

# Course of Study Civil Engineering (Study Cohort w20)

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

Sample course plan B Master Civil Engineering (BAUMS)

## Specialisation Geotechnical Engineering

|   |   |       |  |       |  |  |
|---|---|-------|--|-------|--|--|
| 1   | <b>Finite Elements Methods</b>            |       | <b>Building Materials and Building Preservation</b>            |       | <b>Study Work Foundation Engineering</b>             | <b>Selected Topics in Civil Engineering (part 2)</b> |
| 2   | Finite Element Methods                    | VL 2  | Mineral Building Materials                                     | VL 2  |  | Selection from a catalog                             |
| 3   | Finite Element Methods                    | HÜ 2  | Transport Processes in Building Materials and Damage Processes | VL 1  |  |  |
| 4   |   |       | Repair of Structures   | VL 1  |  |  |
| 5   |   |       | Technology of mineral Building Materials                       | PBL 1 |  |  |
| 6   |   |       |  |       |  |  |
| 7   | <b>Sustainability and Risk Management</b> |       | <b>Marine Geotechnics</b>                                      |       | <b>Concrete Structures</b>                           |  |
| 8   | Environment and Sustainability            | VL 2  | Marine Geotechnics   | VL 1  | Structural Concrete Members                          | VL 2   |
| 9   | Safety, Reliability and Risk Assessment   | SE 2  | Marine Geotechnics   | HÜ 2  | Structural Concrete Members                          | HÜ 2   |
| 10  |   |       | Steel Structures in Foundation and Hydraulic Engineering       | VL 2  | Concrete Structures                                  | SE 1   |
| 11  |   |       |  |       |  |  |
| 12  |   |       |  |       |  |  |
| 13  | <b>Geotechnics III</b>                    |       | <b>Soil Mechanics and -Dynamics</b>                            |       | <b>Selected Topics in Civil Engineering (part 1)</b> |  |
| 14  | Numerical Methods in Geotechnics          | VL 3  | Soil Mechanics - Selected Topics                               | VL 2  | Selection from a catalog                             |  |
| 15  | Advanced Foundation Engineering           | VL 2  | Soil Dynamics  | VL 3  |  |  |
| 16  | Advanced Foundation Engineering           | HÜ 1  | Experimental Researches in Geotechnics                         | PR 1  |  |  |
| 17  |   |       |  |       | <b>Excavation Law and Projects</b>                   |  |
| 18  |   |       |  |       | Subsoil and Underground Engineering Law              | VL 2   |
| 19  | <b>Coastal Hydraulic Engineering I</b>    |       | <b>Harbour Engineering and Harbour Planning</b>                |       | Project Geotechnics                                  | PBL 2  |
| 20  | Basics of Coastal Engineering             | VL 3  | Port Planning and Port Construction                            | VL 2  | Service Contract and Procurement Law                 | VL 2   |
| 21  | Basics of Coastal Engineering             | PBL 1 | Harbour Engineering  | VL 2  |  |  |
| 22  |   |       | Harbour Engineering  | PBL 1 |  |  |
| 23  |   |       |  |       |  |  |
| 24  |   |       |  |       |  |  |
| 25  | <b>Underground Constructions</b>          |       |  |       |  |  |
| 26  | Introduction to tunnel construction       | VL 1  |  |       |  |  |
| 27  | Introduction to tunnel construction       | HÜ 1  |  |       |  |  |
| 28  | Applied Tunnel Constructions              | VL 2  |  |       |  |  |
| 29  |   |       |  |       |  |  |
| 30  |   |       |  |       |  |  |
| 31  |   |       |  |       |  |  |
| 32  |   |       |  |       |  |  |
| 33  |   |       |  |       |  |  |
| Business & Management (from catalogue) - 6LP            |   |       |  |       |  |  |
| Non-technical Courses for Master (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.

