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| Software Engineering Institute | | | Semester 1. of the curriculum 2025-26-1 | | | |
| Name of the subject: | Code of the subject: | Credits: | Weekly hours: | | | |
| | | | | lec | sem | lab |
| Problemsolving using programming | NSXPPIEBNF | 6 | full-time | 1 | 0 | 3 |
| Responsible person for the subject: László Csink | | | Classification: associate professor | | | |
| Subject lecturer(s): László Csink | | | | | | |
| Prerequisites: | none | none | | | | |
| Way of the assessment: | written exam | | | | | |
| Course description | | | | | | |
| Goal: | The purpose of the subject is to present the basics of computer programming and to develop the skills of algorithmic thinking and computer problem solving. | | | | | |
| Course description: | The subject material covers the most important elements of general-purpose programming languages, such as the use of variables, control structures and functions, as well as the methodology of structured programming. Students will also learn the basics of the object-oriented programming paradigm, the process of program code development with objects, the use of complex data structures, strings and files. Within the scope of the subject, students learn the basic use of a specific programming language by implementing some well-known and commonly used algorithms, and by solving practical problems with a computer program. | | | | | |

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| Lecture schedule | |
| Mid-term requirements | |
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| Assessment schedule | |
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| Method used to calculate the <i>mid-term grade</i> (to be filled out only for subjects with mid-term grades) | |
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| Type of the replacement | |
| | |
| Type of the exam (to be filled out only for subjects with exams) | |
| written exam | |
| Calculation of the exam mark (to be filled only for subjects with exams) | |
| The written exam is evaluated in percentage (0-100 %). The written exam is unsuccessful below 50 %. | |
| average of midterm grade and written test | final mark |
| 0-49% | 1 |
| 50-61% | 2 |
| 62-73% | 3 |
| 74-85% | 4 |
| 86-100% | 5 |
| References | |

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| Obligatory: | <ul style="list-style-type: none">• Cormen, Leiserson, Rivest, Stein: Introduction to Algorithms (The MIT Press, 2009)• Practical introductory videos and notes available in Moodle• Bradley L. Jones: Teach Yourself C# in 21 Days (Sams Publishing, 2001) |
| Recommended: | |
| Other references: | none |