

Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w16)

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

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 | Form/hrs | Semester 2 | Form/hrs | Semester 3 | Form/hrs | Semester 4 | Form/hrs | Semester 5 | Form/hrs | Semester 6 | Form/hrs | Semester 7 | Form/hrs/wk | | | | | |
|----|---------------------------------|----------|--|----------|--|----------|--|----------|--|----------|--|----------|--|--------------------------|---|-----------------------------|---|---|--------------------------------------|
| 1 | Chemistry (GES) | VL 2 | Fundamentals of Mechanical Engineering Design | VL 2 | Technical Thermodynamics II | VL 2 | Mechanical Engineering: Design (part 2) | VL 2 | Computer Engineering | VL 3 | Foundations of Management | VL 3 | Advanced Internship GES | | | | | | |
| 2 | | | | | | | | | | | | | | Chemistry I | Fundamentals of Mechanical Engineering Design | Technical Thermodynamics II | Team Project Design Methodology | Computer Engineering | Introduction to Management |
| 3 | | | | | | | | | | | | | | Chemistry II | Fundamentals of Mechanical Engineering Design | Technical Thermodynamics II | Mechanical Design Project II | Computer Engineering | Management Tutorial |
| 4 | | | | | | | | | | | | | | Chemistry I | Fundamentals of Mechanical Engineering Design | Technical Thermodynamics II | | | |
| 5 | | | | | | | | | | | | | | Chemistry II | Fundamentals of Mechanical Engineering Design | Technical Thermodynamics II | | | |
| 6 | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | |
| 8 | Linear Algebra | VL 4 | Technical Thermodynamics I | VL 2 | Mathematics III | VL 2 | Advanced Mechanical Engineering Design (part 2) | VL 2 | Introduction to Control Systems | VL 2 | MED II: Introduction to Physiology | VL 2 | BIO I: Experimental Methods in Biomechanics | | | | | | |
| 9 | | | | | | | | | | | | | | Linear Algebra | Technical Thermodynamics I | Analysis III | Advanced Mechanical Engineering Design II | Introduction to Control Systems | Introduction to Physiology |
| 10 | | | | | | | | | | | | | | Linear Algebra | Technical Thermodynamics I | Analysis III | Advanced Mechanical Engineering Design II | Introduction to Control Systems | |
| 11 | | | | | | | | | | | | | | Linear Algebra | Technical Thermodynamics I | Differential Equations 1 | Fluid Dynamics | Introduction to Control Systems | |
| 12 | | | | | | | | | | | | | | | Technical Thermodynamics I | Differential Equations 1 | Fluid Mechanics | | Experimental Methods in Biomechanics |
| 13 | | | | | | | | | | | | | | | | Differential Equations 1 | Fluid Mechanics | | |
| 14 | | | | | | | | | | | | | | | | | | | |
| 15 | Electrical Engineering I | VL 3 | Mathematical Analysis | HÜ 2 | Mechanics III (GES) | HÜ 1 | Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems) | VL 3 | Measurement Technology for Mechanical and Process Engineers | VL 2 | Fundamentals of Production and Quality Management | VL 2 | Bachelor Thesis | | | | | | |
| 16 | | | | | | | | | | | | | | Electrical Engineering I | Mathematical Analysis | Mechanics III | Mechanics IV | Measurement Technology for Mechanical and Process Engineers | Production Process Organization |
| 17 | | | | | | | | | | | | | | Electrical Engineering I | Mathematical Analysis | Mechanics III | Mechanics IV | Measurement Technology for Mechanical and Process Engineers | Quality Management |
| 18 | | | | | | | | | | | | | | Electrical Engineering I | Mathematical Analysis | Mechanics III | Mechanics IV | Measurement Technology for Mechanical and Process Engineers | |
| 19 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |
| 21 | Mechanics I (GES) | VL 2 | Electrical Engineering II | VL 3 | Mechanical Engineering: Design (part 1) | VL 2 | Signals and Systems | VL 3 | Numerical Mathematics I | VL 2 | Numerical Mathematics I | UE 2 | | | | | | | |
| 22 | | | | | | | | | | | | | | Mechanics I | Electrical Engineering II | Embodiment Design and | Signals and Systems | Numerical Mathematics I | |
| 23 | | | | | | | | | | | | | | Mechanics I | Electrical Engineering II | Embodiment Design and | Signals and Systems | Numerical Mathematics I | |

| | | | | | | |
|---|---|---|--|--|---|--|
| | | | | 3D-CAD Mechanical Design TT 3 Project I | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | Fundamentals of Materials Science (part 1) | | |
| 27 | Programming in C Programming in C VL 1 Programming in C PR 1 | Mechanics II (GES) Mechanics II VL 2 Mechanics II HÜ 2 | | Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials Science VL 2 | MED I: Introduction to Anatomy Introduction to Anatomy VL 2 | MED II: Introduction to Biochemistry and Molecular Biology Introduction to Biochemistry and Molecular Biology VL 2 |
| 28 | | | | | | |
| 29 | Physics for Engineers (GES) | | | Advanced Mechanical Engineering Design (part 1) | | BIO I: Implants and Fracture Healing |
| 30 | Physics for Engineers VL 2 Physics for Engineers UE 1 | | | Advanced Mechanical Engineering Design I VL 2 Advanced Mechanical Engineering Design I HÜ 2 | MED I: Introduction to Radiology and Radiation Therapy Introduction to Radiology and Radiation Therapy VL 2 | Implants and Fracture Healing VL 2 |
| 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.