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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Electronic Engineering |
| **GENERAL INFORMATION** |
| Study program  | **Electrical Engineering and Computing**  |
| Study Module (if applicable) | Applied mathematics  |
| Course title | Interval mathematics  |
| Level of study | [ ] Bachelor [ ]  Master’s [x]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [ ]  Autumn [ ] Spring |
| Year of study  | II |
| Number of ECTS allocated |  |
| Name of lecturer/lecturers | Dušan M. Milošević  |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [ ] Laboratory work [ ]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Obtaining the necessary theoretical and practical knowledge of interval mathematics.*  |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Real interval arithmetic. Complex interval arithmetic. Interval functions. Central and diameter form of interval functions. Interval calculus of residues. Interval methods for solving nonlinear equations. Methods for simultaneous inclusion of polynomial zeros. Interval methods for solving systems of nonlinear equations. Systems of linear equations. Interval methods for matrix inversion. Differentiation and Integration.**  |
| **LANGUAGE OF INSTRUCTION** |
| [x] Serbian (complete course) [x]  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** |  | **Written examination** |  |
| **Practical teaching** | **70** | **Oral examination** | **30** |
| **Teaching colloquia** |  | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |