APPENDIX A to the Addendum for Double Master’s Degrees between Chalmers Tekniska Högskola and Universität Stuttgart Double Master’s Degree Scheme

The attached MACROPLAN depicts the 2-year MSc double degree structure in Infrastructure and Environmental Engineering at Chalmers and in Water Resources Engineering and Management (WAREM) at U Stuttgart. It shows the compulsory and elective courses in each semester as well as the prerequisites for students wishing to spend their 2nd year at the partner institution.

### 1. Semester
- **Chalmers students in Chalmers**: Infrastructure and Urban Systems (7.5 ECTS)
- **Stuttgart students in Stuttgart**: Chemistry and Biology for Environmental Engineers (6 ECTS)
- **Chalmers students in Chalmers**: Geological and Geotechnical Site Characterisation (7.5 ECTS)
- **Stuttgart students in Stuttgart**: Environmental Fluid Mechanics I (6 ECTS)
- **Chalmers students in Chalmers**: Requirements of Professional Life and Engineering in Practice (1) (1.5 ECTS)
- **Stuttgart students in Stuttgart**: German Language or key qualifications (3 ECTS)
- **Chalmers students in Chalmers**: Water and Power Supply (6 ECTS)
- **Stuttgart students in Stuttgart**: Regional and Urban Planning 1 (6 ECTS)
- **Chalmers students in Chalmers**: Data, Statistics and Optimization (6 ECTS)
- **Stuttgart students in Stuttgart**: Hydraulic Structures (1) (3 ECTS)
- **Chalmers students in Chalmers**: Geohydrology and Geoenvironmenting (6 ECTS)

### 2. Semester
- **Stuttgart students in Stuttgart**: Infrastructure and Urban Systems (7.5 ECTS)
- **Chalmers students in Chalmers**: Drinking Water Engineering (7.5 ECTS)
- **Stuttgart students in Stuttgart**: Risk Control and Decision Support (7.5 ECTS)
- **Chalmers students in Chalmers**: Advanced Wastewater Engineering (7.5 ECTS)
- **Stuttgart students in Stuttgart**: German Language or key qualifications (3 ECTS)
- **Chalmers students in Chalmers**: Hydrogeology (7.5 ECTS)
- **Stuttgart students in Stuttgart**: Integrated Watershed Modelling (6 ECTS)
- **Chalmers students in Chalmers**: Hydraulic Structures (2) (3 ECTS)
- **Stuttgart students in Stuttgart**: Hydrogeological Investigation (6 ECTS)
- **Chalmers students in Chalmers**: Integrated River Management and Engineering (6 ECTS)
- **Stuttgart students in Stuttgart**: Modelling of Hydrosystems (6 ECTS)
- **Chalmers students in Chalmers**: Measurements in the Water Cycle (6 ECTS)

### 3. Semester
- **Stuttgart students in Stuttgart**: Infrastructure and Urban Systems (7.5 ECTS)
- **Chalmers students in Chalmers**: Urban Drainage and Design of Wastewater Treatment Plants (6 ECTS)
- **Stuttgart students in Stuttgart**: Requirements of Professional Life and Engineering in Practice (2) (1.5 ECTS)
- **Chalmers students in Chalmers**: Hydrogeology (7.5 ECTS)
- **Stuttgart students in Stuttgart**: Regional and Urban Planning 2 (6 ECTS)
- **Chalmers students in Chalmers**: Integrated Watershed Modelling (6 ECTS)
- **Stuttgart students in Stuttgart**: Constructed Wetlands for Wastewater Treatment (3 ECTS)
- **Chalmers students in Chalmers**: Hydraulic Structures (2) (3 ECTS)
- **Stuttgart students in Stuttgart**: Hydrogeological Investigation (6 ECTS)
- **Chalmers students in Chalmers**: Integrated River Management and Engineering (6 ECTS)
- **Stuttgart students in Stuttgart**: Modelling of Hydrosystems (6 ECTS)
- **Chalmers students in Chalmers**: Measurements in the Water Cycle (6 ECTS)
- **Stuttgart students in Stuttgart**: Master’s Thesis (30 ECTS)
- **Chalmers students in Chalmers**: Master’s Thesis (30 ECTS)
- **Stuttgart students in Stuttgart**: Complex Hydraulic Structures (2) (3 ECTS)

### 4. Semester
- **Chalmers students in Chalmers**: Infrastructure and Urban Systems (7.5 ECTS)
- **Stuttgart students in Stuttgart**: Industrial Waste Water Treatment (6 ECTS)
- **Chalmers students in Chalmers**: Contaminated Site Remediation and Investigation Technologies (6 ECTS)
- **Stuttgart students in Stuttgart**: Water Management and Irrigation Facilities (6 ECTS)
- **Chalmers students in Chalmers**: Sanitary Engineering (6 ECTS)
- **Stuttgart students in Stuttgart**: Environmental Fluid Mechanics I (6 ECTS)
- **Chalmers students in Chalmers**: Hydraulic Structures (1) (3 ECTS)
- **Stuttgart students in Stuttgart**: Planning and Design of Water Supply Facilities (6 ECTS)
- **Chalmers students in Chalmers**: Structural Engineering of Hydraulic Structures (6 ECTS)
- **Stuttgart students in Stuttgart**: Python Programming for Water Resources Engineering and Research (6 ECTS)
- **Chalmers students in Chalmers**: Thermal Treatment of Sewage Sludge, Phosphorus Recycling and Related Application of the Right to Access Environmental Information (6 ECTS)
- **Stuttgart students in Stuttgart**: Master’s Thesis (30 ECTS)
- **Chalmers students in Chalmers**: Master’s Thesis (30 ECTS)

### Compulsory modules in bold

Σ ECTS = 30

Prerequisites:
- US students have to select special section 3 "Sanitary Engineering and Water Quality Management" in their study plan
- US students may not select the module "Water Quality and Treatment" (2nd semester) as part of their studies in Stuttgart
- Chalmers students have to select the modules ‘Drinking Water Engineering’ and ‘Advanced Wastewater Engineering’ (2nd semester) as part of their studies in Chalmers

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1. The modules "Requirements of Professional Life and Engineering in Practice (3.0 ECTS)" and "Hydraulic Structures (6 ECTS)" are divided into 2 semesters. The ECTS can only be acquired if both parts have been completed.