

GENERATIV DESIGN I.

DATA		
COURSE NAME	Generativ design I.	Generativ tervezés I.
COURSE CODE(S)	YAXGED1MNF	
DEPARTMENT	Óbuda University, Ybl Miklós Faculty of Architecture, Institute of Architecture	
PROGRAMME, TRAINING	Architect MSc	full time
COURSE INSTRUCTOR (Instructor managing the course)	Kovács D. Barna kovacs.barna@ybl.uni-obuda.hu	Personal consultation Monday 11:30, email appointment by appointment. During the online training period on Zoom.
INSTRUCTORS, LECTURERS		
PRE-REQUIREMENT	-	
HOURS OF LECTURES (WEEKLY)	1 hours	
HOURS OF CLASSROOM TRAINING/ LABORATORY TRAINING (WEEKLY)	2 hours	
FIELD WORK AND TRAINING (WEEKLY)	0 hours	
ASSIGNMENT	Lectures during the semester with immediate evaluation. At the end of the semester, submit the assignment (upload to the online interface) and present a presentation. A grade is proposed by the consultant and approved by the lead instructor.	
CREDITS	4 credits (ECTS)	
AIM OF THE COURSE, BRIEF DESCRIPTION	The aim of the course is to deepen the complex knowledge about architecture, through design as a creative process. An important element of the semester is the application of problem understanding, task management, choice of research methodology and application. Developing a confident architect's attitude to the relationship between the digital tools and vision to the given task.	
RECOMMENDED LITERATURE	Hollberg, A., & Ruth, J. (2016). LCA in architectural design—a parametric approach. <i>The International Journal of Life Cycle Assessment</i> , 21(7), 943-960. doi:10.1007/s11367-016-1065-1 Stephan, A., Jensen, C. A., & Crawford, R. H. (2017). Improving the Life Cycle Energy Performance of Apartment Units through Façade Design. <i>Procedia Engineering</i> , 196, 1003-1010. doi: https://doi.org/10.1016/j.proeng.2017.08.042 Stephan, A., & Crawford, R. H. (2016). The relationship between house size and life cycle energy demand: Implications for energy efficiency regulations for buildings. <i>Energy</i> , 116, Part 1, 1158-1171. doi: http://dx.doi.org/10.1016/j.energy.2016.10.038	
REQUIRED TECHNICAL APPLIANCES/ SOFTWARE	Maxon Cinema 4D R23 academic licensz https://www.maxon.net/en/educational-licenses Archicad academic licensz https://myarchicad.com/	

Shedule of the semester		
WEEK	FORM OF TRAINING	PROGRAM
1 09.06.	Consultation	Semester starting - C4D INTERFACE
2 09.13.	Consultation	Semester First (little) assignment edition , consultation - MODELING SPLINES
3 09.20.	Consultation	Semester assignment consultation BUILDING 3D MODELS FROM POLYGONS - POLYGON
4 10.27.	Consultation	Semester assignment consultation USING DEFORMERS TO BEND, TWIST, AND WARP MODELS - PARAMETRIKUS DEFORMEREK
5 10.04.	Workshop week	No consultation
6 10.11.	consultation	Semester assignment consultation
7 10.18.	1st Presentation	Presenting 3D development
8 10.25.	consultation	Semester assignment consultation - Developing 3D objects
9 11.01.	consultation	Semester assignment consultation
10 11.08.	consultation	Semester assignment consultation
12 11.15.	consultation	Semester assignment consultation
13 11.22.	2nd Presentation	Last Semester assignment presentation 1: 100 scale, (1: 100 detail) drawings, 2-5 important wiew, model, evaluation
14 11.29.	Submission	Corrections

REQUIREMENTS FOR THE COMPLETION OF THE SEMESTER		
TASKS AND TESTS		
Requirement	Description	Value (point, %, grade)
PARTICIPATION AT LESSONS	The practice lessons can be missed up to three times (see § 46 ETVSZ) Important: Presence only counts with presentation of the material to consult.	-
IN CASE OF ABSENCE FROM LESSONS AND EXAMINATIONS	Absence is considered to be justified with a medical certificate presented.	-
Short description of the TASKS	An important part of the task is getting to know / understanding: research and synthesis, digital modeling and presentation.	

SEMESTER CLOSING REQUIREMENTS					
CONDITIONS FOR OBTAINING A SIGNATURE	SEMESTER ASSIGNMENT FINAL FORM: Plan work piece 100x200 cm portrait format edited, PDF save. Min-max. file size: 20 MB - 200 Megabytes, try to achieve 300dpi resolution before converting pdf. Plans and studies must be uploaded to a specific cloud-based repository by the deadline. Submission is considered a successful upload available by the consultant.				
	CONDITIONS FOR OBTAINING A SIGNATURE: Submission of the Semester assignment (after consultation throughout the semester!) Participation in exercises according to the above requirements.				
SEMESTER GRADE	HOW THE QUALIFICATION IS ESTABLISHED: Five-digit grade based on half-year performance Supplement after final mark only can be made with a value above 60 points.				
	1 - FAIL	2 - PASS	3 - SATISFACTORY	4 - GOOD	5 - EXCELLENT