|  |
| --- |
|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty** | Pedagogical Faculty in Vranje |
| **GENERAL INFORMATION** |
| Study program  | Technical Education and Informatics |
| Study Module (if applicable) | / |
| Course title | Programming |
| Level of study | ☐Bachelor ☒ Master’s ☐ Doctoral |
| Type of course | ☒ Obligatory ☐ Elective |
| Semester  | ☒ Autumn ☐Spring |
| Year of study  | Third |
| Number of ECTS allocated | 7 |
| Name of lecturer/lecturers | Dragan Janković |
| Teaching mode | ☒Lectures ☐Group tutorials ☐ Individual tutorials☒Laboratory work ☒ Project work ☒ Seminar☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Algorithmic problem solving using the paradigm of structured programming with the use of the C programming language, introduction to the basic data types, basic control structures, functions, recursive programming, as well as basic data structures and algorithms for solving basic problems in programming. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Computing and programming, algorithms - basic ways of shifting algorithms, management structures, types and structures, basic data types, Structured data types - linear and non-linear, basic elements of the programming language C, Alphabet C-a and program structure, data types in C, Constants, Operators and operator precedence, C program structure and function of the main, standard input and output control program flow, Fields - arrays and matrices, Functions, Transfer function parameters, the parameters of main functions, recursive functions, derived data types: pointers, structure, nested structures, unions, dynamic memory allocation and dynamic data structures, Processor directive, Strings, Working with files, complexity of algorithms. |
| **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** | **40** |
| **Practical teaching** | **10** | **Oral examination** | **40** |
| **Teaching colloquia** | **40** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |