

# Course of Study Civil Engineering (Study Cohort w24)

Sample course plan D Master Civil Engineering (BAUMS) Dual study program

## Specialisation Water and Traffic

|  | Core Qualification Compulsory                                   |   | Specialisation Compulsory                                       |  | Focus Compulsory  |  | Thesis Compulsory                                    |  |
|--|---|---|---|--|---|--|--|--|
|  | Core Qualification Elective Compulsory                          |   | Specialisation Elective Compulsory                              |  | Focus Elective Compulsory                                       |  | Interdisciplinary complement                         |  |
| 1  | <b>Practical module 1 (dual study program, Master's degree)</b> |   | <b>Practical module 2 (dual study program, Master's degree)</b> |  | <b>Practical module 3 (dual study program, Master's degree)</b> |  | <b>Selected Topics in Civil Engineering (part 2)</b> |  |
| 2  | Practical term 1 0  |   | Practical term 2 0  |  | Practical term 3 0  |  | Selection from a catalog                             |  |
| 3  |   |   |   |  |   |  |  |  |
| 4  |   |   |   |  |   |  |  |  |
| 5  |   |   |   |  |   |  |  |  |
| 6  |   |   |   |  |   |  |  |  |
| 7  |   |   |   |  |   |  |  |  |
| 8  |   |   |   |  |   |  |  |  |
| 9  |   |   |   |  |   |  |  |  |
| 10   |   |   |   |  |   |  |  |  |
| 11   | <b>Sustainable Circular Economy</b>                             |   | <b>Management of Surface Water</b>                              |  | <b>Study work Water and Traffic</b>                             |  | <b>Master thesis (dual study program)</b>            |  |
| 12   | Environment and Sustainability VL 2                             | Modelling of Flow in Rivers and Estuaries VL 3                            |   |  |   |  |  |  |
| 13   | Circular Economy SE 2   | Nature-Oriented Hydraulic Engineering / Integrated Flood Protection PBL 2 |   |  |   |  |  |  |
| 14   |   |   |   |  |   |  |  |  |
| 15   |   |   |   |  |   |  |  |  |
| 16   |   |   |   |  |   |  |  |  |
| 17   | <b>Finite elements</b>  |   | <b>Hydrological Systems</b>                                     |  | <b>Membrane Technology</b>                                      |  |  |  |
| 18   | Finite elements VL 3  | Applied Surface Hydrology VL 2  | Membrane Technology VL 2  |  |   |  |  |  |
| 19   | Finite elements HÜ 2  | Interaction Water - Environment in Fluvial Areas PBL 1                    | Membrane Technology GÜ 1  |  |   |  |  |  |
| 20   |   | Applied Surface Hydrology PBL 1   | Membrane Technology PR 1  |  |   |  |  |  |
| 21   |   |   |   |  |   |  |  |  |
| 22   |   |   |   |  |   |  |  |  |
| 23   | <b>Water Resources and -Supply</b>                              |   | <b>Wastewater Systems</b>                                       |  | <b>Selected Topics in Civil Engineering (part 1)</b>            |  |  |  |
| 24   | Chemistry of Drinking Water Treatment VL 2                      | Advanced Wastewater Treatment VL 2  | Selection from a catalog  |  |   |  |  |  |
| 25   | Chemistry of Drinking Water Treatment HÜ 1                      | Advanced Wastewater Treatment HÜ 1  |   |  |   |  |  |  |
| 26   | Water Resource Management VL 2                                  | Biological Wastewater Treatment VL 2                                      |   |  |   |  |  |  |
| 27   | Water Resource Management GÜ 1                                  | Biological Wastewater Treatment HÜ 1                                      |   |  |   |  |  |  |
| 28   |   |   |   |  |   |  |  |  |
| 29   | <b>Integrated Transportation Planning</b>                       |   | <b>Transportation Modelling</b>                                 |  | <b>Water Protection</b>   |  |  |  |
| 30   | Integrated Transportation Planning PBL 4                        | Transportation Modelling PBL 4  | Water Protection IV 6   |  |   |  |  |  |
| 31   |   |   |   |  |   |  |  |  |
| 32   |   |   |   |  |   |  |  |  |
| 33   |   |   |   |  |   |  |  |  |
| 34   |   |   |   |  |   |  |  |  |
| 35   |   | <b>Modeling in Water Management</b>                                       |   |  |   |  |  |  |
| 36   |   | Groundwater Modeling using Modflow VL 1                                   |   |  |   |  |  |  |
| 37   |   | Groundwater Modeling using Modflow GÜ 2                                   |   |  |   |  |  |  |
| 38   |   | Modeling of Water Supply Network PBL 2                                    |   |  |   |  |  |  |
| 39   |   |   |   |  |   |  |  |  |
| 40   |   |   |   |  |   |  |  |  |
| Business & Management (from catalogue) - 6LP   |   |   |   |  |   |  |  |  |
| Linking theory and practice (dual study program, Master's degree) (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.

