Study program / course: Mechanical Engineering

Type and level of study: academic studies (master degree)

Course: CIM systems

Lecturers: Stefanović Z. Miladin

Status of course: Elective for modules M_1 and M_6 , III semester

Number of ECTS:6
Precondition: none

The objective of course

Presentation of core of computer and management of production beginning with computer supported design, to the integration of production systems, quality and management system.

The outcome of course

Understanding and basic knowledge and skills in the field of computer integrated production, beginning at design, production and manufacturing systems to systems integration.

Syllabus

Theoretical study

In the framework of theoretical study following areas will be discussed: introduction to the CIM, CIM systems and models, the basic elements IS, automated systems identification and data collecting, systems for the exchange of data, computer supported designed, planning and production, computer-controlled production technology, quality control, integration systems and methods, Management of CIM technologies.

Practical classes include:

Exercises and work in laboratories. (CIM work with models, as well as with the DNC software and CNC machine, where will learn programming code G). In the framework of study research work, students will be trained for basic research in the field of cases.

Recommended reading

- 1. Stefanović M.: CIM systems, Faculty of Mechanical Engineering, Kragujevac, 2006 (in Serbian)
- 2. K. Asai, (Editor), et al Edition "Manufacturing, Automation Systems and CIM Factories," Springer, ISBN: 0412482304
- 3. James A. Rehg "Introduction to Robotics in CIM Systems" (5th Edition) ", Prentice Hall, 5 edition (March 8, 2002), ISBN 0130602434

The number of hours of active teaching:				Other classes:
Theory: 3	Practical classes:	Other forms of	Research study:	1
	1.4	teaching: 0.6	0	

Methods of teaching

Classic "frontal" approach combined with group and individual approach with the use of current resources. Evaluation of knowledge will be performed through colloquiums and seminars papers.

Evaluation of knowledge (the maximum number of points 100) Pre-final exam Final exam points points obligations Activities during the Written exam: classes: Practical classes: 30 Oral exam: 30 Colloquiums(s): 20 Seminar(s): 20