inf900 - Group Project

Module label: Group Project
Module code: inf900
Credit points: 24.0 KP
Workload: 720 h

Used in course of study:
- Master's Programme Business Informatics > Kernmodule
- Master's Programme Computing Science > Kernmodule
- Master's Programme Embedded Systems and Microrobotics > Kernmodule
- Master's Programme Engineering of Socio-Technical Systems > Systems Engineering

Contact person:
Module responsibility:
- Die im Modul Lehrenden

Authorized examiners:
- Die im Modul Lehrenden

Entry requirements:
The students get familiar with different software development aspects in a team. Apart from software engineering knowledge and skills they develop key competences like project management, teamwork, problem solving competence and conflict management.

Additionally, students develop special knowledge, skills and competences from the project group topic.

Skills to be acquired in this module:

Professional competence:
The students:
- characterise and apply computer science basics (algorithms, data structures, programming, basics of practical, technical and theoretical computer science)
- define and describe essential mathematical, logical and physical basics of computer science
- define and illustrate the core disciplines of computer science (theoretical, practical and technical computer science)

Methodological competence:
The students:
- examine problems, use formal methods to phrase and analyze them appropriately
- evaluate problems by the use of technical and scientific literature
- reflect on a scientific topic and write a scientific seminar paper under guidance and present their findings

Social competence:
The students:
- integrate criticism into their own actions
- respect team decisions
- communicate with users and experts convincingly

Self-competence:
The students:
- take on project management tasks
- pursue the overall and special computer science development critically
- implement innovative professional activities effectively and independently
- recognise their abilities and extend them purposefully
- reflect their self-perception and actions with regard to professional, methodological and social aspects
- develop and reflect self-developed hypotheses to theories independently
- work in their field independently

Module contents:
Cooperative development of a large-scale computer science project. This project generally includes the (further) development of a hard or software system.
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<thead>
<tr>
<th><strong>Reader’s advisory</strong></th>
<th>According to the assigned task</th>
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<tbody>
<tr>
<td><strong>Links</strong></td>
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<tr>
<td><strong>Languages of instruction</strong></td>
<td>German, English</td>
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<tr>
<td><strong>Duration (semesters)</strong></td>
<td>2 Semester</td>
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<tr>
<td><strong>Module frequency</strong></td>
<td>semi-annual</td>
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<td><strong>Module capacity</strong></td>
<td>unlimited</td>
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<td><strong>Modullevel</strong></td>
<td>AS (Akzentsetzung / Accentuation)</td>
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<td><strong>Modulart</strong></td>
<td>Pflicht o. Wahlpflicht / compulsory or optional</td>
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<tr>
<td><strong>Lern-/Lehrform / Type of program</strong></td>
<td>PG</td>
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| **Vorkenntnisse / Previous knowledge** | - Programmierkurs  
- Softwaretechnik  
- Soft Skills |

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<thead>
<tr>
<th><strong>Examination</strong></th>
<th><strong>Time of examination</strong></th>
<th><strong>Type of examination</strong></th>
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<tbody>
<tr>
<td>Final exam of module</td>
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<td>Active involvement, presentation, final report, project assessment</td>
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<tr>
<th><strong>Course type</strong></th>
<th>Project group</th>
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<tr>
<td><strong>SWS</strong></td>
<td>8.00</td>
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<tr>
<td><strong>Frequency</strong></td>
<td>SuSe and WiSe</td>
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<td><strong>Workload attendance</strong></td>
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