

## Course / module map

"CS321. Parallel and Multithreaded Programming"

5 credits; academic hours in total: 180, including: 36 lectures, 36 labs., 108 self-sufficient.

Teacher Abramyan Mikhail Eduardovich

Department of Algebra and Discrete Mathematics

Course 4, semester 7

Program title: 02.03.02 "Theoretical Computer Science and Information Technologies"

| No. | Assessment methods  | Scoring Formative assessment | Scoring Interim assessment |
|-----|---|------------------------------|----------------------------|
|     | <b>Topic 1.<br/>Introduction to parallel computing.<br/>MPI technology basics</b> | <b>27</b>                    |                            |
| 1.  | Attending lectures  | 5                            |                            |
| 2.  | Laboratory work   | 22                           |                            |
|     | <b>Topic 2.<br/>Advanced MPI 1.1 features</b>                                     | <b>26</b>                    |                            |
| 1.  | Attending lectures  | 5                            |                            |
| 2.  | Laboratory work   | 21                           |                            |
|     | <b>Topic 3.<br/>OpenMP technology. Parallel algorithms in numerical methods</b>   | <b>27</b>                    |                            |
| 1.  | Attending lectures  | 6                            |                            |
| 2.  | Laboratory work   | 21                           |                            |
| 3.  | Final Test  |                              | 20                         |
|     | Total   | <b>80</b>                    | <b>20</b>                  |
|     | Bouns points  |                              | <b>10</b>                  |

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