

General Information:

Name of Course:

Construction Technology 2.

Course Code:

MSB063AN

Semester:

3th

Number of Credits:

2

Allotment of Hours per Week:

1 Lectures and 1 Practical Lessons /Week

Evaluation:

Signature (with grade)

Prerequisites:

Construction Technology I.

Responsible lecturer:

Balázs FÜREDI dr., assistant professor

Office: 7624 Magyarország, Pécs, Boszorkány u. 2. B-340

E-mail: furedib@mik.pte.hu

Telephone number: +36 72 503650/23896

Instructors:

Balázs FÜREDI dr., assistant professor

Office: 7624 Magyarország, Pécs, Boszorkány u. 2. B-340

E-mail: furedib@mik.pte.hu

Telephone number: +36 72 503650/23896

General Subject Description

The subject of Construction Technology 2 provides theoretical and practical training in the Civil 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.

Learning Outcomes

The course will focus on:

- Developing engineering thinking

Subject content

During the lectures students will learn about the basic construction processes, the finishing works of the construction trade, and the order of construction of monolithic and prefabricated building structures. Besides the lectures, they are going to attend construction site visits where they can learn the practical knacks of the trade.

During the practical sessions, students will have to learn the special construction methods.

The Course includes:

- Regular (weekly) supervisions by teacher of the Department of Engineering Studies.
- Preparation for the mid-term paper
- Organizational analysis at the construction sites
- Presentation of organizational plan assignment in class

Examination and evaluation system

*In all cases. 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>*

Attending is required all classes, and will impact the grade (max. 10%). Unexcused absences will adversely affect the grade, and in case of absence from more than 15% of the total number of lesson (it is max. 30%) will be grounds for failing the class. To be in class at the beginning time and stay until the scheduled end of the lesson is required, tardiness of more than 20 minutes will be counted as an absence. In the case of an illness or family emergency, the student must present a valid excuse, such as a doctor's note.

The highest possible grade on the late project (after Study Period before Exam Period) is '2'.

End-of-semester grade may be given by exam grade which may be defined on the basis of the performance at the exam exclusively or by taken into consideration performance on mid-term tests and the exam jointly. In the latter case the exam shall contribute to the grade by 50% at least and the mid-term tests by 50% at most.

Article 50. (2)⁴⁹⁷ In the case of a student failing to fulfil an obligation which is a condition of entry to exam pursuant to the requirements and may be made up for in the exam period, the student shall be entitled to attempt to satisfy the requirement of the given course on one occasion not later than the end of the second week of the exam period. If the student does not attend this one occasion the lecturer is not obliged to provide the student with a further appointment for making up for the completion.

Details of the points in the mid-term:

Task of the practice: 1th task – 50 point,
Mid-semester test: max. 50 point, min. 25 point.

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, avarage)
40 p – 55 p	40%-55% (2, satisfactory)
0 p – 40 p	0%-40% (1, fail)

Grading of the course:

The exam shall contribute to the grade by 50% at least and the mid-term tests by 50% at most.

170 p – 200 p	85%-100% (5, excellent)
141 p – 169 p	70%-85% (4, good)
119 p – 140 p	55%-70% (3, avarage)
99 p – 118 p	40%-55% (2, satisfactory)
0 p – 98 p	0%-40% (1, fail)

Grading will follow the course structure with the following weight: Site plan+midsemester test, 40%, Project 3D modell, cost estimation 50%. The remaining 10% will be assessed according to participation, progress, effort and attitude. Please note that attendance will adversely affect one's grade, both in direct grade reduction and in missing work in the development of a projects.

The final grade will be based on the following guidelines:

(Grade 5) Outstanding work. All semester assignments and the mid-term paper are completed and performed at a high level. The tasks are well thought out and are organised logically. The student actively participates in the consultations and arrives to classes well-prepared. He or she carries out the tasks to be submitted and performs at the mid-term paper in exemplary quality.

(Grade 4) High quality work. All semester assignments and the mid-term paper are completed and performed at a high level. The tasks are well thought out and are organised logically. The student actively participates in the consultations and arrives to classes well-prepared. Work may demonstrate excellence but less consistently than an '5' student.

(Grade 3) Satisfactory work. Student work addresses all of the project and assignment objectives with few minor or major problems. Graphics and models are complete and satisfactory, exhibiting minor problems in detail.

(Grade 2) Less than satisfactory work. The tasks are suitable in terms of content; the level of their elaboration is acceptable, but not outstanding. No failures at any partial tasks or tests are allowed.

(Grade 1) Unsatisfactory work. Work exhibits several major and minor problems with basic conceptual premise, lacking both intention and resolution. Physical representation in drawing and models is severely lacking, and is weak in clarity and completeness.

Grading Scale:

Numeric Grade:	5	4	3	2	1
	A, excellent	B, good	C, avarage	D, satisfactory	F, Fail
Evaluation in points:	85-100	70-85	55-70	40-55	0-40

Readings and Reference Materials

Required:

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

More:

- Sidney Levy - Construction process planning and Management (2010)
ISBN : 978-1-85617-548-7
- Emad Elbeltagi - Lecture notes on construction project management (2009)
- S.W. Nunnally – Construction Methods and Management (2007)
ISBN 0-13-171685-9
- Frank R. Dagostino, Steven J. Peterson - Estimating in Building Construction (2011)
ISBN-13: 978-0-13-119952-1
- Københavns Erhvervsakademi and VIA University College, Horsens(E-BOOK) (2011)

Methodology

During the training, we provide students with up-to-date information. The tasks are based on real cases and examples. Student works are carried out with constant control, but at the same time the personal aptitude of each student must be revealed.

Students with Special Needs

Students with a disability and needs to request special accommodations, please, notify the Deans Office. Proper documentation of disability will be required. All attempts to provide an equal learning environment for all will be made.

Detailed requirements and schedule of the Course

Schedule

Week	Lecture	Subject of lecture
1.	Introduction	The syllabus of the semester
2-3.	Vertical loadbearing structures	Walls, pillars, vaults...etc.
4-5.	Making of ceilings	Traditional and modern ceilings
6-8.	The machines of the concrete works	Mixing, transporting of the concrete Finishing works-concrete pumps
9.	Autumn break	
10-11.	Plastering	Interior and exterior
12-13.	Dry construction systems	Walls and ceilings from plasterboard
14.	Wall-and floor tiling	Ceramics and porcelain tiles

Week	Practice	Subject of practice
2-3.	Special earthworks	Earthworks in big volume
4-5.	Water insulation/Site visit	Traditional and modern solutions
6-7.	Heating insulation	The main rules of the methods
8.	Placing of the cranes I./Site visit	The theoretic and the practical solution
9-11.	Placing of the cranes II.	The theoretic and the practical solution
12-13	Site visit	It's can be different by the phases of the construction
14-15.	Midsemester test	Online test in the classroom

Task description

Each student has to work on an individually selected assignment. The simulations are based on a real construction site, a real building. As part of the implementation, all students will acquire the knowledge required to solve the task at the actual construction sites.

The Students should be on the site visits where the lecturers are going to present the correct solutions of the construction methods.

We reserve the right to make changes to the details of this course syllabus (date / location / clarifications), which will be communicated to the students. In case of questions and problems that arise during the semester contact the responsible lecturer or the study program coordinator.

Balázs FÜREDI dr.
 responsible lecturer

Pécs, 31.08.2022