|--------------|
| 28 | Programming in C VL 1<br>Programming in C PR 1   | <b>Mechanical Engineering (GES)</b>  | <b>Engineering and Material Engineering</b>  | Engineering - Fundamentals<br>Bioprocess Engineering - Fundamentals<br>Bioprocess Engineering - Fundamental Practical Course | UE 2<br>HÜ 2<br>PR 2 | Bioprocess Engineering - Advanced<br><b>Environmental Technology (part 1)</b><br>Environmental Technologie | UE 2<br>VL 2 |
| 29 | <b>Physics for Engineers (GES)</b><br>Physics for Engineers VL 2<br>Physics for Engineers UE 1 | Fundamentals of Mechanical Engineering VL 2<br>Fundamentals of Mechanical Engineering UE 2 | Introduction into Process Engineering/Bioprocess Engineering VL 2<br>Fundamentals of material engineering VL 2 |  |                      |  |              |
| 30 |  |  |  |  |                      |  |              |
| 31 |  |  |  |  |                      |  |              |
| 32 |  |  |  |  |                      |  |              |



Nontechnical Complementary Courses for Bachelors (from catalogue) - 6LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.