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| **UNIVERSITY OF NIŠ** | | | | | | | | |
| **Course Unit Descriptor** | | | **Faculty** | | Faculty of Mechanical Engineering | | | |
| **GENERAL INFORMATION** | | | | | | | | |
| Study Program | **Engineering Management** | | | | | | | |
| Study Module (if applicable) | - | | | | | | | |
| Course Title | Production and service systems | | | | | | | |
| Level of Study | ☒Bachelor | | | ☐ Master’s | | | | ☐ Doctoral |
| Type of Course | ☒ Obligatory | | | ☐ Elective | | | | |
| Semester | ☒ Autumn | | | ☐ Spring | | | | |
| Year of Study | II | | | | | | | |
| Number of ECTS Allocated | 8 | | | | | | | |
| Name of Lecturer/Lecturers | Rado M. Maksimovic | | | | | | | |
| Teaching Mode | ☒ Lectures | | | ☒ Group tutorials | | | | ☐ Individual tutorials |
| ☐ Laboratory work | | | ☐ Project work | | | | ☒ Seminar |
| ☐ Distance learning | | | ☐ Blended learning | | | | ☐ Other |
| **Purpose and Overview (max. 5 sentences)** | | | | | | | | |
| *The course oriented to systematic research and study of complete transformaion process (from inpuut resources to products or services) in varios types of production or service systems. The goal of course are student­’s acquisition for development and design of production or service production structures, and defiing of it­’s characteristics. Final student­’s competitions after successfully completion of this course are: the knowlwege and ability for use of for desing of material, energy and information flows in the production or service systems and desing of it­’s space schedule (lay-out).* | | | | | | | | |
| **Syllabus (brief outline and summary of topics, max. 10 sentences)** | | | | | | | | |
| Lectures: (1) The basic elements of production and business systems; (2) The conditions of production and business systems development; (3) Prodct/service and production/service program; (4) Differences between products and services; (5) Production/service work proces and capacity of sustem­’s elements; (6) The aproches for system­’s structure designig; (7) General model of production/service flows; (8) Balancing of production/service flows; (9) Assessment of production/service system elements; (10) Design of production/service system lay-out; (11) Energy and infoirmation flows in production/service systems; (12) Production/service system location; (13) Simulation of production/service systems work.  Group tutorials are include exercises - solving of various problems related on prodct/service and production/service program, production/service flows and design of production/service system lay-out. Seminar include an interactive analysis and elaboration of real case of production/service system. Seminar based on team work. | | | | | | | | |
| **Language of Instruction** | | | | | | | | |
| ☒Serbian (complete course) | | ☒ English (complete course) | | | | | ☐ Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course) | |
| ☐Serbian with English mentoring | | ☐Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | |
| **Assessment Methods and Criteria** | | | | | | | | |
| **Pre exam Duties** | | **Points** | **Final Exam** | | | **Points** | | |
| **Activity During Lectures** | | **10** | **Written Examination** | | | **60** | | |
| **Practical Teaching** | | **30** | **Oral Examination** | | | **-** | | |
| **Teaching Colloquia** (not obligatory) | | **(60)** | **Overall Sum** | | | **100** | | |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | | | |