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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 | Methods and organization of scientific research | | | | | | | | |
| Level of Study | ☐Bachelor | | | | ☐ Master’s | | | | ☒ Doctoral |
| Type of Course | ☒ Obligatory | | | | ☐ Elective | | | | |
| Semester | ☒ Autumn | | | | ☐ Spring | | | | |
| Year of Study | I | | | | | | | | |
| Number of ECTS Allocated | 10 | | | | | | | | |
| Name of Lecturer/Lecturers | Ratko Pavlovic | | | | | | | | |
| Teaching Mode | ☒ Lectures | | | ☐ Group tutorials | | | | | ☒ Individual tutorials |
| ☐ Laboratory work | | | ☒ Project work | | | | | ☒ Seminar |
| ☐ Distance learning | | | ☐ Blended learning | | | | | ☐ Other |
| **Purpose and Overview (max. 5 sentences)** | | | | | | | | | |
| Preparing students for research in their doctoral dissertation. Student competence in the publication of scientific papers in international journals. | | | | | | | | | |
| **Syllabus (brief outline and summary of topics, max. 10 sentences)** | | | | | | | | | |
| *Theory classes:*  Basic concepts and definitions. Literature search. Selection of issues that could result in scientific work. Selection of adequate scientific papers in international journals. Formulation of the problem , the mathematical model and the selection of methods for solving them. Laboratory and numerical experiments. Analysis of results. Concluding remarks . Mandatory notices in the paper. Citing references. Selection of appropriate scientific journal. Impact factor international journals and Thompson Reuters list. Code of Ethics in publishing scientific papers. The process of preparing to send to the selected international journal. Sending a work in electronic form. Communication with the editor and reviewers. Citation Indexes ( N / G factors). Illegality of the so-called publishing on predatory magazine.  *Guided independent research:*  Prepare students for research in their doctoral dissertation. | | | | | | | | | |
| **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** | | **0** | **Written Examination** | | | | **0** | | |
| **Practical Teaching** | | **50** | **Oral Examination** | | | | **Max. 50** | | |
| **Teaching Colloquia** | | **0** | **Overall Sum** | | | | **100** | | |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | | | | |