## Course of Study Computer Science (Study Cohort w19)

Sample course plan S Bachelor Computer Science (CSBS)  
Specialisation Computer and Software Engineering

### Core qualification

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<thead>
<tr>
<th>Semester 1</th>
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### Specialisation Computer and Software Engineering

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<tr>
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<th>Specialisation</th>
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<td>Computer and Software Engineering</td>
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### Focus

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### Thesis

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### Legend:

- **UE**: Übungslehre (Exercise Lecture)
- **VL**: Vorlesung (Lecture)
- **HÜ**: Hörsaalunterricht (Lecture)
- **PBL**: Projektbezogene Lehrveranstaltung (Project-Based Learning Activity)
- **SE**: Seminar (Seminar)
- **PS**: Praktikum (Practical Training)

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### Semester 1

#### Discrete Algebraic Structures
- **LP 1**: Discrete Algebraic Structures  
  - VL 2  
  - UE 2  

#### Objectoriented Programming, Algorithms and Data Structures
- **LP 2**: Objectoriented Programming, Algorithms and Data Structures  
  - VL 4  
  - UE 1  

#### Computer Engineering
- **LP 3**: Computer Engineering  
  - VL 3  
  - UE 1  

#### Computability and Complexity Theory
- **LP 4**: Computability and Complexity Theory  
  - VL 2  
  - UE 2  

#### Linear Algebra
- **LP 5**: Linear Algebra  
  - VL 3  
  - HÜ 2  

#### Management Tutorial
- **LP 6**: Management Tutorial  
  - HÜ 1  

### Semester 2

#### Automata Theory and Formal Languages
- **LP 7**: Automata Theory and Formal Languages  
  - VL 2  
  - UE 2  

#### Computer Networks and Internet Security
- **LP 8**: Computer Networks and Internet Security  
  - VL 3  
  - UE 1  

#### Signals and Systems
- **LP 9**: Signals and Systems  
  - VL 3  
  - UE 2  

#### Automata Theory and Formal Languages
- **LP 10**: Automata Theory and Formal Languages  
  - VL 2  
  - UE 2  

#### Computer Networks and Internet Security
- **LP 11**: Computer Networks and Internet Security  
  - VL 2  
  - UE 1  

#### Software Industrial Internship
- **LP 12**: Software Industrial Internship  
  - VL 4  
  - PBL 1  

### Semester 3

#### Mathematical Analysis
- **LP 13**: Mathematical Analysis  
  - VL 4  
  - UE 2  

#### Mathematics III
- **LP 14**: Mathematics III  
  - VL 2  
  - UE 1  

#### Stochastics
- **LP 15**: Stochastics  
  - VL 2  
  - UE 2  

#### Software Engineering
- **LP 16**: Software Engineering  
  - VL 2  
  - UE 2  

#### Foundations of Management
- **LP 17**: Foundations of Management  
  - VL 3  
  - HÜ 2  

#### Introduction to Information Security
- **LP 18**: Introduction to Information Security  
  - VL 3  
  - UE 2  

#### Operating Systems
- **LP 19**: Operating Systems  
  - VL 2  
  - UE 2  

#### Distributed Systems
- **LP 20**: Distributed Systems  
  - VL 2  
  - UE 2  

### Semester 4

#### Discrete Algebraic Structures
- **LP 21**: Discrete Algebraic Structures  
  - VL 4  
  - UE 1  

#### Objectoriented Programming, Algorithms and Data Structures
- **LP 22**: Objectoriented Programming, Algorithms and Data Structures  
  - VL 4  
  - UE 1  

#### Computer Engineering
- **LP 23**: Computer Engineering  
  - VL 3  
  - UE 1  

#### Computability and Complexity Theory
- **LP 24**: Computability and Complexity Theory  
  - VL 2  
  - UE 2  

#### Linear Algebra
- **LP 25**: Linear Algebra  
  - VL 3  
  - HÜ 2  

#### Management Tutorial
- **LP 26**: Management Tutorial  
  - HÜ 1  

### Semester 5

#### Operating Systems
- **LP 27**: Operating Systems  
  - VL 2  
  - UE 2  

#### Distributed Systems
- **LP 28**: Distributed Systems  
  - VL 2  
  - UE 2  

### Semester 6

#### Operating Systems
- **LP 29**: Operating Systems  
  - VL 2  
  - UE 2  

#### Distributed Systems
- **LP 30**: Distributed Systems  
  - VL 2  
  - UE 2  

### Bachelor Thesis

- **LP 31**: Bachelor Thesis  
  - VL 1  
  - PBL 2
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.