

**Study Guide of Master Degree Program
of Civil Engineering (M. ENG.) / Examination Regulations 2011
Deadlines, Examination (written), Course achievements**

	Study Guide		
	1. Sem.	2. Sem.	3. Sem.
elective modules	30 CP		
elective modules		30 CP	
elective modules			15 CP
Master-Thesis			15 CP

At least 45 CP have to be acquired from the core area of Civil Engineering while up to 30 CP can also be earned from modules of other departments (Studium Generale).

Modulcode	Description of module	CP	Semester	PL, SL, PVL
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General Modules

GEO-3	Selected Chapters of Geotechnical Engineering	5	Winter	PL
FEMG	Finite Element Methods	5	Summer	PL
GEO5	Geotechnical Engineering in road construction	5	Summer	SL, PL
GEOW	Geotechnical Engineering in water construction	5	Winter	SL, PL
MATH-3	Higher Mathematics	5	Winter	PL
MATH-4	Statistical Methods	5	Winter	PL
MATH-5	Numerical Methods	5	Summer	PL
MWIP-1*	Scientific research project	5	Winter/Summer	PL*
MWIP-2*	Scientific research project	10	Winter/Summer	PL*
MWIP-3*	Scientific research project	15	Winter/Summer	PL*

Focus on Construction Operation

BBET-4	Construction Operation 4: Price finding	5	Winter	PL
BBET-5	Construction Operation 5: Project Management	5	Summer	PL
BBET-6	Construction Operation 6: Claim Management	5	Summer	PL
BBET-7	Construction Operation 7: Tender procedure and law	5	Winter	PL
PROM-1	Management structures in building companies	5	Winter	SL, PL
PROM-2	Site Management	5	Summer	SL, PL
PROM-3	Principles of leadership and Decision making Techniques	5	Summer	SL
IMMO-1	Real Estate Management 1	5	Winter	PL
IMMO-2	Real Estate Management 2	5	Winter	PL

Schwerpunkt Fassade/Energie (FA)

EPLA-1	Sustainable Construction and energy-efficient building design	5	Winter	PL
FASA	Façade	5	Summer	PL

Focus on Structural Engineering

BRAND	Structural Fire Protection	5	Winter	SL
BTEC-2	Advanced Study of Concrete Technology	5	Summer	PL
BFBA	Concrete Construction			
BSIB-3	Protection and Maintenance of Concrete Building Parts	5	Winter/Summer	SL, PL
BRÜB	Structural Design of Bridges	5	Winter	SL, PL
FEMP	Finite Element Method - Application	5	Winter	SL
HOLZ-2	Structural Design of Timber Construction 2	5	Winter	SL, PL
NABA	Sustainable Building 1	5	Summer	PL
NABA-2	Sustainable Building 2	5	Winter	PL
STAHL-3	Structural Design of Steel 3	5	Summer	SL, PL
STAHL-4	Structural Design of Steel 4	5	Winter	SL, PL
STBB-4	Structural Design of Reinforced Concrete 4	5	Summer	SL, PL
SPAN	Structural Design of Prestressed Concrete	5	Winter	SL, PL
STAT-5	Structural Analysis 5	5	Winter	PL
STAT-6	Structural Analysis 6	5	Summer	PL
DYNA	Dynamics	5	Winter/Summer	PL
VERB-1	Structural Design of Steel-Concrete Composition 1	5	Summer	SL, PL
VERB-2	Structural Design of Steel-Concrete Composition 2	5	Winter	SL, PL
ENVE	Design and Planning of Bridges and Earth Retaining Structures	5	Summer	PL
BBHO	Structural Design of Existing Buildings	5	Summer	SL, PL
INPL	Integral Planning	5	Winter	PL

Focus on Planning, Transport and Water

ASPT	Asphalt technology	5	Winter	SL, PL
EISB	Railway Construction 2	5	Sommer	SL, PL
FLPB	Airport Planning	5	Winter	PL
GIS	Geographical Information Systems	5	Winter	PL
ÖPNV	Urban Public Transport	5	Winter	PL
GVPL	Freight Traffic Planning and Logistics	5	Summer	PL
HYGE	Introduction to Water Hydrology	5	Summer	PL
LÄRM	Emission protection	5	Winter	SL, PL
SIWW-2	Urban Water Management/Waste Water Management 2	5	Winter	SL, PL
STAP	Urban Planning	5	Sommer	PL
STEB	Road Maintenance and road service	5	Sommer	SL, PL
UMWT	Environmental Engineering	5	Winter	SL, PL
WVER	Hydraulic Modelling	5	Sommer	PL
WASW-2	Hydraulic Construction/Water Engineering 2	5	Sommer	SL, PL
NAM	Precipitation Runoff Modeling	5	Winter	PL
WMDC	Water Management in developing countries	5	Summer	PL
FREI	Urban space - latitude	5	Summer	PL

PL = Examination (written) according to §7
SL = Course achievement according to § 8.4
CP = Credit Points

Module* max. 15 CP out of the scientific research project according to § 11