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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Faculty of Mechanical Engineering | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | **Mechanical Engineering** | | |
| Study Module (if applicable) | | | | - | | |
| Course title | | | | Mechatronic system design | | |
| Level of study | | | | ☒Bachelor ☐ Master’s ☐Doctoral | | |
| Type of course | | | | ☐ Obligatory ☒Elective | | |
| Semester | | | | ☐ Autumn ☒Spring | | |
| Year of study | | | | IV | | |
| Number of ECTS allocated | | | | 6 | | |
| Name of lecturer/lecturers | | | | Petrović B. Tomislav | | |
| Teaching mode | | | | ☒Lectures ☒Group tutorials ☐ Individual tutorials  ☒Laboratory work ☒ Project work ☐ Seminar  ☐Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| *Introducing methods for mechatronic system design and development. Introducing methods for mechatronic system optimization. Training for the design of mechatronic systems and team work in the field of development of mechatronic systems.* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| Basics of the development and design of mechatronic systems.  Process of mechatronic system design and development.  Environment, function and structure of mechatronic system  Methods for mechatronic system design and development  Methods for selection of optimal mechatronic system design  Methods for accuracy and reliability enhancement of mechatronic system  Safety issues for mechatronic systems  Analysis of developed mechatronic systems | | | | | | |
| **LANGUAGE OF INSTRUCTION** | | | | | | |
| ☒Serbian (complete course) ☐ English (complete course) ☐ Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)  ☒Serbian with English mentoring ☒ Serbian with German mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | |
| **ASSESSMENT METHODS AND CRITERIA** | | | | | | |
| **Pre exam duties** | **Points** | | **Final exam** | | | **points** |
| **Activity during lectures** | **10** | | **Written examination** | | | **0** |
| **Practical teaching** | **10** | | **Oral examination** | | | **30** |
| **Teaching colloquia** | **50** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |