# Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w19)

**Sample course plan C** Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))

Specialisation Mechanical Engineering, Focus Energy Systems

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<tr>
<th>Semester 1</th>
<th>Form</th>
<th>Semester 2</th>
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<th>Semester 3</th>
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<td>Technical Thermodynamics II</td>
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<td>Technical Engineering: Design (part 2)</td>
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<td>Introduction to Control Systems</td>
<td>VL 2</td>
<td>Foundations of Management</td>
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**Legend:**
- **Compulsory**
- **Specialisation Compulsory**
- **Focus Compulsory**
- **Thesis Compulsory**
- **Core qualification Elective Compulsory**
- **Specialisation Elective**
- **Focus Elective Compulsory**
- **Interdisciplinary complement**

**Form:**
- **VL** Lecture
- **UE** Exercise
- **HÜ** Seminar
- **PBL** Project Based Learning
- **PR** Practical Course

**Hrs/wk**

- **Mechanical Engineering:**
  - Advanced Mechanical Engineering Design (part 1)
  - Advanced Mechanical Engineering Design (part 2)
- **Advanced Materials:**
  - Advanced Materials Characterization
  - Advanced Materials Design
- **Signals and Systems:**
  - Heat Transfer
  - Renewable Energy
- **Renewables and Energy Systems:**
  - Energy Systems

## Course Details

**Semester 1**
- **Chemistry (GES)**
  -VL 2
- **Mechanics I (GES)**
  - VL 2
- **Electrical Engineering I**
  - VL 3
  - UE 2
- **Linear Algebra**
  - VL 4
  - HÜ 2
  - UE 2

**Semester 2**
- **Technical Thermodynamics I**
  - VL 2
  - HÜ 1
  - UE 1
- **Mathematical Analysis**
  - VL 4
  - HÜ 2
  - UE 2
- **Electrical Engineering II**
  - VL 3
  - UE 2
  - HÜ 1
- **Mechanics III (GES)**
  - VL 2
  - HÜ 1
  - UE 2

**Semester 3**
- **Fluid Mechanics**
  - VL 3
  - HÜ 2
- **Advanced Mechanical Engineering Design I**
  - VL 2
  - HÜ 2
- **Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)**
  - VL 3
  - HÜ 1
  - UE 2
- **Signals and Systems**
  - VL 3
  - UE 2

**Semester 4**
- **Measurement Technology for Mechanical and Process Engineers**
  - VL 2
  - HÜ 1
  - UE 2
- **Advanced Mechanical Engineering Design II**
  - VL 2
  - HÜ 2
- **Advanced Internship GES**
  - VL 3
  - HÜ 2

**Semester 5**
- **Advanced Mechanical Engineering Design (part 2)**
  - VL 2
  - HÜ 2
- **Internal Combustion Engines I**
  - VL 2
  - HÜ 1
- **Energy Systems**
  - VL 2

**Semester 6**
- **Advanced Materials Design**
  - VL 2
  - HÜ 2
- **Bachelor Thesis**
  - VL 2
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**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.