ÓBUDA UNIVERSITY Bánki Donát, Faculty of Mechanical and Safety Engineering			Department of Machine Construction and Safety Techniques	
Name and code of the course:	**Computer Systems for Product Engineering (BGBRSTENND)** Credits *: 2* **2015/2016 Fall**			
Courses:	**Mechatronical Engineering**			
Responsible Lecturer:	**György Gyurecz**	Lecturers:	**György Gyurecz**	
Pre-Courses:	**Géprajz, Gépelemek BGBGG2ENND**			
Hours/weeks	Lectures:**1**	Practicies:**3**	Laboratory: **0**	Consultation: **0**
Method of Controls (s,v,f):	**test**			

Teaching material

Aims: The aim of the course is to provide students with a general overview and practice of the form feature based parametric design.

SYLLABUS

Weeks	
1.	*Introduction. Creating a Project.*
2.	*Create a Sketch, Constraints, Extruding, Editing Profiles, Work Planes.*
3.	*Solid Bodies, Centerlines, Revolve a Feature, Projecting Geometry, Extruding to a Plane.*
4.	*Mirroring Features, Circular Feature Array, Rectangular Feature Array.*
5.	*Creating Holes, Placing Holes, Creating Hole Patterns, Threaded Holes.*
6.	*Using the Shell Command, 2D Splines, Constraining Splines.*
7.	*Sweep, Sweep Path and Guide Rail, Sweep Path and Guide Surface.*
8.	*Introduction to 3D Sketches, 3D Splines and Coils.*
9.	*Lofts, Loft Conditions, Lofts with Rails, Rails on Cylindrical Lofts.*
10.	*Parameters, Linking Excel Spreadsheets.*
11.	*Importing Points, The Bend Part Command, Bending Conical and Loft Parts*
12.	*Assemblies. Creating and Editing Derived Parts, Degrees of Freedom, Driving Constraints.*
13.	*Drawing Views, Drawing Projects, Bill of Materials, Parts Lists, Editing Parts List, Balloons.*
14.	*TEST*

Validity of the semester and method of creating the semester mark:

The semester can be valid with as minimum as 50% of the test:

50% - 60%	*failed*
60% - 70%	*satisfactory*
70% - 80%	*medium*
80% - 90%	*good*
90% - 100%	*excellent*

Literature:
- Lecture notes
- G. Renner: CAD technologies (BME, 2007)

Budapest, 2015-06-04

György Gyurecz

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Responsible Lecturer