

Title of Course	Selected problems of CAD		
Semester	Autumn		
Teaching Hours per Course:	Total	- Lectures:	- Project:
	30	15	15
ECTS Credits	3		
The content of education			
<b>Aims of Course</b>	<p>The main goal is to teach students the subject applications of CAD systems in the process designing machines and devices</p> <p>Preparation is an additional goal of teaching students to solve on their own engineering problems in the field specific curriculum item.</p>		
<b>Program</b>	<p><b>Lectures:</b></p> <p>Preliminary issues: design, construction, general and detailed principles of construction, structure design process.</p> <p>CAD systems: definition, design structure computer-assisted benefits of CAD application.</p> <p>Computer Aided Manufacturing Systems CAM, integration of CAD / CAM systems.</p> <p>Modeling in engineering activities.</p> <p>Optimization in CAD systems.</p> <p>Engineering calculation methods: classical, FEM, digital simulation.</p> <p>Presentation of sample CAD systems.</p> <p><b>Projects:</b></p> <p>3D digital model of a bearing seat</p> <p>3D digital model of a simple mechanical device</p> <p>3D parametric model</p> <p>Sheet metal design</p> <p>Optimization task design</p>		
<b>Conditions of completion</b>	<p>The condition for passing the course is to pass the test on the portal portaliusz.pl, perform and send to the portal portaliusz.pl and positively evaluate the 3D model of the selected part.</p>		
<b>Teacher</b>	Włodzimierz Malesa		