

## COURSE SYLLABUS AND COURSE REQUIREMENTS

ACADEMIC YEAR ... SEMESTER ...

<i>Course title</i>	<i>Computer Aided Structural Design 4. (Nemetschek)</i>
<i>Course Code</i>	MSB377ANEP
<i>Hours/Week: le/pr/lab</i>	0/0/2
<i>Credits</i>	2
<i>Degree Programme</i>	Civil Engineering (Bsc)
<i>Study Mode (training schedule)</i>	Full-time training
<i>Requirements</i>	Mid-semester grade
<i>Teaching Period</i>	7. semester
<i>Prerequisites</i>	Computer Aided Structural Design 3. (Nemetschek)
<i>Department(s)</i>	Civil Engineering Department
<i>Course Director</i>	Dávid Mansoor SADRINIA
<i>Teaching Staff</i>	Dávid Mansoor SADRINIA

## COURSE DESCRIPTION

Neptun: Instruction/Subjects/Subject Details/Basic data/Subject description

The aim of the course is to provide students with an advanced understanding of Allplan's structural design software.

## SYLLABUS

Neptun: Instruction/Subjects/Subject Details/Syllabus

### 1. GOALS AND OBJECTIVES

Goals, student learning outcome.

Neptun: Instruction/Subjects/Subject Details/Syllabus/Goal of Instruction

The courses knowledge is built on the previous Allplan's basics. The first big half of the course is about free 3D modelling methods which is most commonly used in precast elements in the civil engineering firm. The student will also learn how to create own standards within the software to improve the design process to a large extent. The other half of the course is about how to create unique reinforcement/strand/welded mesh and some basics how to automatically updated lists/texts combining it with the "assistants". From the completed model and lists a detailed design documentation shall be made that includes formwork, reinforcement and cast-in assembly plans. In this way the student will learn another part of Allplans modules and can feel the efficiency of the standards by comparing the work dynamic to the previous course. During the course there will be an assignment that covers the semesters material.

### 2. COURSE CONTENT

Neptun: Instruction/Subjects/Subject Details/Syllabus/Subject content

#### TOPICS

#### LABORATORY PRACTICE

Wizards, Layers, Area styles  
Free 3D modelling methods  
Object properties, lists  
General Arrangement plan formal requirements  
Formwork plan formal requirements  
Reinforcement plan formal requirements  
Plan documentation.

# DETAILED SYLLABUS AND COURSE SCHEDULE

ACADEMIC HOLIDAYS INCLUDED

## LABORATORY PRACTICE

week	Topic	Compulsory reading; page number (from ... to ...)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	General course description	...	...	...
2.	Wizards, Layers, Area styles			
3.	Introduction to free 3D modelling		Assignment review	
4.	Free 3D modelling – Column and Chalice neck			
5.	Free 3D modelling – Column and Main beam			
6.	Free 3D modelling – Side beam and Fixtures			
7.	Object properties, lists			
8.	General Arrangement plan formal requirements		1 <sup>st</sup> assignment submission	
9.	AUTUMN BREAK			
10.	Formwork plan formal requirements			
11.	Reinforcement plans – Column			
12.	Reinforcement plans – Main beam			
13.	Plan documentation			
14.	Consultation			
15.	Consultation		2 <sup>nd</sup> assignment submission	

## 3. ASSESSMENT AND EVALUATION

(Neptun: Instruction/Subjects/Subject Details/Syllabus/Examination and Evaluation System)

### 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.

**Method for monitoring attendance** (e.g.: attendance sheet / online test/ register, etc.)

Attendance list

### ASSESSMENT

Cells of the appropriate type of requirement is to be filled out (course-units resulting in mid-term grade or examination). Cells of the other type can be deleted.

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

**Mid-term assessments, performance evaluation and their ratio in the final grade** (The samples in the table to be deleted.)

Type	Assessment	Ratio in the final grade
Attendance list		10%
Assignment (3D modell)		50%
Assignment (Plans)		40%
Each assignment part should have at least 40% (20% ration in final grade for 3D modell, 16% for Plans)		

**Opportunity and procedure for re-takes** (PTE TVSz 47§(4))

The specific regulations for improving grades and resitting tests must be read and applied according to the general Code of Studies and Examinations. E.g.: all tests and assessment tasks can be repeated/improved at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.

...

**Calculation of the final grade based on aggregate performance in percentage.**  
*based on the aggregate performance according to the following table*

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**

*In order of relevance. (In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature)*

##### **COMPULSORY READING AND AVAILABILITY**

- [1.] Felvett webináriumok: <https://www.allplan.com/en/recorded-webinars/all-recorded-webinars/>
- [2.] Tutorials: <https://www.allplan.com/en/cad-tutorials/allplan-2017-tutorials/>
- [3.] Building Information Modeling: <https://www.allplan.com/en/bim/bim-and-allplan/>

##### **RECOMMENDED LITERATURE AND AVAILABILITY**

- [3.] .....
- [4.] .....
- [5.] .....