MM1361

Study program / course: Mechanical engineering

Type and level of study: Master academic studies

Course: Production Organization and Operational Research

Lecturers: Tadić, P. Danijela

Status of course: Obligatory for modules M₆ and M7, I semester

Number of ECTS: 6
Precondition: None

The objective of course

The course objective is that students master the basic knowledge from the production management, including the methods of operational research. The emphasis is especially set on the fact that in a company any type of activity can be performed, both industrial and any other production activity.

The outcome of course

After the passed final exam student *should understand* the principles of the production management and master the methods of operational research.

Syllabus

Theoretical study

The course study include the following units: Introduction to production organization, Capacities planning, Linear programming, Dual task of linear programming, Production Planning and organization, Nonlinear programming, Supplies management, Planning according to materials requirement, JIT system for production planning, production scheduling.

Practical classes

Practical work, Individual work, Visits to companies

Recommended reading

1.Milanović, D., D.Tadić and M.Misita, "management Information Systems with Examples", Megatrend University of Applied Sciences, Belgrade, 2005. (In Serbian)

2. Tadić, D. et al., "Operational Research", Facutlz for Industrial Management, ICIM Plus, Kruševac, 2005. (In Serbian)

The number of hou	Other classes:			
Theory:	Practical classes:	Other forms of	Research study:	1
2	1.6	teaching: 0.4		

Methods of teaching

Evaluation of knowledge					
Pre-final exam obligations	Points	Final exam	Points		
Activities during the classes:	10	Written test	25		
Practical classes:		Oral exam	5		
Colloquiums(s):	60				
Seminar(s):					