| **Module**<br>MA-INF 1309 | **Lab Efficient Algorithms for Selected Problems: Design, Analysis and Implementation** | | | | |
|---|---|---|---|---|---|
| **Workload**<br>270 h | **Credit points**<br>9 CP | **Duration**<br>1 semester | **Frequency**<br>at least every year | | |
| **Module coordinator** | Prof. Dr. Marek Karpinski | | | | |
| **Lecturer(s)** | Prof. Dr. Marek Karpinski, Prof. Dr. Norbert Blum, Prof. Dr. Rolf Klein, Prof. Dr. Heiko Röglin | | | | |
| **Classification** | **Programme**<br>M. Sc. Computer Science | **Mode**<br>Optional | **Semester**<br>3. | | |
| **Technical skills** | Ability to design, analyze and implement efficient algorithms for selected computational problems. | | | | |
| **Soft skills** | ability to work on advanced algorithmic implementation projects, to work in small teams, clear didactic presentation and critical discussion of results | | | | |
| **Contents** | Design of efficient exact and approximate algorithms and data structures for selected computational problems. | | | | |
| **Prerequisites** | none | | | | |
| **Format** | **Teaching format** | **Group size** | **h/week** | **Workload[h]** | **CP** |
| | Lab | 8 | 4 | 60 T / 210 S | 9 |
| | T = face-to-face teaching; S = independent study | | | | |
| **Exam achievements** | Oral presentation, written report (graded) | | | | |
| **Study achievements** | none (not graded) | | | | |
| **Forms of media** | | | | | |
| **Literature** | The relevant literature will be announced in time. | | | | |