Course Unit Descriptor

Study Programme: Mechanization And Construction Engineering	
Course Unit Title: Optimization in Intralogistics	
Course Unit Code: M2528A	
Name of Lecturer(s): Bojić Sanja	
Type and Level of Studies: Master Academic Degree	
Course Status (compulsory/elective): elective	
Semester (winter/ summer): winter	
Language of instruction: english	
Mode of course unit delivery (face-to-face/distance learning): face-to-face	
Number of ECTS Allocated: 5	
Prerequisites: none	

Course Aims:.

The aim of the subject is acquiring knowledge about different methods and tools for optimization of material flows in

intralogistics. The special attention is given to LEAN and KAIZEN approach to optimization.

Learning Outcomes:
Students acquire knowledge that enable them to optimize material flows in general, and in particular in intralogistics. They gain knowledge about the most important LEAN tools for organization and optimization of the material flows, as well as about the KAIZEN philosophy.

Syllabus.
SC - Supply Cain technology and processes from raw materials to finished products and customers, Make or buy analysis. Optimal organization of processes and material flows.Value Stream Mapping (VSM), material leveling (Heijunka), organization and optimization of material flows using the LEAN tools 5s, standardization and SMED.Preventing downtime of material flows using LEAN tools Poka Yoke and TPM. Examples from industry, business and services.

Required Reading:
Relevant literature in English TBD

Weekly Contact Hours: 2	**Lectures: 3**	**Practical work: 1**

Teaching Methods:
Lectures, auditory and laboratory practice

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Attendance			
Computer exercises			
Tests (4x)			