

BME Faculty of Architecture			Department of Urban Planning and Design	
			Department of Mechanics, Materials & Structures	
Name of the course: Interdisciplinary, Project Based Design			Code: BMEEPTCEP02	
A tárgy angol neve:				
Grading:	practical	Credits: 8	Location in the curriculum: Erasmus	
Lecturer:	ANTYPENKO Hleb KLANICZAY János KÖHSERLI Mehmet VÁRKONYI Péter		Person in charge at the department: KLANICZAY János VÁRKONYI Péter PhD	

COURSE REQUIREMENTS

Requirements of signing up for the subject:	Registration in the NEPTUN system. Prerequisites: according to university regulations
Type of classes:	lectures, student presentations, consultation, workshops, site visits
Requirements of appearance:	According to university regulations, attendance at classes has to exceed 70%! The lecturers may make attendance-sheets during any of the classes.
Requirements during class period:	active (online) presence, project presentations according to schedule
Tasks with deadline :	See timetable below!
Requirements for signature:	Appearance has to exceed 70%. Accepted project presentations
Evaluation at the end of the semester:	Evaluation is based on quality of presentations.

CROSSING THE TRACKS – Integration of the railway into the urban fabric

The goal of the project is to find innovative and experimental solutions to connect the two sides of railway tracks in Budapest.

The task: The railway system of Budapest is undergoing a complex revitalization, providing a better public transportation system for the citizens and connecting the agglomeration to the center in a 21st century manner. New inner city stations are planned, but the train tracks still divide the city, cutting through the urban fabric, resulting in disconnected streets, uncomfortable crossing opportunities and peripheric situations. **The task of the semester is to map existing and missing connections along the “railway belt” in Budapest, and after an urban analysis conceive a structure that can potentially connect the divided areas.** During the planning process a careful attention should be given to the urban context, and the urban revitalization of the peripheric area. The designed structure may include additional functions such as railway station.

The project will include continuous development of the urban, architectural and structural design concepts.



Common platform:

During the studio work we use a common Microsoft Teams Group, where all students will be invited to join. The main channel of communication is through Microsoft Teams: URB-STR / 20_21 / Inter Railways

Studio work:

During the 7 weeks project all students have to:

- **participate in an international group project work:** students have to form international groups of 3 to 4 people
- **submit** and if requested present **the 2 individual research tasks:**
 - o 1st task – case study peripheric railway areas and crossing solutions – urban setting
 - o 2nd task – to be specified later

Grading:

The final grade of this 7-week long period is defined:

- 20% - quality of the preliminary design presentation of the group work on **March 1st**
- 50% - quality of the final design presentation of the group work on **March 24th** (including the quality of the urban project and the quality of the structural concept as well!)
- 15-15% - quality of the two individual research tasks

Project site:

The projects have to be developed along the “railway belt” of Budapest. More detailed information will be available during the studio.

Mapping presentation: each group prepares a short slideshow of the existing and the missing connections along a chosen section of the railway. The slideshow should include photos of the site, urban analyses of the street grid, functions, positive and negative effects of the proximity of the train tracks, etc. At the end of the presentation the concept of interventions should be introduced.

Individual research task 1: Students are asked to bring examples of railway crossing solutions in urban situations from around the world. They should present the urban context of the chosen example, and the architectural connotations of the situation.

Individual research task 2: will be specified during the semester

Preliminary submission:

- Presenting the site of the intervention
- Urban and structural concept
- Format: pdf + presentation in class

Each group should present site plans to show the urban analyses, functional plan for the site, conceptual design of structures and buildings.

Final presentation:

- Uploading 1 multipage pdf including all project work (urban design + structural design concept)
- Uploading 1 summary panel with the predefined format (including urban + structure)

Each group should present detailed site plans to show connection of the urban fabric, plans of the building(s) (floor plans, elevations, sections), visualizations of the structure and the newly formed urban space, presentation of the structural system (floor plans, sections, materials and estimated structural dimensions).

27 January 2021

SCHEDULE					
		TIME	Lecture/Consultation	task / submission before class	Student activity in class
1.	02.08.	14:15 -	General Introduction (KJ, VP) Introduction of the task (KJ) Budapest urban context, history (KJ)		groups formed and finalized analysis themes explained
	02.10.	10:15 –	no classroom activity	individual site visits during class	
2.	02.15.	14:15-	Consultation	Urban mapping – site analysis, programme, scale - 1	Mapping presentation (site(s) chosen, program and concept of intervention)
	02.17.	10:15 –	Consultation	first individual task (urban design)	Presentation of selected submitted works 10x10 min
3.	02.22.	14:15-	Lecture on compression and tension arches (VP) or Structural design workshop (MK)		Consultation
	02.24.	10:15 –	Consultation		Consultation
4.	03.01.	14:15-		Preliminary Design (group) – model + presentation	Project preliminary presentation
	03.03.	10:15 –	Consultation	Submission of second individual task (structures)	Presentation of selected submitted works
5.	03.08.	14:15-	Consultation		consultation (urban design + structures)
	03.10.	10:15 –	Consultation		consultation (urban design + structures)
6.	03.15.	14:15-	No class - National holiday		
	03.17.	10:15 –	Consultation		Final consultation: each group should bring all components of the final presentations
7.	03.22.	Project finalization			
	03.24.	14:15-	Final submission date (digital uploading): 23 March (Tuesday) 20:00 <i>The deadline date and the time is strict! No submission is accepted after the given date!</i>		

Group presentation
Individual presentation

01/ 2021. January
 KLANICZAY János, VÁRKONYI Péter PhD