

<b>BME Faculty of Architecture</b>		<b>Department of Mechanics, Materials and Structures</b>	
<b>Subject:</b> <i>Special Loadbearing Structures</i>		<b>Code:</b> BMEEPSTT601, BMEEPSTM101	
<b>Grade:</b> midterm	<b>Credits:</b> 4	3rd year	
<b>Lecturer:</b> Dezső, DR. HEGYI		<b>Practicals:</b> Orsolya, GÁSPÁR	

## SCHEDULE 2019/2020 SPRING SEMESTER

week	date	Lecture M 12:15-14:00 K285	date	Practical F 12:15-14:00 K345
1.	10.02.	1. Large span beams	14.02.	1. Large span structures <i>(HW description)</i>
2.	17.02.	2. Large span plates	21.02.	2. Frame-like structures
3.	24.02.	3. Internal forces of spatial structures, surface-structures	28.02.	10:15-11:00 1. TEST 3. Shell structures 1. (HP)
4.	02.03.	4. Shell structures: geometry, support conditions	06.03.	Presentation of the 1 <sup>st</sup> HW
5.	09.03.	5. Shell structures: supports, construction	13.03.	Presentation of the 1 <sup>st</sup> HW
6.	16.03.	6. Masonry arches and vaults	20.03.	4. Shell structures 2. + Arches
7.	23.03.	<i>Draft plan week</i>	27.03.	<i>Draft plan week</i>
8.	30.03.	7. Pre-tensioned structures + PRACTICAL (arches, shells)	03.04.	10:15-11:00 2. TEST 5. (cable) Modelling
9.	06.04.	8. Cable structures	10.04.	<i>National Hoilday</i>
x.	13.04.	<i>Spring break</i>	17.04.	<i>Spring Break</i>
10.	20.04.	9. Tent structures	24.04.	6. Cable structures
11.	27.04.	10. Tall buildings 1	01.05.	<i>National Holiday</i>
12.	04.05.	11. Tall buildings 2.	08.05.	7. Tent sctructures
13.	11.05.	12. Spatial trusses + PRACTICAL (cables/tents)	15.05.	10:15-11:00 3. TEST 8. 3D scan <i>(Deadline of the 2<sup>nd</sup> HW)</i>
14.	18.05.	<i>Project week</i>	22.05.	<i>Project week</i>
15.	25.05.	<i>Replacement week</i>	27.05.	<i>Replacement week</i> <i>RETAKE on Wednesday 12:15-15:00</i>

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## REQUIREMENTS

Requirements for registration:	1) Register via Neptun 2) For BMEEPST601 students: Design of Load-bearing Structures																									
Midterm activities:	Lectures Practicals (seminar) practical – black board practical (exercises)+group activities homework tests																									
Presence:	At least 70% presence at lectures and practicals! The presence is checked by the teachers.																									
Mark:	3 tests, 45 minutes each, max. 50 points each, 0 points in case of absence. Retake is possible for each during replacement week, according to schedule.  <b>There are no other opportunities for retake beside those listed in the schedule!</b>  Adjacent to each topic, extra homework exercises are uploaded to the following link: <a href="http://www.szt.bme.hu/files/Kultarto/index.php?lang=en">http://www.szt.bme.hu/files/Kultarto/index.php?lang=en</a> . Each student is assigned individual data and can check and submit the results (for bonus points) online. Max. 15 points can be earned with the extra exercises (by the following formula: gained points/maximum points *15) which is added to the total points only if the sum of compulsory homework points and test points exceed 150.  Preparation of a two-part homework (HW) is required for 45-45 points. Students are required to work in groups for both parts. The 1st homework consists of an oral presentation ( <b>possible dates are designated in the schedule</b> ) and a brief written summary. The deadline for the written part is the day of the presentation. The 2nd homework is the draft plan of a conceptual design of a structure inspired by the first HW. The deadline for the 2nd homework is <b>15<sup>th</sup> May 2020</b>  The oral part of the homework cannot be delayed. Last day of late submission for any written part is the first day of the project week (18 <sup>th</sup> May 2019). However, in the case of late submission, the earned points are reduced to 80%. Any homework submitted thereafter earns 0 points, with an ultimate deadline <b>22<sup>th</sup> May 2020</b> , <i>note that late charge applies!</i>																									
Requirements for signature:	<ul style="list-style-type: none"> <li>– Presence on at least 70% of the practicals and lectures.</li> <li>– Min 25 points for each test.</li> <li>– Presentation of the first part of the homework according to the schedule.</li> <li>– Submitted and accepted written part.</li> </ul>																									
The midterm mark:	<p>The given mark is based on the following calculation:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Test + HW + Bonus points* =</td> <td style="width: 10%; text-align: center;">200 –</td> <td style="width: 10%; text-align: center;">240</td> <td style="width: 10%; text-align: center;">Excellent</td> <td style="width: 10%; text-align: center;">(5)</td> </tr> <tr> <td></td> <td style="text-align: center;">170 –</td> <td style="text-align: center;">199</td> <td style="text-align: center;">Good</td> <td style="text-align: center;">(4)</td> </tr> <tr> <td>* <i>bonus points count only if the total test points + homework points &gt; 150.</i></td> <td style="text-align: center;">150 –</td> <td style="text-align: center;">169</td> <td style="text-align: center;">Satisfactory</td> <td style="text-align: center;">(3)</td> </tr> <tr> <td></td> <td style="text-align: center;">120 –</td> <td style="text-align: center;">149</td> <td style="text-align: center;">Pass</td> <td style="text-align: center;">(2)</td> </tr> <tr> <td></td> <td style="text-align: center;">&lt;</td> <td style="text-align: center;">120</td> <td style="text-align: center;">Fail</td> <td style="text-align: center;">(1)</td> </tr> </table>	Test + HW + Bonus points* =	200 –	240	Excellent	(5)		170 –	199	Good	(4)	* <i>bonus points count only if the total test points + homework points &gt; 150.</i>	150 –	169	Satisfactory	(3)		120 –	149	Pass	(2)		<	120	Fail	(1)
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Recommended study aids:	The material of the lectures and the blackboard exercises are available on the website of the department ( <a href="http://www.szt.bme.hu/index.php/en/downloads">http://www.szt.bme.hu/index.php/en/downloads</a> ) and on moodle.																									