## Course of Study General Engineering Science (English program) (Study Cohort w14)

Sample course plan - Bachelor General Engineering Science (English program) (GESBS) Specialisation Computer Science and Engineering

| LP | Semester 1                           | FormHrs/wk | Semester 2 Form   | nHrs/wk | Semester 3  | FormHrs/wl   | Semester 4   | FormHrs/wk | Semester 5 Fo   | mHrs/wk | Semester 6        | FormHrs/wk |
|----|--------------------------------------|------------|---|---------|---|--------------|--|------------|---|---------|-------------------|------------|
| 1  | Chemistry (GES)                      |            | Physics for Engineers (GES) (part 2)                      |         | Technical Thermodynamics II                       |              | Foundations of Management                                  |            | Introduction to Control Systems                         |         | Stochastics       |            |
| 2  | Chemistry I                          | VL 2       | Physics-Lab for ET/IIW-Engineers PR                       | 1       | Technical Thermodynamics II                       | VL 2         | Introduction to Management                                 | VL 4       | Introduction to Control Systems V                       | L 2     | Stochastics       | VL 2       |
| 3  | Chemistry II                         | VL 2       | Fundamentals of Mechanical Engineering                    |         | Technical Thermodynamics II                       | HÜ 1         | Project Entrepreneurship                                   | POL 2      | Introduction to Control Systems                         | Ε 2     | Stochastics       | UE 2       |
|    | Chemistry I                          | HÜ 1       | Design  |         | Technical Thermodynamics II                       | UE 1         |  |            |   |         |                   |            |
| 4  | Chemistry II                         | HÜ 1       |   | 2       |   |              |  |            |   |         |                   |            |
| 5  |                                      |            | Engineering Design  |         |   |              |  |            |   |         |                   |            |
| 6  |                                      |            | Fundamentals of Mechanical HÜ                             | 2       |   |              |  |            |   |         |                   |            |
| 7  | Linear Algebra                       |            | Engineering Design  |         | Computer Engineering                              |              | Objectoriented Programming, Algorith                       | nms and    | Conceptual Modeling, Databases and Da                   | ıta     | Operating Systems |            |
| 8  | Linear Algebra                       | VL 4       |   |         | Computer Engineering                              | VL 3         | Data Structures  |            | Management  |         | Operating Systems | VL 2       |
| 9  | Linear Algebra                       | HÜ 2       | Technical Thermodynamics I                                |         | Computer Engineering                              | UE 1         | Objectoriented Programming,                                | VL 4       |   | L 4     | Operating Systems | UE 2       |
|    | Linear Algebra                       | UE 2       |   | 2       |   |              | Algorithms and Data Structures Objectoriented Programming, | UE 1       | and Data Management  Conceptual Modeling, Databases, PC | DL 1    |                   |            |
| 10 |                                      |            | Technical Thermodynamics I HÜ                             |         |   |              | Algorithms and Data Structures                             | OL I       | and Data Management                                     | /L I    |                   |            |
| 11 |                                      |            | Technical Thermodynamics I UE                             | 1       |   |              |  |            |   |         |                   |            |
| 12 |                                      |            |   |         |   |              |  |            |   |         |                   |            |
| 13 |                                      |            |   |         | Mathematics III                                   |              | Logic, Automata and Formal Language                        | es         | Numerical Mathematics I                                 |         | Bachelor Thesis   |            |
| 14 |                                      |            |   |         | Analysis III                                      | VL 2         | Logic, Automata Theory and Formal                          | VL 2       | Numerical Mathematics I V                               | L 2     |                   |            |
| 15 | Electrical Engineering I             |            | Mathematical Analysis                                     |         | Analysis III                                      | UE 1         | Languages  |            | Numerical Mathematics I U                               | E 2     |                   |            |
|    | Electrical Engineering I             | VL 3       |   | 4       | Analysis III                                      | HÜ 1         | Logic, Automata Theory and Formal Languages                | UE 2       |   |         |                   |            |
| 16 | Electrical Engineering I             | UE 2       | Mathematical Analysis HÜ                                  |         | Differential Equations 1 Differential Equations 1 | VL 2<br>UE 1 | Languages  |            |   |         |                   |            |
| 17 |                                      |            | Mathematical Analysis UE                                  | 2       | Differential Equations 1                          | HÜ 1         |  |            |   |         |                   |            |
| 18 |                                      |            |   |         | ·   |              |  |            |   |         |                   |            |
| 19 |                                      |            |   |         |   |              | Signals and Systems  |            | Computer Architecture                                   |         |                   |            |
| 20 |                                      |            |   |         |   |              | Signals and Systems  | VL 3       | Computer Architekture V                                 | L 2     |                   |            |
| 21 | Mechanics I (GES)                    |            |   |         | Mechanics III (GES)                               |              | Signals and Systems  | HÜ 1       | Computer Architekture U                                 | Ε 2     |                   |            |
|    | Mechanics I                          | VL 2       |   |         | Mechanics III                                     | HÜ 1         |  |            |   |         |                   |            |
| 22 | Mechanics I                          | HÜ 3       |   |         | Mechanics III                                     | UE 2         |  |            |   |         |                   |            |
| 23 |                                      |            | Electrical Engineering II                                 |         | Mechanics III                                     | VL 3         |  |            |   |         |                   |            |
| 24 |                                      |            | Electrical Engineering II VL Electrical Engineering II UE | 3       |   |              |  |            |   |         |                   |            |
| 25 |                                      |            | Electrical Engineering II OE                              | 2       |   |              | Graph Theory and Optimization                              |            | Seminars Computer Science and Mathe                     | matics  |                   |            |
| 26 |                                      |            |   |         |   |              | Graph Theory and Optimization                              | VL 2       | Selection from a catalog                                |         |                   |            |
| 27 | Physics for Engineers (GES) (part 1) |            |   |         | Discrete Algebraic Structures                     |              | Graph Theory and Optimization                              | UE 2       |   |         |                   |            |
| 28 | Physics for Engineers                | VL 2       |   |         | Discrete Algebraic Structures                     | VL 2         |  |            |   |         |                   |            |
|    | Physics for Engineers                | UE 1       |   |         | Discrete Algebraic Structures                     | UE 2         |  |            |   |         |                   |            |
| 29 |                                      |            | Mechanics II (GES)  |         |   |              |  |            |   |         |                   |            |
| 30 |                                      |            |   | 2<br>2  |   |              |  |            |   |         |                   |            |
| 31 |                                      |            | noonanioo ii no   | _       |   |              |  |            | Computernetworks and Internet Security                  |         |                   |            |
| 32 |                                      |            |   |         |   |              |  |            |   | L 3     |                   |            |
| 33 |                                      |            |   |         |   |              |  |            | Security  | _ ,     |                   |            |
|    |                                      |            |   |         |   |              |  |            |   | Ε 1     |                   |            |
| 34 |                                      |            |   |         |   |              |  |            | Security  |         |                   |            |

| 35 | Programming in C |    |   |
|----|------------------|----|---|
| 36 | Programming in C | VL | 1 |
|    | Programming in C | PR | 1 |

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.