

CIVIL ENGINEERING BSC FROM 2019 - SPECIALIZATION IN INFRASTRUCTURE ENGINEERING

Subject Name	Code	Credit	Lecture	Seminar	Laborator	Consultation	Day	M/E/S	Semester	Semesters								Preliminary Requirement(s)
										1	2	3	4	5	6	7	8	
Core subjects																		
English for Civil Engineering 1	BMEGT60Z911	4		4				M	1	X								
Surveying 1	BMEEOFAT45	3	1		2			E	1	X								
Chemistry of Construction Materials	BMEEOMAT41	2	2					M	1	X								
Civil Engineering Representation and Drawing	BMEEOMAT42	4	2	2				M	1	X								
CAD for Civil Engineers	BMEEOFAT41	2			2			M	1	X								
Geology	BMEEOGMAT41	3	1		2			E	1	X								
Basis of Statics and Dynamics	BMEEOTMAT41	6		5				E	1	X								
Mathematics A1a - Calculus	BMETE90AX00	6	4	2				E	1	X								
Physics for Civil Engineers	BMETE11AX13	2	2					M	1	X								
English for Civil Engineering 2	BMEGT60Z912	4		4				M	2		X							
Surveying 2	BMEEOFAT42	4	2	2				E	2		X						EOAFAT41~	
Construction Materials 1	BMEEOMAT43	5	2		2			E	2		X						EOEMAT41	
Civil Engineering Informatics	BMEEOFAT42	5	2	2				M	2		X						EOFTAT41	
Building Construction Study	BMEEOMAT44	3	1	2				M	2			X					EOEMAT42	
Introduction to Strength of Materials	BMEEOTMAT42	6		5				M	2		X						EOTMAT41	
Hydraulics 1	BMEEOVVAT42	3	2	1				E	2		X							
Mathematics A2a - Vector Functions	BMETE90AX02	6	4	2				E	2		X						TE90AX00	
Surveying Field Course	BMEEOFAT43	3					9	M	3			X					EOAFAT42~	
Soil Mechanics	BMEEOGMAT42	4	2	2				M	3		X						EOGMAT41	
Geoinformatics	BMEEOFAT43	3	2		1			M	3			X					EOAFAT42	
Basis of Design	BMEEOHSAT41	3	2					M	3			X					EOTMAT41	
Structural Analysis 1	BMEEOTMAT43	4	4					E	3			X					EOTMAT42	
Railway Tracks	BMEEOUVAT41	3	3					E	3			X					EOAFAT41	
Basics of Environmental Engineering	BMEEOVKAT41	3	2					M	3		X							
Public Works 1	BMEEOVKAT42	3	2	1				E	3			X					EOVVAT42	
Hydrology 1	BMEEOVVAT41	3	2	1				M	3			X						
Mathematics A3 for Civil Engineers	BMETE90AX07	4	2	2				E	3		X						TE90AX02	
Earthworks	BMEEOGMAT43	3	2	1				E	4			X					EOGMAT42	
Steel Structures	BMEEOHSAT42	3	3					M	4			X					EOTMAT42	
Reinforced Concrete Structures	BMEEOHSAT43	3	3					M	4			X					EOTMAT42	
Roads	BMEEOUVAT42	2	2					M	4			X					EOVVAT41	
Hydraulic Engineering, Water Manag.	BMEEOVVAT43	3	2	1				E	4			X					EOVVAT41	
Construction Management	BMEEPEKAT41	3	2	1				M	4			X					EOEMAT42	
Business Law	BMEGT55A001	2	2					M	4			X						
Foundation Engineering	BMEEOGMAT45	4	3	0				E	5				X				EOGMAT43	
Management and Business Economics	BMEGT20A001	4	4					M	5				X					
Micro- and Macroeconomics	BMEGT30A001	4	4					E	6					X				
Communication Skills for Civil Engineers	BMEGT60Z913	2		2				M	6					X				
Urban and Regional Development	BMEEOUVAT43	3	2					M	7						X			
Elective subject		4	4					M	7							X		
Branch Subjects																		
Infrastructure CAD Course	BMEEOUVAI45	1			2			M	4				X				EOUVAT41	
Water Chemistry and Hydrobiology	BMEEOVKAI43	3	2		1			E	4			X					EOVKAT41	
* Legal Aspects of Water and Environment	BMEEOVKAI45	2	2					M	4			X						
Hydraulics 2	BMEEOVVAI42	3	2	1				E	4			X					EOVVAT42	
Highway and Railway Structures	BMEEOUVAI41	5	4					E	5				X				EOUVAT41	
Highway and Railway Design	BMEEOUVAI43	5	3	2				E	5				X				EOUVAT41	
Public Works 2	BMEEOVKAI41	5	2	2				E	5				X				EOVKAT42	
Urban Environment	BMEEOVKAI42	3	2			1		M	5				X				EOVKAT41	
* Water Quality Management	BMEEOVKAI44	3	2	1				M	5				X				EOVKAI43	
Hydrology 2	BMEEOVVAI41	3	2	1				M	5				X				EOVVAT41	
* Transportation Networks	BMEEOUVAI42	3	2					M	6					X			EOUVAT42	
* Highway and Railway Laboratory Practice	BMEEOUVAI44	1			3			M	6					X			EOUVAI41	
* Water Resources Management	BMEEOVVAI43	3	2					E	6				X				EOVVAT43	
Hydraulic Engineering Field Course	BMEEOVVAI44	2				6		M	6				X				EOVVAI41	
Infrastructure Study Project	BMEEODHAI41	6				2		M	6					X			EOVVAT43	
Public Administration and Land Registry	BMEEOUVAT44	3	2					M	7						X		GT55A001	
Earthworks and Drainage of Transportation Infra	BMEEOGMAI41	3	3					E	7						X		EOGMAT43	
Technical Internship	BMEEODHAI42	0					20	S	7							X	EOVVAT43	
Proposed Optional Branch Subjects																		
* Building Construction I.	BMEEOMAS42	3	1	2				E	4				X				EOEMAT44	
* Timber Structures	BMEEOHSAS44	3	2					M	4			X					EOTMAT42	
* Construction Materials II.	BMEEOMAS41	3	1		2			E	5				X				EOEMAT43	
* Bridges and Infrastructures	BMEEOHSAS43	3	2					E	5				X				EOHSAT42	
* Rock Mechanics	BMEEOGMAS41	3	1	1				M	6					X			EOGMAT41	
* Underground Structures, Deep Found.	BMEEOGMAS42	3	2	1				M	6					X			EOGMAT45	
Specialization in Infrastructure Engineering																		
Road Design	BMEEOUVA-E1	3	2					E	7						X		EOUVAI43	
Water Damage Prevention and Water Use	BMEEOVVA-F1	5	4					E	6				X				EOVVAT43	
Drinking Water and Wastewater Treatment	BMEEOVKA-H1	4	3					E	6				X				EOVKAI44	
** Railway Design	BMEEOUVA-E2	3	2					E	7					X			EOUVAI43	
** River Basin Management	BMEEOVVA-F2	3	2					E	7					X			EOVVAI43	
** Environmental Impact Assessment	BMEEOVKA-H3	3	3					E	7					X			EOVKAI42	
** Transport Infrastructure Design Project	BMEEOUVA-QP	6				2		M	7					X			EODHAI41	
** Hydraulic Engineering Design Project	BMEEOVVA-QP	6				2		M	7					X			EODHAI41	
** Urban Water Infrastructure Design Project	BMEEOVKA-QP	6				2		M	7					X			EODHAI41	
Preparatory Course for BSc Thesis Project	BMEEODHA-QT	9						M	8						X		*EOUVA-QP	
Bachelor Thesis Project	BMEEODHA-QS	15						M	8						X		*EOUVA-QP	
Total number of credits		240								32	37	32	28	32	30	25	24	
Total number of classes		184								31	34	27	29	28	20	15	0	
Number of exams		23								3	4	4	4	4	4	3	0	
Recommended Optional Subjects																		
Field Course of Structural Geodesy	BMEEOFAS42	1			2			M	7						X		EOAFAT43	
Satellite Positioning	BMEEOFAG45	3	2					E	5				X				EOAFAT43	
The Digital Earth	BMEEOFAG41	3	2	1				M	5					X			EOFTAT43	
Hungarian Language and Culture for SH Students	BMEGT60Z9H1	2		4				M		X								
Hungarian Language and Culture for SH Students	BMEGT60Z9H2	2		4				E			X							

* Note: Credits of the starred(*) Branch Subjects can be substituted by the credits of the Proposed Optional Branch Subjects as long as the preliminary requirements of the prospective specialisation subjects are fulfilled.

** Taking one project subject (UVA-QP or VVA-QP or VKA-QP) and its pre-requisites is mandatory in the specialization