

# Master programme Civil Engineering and Management

Transport Engineering and Management							
PROFILES							
<b>Transport Planning and Modeling</b>				<b>Transport and Logistics</b>			
<b>Profile Courses (minimum 30 EC)</b>	<i>Course code</i>	<i>EC</i>	<i>Quartile</i>	<b>Profile Courses (minimum 30 EC)</b>	<i>Course code</i>	<i>EC</i>	<i>Quartile</i>
Transport Research Project (mandatory)	201100009	7,5	any	Transport Research Project (mandatory)	201100009	7,5	any
<b>at least 3 of the following 4 courses:</b>				<b>at least 22,5 EC of the following courses:</b>			
Planning and Process Management	201500097	7,5	1	Simulation (IEM; follow-up of Module 8 CiT/TBK)	191820210	5	1 and 2
Transport Modeling	201100008	7,5	2	Traffic Operations	201100005	7,5	2
Land Use and Transport Interactions	201000025	7,5	3	Mathematical Optimization in Transport	201100012	7,5	3
Sustainable Transport	195420800	7,5	4	Traffic Management	201100006	7,5	4
				Data Science (EWI) + assignment	201400174	7,5	1,2 or 3
<b>Profile Electives</b>				<b>Profile Electives</b>			
- Free to choose any of the 35 CEM-courses (pay attention to the required prior knowledge)				- 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: 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				- Below: courses from other programmes that fit in this profile			
(If you include courses from other programmes, we <b>recommend</b> you to make a selection, such that the majority of the programme is still formed by CEM-courses)				(If you include courses from other programmes, we <b>recommend</b> you to make a selection, such that the majority of the programme is still formed by CEM-courses)			
Legal & Governance Aspects	195800100	7,5	1	Supply Chain Management and ICT	195810200	7,5	1
Public Transport in urban areas	201600131	7,5	2	Statistics and Probability (IEM)	191506103	5	1
Data Science (EWI) + assignment	201100012	7,5	3	Public Transport in urban areas	201600131	7,5	2
Mathematical Optimization in Transport	195820500	7,5	4	Supply Chain & Transportation Management (IEM)	201400174	7,5	1,2 or 3
Infrastructure Management				Sustainable Transport	191820190	5	3
				Warehousing (IEM)	195420800	7,5	4
					191820120	5	4
Policy Analysis in Public and Technol.Domains (PA)	201100077	5	1	Discrete Optimization (AM)	191581100	6	1
Economic Methods Sustainability Assessment (PA)	201100073	5	1	Cognition and Technical Systems (Psy, prior knowl:mod6 Psy)	201400583	5	1 or 3
Statistics and probability (IEM)	191506103	5	1	Optimization Modelling (AM)	191581420	5	3
Simulation (IEM; follow-up of Module 8 CiT/TBK)	191820210	5	1 and 2	Scientific Computing (AM)	191551200	6	3
Cognition and Technical Systems (Psy, prior knowl:mod6 Psy)	201400583	5	1 or 3	Human Computer Interaction (Psy, prior knowl:mod6 Psy)	201100126	5	3
Electric Vehicle System Design (IDE)	201500009	5	2	Stochastic Models (part of module 8, BSc-AM)	201400434	± 6	4
Policy Instr and Evaluation in Environm+Sust. (PA)	194106100	5	3	Markov Chains and Stoch.Sim. (part of mod 8, BSc-AM)	201400434	± 6	4
Public Governance & Policy Networks (PA)	194111240	5	3				
Energy, Sustainability and Society (SET)	201700029	5	3				
Human Computer Interaction (Psy)	201100126	5	3				
<b>GENERAL COURSES</b>							
<b>Free Electives (max 15 EC)</b>		<i>EC</i>	<i>Quartile</i>	<b>Free Electives (max 15 EC)</b>		<i>EC</i>	<i>Quartile</i>
Any course from UT or approved other university*				Any course from UT or approved other university*			
<b>Thesis **</b>		<i>EC</i>	<i>Quartile</i>	<b>Thesis **</b>		<i>EC</i>	<i>Quartile</i>
Preparation Master Thesis		7,5	-	Preparation Master Thesis		7,5	-
Master Thesis Traffic		30	-	Master Thesis Traffic		30	-
<b>PLANNING AND CONSULTATION FOR THE MASTER PROFILES</b>							
Track coordinator: prof. dr. ir. Eric van Berkum							
Coordinator Master Theses: prof. dr. ir. Eric van Berkum							

\* 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/en/et/student-mobility/partners/>  
 For courses from other universities: contact your track coordinator.  
 The Free Electives should be at MSc-level and should have no overlap with other courses in your programme.