Study program: Mechatronics

Type and level of studies: Master studies (second level of studies)

Course unit: New manufacturing technologies

Teacher in charge: Radomir Slavkovic

Language of instruction: English

ECTS: 6

Prerequisites: -

Semester: Winter

Course unit objective

The main objective of this course is to introduce students to fundamentals of Rapid Prototyping technologies (RP), Computer Numerical Control (CNC), Distributive Numerical Control (DNC), Flexible manufacturing system (FMS), and Intelligent Manufacturing Systems (IMS).

Learning outcomes of Course unit

Students gain theoretical and practical knowledge of the investigated technologies and techniques. Students are able to participate in the production processes and improve them.

Course unit contents

Theoretical classes

Rapid Prototyping technologies (RP), Computer Numerical Control (CNC), Distributive Numerical Control (DNC), Flexible manufacturing system (FMS), Intelligent Manufacturing Systems (IMS).

Practical classes

Laboratory and computer sessions, case study

Literature

1. RAPID PROTOTYPING: PRINCIPLES AND APPLICATIONS, World Scientific Publishing, 2010.
2. CNC Handbook: McGraw-Hill Education, 2012.

Number of active teaching hours				**Other classes**
Lectures: 2	*Practice:2*	*Other forms of classes:* Mentoring system	*Independent work:* Case study	

Teaching methods: consultations, indipendent work

Examination methods (maximum 100 points)

Exam prerequisites	**No. of points:**	**Final exam**	**No. of points:**
Student's activity during lectures	**10**	oral examination	**50**
Practical classes		written examination	**0**
Seminars/homework	**40**	.....	
Project			

Grading system

Grade	**No. of points**	**Description**
10	**91-100**	Excellent
9	**81-90**	Exceptionally good
8	**71-80**	Very good
7	**61-70**	Good
6	**51-60**	Passing
5	**less than 50**	Failing