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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Electronic Engineering |
| **GENERAL INFORMATION** |
| Study program  | Electrical Engineering and Computing |
| Study Module (if applicable) | Electrical Power Engineering |
| Course title | Engineering mechanics |
| Level of study | x☐Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☐ Obligatory x☐ Elective |
| Semester  |  ☐ Autumn x☐Spring |
| Year of study  | 2-nd |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Ratko G. Pavlović |
| Teaching mode |  x☐Lectures ☐Group tutorials ☐ Individual tutorials ☐Laboratory work ☐ Project work ☐ Seminar ☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Acquiring knowledge from the basics of engineering mechanics. Static and dynamic analysis of systems. Creation of mathematical models of mechanical and electromechanical systems. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Equilibrium of planar and spatial force systems. Centres of gravity of surface and body lines. Moments of inertia of plane surfaces. Analysis of basic types of stresses. Statically indeterminate structures. Velocity and acceleration of a particle. Dynamics of a particle and fundamental laws of dynamics of a particle and body. |
| **LANGUAGE OF INSTRUCTION** |
| x☐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** | **30** |
| **Practical teaching** |  | **Oral examination** | **30** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |