Study program: Modern computer technologies

Course title: Data Structures

Professor/assistant: Miloš B. Stojanović

Type of course: elective

ECTS credits: 6

Pre-requisites: none

Aims of the course:
Introducing students with the properties of data structures and algorithms. Acquiring basic theoretical knowledge on the complexity of algorithms and data structures in object oriented languages.

Learning outcomes:
Students are able to: independently set up and solve computer problems by writing algorithms and implementing different data structures in object oriented languages.

Syllabus

Theoretical part

Practical part
Implementation and testing of structures and algorithms in one of the programming languages, such as Java, C++ or C#.

Literature

Number of active classes
Lectures: 30  Practical classes: 30  Research work:

Other forms of teaching:

Teaching methods
Combination of interactive approach with practical problem solving.

Grading system (maximum 100 points), grading scale from 5 to 10: below 51 points grade 5, grade 6 from 51-60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91-100 points.

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<thead>
<tr>
<th>Pre-exam obligations</th>
<th>points</th>
<th>Final exam</th>
<th>points</th>
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<tr>
<td>activity during theoretical lectures</td>
<td>10</td>
<td>written exam</td>
<td>30</td>
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<tr>
<td>practical training</td>
<td>40</td>
<td>oral exam</td>
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<tr>
<td>colloquium(s)/seminar papers</td>
<td>20</td>
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<td><strong>Sum</strong></td>
<td><strong>70</strong></td>
<td><strong>Sum</strong></td>
<td><strong>30</strong></td>
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