inf351 - Special Topics in 'Safety-Critical Systems' II

Module name: Special Topics in 'Safety-Critical Systems' II

Module code: inf351

ECTS credit points: 6.0 KP

Workload: 180 h

Used in degree programmes:
- Master's Programme Computing Science > Mastermodule
- Master's Programme Embedded Systems and Microrobotics > Akzentsetzungsmodule

Contact person:

module responsibility
- Andreas Hein
- Werner Damm

authorized examiners
- Andreas Hein
- Werner Damm

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:
- evaluate and apply tools, technology and methods sophisticatedly
- combine new and original approaches and methods creatively
- evaluate problems/tasks, including new or developing subject areas of their discipline and apply computer science methods for solutions and research

Social competences
The students:
- support team process by their abilities

Self-competences
The students:
- pursue the overall and special computer science development critically
- implement innovative professional activities effectively and independently

<table>
<thead>
<tr>
<th><strong>Module contents</strong></th>
<th>See assigned course description, e.g. „Sicherheitsanalysetechniken“, „Modellbasierter Systementwurf“, ...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommended reading</strong></td>
<td>As announced in course</td>
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<tr>
<td><strong>Language of instruction</strong></td>
<td>German</td>
</tr>
<tr>
<td><strong>Duration (semesters)</strong></td>
<td>1 semester</td>
</tr>
<tr>
<td><strong>Module frequency</strong></td>
<td>halbjährlich</td>
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<tr>
<td><strong>Module capacity</strong></td>
<td>Unlimited</td>
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<tr>
<td><strong>Modulelevel</strong></td>
<td>AS (Akzentsetzung / Accentuation)</td>
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<tr>
<td><strong>Modulart</strong></td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
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<tr>
<td><strong>Lern-/Lehrform / Type of program</strong></td>
<td>2 courses out of V, S, Ü, P, PR</td>
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**Examination**

<table>
<thead>
<tr>
<th><strong>Examination periods</strong></th>
<th><strong>Type of examination</strong></th>
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<tbody>
<tr>
<td>Final exam of module</td>
<td>Portfolio or presentation or oral exam</td>
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**Course type**

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<th><strong>Course selection</strong></th>
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**SWS**

| **4** |

**Workload attendance**

| **56 h** |