inf108 - Requirements Engineering and Management

Module label
Requirements Engineering and Management

Module code
inf108

Credit points
6.0 KP

Workload
180 h

Used in course of study
- Master's Programme Business Informatics > Bereichswahlmodule
- Master's Programme Computing Science > Praktische Informatik

Contact person
Module responsibility
- Andreas Winter
- Die im Modul Lehrenden

Authorized examiners
- Andreas Winter
- Die im Modul Lehrenden

Entry requirements
The objective of the module "Requirements Engineering and Management" is to convey the core concepts and technology of the requirements engineering and of the requirements management. In the second half of the semester these methods and techniques will be carried out practically to develop an exemplary requirements definition.

Skills to be acquired in this module

Professional competence
The students:
- integrate the process of requirements engineering in the software engineering process
- name the methods and tools of requirements engineering and management
- select methods and tools from requirements engineering and management to solve given problems appropriately
- illustrate the key tasks of the requirements engineering and management
- name the essential concepts to develop and to structure ideas
- discuss the methods of determination requirements and develop validation concepts
- differentiate the software development core activities in greater detail

Methodological competence
The students:
- apply the methods of determination, documentation, validation and confirmation of requirements and
- create a comprehensive requirement document in group work

Social competence
The students:
- communicate with all stakeholders dealing with software development
- design project visions in groups
- collect requirements in interviews
- design requirements for software systems collaboratively

Self-competence
The students:
- reflect their problem-solving behaviour by applying requirements engineering and management capabilities

Module contents
The module deals with requirements analysis core concepts as well as methods and techniques of requirements engineering and management. Topics of this module are:
- the necessity of requirements engineering and management
- the requirements engineering process in the software development process
- requirements engineering process (participants, documents, activities)
- understanding the application domains (vision development, system environment documentation, domain model development, use case identification)
- requirements collection (functional and non-functional requirements, requirements collection, requirements documentation, requirements validation, requirements needs)
- requirements management

**Reader's advisory**


**Links**

<table>
<thead>
<tr>
<th>Language of instruction</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration (semesters)</td>
<td>1 Semester</td>
</tr>
<tr>
<td>Module frequency</td>
<td>jährlich</td>
</tr>
<tr>
<td>Module capacity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Module level</td>
<td>MM (Mastermodul / Master module)</td>
</tr>
<tr>
<td>Modulart</td>
<td>je nach Studiengang Pflicht oder Wahlpflicht</td>
</tr>
<tr>
<td>Lern-/Lehrform / Type of program</td>
<td>Knowledge from Softwaretechnik und Softwaretechnik II</td>
</tr>
<tr>
<td>Vorkenntnisse / Previous knowledge</td>
<td>Knowledge from Softwaretechnik und Softwaretechnik II</td>
</tr>
</tbody>
</table>

**Examination**

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
<th>Portfolio: report and short oral exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final exam of module</td>
<td>At the end of the lecture period</td>
<td>SWS</td>
<td></td>
</tr>
</tbody>
</table>

**Course type**

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Practical</th>
<th>Total time of attendance for the module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment</td>
<td>SWS</td>
<td>2.00</td>
</tr>
<tr>
<td>Frequency</td>
<td>Workload attendance</td>
<td>28 h</td>
</tr>
<tr>
<td>WiSe</td>
<td>28 h</td>
<td>28 h</td>
</tr>
<tr>
<td>WiSe</td>
<td>28 h</td>
<td>28 h</td>
</tr>
</tbody>
</table>