

<p>HALF SEMESTER COURSE 1 "CANTILEVER" Medium size public building design to reduce physical footprint of the building by using cantilever structures</p>	<p>Credits: 8</p>	<p>in cooperation with Dept. of PUBLIC BUILDING DESIGN and Dept of MECHANICS, MATERIALS & STRUCTURES</p>
<p>Tutors: Zoltan SCHRAMMEL Péter VÁRKONYI Gyula GRÉDICS Tamás THER Orsolya GÁSPÁR Dezső HEGYI</p>	<p>Responsible: Gábor NEMES Vice Dean</p>	
<p>Way of training</p>	<p>Practical interdisciplinary design course – Lectures, team consultations, common presentations and evaluation in English – according to the timetable</p>	

TIMETABLE AND TOPIC SCHEDULE

Mondays 8:15 AM - 4 PM, Wednesdays 8:15 PM - 4 PM at the room K 322

week	MONDAY	WEDNESDAY
<p>1. 5. and 7. Feb.</p>	<p>introduction, general information (2 classes) Lecture by Public Building Design Dept. (2 classes) 10AM Lecture by Mechanics, Materials & Structures Dept. (2 classes) 2:30PM by Mr Dezső HEGYI</p>	<p>Morning: site visit - 4 hours Meeting in front of main gate of "K" organising the teams</p>
<p>2. 12. and 14. Feb.</p>	<p>analysis of function, location and references, focusing on reduction of footprint (2 classes) consultation with both Dept.s</p>	<p>presentation of site analysis Lecture about footprints of architects (2 classes) consultation with both Dept.s</p>
<p>3. 19. and 21. Feb.</p>	<p>workshop of structures 9:30-12AM consultation 4 classes</p>	<p>building the base model of teams consultation with both Dept.s</p>
<p>4 26. and 28. Feb</p>	<p>building the base model of teams consultation with both Dept.s</p>	<p>preliminary presentation and common evaluation of analysis, concept</p>
<p>5. 5. and 7. March</p>	<p>design, 4 classes consultation 4 classes</p>	<p>building the structure models design of individual buildings consultation with both Dept.s</p>
<p>6. 12. and 14. March</p>	<p>design, 4 classes consultation 4 classes</p>	<p>building the structure models design of individual buildings consultation with both Dept.s</p>
<p>7. 19. and 21. March</p>	<p>final presentation of completed projects and evaluation, discussion preparation for exhibition, closing party</p>	

- **Conditions:**
- - accepted presentations of site analysis (slideshow)
- - accepted preliminary presentations 2x (slideshow, preliminary plans, site model, structural model)
- - submitted and presented project plans, (floor plans, section, all elevations 1:200/100, site plan 1:500/200, and model 1.500/200/100). Plans and model should represent architectural forms, details and structures.
- **Deadline: 21st of MARCH, WED, Presentation starts at 10:00AM**

- **Grading:**
- The final grade will be established as the result of the personal and team work of the student in class and at home. The submissions, presentations and class work will be graded.

Grades:	0-49 %	failed	(1)
	50-62 %	passed	(2)
	63-75 %	satisfactory	(3)
	76-89 %	good	(4)
	90-100 %	excellent	(5)
- The final grade will be established as the result of the personal and team work of the student in class and at home. The submissions, presentations and **class work** will be graded according to the following:
 - 1st preliminary presentation: 15 %
 - structure study: 20 %
 - activity during semester workshops: 15 %
 - final submission and presentation: 50 %

Grades:	0-49 %	failed	(1)
	50-62 %	passed	(2)
	63-75 %	satisfactory	(3)
	76-89 %	good	(4)
	90-100 %	excellent	(5)

- **Way of completion:**
- - active participation in consultations with home-prepared plans and models
- (presence at least 70% of consultations - according to Code of Studies)
- - submission and presentation as detailed before
- - result is published during a common discussion on 23^d of May 2018.

Short description of the course

Interdisciplinary Project Design for exchange students is a 2x half-semester design course in English, organized by two Departments - one design and one engineering - for "CANTILEVER" Project the Public Building Design and Mechanics, Materials & Structures departments. Cantilever doesn't mean only a formal or structural solution - it is a perfect shape to reduce buildings' footprint on the ground. Humans anyway cover much more area on the ground than it would be necessary and architects contribute very intensive in this kind of destruction of nature. Let's open the eyes!

The special objective of the course is to explore the interaction between architectural form and structural behavior. An architectural design based on the analysis of the location, natural and cultural heritage, architectural details is going to give a common frame for individual architectural proposals. Design program - a small public function with c/a. 300 sm - will be provided by personal experiences of site analysis and local impressions, research works. Buildings should be designed with minimal disturbance

of the ground, based on cantilever solutions, in which the geometry strongly affects the structural behavior. The students will explore different cantilever mass solutions in order to reduce the covered area in the nature - the architectural footprint and how the chosen forms can be integrated into their architectural concept. Teamwork and individual work will constantly support each other. The semester will also give space to work on some contemporary questions in architecture like the relationship and social aspects of public and private spaces, effects of landscape design, etc.



Structure of the semester

Three main phases form the basic structure of the course:

1. **Analysis** – discovering the characteristics of the landscape: history, layers, development plans, etc. The analysis starts with individual exploration, but the final workgroups of 2-4 people will take on the analysis together. From the beginning a teamwork involving all the class will take place based on the discussions of the findings and of the differences of cultures and visions.
2. **Structural references** – groups will collect references of cantilever structures to learn about the richness of their forms, about the limits and how they can be successfully used to express the architect's vision.
3. **Structural plans:** groups show the geometry, the logic and the approximate dimensions of the structural system (by using floorplans and sections and/or 3D views of the structural frame)
4. **Architectural plans** – architectural behavior, interpreting the context: building and landscape design. A full documentation of an architectural intervention will be developed in scale 1:200/100. Design work will be assisted by consultations in class, and common presentation is held with collective critical evaluation.

Site

Budapest, Aquincum slopes - archeological sites - where size of footprint counts