

Construction Management and Engineering

PROFILES

Markets & Organization of Construction			Digital Technologies in Construction		
Profile Courses (minimum 30 EC)	EC	Quartile	Profile Courses (minimum 30 EC)	EC	Quartile
Research Methodology & Academic Skills (compulsory)	7,5	2	Research Methodology & Academic Skills (compulsory)	7,5	2
Research Methodology & Academic Skills (compulsory) (2019-2020)	5	any	Research Methodology & Academic Skills (compulsory) (2019-2020)	5	any
Legal & Governance Aspects	7,5	1	Legal & Governance Aspects	7,5	1
Planning & Process Management	5	1	Planning & Process Management	5	1
Sustainability and Circularity in Civil Engineering	5	1	Construction Industry Dynamics	5	2
Construction Industry Dynamics	5	2	Construction Process Management	5	2
Construction Process Management	5	2	Systems Engineering in Construction	5	3
Systems Engineering in Construction	5	3	Digital Technologies for Civil Engineering	5	3
Infrastructure Asset Management	5	4	Technology and Innovation in Road Construction	5	4
Profile Electives - Free to choose any of the CEM courses offered (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)			Profile Electives - Free to choose any of the CEM courses offered (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)		
Construction Supply Chains and Digitization	5	1	Sustainability and Circularity in Civil Engineering	5	1
Experiments in Water Infrastructure	5	2	Construction Supply Chains and Digitization	5	1
Procurement Strategies and Tendering	5	3	BIM and 5D Planning	5	2
Infrastructure Maintenance Machines	5	4	Experiments in Water Infrastructure	5	2
Urban Governance and Resilience for Smarter Cities (2019-2020)	5	4	Simulation and Optimization of Construction Processes	5	3
Value Management	5	4	Value Management	5	4
Culture in Construction (2019-2020)			Subsurface Infrastructure Engineering	5	4
Innovation in Construction (2019-2020)			Infrastructure Maintenance Machines	5	4
Decision Engineering in Construction (2019-2020)			Infrastructure Asset Management	5	4
			Innovation in Construction (2019-2020)		
			Decision Engineering in Construction (2019-2020)		
Governing Product development (IDE)	5	1	Simulation (IEM; follow-up of Module 8 CIT/TBK) 191820210	5	1
Maintenance Engineering and Management (ME) 201200146	5	1	Maintenance Engineering and Management (ME) 201200146	5	1
Product Life Cycle (IDE) 192850740	5	2	Product Life Cycle (IDE) 192850740	5	2
Scenario based product design (IDE) 192850810	5	2	Scenario based product design (IDE) 192850810	5	2
Cost Management and Engineering (IEM) 194110140	5	2	Cost Management and Engineering (IEM) 194110140	5	2
Product Life Cycle Management (IDE) 192850750	5	3	Product Life Cycle Management (IDE) 192850750	5	3
Reliability Engineering & Maintenance Mgmt. (IEM) 191852630	5	3	Reliability Engineering & Maintenance Mgmt. (IEM) 191852630	5	3
Design for Maintenance Operations (IDE) 201500235	5	3	Design for Maintenance Operations (IDE) 201500235	5	3
Advanced 3D Modelling (IDE) 201500518	5	3	Advanced 3D Modelling (IDE) 201500518	5	3
Supply Chain Finance (IEM)	5	3	Supply Chain Finance (IEM)	5	3
Virtual Reality (IDE) 201000201	5	4	Virtual Reality (IDE) 201000201	5	4
LEAN Six-Sigma Green Belt (ME) 191127520	5	4	LEAN Six-Sigma Green Belt (ME) 191127520	5	4
Safety by Design	5	2	Safety by Design	5	2

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
Research Methodology and Academic skills	5/7,5	-	Research Methodology and Academic skills	5/7,5	-
Preparation Master Thesis	5	-	Preparation Master Thesis	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