# Study program : Mechanical Engineering, Module Industrial Engineering, Master Engineering Management

Type and level of studies: MSC

Course unit: Integrated Management Systems (IMS)

Teacher in charge: Slavko Arsovski, Miladin Stefanovic

Language of instruction: English

ECTS: 6

Prerequisites: no

Semester: Winter semester

**Course unit objective:** Course is designed to inform students with basic issues of partial and integrated management systems. Beside theoretical knowledge, students will master with skills necessary for design and implementation of IMS, a specially ICT support for management of IMS performances.

## **Learning outcomes of Course unit**

At the end of the course student will be able to:

- Understanding of concept and importance of IMA
- Knowledge and implementation of methodology for design and implementation of IMS
- Knowledge of integration models of integrated management systems
- Knowledge of partial management systems

### **Course unit contents**

Theoretical classes

Importance of integrated management systems, structure of IMS, introduction to EMS, introduction to OHSAS, introduction to 16949, introduction to ISO 10014, introduction to risk management, introduction to management of information security, process management – basis for integration, design of IMS, implementation of IMS, Measurement and management with IMS performances, information support in implementation of IMS.

#### Practical classes

Covers demands of standards of IMS (EMS, OHSAS, ISO 16949, ISO 10014, risk management) during auditory exercises, directions for seminar papers and writing of seminar papers in the field of design and implementation of IMS, through research study work. In the frame of study research students will be trained for basic research in the field of this course.

### Literature

- [1] Arsovski, S. Process Management, Center for Quality, Faculty of Mechanical Engineering, Kragujevac 2007.
- [2] Lee, T. H., Shiba, S., & Wood, R. C. (1999). Integrated management systems: A practical approach to transforming organizations (Vol. 8). John Wiley & Sons.

Number of activ				
Lectures:	Practice:	Other forms of	Independent work:0	Other classes 1
2	1,6	classes:0,4	macpendent work.o	

## **Teaching methods**

Classical, frontal lecturing, combined with individual and group approach using modern education equipment. Evaluation of knowledge: tests and seminars.

## **Examination methods (maximum 100 points)**

Exam prerequisites	No. of points:	Final exam	No. of points:	
Student's activity during lectures	10	oral examination	30	
practical classes/tests	40	written examination		
Seminars/homework				
Project	20			
Other				

## **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	≤50	Failing	