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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 | CAD Technology |
| Level of Study | ☒Bachelor | ☐ Master’s | ☐ Doctoral |
| Type of Course | ☐ Obligatory | ☒ Elective |
| Semester | ☒ Autumn | ☐ Spring |
| Year of Study | III |
| Number of ECTS Allocated | 6 |
| Name of Lecturer/Lecturers | Miomir Lj. Jovanović |
| Teaching Mode | ☒ Lectures | ☐ Group tutorials | ☐ Individual tutorials |
| ☒ Laboratory work | ☒ Project work | ☐ Seminar |
| ☐ Distance learning | ☐ Blended learning | ☐ Other |
| **Purpose and Overview (max. 5 sentences)** |
| *Introduce students to the basics of CAD technology, Processes design, Computer graphics, Concept of geometry Moddeling, Tools for moddeling. Finit Element concept, Training of the structural analysis. Developing skills to good software design. Examples of CAD realisation.*  |
| **Syllabus (brief outline and summary of topics, max. 10 sentences)** |
| *1. Introduce students to the basics of CAD technology, 2. Processes design, 3. Computer graphics, 4. Teory of colors, 5. Geometry moddeling, 6. Tools for moddeling, 7. Finit Element concept, 8. Structural analysis ( Statical and dynamical analysis). 9. Optimisation of construction, 10. Clasical (differential) optimisation, 11. Gradient technique of minimisation, 12. Numerical procedures, 12. Examples of computer software. 13. Instructions for exam. 14. Preparatory examination.*  |
| **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** | **5** | **Written Examination** | **(Three Colloquiums) 60** |
| **Practical Teaching** | **5** | **Final (oral) Examination** | **Max. 30**  |
| **Teaching Colloquia** | **60** | **Overall Sum** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |