Master programme Civil Engineering and Management

Water Engineering and Management

PROFILES

Integrated Water Management			
Profile Courses (minimum 30 EC)	*Course code*	*EC*	*Quartile*
at least 4 of the following 5 courses:			
Hydrology	195400100	7,5	1
Water Footprint Assessment	201400010	7,5	1
Design Project Water II	195400500	7,5	2
Tools for Water Policy Analysis	195400600	7,5	3
Integrated Water Management	195400300	7,5	4
Profile Electives			
- Free to choose any of the 35 CEM-courses *(pay attention to the required prior knowledge)*			
- Below: list of CEM-courses that fit best in this profile (in addition to profile courses)			
- Below: courses from other programmes that fit in this profile			
(If you include courses from other programmes, we ***recommend*** *you to make a selection, such that the majority of the programme is still formed by CEM-courses)*			
Water Systems	201300077	7,5	1
Legal & Governance Aspects	195800100	7,5	1
Planning and Process Management	201500097	7,5	1
Data Analysis in Water Engineering & Management	195410100	7,5	2
Collaborative Design & Engineering	195800400	7,5	3
Infrastructure Management	195820500	7,5	4
Policy Instr and Evaluation in Environm+Sust. (PA)	194106100	5	1
Policy Analysis in Public and Technol.Domains (PA)	201100077	5	1
Economic Methods of Sustainability Assessment (PA)	201100073	5	1
Public Governance and Policy Networks (PA)	194111240	5	3
Policy Strat.&Impl. for Water Govern+Sust. Issues (MEEM)		4	1
Sustainable Management Strat. and Innovation (MEEM)		4	1
Energy Management, Policy and Technology (MEEM)		4	2
Environment and Technology (MEEM)		4	2
Data Science (EWI)	201400174	5	2 or 3

River and Coastal Engineering			
Profile Courses (minimum 30 EC)	*Course code*	*EC*	*Quartile*
at least 4 of the following 6 courses:			
Water Systems	201300077	7,5	1
Hydrology	195400100	7,5	1
Marine Dynamics (prior knowledge: Math.Physics of WS)	195400800	7,5	1
Morphology (pr.knowl: Marine Dynamics)	195410200	7,5	2
Mathematical Physics of Water Systems	195400900	7,5	3
River Dynamics (prior knowledge: Math.Physics of WS)	195400400	7,5	4
Profile Electives			
- Free to choose any of the 35 CEM-courses *(pay attention to the required prior knowledge)*			
- Below: list of CEM-courses that fit best in this profile (in addition to profile courses)			
- Below: courses from other programmes that fit in this profile			
(If you include courses from other programmes, we ***recommend*** *you to make a selection, such that the majority of the programme is still formed by CEM-courses)*			
Data Analysis in Water Engineering & Management	195410100	7,5	2
Design Project Water II	195400500	7,5	2
GeoRiskManagement	195820300	7,5	3
Hydraulic Engineering	195410300	7,5	4
Fluid Mechanics II (ME)	201500136	5	1
Transport Phenomena (ME; prior knowledge Fluid Mech. II)	191141700	5	1
Numerical Methods in ME (ME; prior knowledge: Intro FE)	191157710	5	1-2
Data Science (EWI)	201400174	5	2 or 3
Wave Motion (ME)	191154770	5	2
Turbulence (AP)	193580010	5	2
Theory of Partial Differential Equations (AM)	191550105	5	3
Introduction to Finite Elements (part mod11 WB)	201400311	± 3	3
Applied Finite Elements for PDE (AM)	191551161	6	3
Comp.Fluid Dynamics (ME; pr.knowl: numerical methods)	191154731	5	4

GENERAL COURSES

Free Electives (max 15 EC)		*EC*	*Quartile*
Any course from UT or approved other university*			
Thesis **		*EC*	*Quartile*
Preparation Master Thesis		7,5	-
Master Thesis Water		30	-

Free Electives (max 15 EC)		*EC*	*Quartile*
Any course from UT or approved other university*			
Thesis **		*EC*	*Quartile*
Preparation Master Thesis		7,5	-
Master Thesis Water		30	-

PLANNING AND CONSULTATION FOR THE MASTER PROFILES

Track-coordinator: dr. ir. Denie Augustijn

Coordinator Master Theses: dr. ir. Martijn Booij

* an "approved university" is any university in The Netherlands (not HBO-schools),
or any international university that is partner of the UT or of the faculty of Engineering Technology.
For a list of partner universities, see: https://www.utwente.nl/ctw/student-mobility/partners/
For courses from other universities: contact your track-cooridnator.
The Free Electives should be at MSc-level and should have no overlap with other courses in your programme.

** For the procedure of how to start the course Preparation Master Thesis and your MSc-thesis project, see:
https://www.utwente.nl/cem/master_programme/graduate/