

COURSE SYLLABUS AND COURSE REQUIREMENTS

ACADEMIC YEAR 2022/2023 SEMESTER 2ND

<i>Course title</i>	<i>Construction management 1.</i>
<i>Course Code</i>	MSB057AN
<i>Hours/Week: le/pr/lab</i>	1/1/0
<i>Credits</i>	2
<i>Degree Programme</i>	Civil Engineering Bsc
<i>Study Mode</i>	full time course
<i>Requirements</i>	examination grade
<i>Teaching Period</i>	4 th
<i>Prerequisites</i>	-
<i>Department(s)</i>	Department of Engineering Studies
<i>Course Director</i>	Balázs Füredi dr.
<i>Teaching Staff</i>	Balázs Füredi dr. Szabolcs Patyi Balázs Novák

COURSE DESCRIPTION

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

The subject of Construction Management 1 provides theoretical and practical training in the Architect BSc degree program. During the lectures and practical sessions of the semester, students will gain competitive knowledge in the field of construction implementation and construction management. Building modelling, quantity calculation make up the tasks of the semester for students.

SYLLABUS

Neptun: Instruction/Subjects/Subject Details/Syllabus

1. GOALS AND OBJECTIVES

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

The course will focus on:

- Developing engineering thinking
- Creation and development of a digital building models

2. COURSE CONTENT

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

TOPICS

LECTURE	<ol style="list-style-type: none"> 1. topic: construction processes 2. topic: technical preparation and controlling of the construction, contracting process 3. topic: the state and the environment of the construction site 4. topic: conditions of the start up and the finishing of the construction work, handover process 5. topic: quality controlling in the construction 6. topic: health and safety requirements 7. topic: basics of scheduling
PRACTICE	<ol style="list-style-type: none"> 1. topic: introduction about building design, plans and softwares – ArchiCad basics 2. topic: building construction process

During the lectures and practices students will learn all of the topics which are in the previous "TOPICS" schedule. Besides the lectures, they are going to attend construction site visits where they can learn the practical knacks of the trade.

Important note: Taking into account the meteorological conditions and the currently valid legal regulations and the possible pandemic situation in Hungary, as well as the mandatory university closures, the practical site visits may be modified.

The requirements are issued according to the course syllabus, which are uploaded to the Neptun and MS Teams interfaces of the course, as well as to the "witch" server of the Faculty, together with the lecture materials and help documents. Information related to the subject will also be available on these interfaces.

DETAILED SYLLABUS AND COURSE SCHEDULE

LECTURE

week	Topic	Compulsory reading; page number (from ... to ...)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	The construction process Phases and participants of the construction process (roles, responsibilities, connections, etc.).	lecture notes	-	08.02.2023.
2.	-	-	-	
3.	Technical preparation and controlling of the construction. Contracting process. Detail design: Documentation for tendering (tender set of drawings), documentation for construction (working drawings) Tendering - choosing from several possible contractors	lecture notes	preparation from the previous lecture	22.02.2023.
4.	-	-	-	
5.	The state and the environment of the construction site Soil mechanics, geodesics. Reviewing natural and geographic characteristics of the site, accessing roads, water and power supply, etc.	lecture notes	preparation from the previous lecture	08.03.2023.
6.	-	-	-	
7.	Consultation	lecture notes	preparation from the previous lecture	22.03.2023.
8.	-	-	-	
9.	SPRING BREAK	-	-	05.04.2023.
10.	-	-	-	
11.	Conditions of the start up and the finishing of the construction work. Handover process. Quality controlling in the construction. Health and safety requirements. Erecting the building according to the completed plans. Supervision of construction. Running in (testing the systems of the building). Handover take over of the building (reviewing the constructions quality and quantity and the plans)	lecture notes	preparation from the previous lecture	19.04.2023.
12.	-	-	-	
13.	Basics of scheduling TIME SCHEDULE: Types, relations. List of operations, survey for quantities, labour schedule, plant schedule, material schedule.	lecture notes	Midsemester test different time of the lecture	03.05.2023.
14.	-	-	-	
15.	SITE VISIT Load bearing structures, formwork systems, etc.	lecture notes	Replied midsemester test different time of the lecture	17.05.2023.

PRACTICE, LABORATORY PRACTICE

week	Topic	Compulsory reading; page number (from ... to ...)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	-	-	-	-
2.	Introduction about building construction, datasheet of practice	practice notes, help documents	-	15.02.2023.
3.	-	-	-	-
4.	Introduction about building design and plans and softwares, Archicad basics	practice notes, help documents	preparation from the previous practice	01.03.2023.
5.	-	-	-	-
6.	NATIONAL HOLIDAY	practice notes, help documents	preparation from the previous practice	15.03.2023.
7.	-	-	-	-
8.	Building construction process (detached house), Archicad basics 1.	practice notes, help documents	preparation from the previous practice	29.03.2023.
9.	SPRING HOLIDAY	-	-	-
10.	Archicad basics 2. Mid-semester task	practice notes, help documents	preparation from the previous practice	12.04.2023.
11.	-	-	-	-
12.	Archicad basics 3. Consultation	practice notes, help documents	preparation from the previous practice	26.04.2023.
13.	-	-	-	-
14.	Consultation	practice notes, help documents	preparation from the previous practice	10.05.2023.
15.	-	-	deadline of the task	-

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

Method for monitoring attendance: attendance sheet, which led to lectures and practices, every time

ASSESSMENT**Course-unit with final examination****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. 3D modelling – ArchiCad basics	max 50 points	50%
2. Test	max 28 points	
3. Attendance at lectures and laboratory practices	max 14 points	
4. Visiting optional construction site tours	max 8 points	
5. Exam	max 100 points	50 %

Requirements for the end-of-semester signature

The conditions for successful completion of the semester are active class attendance, attendance at construction site visits in appropriate protective equipment, and successful completion of the mid-semester test and the exam.

Certified attendance at practical sessions is done in accordance with the regulations laid down in the topic! The practice leaders keep an attendance sheet/consultation sheet, with published and not attended/didn't prepare for class. The maximum number of absences allowed during practical classes is 30% according to the Annex 5 of the Statutes of the University of Pécs, the Code of Studies and Examinations (CSE) of the University of Pécs shall prevail (<https://english.mik.pte.hu/codes-and-regulations>), 2 occasion.

During the semester, students report on their work and knowledge several times.

Attendance at lectures and laboratory practices are worth a total of 14 points during the semester in a distribution of 7 points each.

During the semester, we organize on-site visits and construction visits, with an educational purpose. Their time and group assignments are determined individually and announced during the first education week. During the semester, the student can confirm his participation in two optional tours of the construction site at a time determined in advance by the instructors by signing the attendance led by the Organizer. Therefore, 4-4 points are awarded, which are included in the semester score

Re-takes for the end-of-semester signature

The semester closes at the end of the 15th week. Mid-semester tests that do not reach the minimum score can be corrected once during the due diligence period.

Points of exam:

85 p – 100 p	85-100% (5, excellent)
70 p – 85 p	70-85% (4, good)
55 p – 70 p	55-70% (3, average)
40 p – 55 p	40-55% (2, satisfactory)
0 p – 40 p	-40% (1, fail)

Type of examination (written, oral): **oral**

The exam is successful if the result is minimum **40** %.

Calculation of the grade

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

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

(In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature)

COMPULSORY READING AND AVAILABILITY

[1.] R. Chudley, R. Greeno - Building construction handbook seventh edition (2008), ISBN: 978-0-7506-86228

RECOMMENDED LITERATURE AND AVAILABILITY

[1.] Sidney Levy - Construction process planning and Management (2010), ISBN : 978-1-85617-548-7

[2.] Emad Elbeltagi - Lecture notes on construction project management (2009)

- [3.] S.W. Nunnally – Construction Methods and Management (2007), ISBN 0-13-171685-9
- [4.] Frank R. Dagostino, Steven J. Peterson - Estimating in Building Construction (2011), ISBN-13: 978-0-13-119952-1
- [5] Københavns Erhvervsakademi and VIA University College, Horsens(E-BOOK) (2011)