BM4400

Study program / course: Mechanical Engineering

Type and level of study: Batchelor academic studies

Course: Engineering tools

Lecturers: Marjanović J. Nenad, Jovičić M. Nebojša, Devedžić B. Goran, Jovičić R. Gordana

Status of course: Obligatory, joint for all modules, IV semester

Number of ECTS: 6

Precondition: Drawing and computer graphics, Computer tools

The objective of course:

- To introduce students with the contemporary capability of computer applying in product life cycle,
- Getting skills for part and assembly modeling and appropriate engineering documentation in commercial CAD software as well,
- To introduce students with potentials of using various approaches in computer aided engineering (CAE, CAM, CAPP).

The outcome of course

After finishing the course students will be able:

- To know capability of applying computers in product life cycle,
- To model parts, assemblies and technical documentations by using contemporary computer software,
- To know potentials of computer aided engineering and computer aided manufacturing.

Syllabus

Theoretical study

- Introduction. Advantage of using computers in all phase of product life cycle.
- Modeling of parts, assemblies and documentation (CAD). Using standard parts.
- Capabilities of computer aided engineering and computer aided manufacturing.

Practical classes

Assignments in part modeling (sketcher, constraints, features, parametric modeling), assembly modeling and generating of technical documentation.

Recommended reading

1.Devedžić G., J. Maksić, S. Ćuković, S. Petrović: "3D modeliranje proizvoda – metodička zbirka zadataka", Mašinski fakultet, CIRPIS centar, Kragujevac, 2008.
2. Devedžić G.: "Softverska rešenja CAD/CAM sistema", Mašinski fakultet, Kragujevac, 2004.
3. Devedžić G.: "CAD/CAM tehnologije", Mašinski fakultet, WUS Austria, Kragujevac, 2006.

The number of hours of active teaching:				Other classes:
Theory: 2	Practical classes: 1	Other forms of teaching: 1	Research study:	1

Methods of teaching

Evaluation of knowledge

Pre-final exam obligations	Points	Final exam	points
Activities during the classes:	**10**	Final test	**30**
Practical classes:			
Tests(s) :	**60**		
Seminar(s) :			