

## Operations management Course

<i>Name of the subject:</i> <b>Operations management - PhD</b>	<i>SUBJECT code:</i>	Weekly hours: up to 6 hours of individual consultations and 4 hours of students research work	Credit: 15
<i>Subject leader:</i> Ivan Mihajlovic	<i>Academic Degree:</i> Full Professor	Prerequisites: Knowledge from the field of general management, basic of qualitative and quantitative analysis	

**Purpose:** Acquiring the necessary knowledge and skills required for planning, managing and optimization of the operations in the field of production and/or service development in industrial

**Course description:** The course should ascertain wide base in key aspects of contemporary business operations. The teaching/ consultations are based on application of the adequate case studies and relying on contemporary approaches in management and decision making. Special emphasize is given on understanding the following concepts: relevance and importance of the operational possibilities with high performances; understanding of the key resources – human, organizational and technological - as well as the fundamental variables in the operations management and their interactions; key concepts in the design of effective operational systems for wide span of services; understanding integrative nature of operations management. Consultations are carried out in the classrooms and computer rooms, but also using the online learning tools.

### Schedule of consultations/teaching

Weeks	Topics
1.	Defining the operations management and basic terminology.
2.	Managing operations in the global environment.
3.	Planning the strategic resource utilization.
4.	Predicting the required quantities, quantitative prediction models, computer applications for predictions.
5.	Product and process design.
6.	Location, capacity and layout of the operations processes / applying the MLAB software in the layout problems.
7.	Managing the operations quality, applying the Path Maker software in the quality control.
8.	Managing operations in the supply chains. Just in time and LEAN concept.

9.	Inventory management models and MRP systems. MRP systems as the part of QM for windows application.
10.	Seminar project work
11.	Seminar project work
12.	Seminar project work
13.	Seminar project work
14.	Seminar project work
<p><b>Final grade:</b> 40pt – seminar project work; 60 pt final exam (&lt;51pt fail; 51-60 grade 6; 61-70 grade 7; 71-80 grade 8; 81-90 grade 9; 91-100 grade 10)</p>	
<p><b>Compulsory literature:</b> Nigel Slack, Stuart Chambers, Robert Johnston, Operations management, Pranice Hall, 8<sup>th</sup> edition, Harlow, England 2013.</p>	
<p><b>Supplemental literature:</b> N. Gaither, G. Fraizer, Operations Management, 9<sup>th</sup> Edition, Thomson Learning, International Edition, 2002.</p>	