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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Faculty of Electronic Engineering | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | **Computing and informatics** | | |
| Study Module (if applicable) | | | | Computer system security | | |
| Course title | | | | Secure Software Design And Implementation | | |
| Level of study | | | | ☐Bachelor ☒ Master’s ☐ Doctoral | | |
| Type of course | | | | ☐ Obligatory ☒ Elective | | |
| Semester | | | | ☒ Autumn ☐Spring | | |
| Year of study | | | | 1 | | |
| Number of ECTS allocated | | | | 4 | | |
| Name of lecturer/lecturers | | | | Prof. Dr. Dragan Janković  Prof. Dr. Milorad Tošić | | |
| Teaching mode | | | | ☒Lectures ☐Group tutorials ☐ Individual tutorials  ☒Laboratory work ☒ Project work ☐ Seminar  ☐Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| *The main course objective is introducing students with basic concepts and applied techniques used for secure code development* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| **1. Introduction 2. Passwords 3. Pseudorandom numbers 4. Pseudorandom generators 5. Buffer Overflow 6. Safety increase techniques 7. Shared resources deadlock problems 8. Input validation 9. Cryptography 10. Authentication protocols 11. Software configurability 12. Processing sensitive data 13. Memory management** | | | | | | |
| **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** | | |  |
| **Practical teaching** | **15** | | **Oral examination** | | | **50** |
| **Teaching colloquia** | **30** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |