CIVIL ENGINEERING BSC FROM 2019 - SPECIALIZATION IN INFRASTRUCTURE ENGINEERING

Subject name	Code	Credit	Lecture	Seminar	Laboratory	Consultation	Day	M/E/S	semester	1	2	3	4	5	6	7	8	Preliminary requirement(s)		
Core subjects																				
English for Civil Engineering 1	BMEGT60Z911	4		4				M	1	X								-		
Surveying 1	BMEEOAFAT41	3	1	2				M	1	X								-		
Chemistry of Construction Materials	BMEEOEMAT41	2	2					M	1	X								-		
Civil Engineering Representation and Drawing	BMEEOEMAT42	4	2	2				M	1	X								-		
CAD for Civil Engineers	BMEEOFTAT41	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	BMEEOAFAT42	4	2	2				E	2		X							EOAFAT41	EOFTAT41	
Construction Materials 1	BMEEOEMAT43	5	2		2			E	2		X							EOEMAT41		
Civil Engineering Informatics	BMEEOFTAT42	5	2	2				M	2		X							EOFTAT41		
Building Construction Study	BMEEOEMAT44	3	1	2				M	2			X						EOEMAT42		
Introduction to Strength of Materials	BMEEOTMAT42	6		5				M	2		X							EOTMAT41	TE90AX00~	
Hydraulics 1	BMEEOVVAT42	3	2	1				E	2		X							EOVVAT42		
Mathematics A2a - Vector Functions	BMETE90AX02	6	4	2				E	2		X							TE90AX00		
Surveying Field Course	BMEEOAFAT43	3					9	M	3			X						EOAFAT42~		
Soil Mechanics	BMEEOGMAT42	4	2	2				M	3		X							EOGMAT41	EOTMAT42	
Geoinformatics	BMEEOFTAT43	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	TE90AX00	
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	EOEMAT43~	EOHSAT41
Reinforced Concrete Structures	BMEEOHSAT43	3	3					M	4				X					EOTMAT42	EOEMAT43~	EOHSAT41
Roads	BMEEOUVAT42	2	2					M	4				X					EOUVAT41		
Hydraulic Engineering, Water Manag.	BMEEOVVAT43	3	2	1				E	4				X					EOVVAT41	EOVVAT42	
Construction Management	BMEEPEKAT41	3	2	1				M	4				X					EOEMAT44	EOGMAT42	
Business Law	BMEGT55A001	2	2					M	4				X					-		
Foundation Engineering	BMEEOGMAT45	4	3	0				E	5					X				EOGMAT43		
Management and Enterprise	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	EOVKAT42	EOFTAT42
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	EOUVAT42	
Highway and Railway Design	BMEEOUVAI43	5	3	2				E	5					X				EOUVAT41	EOUVAT42	EOAFAT43
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	EOVVAI42	
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	EOVVAI42	
Infrastructure Study Project	BMEEODHAI41	6				2		M	6						X			EOVVAT43	EOUVAI43	EOVKAI41
Public Administration and Land Registry	BMEEOUVAT44	3	2					M	7							X		GT55A001		
Earthworks and Drainage of Transportation Infrastructures	BMEEOGMAI41	3	3					E	7							X		EOGMAT43	EOVVAT41	
Technical Internship	BMEEODHAI42	0					20	S	7							X		EOVVAT43	EOUVAI43	EOVKAI41
Proposed Optional Branch Subjects																				
* Building Construction I.	BMEEOEMAS42	3	1	2				E	4				X					EOEMAT44		
* Timber Structures	BMEEOHSAS44	3	2					M	4				X					EOTMAT42	EOEMAT43	
* Construction Materials II.	BMEEOEMAS41	3	1		2			E	5					X				EOEMAT43		
* Bridges and Infrastructures	BMEEOHSAS43	3	2					E	5					X				EOHSAT42	EOHSAT43	
* 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	EOVVAI41	EOVVAI42
Drinking Water and Wastewater Treatment	BMEEOVKA-H1	4	3					E	6						X			EOVKAI41		
** Railway Design	BMEEOUVA-E2	3		2				E	7							X		EOUVAI43		
** River Basin Management	BMEEOVVA-F2	3	2					E	7							X		EOVVAI43	EOVKAI44	
** Environmental Impact Assessment	BMEEOVKA-H3	3	3					E	7							X		EOVKAI42	EOVKAI44	EOVKAI45
** Transport Infrastructure Design Project	BMEEOUVA-QP	6			2			M	7							X		EODHAI41	EOUVAI42	EOUVA-E2!
** Hydraulic Engineering Design Project	BMEEOVVA-QP	6			2			M	7							X		EODHAI41	EOVVA-F1	EOVVA-F2!
** Urban Water Infrastructure Design Project	BMEEOVKA-QP	6			2			M	7							X		EODHAI41	EOVKA-H1	EOVKA-H3!
Preparatory Course for BSc Thesis Project	BMEEODHA-QT	9						M	8								X	*EOUVA-QP	*EOVVA-QP	*EOVKA-QP
Bachelor Thesis Project	BMEEODHA-QS	15						M	8								X	EODHA-QT!		
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	26									3	4	4	4	4	4	3	0			
Proposed Elective Subjects																				
Field Course of Structural Geodesy	BMEEOAFAS42	1			2			M	7							X		EOAFAT43	EOHSAT42	EOHSAT43
Satellite Positioning	BMEEOAFAG45	3	2					E	5					X				EOAFAT43		
The Digital Earth	BMEEOFTAG41	3	2	1				M	5					X				EOFTAT43		
Hungarian Language and Culture for SH Students 1	BMEGT60Z9H1	2		4				M		X								-		
Hungarian Language and Culture for SH Students 2	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 fullfiled.

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