inf495 - Current Topics in 'Modeling and Analysis of Complex Systems' II

Module name
Current Topics in 'Modeling and Analysis of Complex Systems' II

Module code
inf495

ECTS credit points
3.0 KP

Workload
90 h

Used in degree programmes
- Master's Programme Computing Science > Mastermodule

Contact person
module responsibility
- Sebastian Lehnhoff
- Sibylle Fröschle
- Die im Modul Lehrenden

authorized examiners
- Sebastian Lehnhoff
- Sibylle Fröschle
- Die im Modul Lehrenden

Prerequisites

Skills to be acquired in this module
This module integrates current developments in the field in adequate study courses.

Professional competences
The students:

• define and contrast a computer science part, in which they are specialised, in detail or evaluate computer science in general
• recognise and evaluate applied techniques and methods of their subject and are aware of their limits
• identify, structure and solve problems/tasks, also in new or developing subject areas
• apply state of the art and innovative methods to solve problems, if necessary from other disciplines
• are aware of the current limits and contribute to the development of computer science research and technology
• discuss and evaluate recent computer science developments

Methodological competences
The students:

• examine tasks with technical and research literature, write an academic article and present their solutions academically
• evaluate problems/tasks, including new or developing subject areas of their discipline and apply computer science methods for solutions and research
• schedule time processes and resources

Social competences
The students:

• communicate with users and experts convincingly

Self-competences
The students:
- pursue the overall and special computer science development critically
- develop and reflect self-developed hypotheses to theories independently

<table>
<thead>
<tr>
<th>Module contents</th>
<th>See assigned course description, e.g. „Security: Grundlagen“ oder „Security for Cyberphysical Systems“</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended reading</td>
<td>As announced in course</td>
</tr>
<tr>
<td>Language of instruction</td>
<td>German</td>
</tr>
<tr>
<td>Duration (semesters)</td>
<td>1 semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td>unregelmäßig</td>
</tr>
<tr>
<td>Module capacity</td>
<td>Unlimited</td>
</tr>
<tr>
<td>Modulelevel</td>
<td>AS (Akzentsetzung / Accentuation)</td>
</tr>
<tr>
<td>Modularart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td>Lern-/Lehrform / Type of program</td>
<td>S or V</td>
</tr>
<tr>
<td>Examination</td>
<td>Examination periods</td>
</tr>
<tr>
<td>Final exam of module</td>
<td>At the end of the lecture period</td>
</tr>
<tr>
<td>Course type</td>
<td>course or seminar</td>
</tr>
<tr>
<td>SWS</td>
<td>2</td>
</tr>
<tr>
<td>Workload attendance</td>
<td>28 h</td>
</tr>
</tbody>
</table>