BME Faculty of Architecture		Department of Mechanics, Materials and Structures	
Subject:		SPECIAL LOADBEA-RING STRUCTURES	Code: BMEEPSTQ602, BMEEPSTT601, BMEEPSTT101
Grade: exam	Creditst: 4	3rd year	
Lecturer: DR. HEGYI Dezső		Practicals: Guerra Riano Andres, Rita Vajk	

SCHEDULE 2023/2024 FALL SEMESTER

Week Nr.	date	**lecture at K351** **publication of weekly material** ***edu.epitesz.bme.hu*** **MON 12:15-14:00**	date	**practical at K397** **TUE 8:15-10:00**
0.	*Registration week*			
1.	02.12.	1. Large span beams	02.13.	1. Large span structures *+ HW1 assignment out*
2.	02.19.	2. Large span plates	02.20.	2. Frames
3.	02.26.	3. High-rise buildings	02.27.	STUDENT PRESENTATIONS *1st HW submission till 02.27 8:00*
4.	03.04.	4. Internal forces of spatial structures, surface-structures	03.05.	8:15-9:00 TEST 1 *+ Discussion of Test exercises, Mockup experimenting*
5.	03.11.	5. Shell structures: geometry, support conditions	03.12.	3. Shell structures *+ HW2 assignment out*
6.	03.18.	6. Masonry arches and vaults	03.19.	4. Masonry arches and vaults
7.	03.25.	*Preliminary design week*	03.26.	*Preliminary design week*
	04.01.	*Spring holdays*	04.02.	*Spring holidays*
8.	04.08.	7. Shell structures: supports, construction	04.09.	5. Quadrilateral shell
9.	04.15.	*8.* Cable strutcures	04.16.	8:15-9:00 TEST 2 *+ Discussion of Test exercises, HW consultation*
10.	04.22.	9. *Tents*	04.23.	STUDENT PRESENTATIONS
11.	04.29.	10. Space frames	04.30.	6. Cable structures
12.	05.06.	11. Construction of tensile structures	05.07.	7. Membrane structures
13.	05.11.	12. Summary	05.14.	8:15-9:00 TEST 3 *+ Discussion of Test exercises* *2nd HW submission till 05.14, 24:00*
14.	05.20.	*Draughting week*	05.21	*Draughting week*
15.	05.29.	RETAKE (Wednesday 12-15)	05.	*Replacement week*

BME Faculty of Architecture	Department of Mechanics, Materials and Structures		
Subject:	SPECIAL LOADBEARING STRUCTURES		Code: BMEEPSTQ605
Grade: exam	Creditst: 3	3rd year	
Lecturer: DR. HEGYI Dezső		Practicals: Guerra Riano Andres, Rita Vajk	

SCHEDULE 2022/2023 FALL SEMESTER

Week Nr.	date	**lecture at K351** **publication of weekly material** ***edu.epitesz.bme.hu*** **MON 12:15-14:00**	date	**practical at K397** **TUE 8:15-10:00**
0.	*Registration week*			
1.	02.12.	1. Large span beams	02.13.	
2.	02.19.	2. Large span plates	02.20.	1. Frames
3.	02.26.	3. High-rise buildings	02.27.	
4.	03.04.	4. Internal forces of spatial structures, surface-structures	03.05.	8:15-9:00 TEST 1 *+ Mockup experimenting*
5.	03.11.	5. Shell structures: geometry, support conditions	03.12.	
6.	03.18.	6. Masonry arches and vaults	03.19.	2. Masonry arches and vaults, domes *+ HW submission till 03.19. 24:00 online*
7.	03.25.	*Preliminary design week*	03.26.	*Preliminary design week*
	04.01.	*Spring holdays*	04.02.	*Spring holidays*
8.	04.08.	7. Shell structures: supports, construction	04.09.	
9.	04.15.	*8.* Cable strutcures	04.16.	8:15-9:00 TEST 2 *+ Student presentations*
10.	04.22.	9. *Tents*	04.23.	
11.	04.29.	10. Space frames	04.30.	3. Cable and membrane structures
12.	05.06.	11. Construction of tensile structures	05.07.	
13.	05.11.	12. Summary	05.14.	8:15-9:00 TEST 3 *+ Student presentations*
14.	05.20.	*Draughting week*	05.21	*Draughting week*
15.	05.29.	RETAKE (Wednesday 12-15)	05.	*Replacement week*

BME Faculty of Architecture		Department of Mechanics, Materials and Structures	
Subject:	SPECIAL LOADBEARING STRUCTURES		Code: BMEEPSTT601, BMEEPSTM101
Grade: semester mark	Credits: 4	3rd year	
Lecturer: DR. HEGYI Dezső		Practicals: Guerra Riano Andres, Rita Vajk	

COURSE REQUIREMENTS

Requirements for registration:	1) Register via Neptun 2) For BMEEPSTS601 students: Design of Load-bearing Structures

Midterm activities:	- **Lectures**
	- **Online learning of the digital/interactive materials** (published via Moodle: **edu.epitesz.bme.hu**)
	  - completing online quizzes linked to the practicals and lectures;
	  - practical exercises with unique data set to be submitted online
	- **HW**- 2-parts, group work;
	- **Practicals Tuesday** 8-10
	- **TESTs**

Presence:	Live presence at the practicals is mandatory (70%) and is checked regularly.
Mark, midterm points:	During the semester there is a **Homework**, which consists of 2 parts. Both parts worth 45-45 points, and both Homework are teamwork. Homework 1 is a presentation which have to handed in till the 28th February 8:00 online and which have to be presented in person during the 2 scheduled practicals. For the in person presentation no late submission is possible! Homework 2 is a drawing + analysing exercise, the deadline of it is 14th May 24:00. For this homework late submission is possible until 17th May 24.00, note that late submission charge applies! The submission and acceptance of both homework is obligatory to obtain the signature! There are **3 closed book Tests**, each of them worth maximum 50 points. Minimum 25 points is needed from each to get the signature. There is **only one** retake test for all of them at the end of the semester. During the semester bonus points can be gained: For bonus exercises there is no late submission. - **Practice exercises** belonging to each of the topics, published at Moodle. Deadline of these exercises are the test of the topic. The gained points are devided so as maximally 10 bonus points can be gained. - Every Monday the theoretical and practical materials of the week will be published on Moodle. Belonging to these study materials there will be **quiz questions**. By solving these quiz questions till 8.00 of the day of the practical you can gain bonus points, maximum 30 points for the whole semester. - By **activity during the practicals** you can get maximum 10 bonus points at the end of the semester.
Requirements for signature:	– *Presence and participation in the classes* – *Passing EACH test (at lest 25 points each)* – *presentation of HW part 1* – *submitted and **accepted** HW (BOTH parts!)* – *At least 120 points gained during the semeter without bonus points.*

Final mark:	The final mark is based on the following calculation: HW (max 90) + Test grades (max 150) +*bonus** (max 50) *:applicable only if the signature-requirements been otherwise met 200 – 240 excellent (5) 170 – 199 good (4) 150 – 169 satisfactory (3) 120 – 149 pass (2) < 120 fail (1)
Written notes	D. Hegyi, O. Gáspár, E. Fehér: Special Loadbearing Structures
online platforms, course material	available at https://edu.epitesz.bme.hu – practicals, study aids
Communication	MS Teams: **ioilcew**

BME Faculty of Architecture		Department of Mechanics, Materials and Structures	
Subject:	SPECIAL LOADBEARING STRUCTURES		Code: BMEEPSTQ602
Grade:	exam	Credits: 4	3rd year
Lecturer:	DR. HEGYI Dezső	Practicals:	Guerra Riano Andres, Rita Vajk

COURSE REQUIREMENTS

Requirements for registration:	1) Register via Neptun 2) For BMEEPSTQ602 students: Design of Load-bearing Structures

Midterm activities:	- **Lectures**
	- **Online learning of the digital/interactive materials** (published via Moodle: **edu.epitesz.bme.hu**)
	  - completing online quizzes linked to the practicals and lectures;
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Requirements for signature:	– *Presence and participation in the classes* – *Passing EACH test (at lest 25 points each)* – *presentation of HW part 1* – *submitted and **accepted** HW (BOTH parts!)* – *At least 120 points gained during the semeter without bonus points.*

Participation at the examinations	- mid-semester signature of the subject obtained within 3 years - registration of the exam in Neptun until the deadline specified there - during the examination the identity will be checked, a photo ID will be needed - the detailed conditions specified in the Code of Studies
Date of the exam	Will be published in Neptun system. (The given classroom might be wrong. Check the classroom and seating at the Teams channel of the class the evening before the exam!)
Type of exam	The examination consists of a 90-minute-long written part, where maximum 120 points can be gained. If 60 points is reached from the written exam there is an obligatory oral exam. At the oral exam minimum 60 points should be gained from the maximal 120 points.
Final mark:	To successfully pass the exam minimum 60 points from the written exam and minimum 60 points from the oral exam is needed. The final mark is based on the following calculation: HW (max 90) + Test grades (max 150) +*bonus** (max 50) + written exam (max 120 points) + oral exam (max 120 points) *:applicable only if the signature-requirements been otherwise met 400 – 480 excellent (5) 340 – 399 good (4) 300 – 339 satisfactory (3) 240 – 299 pass (2) < 240 fail (1)
Written notes	D. Hegyi, O. Gáspár, E. Fehér: Special Loadbearing Structures
online platforms, course material	available at https://edu.epitesz.bme.hu – practicals, study aids
Communication	MS Teams: **ioilcew**