|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | |  | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | **Mechatronics and Control** | | |
| Study Module (if applicable) | | | | - | | |
| Course title | | | | MМ.1.4-I.2-1 Digital Image Processing in Mechatronics | | |
| Level of study | | | | ☐Bachelor ☑ Master’s ☐ Doctoral | | |
| Type of course | | | | ☐ Obligatory☑ Elective | | |
| Semester | | | | ☑ Autumn ☐Spring | | |
| Year of study | | | | I | | |
| Number of ECTS allocated | | | | 6 | | |
| Name of lecturer/lecturers | | | | Aca D. Micic | | |
| Teaching mode | | | | ☑Lectures ☐Group tutorials ☐ Individual tutorials  ☐Laboratory work ☐ Project work ☐ Seminar  ☐Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| Use of and mastering the basic techniques of digital image processing. Management of mechatronic processes.    Mastering software agents for monitoring and process control. | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| * Introduction to digital image processing. * The formation and presentation of images. * Transformation of the picture. * Restoration image, detecting edges. * Analysis of texture and pattern recognition in the image. * Analysis of dynamic scenes. * Measuring the dimensions of movable and immovable objects. * Design of image processing ipraćenja process. | | | | | | |
| **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** | **10** | | **Written examination** | | |  |
| **Practical teaching** |  | | **Oral examination** | | | **50** |
| **Teaching colloquia** | **10+10+10+10** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |