Master’s Programme in Water and Environmental Engineering

Water and environmental engineering is essentially about making the world work. Faced with limited natural resources and an increasing demand for water, food and energy, we look for practical ways developing our society in a sustainable manner.

The multidisciplinary, two-year Master’s Programme in Water and Environmental Engineering brings together the best of the two fields. The programme makes use of students’ diverse backgrounds and encourages individualised study paths.

- Only 15 cr of common courses
- Student-centered learning with group work, personal portfolio and mentoring

Our water & environmental engineering graduates are enthusiastic professionals with solid problem-solving skills.

- Sound professional identity
- Attitude and readiness for problem-solving
- Answering society’s practical needs

Master’s thesis (30 cr)
Elective studies (30 cr)
Major studies, advanced (45 cr)

Students choose 45 cr of studies from the list below
- WAT-E2010 Groundwater Hydrology (5 cr)
- WAT-E2020 Environmental Hydraulics (5 cr)
- WAT-E2030 Hydrological modelling (5 cr)
- WAT-E2040 Surface Water Resources (5 cr)
- WAT-E2060 Sustainable Built Environment (5 cr)
- WAT-E2070 Sustainability Global Technologies (SGT) Studio (10 cr)
- WAT-E2080 Water and Governance (5 cr)
- WAT-E2090 Water and People in a Changing World (5 cr)
- WAT-E2100 Urban Water Systems (5 cr)
- WAT-E2110 Design and Management of Water and Wastewater Networks (5 cr)
- WAT-E2120 Physical and Chemical Treatment of Water and Waste (5 cr)
- WAT-E2130 Modelling and Control of Water and Wastewater Treatment Processes (5 cr)
- WAT-E2140 Sustainability in Environmental Engineering (5 cr)
- WAT-E2150 Environmental Risk Analysis (5 cr)
- WAT-E2170 Circular Economy in Environmental Engineering (5 cr)
- WAT-E2180 Biological Treatment of Water and Waste (5 cr)
- WAT-E3010 Special Course on Water & Environmental Engineering (5 cr)
- WAT-E3020 State of the World and Development (2 cr)
- CHEM-E6125 Environmental Management in Industry (5 cr)

Major studies, common (15 cr)

Obligatory courses
- WAT-E1011 Water & Environmental Engineering (10 cr)
- WAT-E1030 Computational Methods in Water & Environmental Engineering (5 cr)

Responsible professors:
Harri Koivusalo, Matti Kummu, Jaana Sorvari, Riku Vahala, Olli Varis
Academic coordinator: University Lecturer Marko Koskinen
Assisting coordinator: Doctoral Candidate Meeri Karvinen

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