

INDUSTRIAL AND AGRICULTURAL BUILDING DESIGN

Course Code: PMTURB047CA
Semester: Autumn 2018/2019 1.

Course Syllabus

Time: L Tuesday 16:30-17:15
P Tuesday 14:45-16:15
Location: PTE MIK, L A-217, P A-217

General Information:

Name of Course:	INDUSTRIAL AND AGRICULTURAL BUILDING DESIGN
Course Code:	PMTURB047CA
Semester:	7 th
Number of Credits:	4
Allotment of Hours per Week:	2 lectures, 1 practices
Evaluation:	Signature (with grade)
Prerequisites:	-
Instructors:	András GREG, assistant lecturer Office: 7624 Hungary, Pécs, Boszorkány u. 2. Office N° B326 E-mail: gregandras@mik.pte.hu Office Phone: +36 72 503650

Introduction, Learning Outcomes

This lecture and practical based course aims to give knowledge about the design of the industrial and the agricultural buildings. The course focuses the history of the industrial buildings, the structural development of buildings and the contemporary examples.

Through the course historical overview of the development of industrial architecture, the aesthetic and formal qualities of this building typology were identified. To examine how the basic, simple structures are used through the analysis of contemporary industrial buildings. Students analyse and learn about the relationship between function, material, structure and form. During the semester the course tries to bring architect's perspective and civil engineer's method closer together. The course introduces the beginning of the industrial building from the Industrial Revolution, with multi-storied buildings that combined brick or masonry bearing to reach the largest column-free interior spaces as possible, till the 'fine arts' quality factory building nowadays.

Students learn about the works of few architects and their examples like (Peter Behrens – AEG turbine factory, Albert Kahn – Packard Building 1909, Chrysler Half-Ton Truck Plant - Export Building, 1937, José María Sánchez García - Factory of Electrical Assembly 2015, etc.).

Contents:

- history of the industrial and the agricultural buildings
- the structural development of buildings
- contemporary architectural on that field
- individual design processing, and developing upon relevant methodologies and design techniques

General Course Description and Main Content:

This lecture and practical based course aims to give knowledge about the design of the industrial and the agricultural buildings. The subject completes the study of students attending the B.Sc. programme. Through the course historical overview of the development of industrial architecture, the aesthetic and formal qualities of this building typology were identified. To examine how the basic, simple structures are used through the analysis of contemporary industrial buildings like wineries, warehouses, farm complexes, food centres, factories and etc. Students analyse and learn about the relationship between function, material, structure and form. During the semester the students will have opportunity to know the design, the interior design and the aesthetic elements in the architecture, to get closer the creation process. The civil engineer and the architecture design are not selective separately, these are hand in hand.

The course includes:

- Regular (weekly) supervisions by an appointed Main Supervisor.

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A; Case study about the works of one freely chosen architect or a specific building connected to the topic of the course. It has two parts:

- 1, Case study contains booklet (at least 10 pages in A/3 format)
- 2, A power point presentation in front of the class

B; Design task(selected number A/3 pages depending on the size of project)

PROJECT DESCRIPTION

The Project for the semester will be design of an Industrial/Agricultural building for a choose function at a given territory.

Required contain:

- Site Plan (1:500)
- Plans of Each Different Levels (1:200)
- Sections (1:200, in necessary number for understanding)
- Elevations of Each Different Side (1:200)
- Views (in necessary number for understanding, min. 3 about the inner and 3 about the outer spaces), in high quality design and graphic
- Plot and Building's Surrounding Paper Modell (1:500)

Schedule:

1.	Introduction	Introduction
2.	Lecture – In general of the industrial buildings	Case Study introduction
3.	Lecture – Art history	Case Study discussion
4.	Lecture – Analysis of a contemporary building	Case Study discussion
5.	Case study presentation	Case study presentation
6.	Design Task introduction	consultation, physical modelling
7.	Lecture – Analysis of a contemporary building	Consultation
8.	Site trip	Site trip
9.	Holiday	Holiday
10.	Lecture – Light and Shadow	Consultation
11.	Lecture - Materials	Consultation
12.	Site trip	Site trip
13.	Lecture	Consultation
14.	Lecture	Final Consultation
15.	Design task presentation and submission	Presentation and drawing submission

Attendance:

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 30% of the total number of lesson will be grounds for failing the class. To

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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.

Studio Culture:

The course is based on through collaboration, participation and discussions through lessons. This is an interaction between Students and Faculty; used the teaching methods like 'Problem-based learning' and 'learning-by-doing'. The communication and work should reflect a respect for fellow students and their desire to work with regard to noise levels, noxious fumes, etc – from each site of participants.

Evaluation + Grading

Grading will follow the course structure with the following weight:

1. Class participation, class activity 10 % (5 points)
2. Case Study 30 % (15 points)
3. Design project 60 % (30 points)

Grading scale

Numeric Grade:	5	4	3	2	1
Evaluation in points:	89%-100%	77%-88%	66%-76%	55%-65%	0-54%

5. Outstanding work. Execution of work is thoroughly complete and demonstrates a superior level of achievement overall with a clear attention to detail in the production of drawings, models and other forms of representation. The student is able to synthesize the course material with new concepts and ideas in a thoughtful manner, and is able to communicate and articulate those ideas in an exemplary fashion in.

4. High quality work. Student work demonstrates a high level of craft, consistency, and thoroughness throughout drawing and modelling work. The student demonstrates a level of thoughtfulness in addressing concepts and ideas, and participates in group discussions. Work may demonstrate excellence but less consistently than an '5' student.

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 craft and detail.

2. Less than satisfactory work. Graphic and modelling work is substandard, incomplete in significant ways, and lacks craft and attention to detail.

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, craft and completeness.

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.

Readings and Reference Materials:**Required:**

1. Ching, F. (1996). Architecture: form, space, & order (2nd ed). New York: Van Nostrand Reinhold

More:

2. Frampton, K. (2014) : Modern Architecture: A Critical History (Fourth Edition) (World of Art) London: Thames and Hudson

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3. Davies, C. (2006). Key houses of the twentieth century: plans, sections and elevations. London: Laurence King.
4. Laseau, P. (2001). Graphic thinking for architects & designers (3rd ed). New York: J. Wiley
5. Unwin, S. (2003). Analysing architecture (2nd ed). New York: Routledge.
6. Adam, J. (2004). Industrial Buildings (Design Manuals). Hanover: Deutsche Messe AG