COURSE SYLLABUS AND COURSE REQUIREMENTS
ACADEMIC YEAR 22/23 SEMESTER SPRING

Course title	*REINFORCED CONCRETE STRUCTURES II*
Course Code	*MSB383AN*
Hours/Week: le/pr/lab	2/2/0
ECTS	4
Degree Programme	Civil Engineer BSc
Study Mode	*Full-time, in-person*
Requirements	Exam
Teaching Period	22/23 Spring
Prerequisites	Reinforced Concrete Structures I
Department(s)	Department of Civil Engineering
Course Director	
Teaching Staff	*Tamas Juhasz juhasz.tamas@mik.pte.hu*

COURSE DESCRIPTION

The objective of the course is to provide basic knowledge in the field of reinforced concrete slabs and frames.

SYLLABUS

1. GOALS AND OBJECTIVES

Specific (Measurable) Student Behavioral Learning Objectives:
Upon completion of this course, the student should be able to
1. Determine loads on concrete slabs and frames
2. Determine internal forces developed in slabs and frames.
3. Design optimal reinforcement.
4. Produce appropriate engineering drawings of detailed reinforcement plans.

2. COURSE CONTENT

	TOPICS
LECTURE, PRATICE, LAB	1. *Mechanics of Concrete Plates* 2. *One-way Concrete Slabs* 3. *Two-way Concrete Slabs* 4. *Flat Slabs* 5. *Punching Shear* 6. *Concrete Frames*

DETAILED SYLLABUS AND COURSE SCHEDULE, TENTATIVE

UNFORESEEABLE CIRCUMSTANCES MIGHT AFFECT THE SCHEDULE BELOW.
ACADEMIC HOLIDAYS INCLUDED

LECTURE, PRATICE, LAB

week	**Topic**	**Compulsory reading**	**Required tasks (assignments, tests, etc.)**	**Completion date, due date**
1.	Registration, introduction in general	[1]	TBD	TBA
2.	Mechanics of Plates, Beam to Plate comparison	[1]	TBD	TBA
3.	Elastic Theory of Plates	[1]	TBD	TBA
4.	One-way Concrete Slabs	[1]	TBD	TBA
5.	Two-way Concrete Slabs	[1]	TBD	TBA
6.	Two-way Concrete Slabs, Simplified Approaches, Strip-method	[1]	TBDe	TBA
7.	Two-way Concrete Slabs, Simplified Approaches, Tabular Methods	[1]	TBD	TBA
8.	Two-way Concrete Slabs, Flat Slabs	[1]	TBD	TBA
9.	Two-way Concrete Slabs, Simplified Approaches, Punching Shear	[1]	TBD	TBA
10.	Johansen's Yield-line Method	[1]	TBD	TBA
11.	Mechanics of Concrete Frames	[1]	TBD	TBA
12.	Mechanics of Indeterminate Concrete Frames, Internal Force Envelopes	[1]	TBD	TBA
13.	Slender Columns I	[1]	TBD	TBA
14.	Slender Columns II	[1]	TBD	TBA
15.	Final week, evaluation, make-ups		TBD	TBA

3. ASSESSMENT AND EVALUATION

ATTENDANCE

In accordance with the Code of Studies and Examinations of the University of Pécs, Article 45 (2) and Annex 9. (Article 3) a student may be refused a grade or qualification in the given full-time course if the number of class absences exceeds 30% of the contact hours stipulated in the course description. Online attendance is not available.

Method for monitoring attendance

Attendance will be monitored by attendance lists. All relevant university regulations apply.

ASSESSMENT

There will be two 120-minute midterm tests and one take-home project work. Preliminary midterm dates are the 7th and 14th weeks. The exact dates are to be announced no later than 14 days before.
The home project will be assigned on the 7th week and must be turned in by the final week. No late submission is accepted.
No tests scored below 40% can be accepted and must be repeated.
Midterm test results cannot be combined.
A make-up test is available on the 15th week.
Neatness is part of the grade for all student work.

Course resulting in mid-term grade *(PTE TVSz 40§(3))*

Mid-term assessments, performance evaluation, and their weighting as a pre-requisite for taking the final exam

Type	**Assessment**	***Weighting as a proportion of the pre-requisite for taking the exam***
1. ***Test 1***	*max 100 points*	*30%*
2. ***Test 2***	*max 100 points*	*30%*
3. ***Take-home assignment***	*max 100 points*	*40%*

Requirements for the end-of-semester signature

- Each semester test and home assignment must score 40 points or beyond.
- Regular attendance as per the Code of Studies.

Re-takes for the end-of-semester signature

- *A make-up test is available on the 15th week.*

Type of examination spoken

The exam is successful if the result is a minimum of 40%

Calculation of the grade *(TVSz 47§ (3))*

The mid-term performance accounts for 50%, and the performance at the exam accounts for 50% of the final grade calculation.

Calculation of the final grade based on aggregate performance in percentage.

Course grade	Performance in %
excellent (5)	85 % …
good (4)	70 % ... 85 %
satisfactory (3)	55 % ... 70 %
pass (2)	40 % ... 55 %
fail (1)	below 40 %

The lower limit given at each grade belongs to that grade.

4. SPECIFIED LITERATURE

COMPULSORY READING AND AVAILABILITY

[1.] Bill Mosley, John Bungey, Ray Hulse Reinforced Concrete Design to Eurocode 2 7th Edition ISBN0230302858, 9780230302853