Orientation meeting 2024 spring

- Dr. Nauzika Kovács
  - Vice dean for education
- Dr. Olivér Fenyvesi
  - Course director
- Ms. Nóra Gáspár
  - CAO admin for civil engineering students
  - program coordinator

Course director since 2018 fall

Dr. Olivér Fenyvesi

fenyvesi.oliver@emk.bme.hu

Room K.I.85/9.

- Contact course director wrt all educational matters except:
  - The ones related to a particular subject (grading, retake options etc.)
  - The ones regulated in the Code of Studies
  - The ones regulated by the Faculty Study Committee (see homepage)
  - The ones related to your scholarship administration

Vice-dean since 2022

Dr. Nauzika Kovács

kovacs.nauzika@emk.bme.hu

Room K.mf.85/21.

- Contact the Vice-dean:
  - Specific educational issues; wrt educational progress, curricula, requests if the Course Director can not help you!

BME Faculty of Civil Engineering

- Pre-engineering – 1 year
- BSc – 4 years
- Pre-MSc – 0.5-1 year
- MSc – 1.5 year

- Stipendium Hungaricum students
- SCYP students
- Regular students
- Erasmus students
- Other exchange students

Pre-Engineering 2nd semester

2. semester Q3

	Mon	Tue	Wed	Thu	Fri
8-10	English	Study room (optional)	English	Study room (optional)	English
10-12	Physics/Chemistry	Physics/Chemistry	Mathematics	Engineering courses	Mathematics
12-14	Mathematics	Mathematics	Physics/Chemistry	Mathematics	Engineering courses
14-16	Engineering courses	Engineering courses	Study room (mandatory)	Study room (mandatory)	Study room (optional)

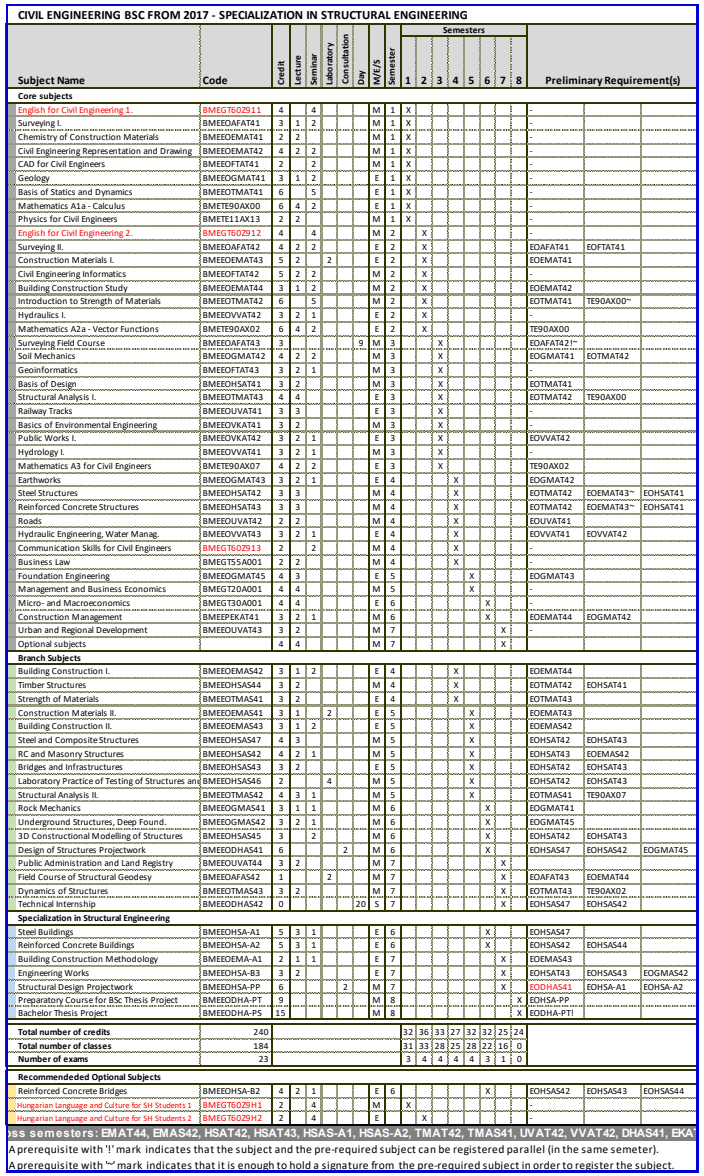
2. semester Q4

	Mon	Tue	Wed	Thu	Fri
8-10	English	Study room (optional)	English	Study room (optional)	English
10-12	Physics/Chemistry	Physics/Chemistry	Mathematics	Engineering courses	Mathematics
12-14	Mathematics	Mathematics	Mathematics	Mathematics	Engineering courses
14-16	Engineering courses	Engineering courses	Study room (mandatory)	Study room (mandatory)	Study room (optional)

BSc in **Civil Engineering**

2 specializations choice by **end of 3rd semester!**	Structural engineering https://epito.bme.hu/sites/default/files/page/BSc%20mintatanterv%20220231221%20Eng%20structural.pdf Infrastructure engineering do not start in 2024! https://epito.bme.hu/sites/default/files/page/BSc%20infrastructure%20engineering%20curriculum%20final_2.pdf
Technical internship	https://epito.bme.hu/node/17395
Diploma project	Preparatory Course for BSc Thesis Project (9 credits) Bachelor Thesis Project (15 credits)

https://epito.bme.hu/sites/default/files/page/angol%20regul%C3%A1ris%202022%20%C5%91sz.pdf



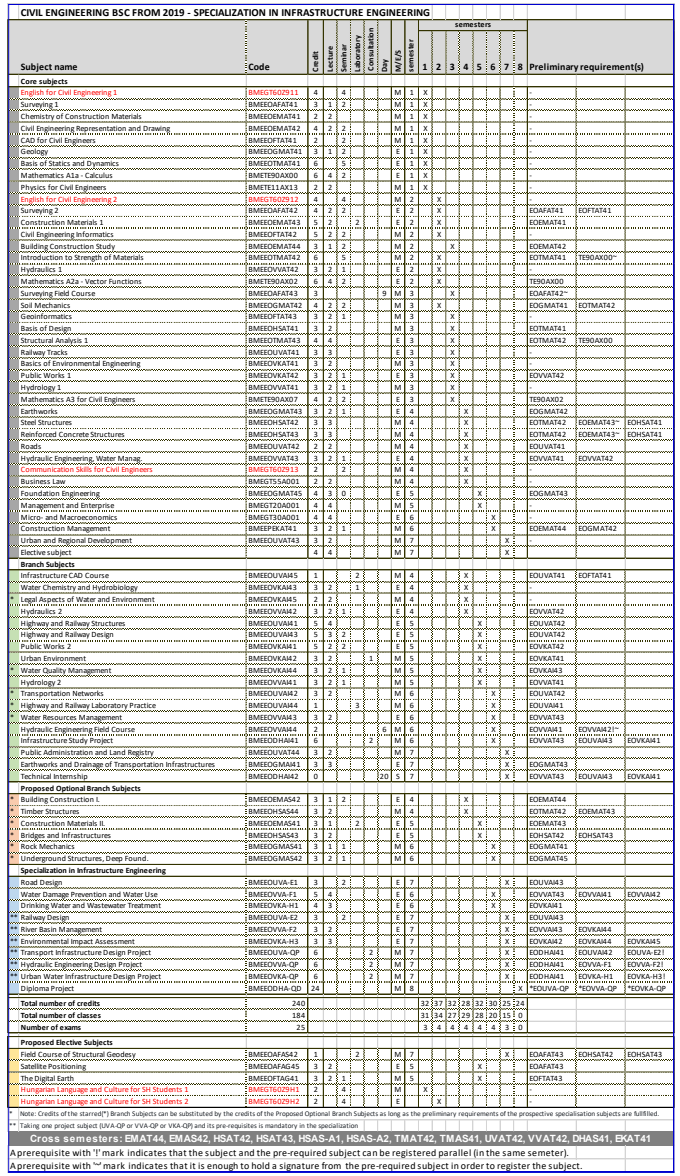
CIVIL ENGINEERING BSC FROM 2017 - SPECIALIZATION IN STRUCTURAL ENGINEERING

Subject Name	Code	Credit	Lecture	Seminar	Laboratory	Consultation	Day	M/E/S	Semester	Semesters 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 I.	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 II.	BMEEOAFAT42	4	2	2				E	2		X							EOAFAT41	EOFTAT41	
Construction Materials I.	BMEEOEMAT43	5	2		2			E	2		X							EOEMAT41		
Civil Engineering Informatics	BMEEOFTAT42	5	2	2				M	2		X									
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 I.	BMEEOVVAT42	3	2	1				E	2		X							-		
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						-		
Basis of Design	BMEEOHSAT41	3	2					M	3			X						EOTMAT41		
Structural Analysis I.	BMEEOTMAT43	4	4					E	3			X						EOTMAT42	TE90AX00	
Railway Tracks	BMEEOUVAT41	3	3					E	3			X						-		
Basics of Environmental Engineering	BMEEOVKAT41	3	2					M	3			X						-		
Public Works I.	BMEEOVKAT42	3	2	1				E	3			X						EOVVAT42		
Hydrology I.	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	EOTMAT41	
Reinforced Concrete Structures	BMEEOHSAT43	3	3					M	4				X					EOTMAT42	EOTMAT41	
Roads	BMEEOUVAT42	2	2					M	4				X					EOUVAT41		
Hydraulic Engineering, Water Manag.	BMEEOVVAT43	3	2	1				E	4				X					EOVVAT41	EOVVAT42	
Communication Skills for Civil Engineers	BMEGT60Z913	2		2				M	4				X					-		
Business Law	BMEGT55A001	2	2					M	4				X					-		
Foundation Engineering	BMEEOGMAT45	4	3					E	5					X				EOGMAT43		
Management and Business Economics	BMEGT20A001	4	4					M	5					X				-		
Micro- and Macroeconomics	BMEGT30A001	4	4					E	6						X			-		
Construction Management	BMEEPEKAT41	3	2	1				M	6						X			EOEMAT44	EOGMAT42	
Urban and Regional Development	BMEEOUVAT43	3	2					M	7							X		-		
Optional subjects		4	4					M	7							X				
Branch Subjects																				
Building Construction I.	BMEEOEMAS42	3	1	2				E	4				X					EOEMAT44		
Timber Structures	BMEEOHSAS44	3	2					M	4				X					EOTMAT42	EOHSAT41	
Strength of Materials	BMEEOTMAS41	3	2					E	4				X					EOTMAT43		
Construction Materials II.	BMEEOEMAS41	3	1		2			E	5					X				EOEMAT43		
Building Construction II.	BMEEOEMAS43	3	1	2				E	5					X				EOEMAS42		
Steel and Composite Structures	BMEEOHSAS47	4	3					M	5					X				EOHSAT42	EOHSAT43	
RC and Masonry Structures	BMEEOHSAS42	4	2	1				M	5					X				EOHSAT43	EOEMAS42	
Bridges and Infrastructures	BMEEOHSAS43	3	2					E	5					X				EOHSAT42	EOHSAT43	
Laboratory Practice of Testing of Structures and	BMEEOHSAS46	2			4			M	5					X				EOHSAT42	EOHSAT43	
Structural Analysis II.	BMEEOTMAS42	4	3	1				M	5					X				EOTMAS41	TE90AX07	
Rock Mechanics	BMEEOGMAS41	3	1	1				M	6						X			EOGMAT41		
Underground Structures, Deep Found.	BMEEOGMAS42	3	2	1				M	6						X			EOGMAT45		
3D Constructional Modelling of Structures	BMEEOHSAS45	3		2				M	6						X			EOHSAT42	EOHSAT43	
Design of Structures Projectwork	BMEEODHAS41	6				2		M	6						X			EOHSAS47	EOHSAS42	EOGMAT45
Public Administration and Land Registry	BMEEOUVAT44	3	2					M	7							X				
Field Course of Structural Geodesy	BMEEOAFAS42	1				2		M	7							X		EOAFAT43	EOEMAT44	
Dynamics of Structures	BMEEOTMAS43	3	2					M	7							X		EOTMAT43	TE90AX02	
Technical Internship	BMEEODHAS42	0					20	S	7							X		EOHSAS47	EOHSAS42	
Specialization in Structural Engineering																				
Steel Buildings	BMEEOHSA-A1	5	3	1				E	6						X			EOHSAS47		
Reinforced Concrete Buildings	BMEEOHSA-A2	5	3	1				E	6						X			EOHSAS42	EOHSAS44	
Building Construction Methodology	BMEEOEMA-A1	2	1	1				E	7							X		EOEMAS43		
Engineering Works	BMEEOHSA-B3	3	2					E	7							X		EOHSAT43	EOHSAS43	EOGMAS42
Structural Design Projectwork	BMEEOHSA-PP	6				2		M	7							X		EODHAS41	EOHSA-A1	EOHSA-A2
Preparatory Course for BSc Thesis Project	BMEEODHA-PT	9						M	8								X	EOHSA-PP		
Bachelor Thesis Project	BMEEODHA-PS	15						M	8								X	EODHA-PT!		
Total number of credits	240									32	36	33	27	32	32	25	24			
Total number of classes	184									31	33	28	25	28	22	16	0			
Number of exams	23									3	4	4	4	4	3	1	0			
Recommendeded Optional Subjects																				
Reinforced Concrete Bridges	BMEEOHSA-B2	4	2	1				E	6						X			EOHSAS42	EOHSAS43	EOHSAS44
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							-		

ss semesters: EMAT44, EMAS42, HSAT42, HSAT43, HSAS-A1, HSAS-A2, TMAT42, TMAS41, UVAT42, VVAT42, DHAS41, EKA

A prerequisite with '!' mark indicates that the subject and the pre-required subject can be registered parallel (in the same semeter).

A prerequisite with '~' mark indicates that it is enough to hold a signature from the pre-required subject in order to register the subject.



CIVIL ENGINEERING BSC FROM 2019 - SPECIALIZATION IN INFRASTRUCTURE ENGINEERING

Subject name	Code	Credit	Lecture	Seminar	Laboratory	Consultation	Day	M/E/S	semester	semesters 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									
Building Construction Study	BMEEOEMAT44	3	1	2				M	3			X						EOEMAT42		
Introduction to Strength of Materials	BMEEOTMAT42	6		5				M	2		X							EOTMAT41	TE90AX00!	
Hydraulics 1	BMEEOVVAT42	3	2	1				E	2		X							-		
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						-		
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						-		
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	
Communication Skills for Civil Engineers	BMEGT60Z913	2		2				M	4					X				-		
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		-		
Construction Management	BMEEPEKAT41	3	2	1				M	6							X		EOEMAT44	EOGMAT42	
Urban and Regional Development	BMEEOUVAT43	3	2					M	7								X			
Elective subject		4	4					M	7								X			
Branch Subjects																				
Infrastructure CAD Course	BMEEOUVAA45	1			2			M	4					X				EOUVAT41	EOFTAT41	
Water Chemistry and Hydrobiology	BMEEOVKAA43	3	2		1			E	4					X						
* Legal Aspects of Water and Environment	BMEEOVKAA45	2	2					M	4					X						
Hydraulics 2	BMEEOVVAA42	3	2	1				E	4					X				EOVVAT42		
Highway and Railway Structures	BMEEOUVAA41	5	4	1				E	5						X			EOUVAT42		
Highway and Railway Design	BMEEOUVAA43	3	2					E	5						X			EOUVAT42		
Public Works 2	BMEEOVKAA41	5	2	2				E	5						X			EOVVAT42		
Urban Environment	BMEEOVKAA42	3	2		1			M	5						X			EOVVAT41		
* Water Quality Management	BMEEOVKAA44	3	2	1				M	5						X			EOVVAA43		
Hydrology 2	BMEEOVVAA41	3	2	1				M	5						X			EOVVAT41		
* Transportation Networks	BMEEOUVAA42	3	2					M	6							X		EOUVAT42		
* Highway and Railway Laboratory Practice	BMEEOUVAA44	1			3			M	6							X		EOUVAA41		
* Water Resources Management	BMEEOVVAA43	3	2					E	6							X		EOVVAT43		
Hydraulic Engineering Field Course	BMEEOVVAA44	2					6	M	6							X		EOVVAA41	EOVVAA21~	
Infrastructure Study Project	BMEEODHAA41	6				2		M	6							X		EOVVAT43	EOUVAA43	EOKVAA41
Public Administration and Land Registry	BMEEOUVAT44	3	2					M	7								X			
Earthworks and Drainage of Transportation Infrastructures	BMEEOGMAA41	3	3					E	7								X	EOGMAT43		
Technical Internship	BMEEODHAA42	0					20	S	7								X	EOVVAT43	EOUVAA43	EOKVAA41
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		EOUVAT43		
Water Damage Prevention and Water Use	BMEEOVVA-F1	5	4					E	6						X			EOVVAT43	EOVVAA1	EOVVAA2
Drinking Water and Wastewater Treatment	BMEEOVKA-H1	4	3					E	6						X			EOVVAT43		
** Railway Design	BMEEOUVA-E2	3	2					E	7							X		EOUVAT43		
** River Basin Management	BMEEOVVA-F2	3	2					E	7							X		EOVVAT43	EOVVAA44	
** Environmental Impact Assessment	BMEEOVKA-H3	3	3					E	7							X		EOVVAT43	EOVVAA44	EOKVAA45
** Transport Infrastructure Design Project	BMEEOUVA-QP	6				2		M	7							X		EODHAA41	EOUVAA42	EOUVA-E2!
** Hydraulic Engineering Design Project	BMEEOVVA-QP	6				2		M	7							X		EODHAA41	EOVVA-F1	EOVVA-F2!
** Urban Water Infrastructure Design Project	BMEEOVKA-QP	6				2		M	7							X		EODHAA41	EOVKA-H1	EOVKA-H3!
Diploma Project	BMEEODHA-QD	24						M	8								X	*EOUVA-QP	*EOVVA-QP	*EOVKA-QP
Total number of credits	240									32	37	32	28	32	30	25	24			
Total number of classes	184									31	34	27	28	28	20	15	0			
Number of exams	25									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 fulfilled.

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

Cross semesters: EMAT44, EMAS42, HSAT42, HSAT43, HSAS-A1, HSAS-A2, TMAT42, TMAS41, UVAT42, VVAT42, DHAS41, EKAT41

A prerequisite with '!' mark indicates that the subject and the pre-required subject can be registered parallel (in the same semeter).

A prerequisite with '~' mark indicates that it is enough to hold a signature from the pre-required subject in order to register the subject.

BSc program - requirements

- Pre-requisites cannot be bypassed
  - Even not by request based on equity (Faculty chance)
- ~~Accreditation only in registration period~~
- All obligatory (not starred) subject should be passed!
- Special rules for projectwork (6th and 7th semester) enrolment (valid also for infrastructural engineering students!)
  - https://epito.bme.hu/node/18152

Pre-MSc

- 1st semester

Foundation Engineering	BMEEOGMAT45	4
Steel and Composite Structures	BMEEOHSAS41	4
Reinforced concrete structures	BMEEOHSAT43	3
Engineering Works	BMEEOHSA-B3	3
Structural Analysis II.	BMEEOTMAS42	4
Bridges and Infrastructures	BMEEOHSAS43	3
Design of Structures Projectwork	BMEEODHAS41	6
Total number of credits		29

- 2nd semester

Rock Mechanics	BMEEOGMAS41	3
Underground Structures, Deep Found.	BMEEOGMAS42	3
3D Constructional Modelling of Structures	BMEEOHSAS45	3
Steel Buildings	BMEEOHSA-A1	5
Reinforced Concrete Buildings	BMEEOHSA-A2	5
Reinforced Concrete Bridges	BMEEOHSA-B2	4
Structural Design Projectwork	BMEEOHSA-PP	6
Total number of credits		29

- To be transferred to MSc after 1 semester:
  - All credits earned
  - At least 3.5 GPA
  - 3 and higher grades for all courses
- To be transferred to MSc after 2 semesters (or 1 extended semester):
  - 2/3 of credits

MSc **Structural** Eng.

- 3 specializations
  - Numerical modeling
  - Structures
  - Geotechnics and Geology

Specialization in Numerical Modeling
Obligatory subjects
Structural Dynamics
Stability of Structures
Nonlinear Mechanics
Diploma Project
Recommended elective subjects
Plasticity
Nonlinear FEM
Analysis of Rods and Frames
Discrete Element Method

Specialization in Structures
Obligatory subjects
Structures 2
Stability of Structures
Seismic Design
Structural Dynamics
Diploma Project
Recommended elective subjects
Applied Fracture Mechanics
Prestressing Technologies
Strengthening of Structures

Specialization in Geotechnics and Geology
Obligatory subjects
Engineering Geology MSc
Environmental Geology
Geotechnical Design
Earthworks of Infrastructures
Diploma Project
Recommended elective subjects
Tunneling
Hydrogeology
Numerical Methods in Geotechnics
Engineering Geology of Hungary

MSc in **Infrastructural** Eng.

- Specialization in Highway and Railway Engineering
- Specialization in Water and Hydro-Environmental Engineering

Transport strategic planning		BMEEOUVMU-1
Railway Station Design		BMEEOUVMU-2
infrastructure Management Systems		BMEEOUVMU-3
Project Management in Transportation		BMEEOUVMU-4
Elective Subjects 1st semester	7	
Elective Subjects 2nd semester	10	
Diploma Project BMEEODHMU-D	20	
Transportation Modeling		BMEEOUVMU61
Railway Operation		BMEEOUVMU62
Pavement Structures		BMEEOUVMU63
Railway Track Structures		BMEEOUVMU64
Intelligent Transportation Systems		BMEEOFTMF61
Transport economics		BMEEOUVMU65
CAD Software in Road and Rail Design		BMEEOUVMU66

Water and wastewater treatment II.		BMEEOVKMV-1
Water quality monitoring		BMEEOVKMV-2
Modelling of Hydrosystems		BMEEOVVMV-1
Hydromorphology		BMEEOVVMV-2
Elective Subjects 1st semester	4	
Elective Subjects 2nd semester	12	
Diploma Project		BMEEODHMV-D
Design of Water-Use Structures		BMEEOVVMV61
Design of Water Damage Prevention Structures		BMEEOVVMV62
Groundwater		BMEEOVVMV63
Hydrography and Hydroinformatics		BMEEOVVMV64
Water and wastewater treatment plants		BMEEOVKMV61
Water quality management		BMEEOVKMV62
Public water utility systems modelling		BMEEOVKMV63
Reconstruction of public water utility systems		BMEEOVKMV64

MSc in **Land Surveying and Geoinformatics** Engineering

Obligatory Subjects		
GNSS Theory and Applications	BMEEOAFMF-1	
Information Technologies	BMEEOFTMF-1	
Automated Surveying	BMEEOAFMF-2	
Applied Geoinformatics	BMEEOFTMF-2	
Mapping Technologies	BMEEOFTMF-3	
Elective Subjects	8	
Diploma Project	BMEEODHMF-D20	
Recommended Elective Subjects		
Physical Geodesy and Gravimetry		BMEEOAFMF61
Geodetic Networks and Projections		BMEEOAFMF62
Intelligent Transportation Systems		BMEEOFTMF61
ITS Geoinformatics		BMEEOFTMF62 2

MSc in **Construction Information Technology** Engineering

MSc program in Construction Information Technology Engineering

	English Name	Code	Credit	Lecture	Seminar	Laboratory	Consultation	Day	M/E****	Semester****
Core Subjects										
	Numerical Methods	BMEEOAFMB51	4			2			E	1
	Construction Information Technology Mathematics	BMETE90MX__63	3	2					E	1
	Building Information Modelling	BMEEOFTMB51	3	2					M	1
	Decision Support Methods	BMEEPEKMB51	2	2					M	1
	Construction Information Technology Engineering Projec	BMEEODHMB5P	6				2		M	1
	BIM Modelling and Design	BMEEOFTMB52	5			4			E	2
	Civil Engineering Automation, Modelling	BMEEOHSMB51	5	1	2				E	2
	Construction Information Technology Programming	BMEVIAUM___B51	6	1	4				M	2
	Complex Construction IT project	BMEEODHMB5K	6				2		M	2
	Argumentation, Negotiation, Presentation	BMEGT41M___B51	3	2					M	3
	Technology Assessment	BMEGT41M___B52	2	2					M	3
***	Diploma Project	BMEEODHMB-D	20				1		M	3
Obligatory and recommended Elective Subjects										
	1st Obligatory Elective Subject*		8	2	4				E	1
	2nd Obligatory Elective Subject*		4	1	2				M	1
	1st Recommended Elective Subject*		4	2	1				M	2
	2nd Recommended Elective Subject*		4	2	1				M	2
	Optional subjects	BMEEO	5						M	3
***Students with a BSc degree in Civil Engineering or Architecture (Student Group I.)**										
Obligatory Elective Subjects (at least 12 credits to complete)										
	Programming	BMEVIEEM___B-1	8	2	4				E	1
	Database Systems	BMEEOFTMB-1	4	1	2				M	1
Recommended Elective Subjects (at least 8 credits to complete)										
	Structural Dynamics	BMEEOTMMN-1	4	2	1				M	2
	Stability of Structures	BMEEOHSMT-2	4	2	1				E	2
	FEM for Engineers	BMEEOTMMB-2	4	1	2				M	2
	Numerical Methods in Geotechnics	BMEEOGMMB61	4	1		1			M	2
	Automated Survey Systems	BMEEOAFMB61	4	1	2				M	2
	Electrical Systems in Buildings	BMEVIVEM___B61	4	2					E	2
	HVAC Basics	BMEGEÉEM___B61	4	2					M	2
***Students with a BSc degree in Mechanical Engineering/ Energy Engineering/ Mechatronics Engineering/ Electrical Engineering/ Computer Science (Student Group II.)**										
Obligatory Elective Subjects (at least 12 credits to complete)										
	Building Constructions	BMEEOEMMB-1	8	2	4				M	1
	Finite Element Modelling	BMEEOTMMB-1	4	1	2				E	1
Recommended Elective Subjects (at least 8 credits to complete)										
	Construction Management	BMEEPEKMB61	4	2	1				M	2
	Civil Engineering Structures and Modelling	BMEEOHSMB61	4	2	1				M	2
	Constructions of Buildings and Structures	BMEEOEMMB61	4	2	1				M	2
	Modelling of Hydrosystems	BMEEOVVMV-1	4	2	1				M	2
	Electrical Systems in Buildings	BMEVIVEM___B61	4	2					M	2
	HVAC Basics	BMEGEÉEM___B61	4	2					M	2
Optional Subjects										
**	Optional subject - internship (at company)	BMEEODHMV02	5					20	M	3

*The committee of the MSc program divides the students into groups according to their previous BSc studies in order to unify the output competences that are acquired with the completion of the master's program

**Any subject from other MSc programs of the University can be chosen.

***Taking the Diploma project subject is only possible if the student accomplished 33 credits from the mutual Core Subjects, 12 credits from the subjects of their own Student Group and at least 51 credits as a sum of the above mentioned two types of subjects.

**** The listed numbers of the semesters present the suggested schedule according to the curriculum.

*****Midterm grade/ Exam

A30:N64A

MSc programmes on the Faculty of Civil Engineering

- MSc in **Structural Engineering** program:
- https://epito.bme.hu/sites/default/files/page/MSc%20structural%20program%202020_0.pdf
- MSc in **Infrastructure Eng**ineering program:
- https://epito.bme.hu/sites/default/files/page/MSc%20infrastructure%20program%202020_0.pdf
- MSc in **Land Surveying and Geoinformatics** program:
- https://epito.bme.hu/sites/default/files/page/MSc%20geoinformatics%20program%202020_1.pdf
- MSc in **Construction Information Technology Engineering** program:
- https://epito.bme.hu/sites/default/files/page/%C3%89p%C3%ADtm%C3%A9ny-informatikai%20MSc%20tanterv%2C%20%C3%B3rarend%20v2.4-web_EN%20v3.pdf

Semester schedule

- Holidays
- University events
- Retake days
- Repeat/make-up week
- Exam period

BSc-MSc course year 2023/24 2nd semester calendar

Edu week	even(#)/odd(+)	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
		5-Feb	6-Feb	7-Feb	8-Feb	9-Feb	10-Feb	11-Feb
		Registration week						
1	+	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb	17-Feb	18-Feb
2	#	19-Feb	20-Feb	21-Feb	22-Feb	23-Feb	24-Feb	25-Feb
3	+	26-Feb	27-Feb	28-Feb	29-Feb	1-Mar	2-Mar	3-Mar
4	#	4-Mar	5-Mar	6-Mar	7-Mar	8-Mar	9-Mar	10-Mar
5	+	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar Day off	16-Mar	17-Mar
6	#	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar
7	+	25-Mar	26-Mar	27-Mar	28-Mar Spring break	29-Mar Spring break	30-Mar	31-Mar Easter
8		1-Apr Easter	2-Apr Spring beak	3-Apr Spring beak	4-Apr Spring beak	5-Apr Spring beak	6-Apr	7-Apr
9	#	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr Vásárhelyi Days	13-Apr	14-Apr
10	+	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr
11	#	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr
12	+	29-Apr	30-Apr	1-May Day off	2-May	3-May	4-May	5-May
13	#	6-May	7-May	8-May	9-May	10-May	11-May	12-May
14	+	13-May	14-May	15-May	16-May	17-May	18-May	19-May
15	#	20-May Day off	21-May	22-May	23-May	24-May	25-May	26-May
		27-May	28-May	29-May	30-May	31-May	1-Jun	2-Jun
		Repeat week						
		3-Jun Exam per. start	4-Jun	5-Jun	6-Jun	7-Jun	8-Jun	9-Jun
		10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun
		17-Jun State (Final) examination period starts	18-Jun	19-Jun	20-Jun	21-Jun	22-Jun	23-Jun
		24-Jun	25-Jun	26-Jun	27-Jun	28-Jun Exam per. end	29-Jun	30-Jun
		1-Jul	2-Jul grade registration end until 14:00	3-Jul	4-Jul State Exam per. end	5-Jul	6-Jul	7-Jul

The last examination day of the subjects taught by the Faculty of Civil Engineering in the BSc program is 1st of July because of the Field courses.

Study period:

Repeat week: Exam period: Holiday:

Communication – who should I contact?

Lecturer-professor	• Wrt course schedule, tests, retake/repeat, exam etc.
Course director (vice-dean)	• Any specific educational issues; wrt educational progress, curricula, requests
Dean’s office	• Only PhD students
Central Academic Office	• Any administrative matters; Neptun issues, scholarship issues, scholarship extension, student legal status, etc.
SH mentors	• students' personal issues, accommodation/dormitory issues, health insurance, etc.
Tempus	• Scholarship issues, changing education programs etc.

Communication – etiquette

- First of all **check the** CAO/Faculty/Tempus/Hungary Helps **homepages and newsletters!**
- Email
  - Addressing
  - All required data (e.g. Neptun code is necessary every time)
  - Previous actions
  - Respectful communication
  - Short form!
- In person
  - Ask for appointment in advance
  - Contact lecturers in consultation hours
  - Respectful communication

Contacting professors

- About points/grades: there’s no “please, give me one more point”!
- Professors have nothing to do with students' personal issues, health condition, scholarship status, do not refer such matters/cases!
- Professors are not obliged to reply multiple emails/requests/Teams questions.
- Professors should by contacted in an appropriate manner – politely, respectfully
- Professors will report inappropriate student communications to the Faculty
  - Faculty reports to BME and to Tempus
- Always check subject requirements first!
- Check **Code of Studies/faculty webpage** what is allowed and what isn’t!
  - https://kth.bme.hu/en/for-students/rules-and-regulations/

General info

- Code of Studies and Exams (kth.bme.hu)
- Faculty of Civil Engineering - curriculum (epito.bme.hu)
- Education portal edu.epito.bme.hu
  - Support from lecturer/professor
  - Infosite
- Request regarding tuition fees should be only submitted through Neptun!
  - https://kth.bme.hu/en/for-students/about-neptun/neptun-requests/
- About Neptun requests see this webpage of CAO:
  - https://kth.bme.hu/en/for-students/about-neptun/

Academic honesty, sanctions against academic and exam offences

- Code of studies - Title 32
- Checking identity at exams, tests
- Academic and exam offence
  - Using aids that are not allowed
  - Requesting/accepting any assistance from other students
  - Changing (or attempting to change) corrected/assessed tests/assignments
  - Acting in place of another person
- Failing the course (no credit)
- Professor – Dean’s office – Disciplinary procedure
- Report to Tempus

Academic honesty, sanctions against academic and exam offences

- Cases
  - Cheating during test (from material not allowed, help from other students)
  - Submitted test/home assignment is created by an other student
  - Cheating during oral exam
- Solutions
  - Short deadline, going back in the test sheet is prohibited, minus points for wrong answers
  - Checking IP-s during online tests
  - Plagiarism detection softwares
  - Changing course requirements – focusing on evaluations that can be controlled better
  - Motivating continuous learning during semester
  - New, creative test methods

Repeat period – 27-31st of May

- Missed classes and some of the failed tests (should be discussed with lecturer) can be repeated.
- Part of tests can be repeated by paying extra fee. In this case the type of test (written/oral) might change!
- Homeworks and assignments can be submitted by paying the extra fee.
- Ask the lecturer about the repeat options!
- **Pre-exams** of some subjects can also be taken in the repeat period.

Exam period: 3rd June – 28th July

- All exams can be repeated once for free, ~~but an exam can be repeated no more than 5 times (overall 6 exams/course).~~ the law has been changed from the autumn semester of 2022!
  - A course cannot be taken/registered more than 6 times!!!
- An exam can be cancelled without consequences a day before, until noon.
- For SH and SCYP students: if min. 36 credit points in the last two active semesters (18 credits in each) is not achieved the student will be dismissed and lose the scholarship!
- For all students: min. 20 credit points in the last three active semesters is not achieved the student will be dismissed (and lose the scholarship)!
- For all students: after 2×education period No. of semesters (e.g. in BSc after 16 semesters) the student will be dismissed (and lose the scholarship) regardless the semesters were active or passive!

Subject enrolment I.

- Starts in January/August and closes at the end of the registration week (February/September). It's highly recommended to be registered in the very beginning! Courses with less than 6 students will be cancelled on the registration week Monday!
- Clash detection in the schedule is the students' responsibility. For 1st year students the Faculty register the subjects, in case of problem the Course Director can help.
- „#" in the schedule means every even; + means every odd weeks
- Having the signature of a subject, its exam course can be taken, no need to attend the classes and do the tests again.
- In case of ***branch and specialization courses***, the **signature** might be sufficient to fulfil the pre-requirement.
- Courses cannot be changed from the 2nd week of the semester (in the case of examination and field courses from the 13rd week).

Subject enrolment II.

- In case only 3-4 semesters are remaining, it's recommended to create a subject enrolment plan and check whether all subjects can be passed based on the pre-requisites and minimum requirements.
- Special rules for taking projectworks, and rules for taking thesis projects!
  - https://epito.bme.hu/node/18089
- Always check the updated timetable/schedule on the homepage!
- Optional subject: e.g. Reinforced concrete bridges (in the 6th semester) – always check whether it runs, in advance!
- For optional course any BME course can be selected, but BSc students can select only BSc courses, MSc students only MSc courses
- Cross-semester courses
  - Faculty monitoring
  - Students' request
    - Request signed by min. 15 students *(who would slip a semester)* before the final registration period
    - Department is willing to and able to open the course
    - Faculty is able to provide room for the course

Tuition fee

- Tuition fee reduction is possible under 24 registered credits in a semester or above 3.5 GPA (submitting a Neptun request). Should be approved by BME, not guaranteed!
- If justified, late payment or split payment can be requested (in Neptun), please keep all the deadlines given in the Neptun!
- In case of passive semester, the transferred tuition fee can not be validated in the next semester, you will get back the tuition fee.
- Late passivation upon the Code of Studies Section 57. (6)!

Practical training – technical internship

- Technical internship accomplished at the home country can be approved based on certification that states the student worked at least 6 weeks, and the company works in the field related to civil engineering construction.
- Positions at Hungarian companies can be applied, in this case BME issues document certifying the student status and the aim of the technical internship course.
  - epito.bme.hu – education – BSc – Technical internship BMEEODHAS42 / BMEEODHAI42 for Infrastructural engineering students
- (Laboratories and departments of the Faculty can also be asked whether there are a project to join for at least 6 weeks in the summer.)
- Besides the **certificate**, a **~10 page report** is to be submitted.

Accreditation, summer course etc.

- In the credit system credits from civil engineering programs from same or higher level e.g. from BSc to BSc can be accredited/approved.
- If the student failed a subject after passing it at home university, the subject can not be accredited!
- General rule: reasonable thematic overlap and at least the same number of credits are required.

Diploma project

- Supervisor should be found and contacted in the previous semester.
- One external supervisor is required (ask the BME supervisor for support)!
- Co-supervisors can be involved from other departments or even from abroad.
- BSc from 2018 spring
  - Preparatory course for BSc thesis project
  - Bachelor thesis project
- For SH and SCYP students: submit the extension Neptun request (E009) in time (CAO info letter)! If you miss the deadline, your status will be changed to tuition fee paying student even if you have a passive semester! Try to not slip in your final semester as the extension is not guaranteed!

Diploma project – registration requirements

- BSc thesis
  - Min. 204 credits
  - All core subjects (English and Hungarian languages are not counted here!)
  - Min. 45 credits of branch subjects
  - Min. 17 credits of specialisation subjects
  - Should be taken together with Preparatory Course for Bachelor thesis project
- MSc thesis
  - Min. 54 credits
  - Min. 29 credits of core subjects (English and Hungarian languages are not counted here!)
  - Min. 8 credits of obligatory specialisation subjects

Recommendations

- Course registration
  - Do it in time!
  - Check clashing courses on Neptun!
  - Support only for civil engineering courses and courses from CE curricula!
- Failing tests/exams
  - Contact the lecturers, professors in time, ask for consultation!
- Rules/regulations
  - Attending classes
  - Late arrival
- Use the Faculty Educational portal edu.epito.bme.hu
  - Supporting materials
  - online tests
  - Submitting home assignments
- Cheating/plagiarism is not tolerated at all!
- Sports & language

Education method in 2024 spring

- Face-to-face education
- Based on Neptun request there is an option to change to online education is serious case (health or accident, etc.)
  - on Pre-eng and BSc programs for max. 4 weeks
  - on Pre-MSc and MSc programs for max. 4 weeks
  - on PhD program for max. 4 weeks

Thank you for your kind attention!

Further information:
http://epito.bme.hu/?language=en