



| Course title                       | Problem solving  |
|------------------------------------|--|
| Institute/Division                 | Faculty of Computer Science and Telecommunication/ Department of Computer Science  |
| Course code                        | F-1.PS_1   |
| Erasmus subject code               | 11.3   |
| Number of contact hours**          | 30 lecture hours (30h)   |
| Course duration                    | 1 semester (Fall)  |
| ECTS credits                       | 4  |
| Course description (max 100 words) | The students learn how to define the problems to solve and select the proper methods. They will try to formulate basic global optimization problems and implement heuristic search methods to solve them. They will work on individual projects. |
| Literature                         | All available materials on global optimization and heuristics.   |
| Course type/organization           | <ul style="list-style-type: none"><li>Projects (30h)</li></ul>   |
| Assessment method                  | Realizing all project steps and presenting the results with the prepared report.   |
| Prerequisites                      |  |
| Primary target group               | Computer science students: 2 <sup>nd</sup> or 3 <sup>rd</sup> -year Bachelor's students with good programming skills.  |
| Contact person                     | Joanna Kołodziej (PhD, DsC, Prof.PK)   |
| Remarks                            | N/A  |

\*please insert one of the following codes:

- 11.0 Mathematics, Informatics
- 11.1 Mathematics
- 11.2 Statistics
- 11.3 Informatics, Computer Science
- 11.4 Artificial Intelligence
- 11.5 Actuarial Science
- 11.9 Others Mathematics, Informatics

\*\*1 lecture hour=45 minutes