Óbuda University Bánki Donát Faculty of Mechanical and Safety Engineering	Insitute of Mechatronics and Vehicle Engineering

Subject title and code: **CAD systems BMXSRE3BNE** **Credits:** *4*

Full-time study 2023/24 *ac.* 1. *semester*
year

The course is available at: mechatronical engineering

Supervised by: Ferenc Oláh	**Instructors:** Ferenc Oláh

Prerequisite (neptun code):

Weekly number of lessons

Lecture: 1	Group seminar: 0	Lab: 2	Consultation: 0

Way of assessment: Midterm mark (Written)

Online consultation *(in case it's required): https://bbb2.banki.hu/b/ola-jwc-jkr … (BBB link)*

Educational goal: The aim of the course is to provide students with a general overview and practice of the form feature based parametric design in the Inventor CAD system

Schedule

Education week	Topics
1.	*Introduction. Basics of the Inventor CAD system, sketching, using constraints*
2.	*Extrude and revolve command in different cases*
3.	*Practising basic commands to create parts*
4.	*Introduction to the assembly design, learning different constraints between parts*
5.	*Creating new parts in the assembly, creating parts with projection*
6.	*Frame generator and FEA of beam structures*
7.	*Drawings, creating basic 2D drawing for parts*
8.	*BOM, generating drawings from assemblies with parts list*
9.	*Embossing, welding*
10.	*Shape based features, loft, draft, shell*
11.	*Practice*
12.	*Practice*
13.	*Test*
14.	*Re-take*

Mid-semester requirements

Test		Assignment to be submitted		Lab measurement	
amount	dates	amount	deadlines	amount	dates
1	2023.12.05.	0	-	0	-

According to the Study and Examination regulations of Óbuda University attendance of group seminars and lab exercises are mandatory.

Other requirements for participation in sessions not covered by the regulations and restrictions on substitutions:
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Test		Assignment to be submitted		Lab measurement	
maximum points available	minimum score required to pass /test	maximum points available	minimum score required to pass / assignment	maximum points available	minimum score required to pass /lab
100points	50points	-points	-points	-points	-points

Total number of points achievable in semester: 100points

Grading thresholds	**satisfactory** 50 % and above	**average** 65 % and above	**good** 75 % and above	**excellent** 90 % and above
Other evaluation criteria:				
Receive a signature denied entry:				
Required references: Online tutorials will be available at the e-learning system				
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Quality assurance methods of the subject:				

Things, that are not included, can be found within the regulations of Óbuda University.