# Course of Study Naval Architecture (Study Cohort w20)

Legend:

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| Core Qualification Compulsory | Specialisation Compulsory | Focus Compulsory | Thesis Compulsory |
| Core Qualification Elective Compulsory | Specialisation Elective Compulsory | Focus Elective Compulsory | Interdisciplinary complement |

Sample course plan - Bachelor Naval Architecture (SBBS)

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|---|---|---|---|---|---|---|
| 1 | **Basics of Electrical Engineering**<br>Basics of Electrical Engineering VL 3<br>Basics of Electrical Engineering GÜ 2 | **Fundamentals of Materials Science (part 2)**<br>Fundamentals of Materials Science II VL 2 | **Advanced Mechanical Engineering Design (part 1)**<br>Advanced Mechanical Engineering Design I VL 2<br>Advanced Mechanical Engineering Design I HÜ 2 | **Advanced Mechanical Engineering Design (part 2)**<br>Advanced Mechanical Engineering Design II VL 2<br>Advanced Mechanical Engineering Design II HÜ 2 | **Stochastics and Ship Dynamics (part 1)**<br>Statistics and Stochastic Processes in Naval Architecure and Ocean Engineering VL 2 | **Stochastics and Ship Dynamics (part 2)**<br>Ship Dynamics VL 2<br>Ship Dynamics GÜ 1 |
| 2 | | | | | | |
| 3 | | **Fundamentals of Mechanical Engineering Design**<br>Fundamentals of Mechanical Engineering Design VL 2<br>Fundamentals of Mechanical Engineering Design HÜ 2 | **Mechanical Engineering: Design (part 1)**<br>Embodiment Design and 3D-CAD VL 2<br>Mechanical Design Project I PBL 3 | **Mechanical Engineering: Design (part 2)**<br>Team Project Design Methodology PBL 2<br>Mechanical Design Project II PBL 3 | **Computational Fluid Dynamics I**<br>Computational Fluid Dynamics I VL 2<br>Computational Fluid Dynamics I HÜ 2 | **Structural Design and Construction of Ships (part 2)**<br>Ship Structural Design VL 2<br>Ship Structural Design GÜ 2 |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | **Computer Science for Mechanical Engineers**<br>Computer Science for Mechanical Engineers VL 3<br>Computer Science for Mechanical Engineers GÜ 2 | | **Foundations of Management**<br>Introduction to Management VL 3<br>Management Tutorial GÜ 2 | **Hydrostatics and Body Plan (part 2)**<br>Hydrostatics VL 2<br>Hydrostatics HÜ 2 | | |
| 8 | | | | | | |
| 9 | | **Technical Thermodynamics I**<br>Technical Thermodynamics I VL 2<br>Technical Thermodynamics I HÜ 1<br>Technical Thermodynamics I GÜ 1 | | | | |
| 10 | | | | | **Fundamentals of Ship Structural Design and Analysis**<br>Fundamentals of Ship Structural Analysis VL 2<br>Fundamentals of Ship Structural Design VL 2<br>Fundamentals of Ship Structural Design GÜ 1<br>Fundamentals of Ship Structural Analysis GÜ 1 | |
| 11 | | | | **Fluid Dynamics**<br>Fluid Mechanics VL 3<br>Fluid Mechanics HÜ 2 | | **Ship Design**<br>Ship Design VL 2<br>Ship Design HÜ 2 |
| 12 | | | | | | |
| 13 | **Mathematics I**<br>Linear Algebra I VL 2<br>Linear Algebra I GÜ 1<br>Linear Algebra I HÜ 1<br>Analysis I VL 2<br>Analysis I GÜ 1<br>Analysis I HÜ 1 | | **Mathematics III**<br>Analysis III VL 2<br>Analysis III GÜ 1<br>Analysis III HÜ 1<br>Differential Equations 1 VL 2<br>Differential Equations 1 GÜ 1<br>Differential Equations 1 HÜ 1 | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | **Mechanics II: Mechanics of Materials**<br>Mechanics II VL 2<br>Mechanics II GÜ 2<br>Mechanics II HÜ 2 | | | | |
| 17 | | | | **Mathematics IV**<br>Complex Functions VL 2<br>Complex Functions GÜ 1<br>Complex Functions HÜ 1<br>Differential Equations 2 VL 2<br>Differential Equations 2 GÜ 1<br>Differential Equations 2 HÜ 1 | | **Bachelor Thesis** |
| 18 | | | | | | |
| 19 | | | | | **Structural Design and Construction of Ships (part 1)**<br>Welding Technology VL 3 | |
| 20 | | | | | | |
| 21 | **Mechanics I (Statics)**<br>Mechanics I VL 2<br>Mechanics I GÜ 2<br>Mechanics I HÜ 1 | **Mathematics II**<br>Linear Algebra II VL 2<br>Linear Algebra II GÜ 1<br>Linear Algebra II HÜ 1<br>Analysis II VL 2<br>Analysis II HÜ 1<br>Analysis II GÜ 1 | **Mechanics III (Dynamics)**<br>Mechanics III VL 3<br>Mechanics III GÜ 2<br>Mechanics III HÜ 1 | | **Marine Propulsion**<br>Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines VL 1<br>Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines HÜ 1<br>Fundamentals of Marine Engineering VL 2<br>Fundamentals of Marine Engineering HÜ 1 | |
| 22 | | | | **Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)**<br>Mechanics IV VL 3<br>Mechanics IV GÜ 2<br>Mechanics IV HÜ 1 | | |
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| 27 | **Fundamentals of Materials Science (part 1)**<br>Fundamentals of Materials Science I VL 2<br>Physical and Chemical Basics of Materials Science VL 2 | | **Hydrostatics and Body Plan (part 1)**<br>Body Plan PS 2 | | **Resistance and Propulsion**<br>Resistance and Propulsion VL 2<br>Resistance and Propulsion HÜ 2 | |
| 28 | | | | | | |
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Non-technical 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.