

Construction Management and Engineering							
PROFILES							
Markets and Organization in Construction				Design Management in Construction			
Profile Courses (minimum 30 EC)	Course code	EC	Quartile	Profile Courses (minimum 30 EC)	Course code	EC	Quartile
Research Methodology & Academic Skills (mandatory)	195820400	7,5	2	Research Methodology & Academic Skills (mandatory)	195820400	7,5	2
<b>at least 3 of the following 4 courses:</b>				<b>at least 3 of the following 4 courses:</b>			
Planning and Process Management	201500097	7,5	1	Planning and Process Management	201500097	7,5	1
Legal & governance aspects	195800100	7,5	1	Legal & Governance Aspects	195800100	7,5	1
Project Management	195800200	7,5	2	Project Management	195800200	7,5	2
Collaborative Design & Engineering	195800400	7,5	3	Collaborative Design & Engineering	195800400	7,5	3
Profile Electives				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 <b>recommend</b> you to make a selection, such that the majority of the programme is still formed by CEM-courses)				- 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 <b>recommend</b> you to make a selection, such that the majority of the programme is still formed by CEM-courses)			
Supply Chain Management & ICT	195810200	7,5	1	Sustainable Building	195810400	7,5	1
Markets, Organizations & Innovation	195810100	7,5	2	Building Information Modeling & 5D Planning	201400012	7,5	3
Procurement Strat&Tend (pr.knowl: Project Man.)	201000095	7,5	3	Project Control and Risk Management	195810600	7,5	3
Industrialization & Innovation in Construction	195810310	7,5	4	Industrialization & Innovation in Construction	195810310	7,5	4
Infrastructure Management	195820500	7,5	4	Infrastructure Management	195820500	7,5	4
Maintenance Engineering and Management (ME, IEM)	201200146	5	1	Governing Product development (IDE)	192850730	5	1
Organization & Strategy (IEM)	191864610	5	2	Maintenance Engineering and Management (ME, IEM)	201200146	5	1
Cost Management and Engineering (IEM)	201400244	5	2	Product Life Cycle (IDE)	192850740	5	2
Reliability Engineering & Maintenance Mgmt (IEM)	191852630	5	3	Scenario based product design (IDE)	192850810	5	2
Supply Chain and Transportation Management (IEM)	191820190	5	3	Cost Management and Engineering (IEM)	201400244	5	2
				Product Life Cycle Management (IDE)	192850750	5	3
				Reliability Engineering & Maintenance Mgmt (IEM)	191852630	5	3
				Design for Maintenance Operations (IDE)	201500235	5	3
				Advanced 3D Modelling (IDE)	201500518	5	3
				Virtual Reality (IDE)	201000201	5	4
				LEAN Six-Sigma Green Belt (ME)	191127520	5	4
GENERAL COURSES							
Free Electives (max 15 EC)				Free Electives (max 15 EC)			
Any course from UT or approved other university*				Any course from UT or approved other university*			
Thesis **				Thesis **			
Preparation Master Thesis CEM		7,5	-	Preparation Master Thesis CEM		7,5	-
Master Thesis Construction		30	-	Master Thesis Construction		30	-
PLANNING AND CONSULTATION FOR THE MASTER PROFILES							
Track coordinator: drs. ing. Hans Boes							
Coordinator Master Theses: dr. ir. Robin de Graaf							

\* 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.

\*\* For the procedure of how to start the course Preparation Master Thesis and your MSc-thesis project, see: [https://www.utwente.nl/en/cem/master\\_programme/msc-thesis-and-graduation/](https://www.utwente.nl/en/cem/master_programme/msc-thesis-and-graduation/)