

|  |                                    |                      |               |
|--|------------------------------------|----------------------|---------------|
| <b>Study programme(s):</b> Applied Mathematics – Data Science  |                                    |                      |               |
| <b>Level:</b> master studies   |                                    |                      |               |
| <b>Course title:</b> Master thesis   |                                    |                      |               |
| <b>Lecturer:</b> all the lecturers on the study programme  |                                    |                      |               |
| <b>Status:</b> obligatory  |                                    |                      |               |
| <b>ECTS:</b> 30  |                                    |                      |               |
| <b>Requirements:</b> minimum 90 ECTS including all the obligatory courses.   |                                    |                      |               |
| <b>Learning objectives</b><br>Master paper shows the ability of a student to apply the gained knowledge on master studies. Another goal is to improve the student's ability of an independent scientific research and to upgrade the fundamental knowledge obtained within the studies.  |                                    |                      |               |
| <b>Learning outcomes</b><br>The expected outcome is a final paper which contains an application of the advanced mathematical tools on some real problem or significant development of theoretical results within the field of applied mathematics.   |                                    |                      |               |
| <b>Syllabus</b><br>Within the master paper, student is introduced to research methodology in the relevant scientific field. After the conducted research, student prepares the final paper with the expected seven chapters: introduction, theoretical part, experimental part, the results and the discussion, conclusions and bibliography. When the paper is completed, under the procedure defined by the Faculty of Sciences, student acquires a right to defend the master thesis and finishes the studies after a successful defense. |                                    |                      |               |
| <b>Literature</b>  |                                    |                      |               |
| <b>Weekly teaching load</b>  |                                    |                      | Other: 0      |
|  |                                    | Student research: 25 |               |
| <b>Teaching methodology</b>  |                                    |                      |               |
| <b>Grading (maximum number of points 100)</b>  |                                    |                      |               |
| <b>Pre-exam obligations</b>  | <b>points</b>                      | <b>Final exam</b>    | <b>points</b> |
| 90 ECTS  | 54 (Obligatory) +<br>36 (Elective) |                      |               |