

# Integrated Civil Engineering Systems

## PROFILES

Civil Engineering Structures						Sustainability					
Profile Courses (minimum 30 EC)			EC	Quartile	Profile Courses (30 EC)			EC	Quartile		
Legal & Governance Aspects	5	1			Water Footprint Assessment	5	1				
Sustainability and Circularity in Civil Engineering	5	1			Sustainability and Circularity in Civil Engineering	5	1				
Morphology (Year 2; check Osiris for prerequisites)	5	2			Planning & Process Management	5	1				
Research Methodology & Academic Skills	5	2			Research Methodology & Academic Skills	5	2				
Advanced Soil Mechanics	5	3			Water and Energy	5	2				
Hydraulic Engineering	5	3			Sustainable Transport	5	2				
Geo Risk Management	5	4			Urban Resilience in a Changing Climate	5	3				
<b>Profile Electives</b> <i>- Free to choose any of the CEM-courses</i> (pay attention to the required prior knowledge) <i>- Below: list of CEM-courses that fit best in this profile (in addition to profile courses)</i> <i>- On the website: courses from other programmes that fit in this profile</i> (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)						<b>Profile Electives</b> <i>- Free to choose any of the CEM courses offered</i> (pay attention to the required prior knowledge) <i>- Below: list of CEM-courses that fit best in this profile (in addition to profile courses)</i> <i>- On the website: courses from other programmes that fit in this profile</i> (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)					
BIM and 5D Planning	5	2			Legal & Governance Aspects	5	1				
Data Analysis in Water Engineering and Management	5	2			Public Transport Modelling	5	3				
Mathematical Physics of Water Systems	5	3			Land Use and Transport Interactions (ITC) check Osiris for prerequisites	5	4				
Systems Engineering in Construction	5	3			Value Management	5	4				
Subsurface Infrastructure Engineering	5	4			Systems Engineering in Construction	5	3				
					Infrastructure Asset Management	5	4				
					Water and Climate	5	4				
					Building with Nature	5	4				
GENERAL COURSES											
Free Electives (max 15 EC)			EC	Quartile	Free Electives (max 15 EC)			EC	Quartile		
Any course from UT or approved other university*					Any course from UT or approved other university*						
Thesis **			EC	Quartile	Thesis **			EC	Quartile		
Preparation Master Thesis			5	-	Preparation Master Thesis			5	-		
Master Thesis Construction/Traffic/Water			30	-	Master Thesis Construction/Traffic/Water			30	-		

### PLANNING AND CONSULTATION FOR THE MASTER PROFILES

Track-coordinator: dr. Jord Warmink

Coordination of Master Theses: see coordinators from CME, TEM or WEM