

Modulbeschreibung

Project System Development

Module numbers:	36.4810 [Project System Development I 36.4806; Project System Development II 36.4808]
Language:	english
Study programme:	JIM 2013 - 3. Semester JIM 2006
Type of course:	Pro = Project
Weekly hours:	4 (per semester)
Credit Points:	15
Exam:	Evaluation of the presentation and the written presentation of the project results of the second semester; in addition to these two partial performances, the overall grade also takes into account the commitment and active participation during the entire project phase.
PVL (e.g. Practical):	Presentation and written presentation of the project results of the first semester (in what proportion these two partial performances will be included in the overall evaluation of PVL will be announced at the beginning of the project)
PVL percentage:	50%
Learning objectives:	<p>Students are capable to</p> <ul style="list-style-type: none"> • develop personal ethical and professional practices; to understand and apply a proven project management and quality assurance methodology; • develop abilities to comprehend and to negotiate user requirements and project specification; • develop abilities to perform high level feasibility analysis, risk analysis, economic analysis and ethical analysis, and high level design and synthesis skills; • develop personal professional project and time management practices; • develop interpersonal communication abilities including abilities to produce project reports, advertising flyers / posters and presentations. <p>Generic skills to be taught</p> <ul style="list-style-type: none"> • the ability to evaluate information • the ability to speak and write clearly, coherently and creatively • the ability to select and organize information and communicate it accurately, cogently, coherently, creatively and ethically • the ability to deploy critically evaluated information to practical ends • the ability to select and use appropriate tools and technologies • the ability to use online technologies effectively and ethically • the acquisition of coherent and disciplined sets of skills, knowledge, values and professional ethics from at least one discipline area • the ability to reflect on and evaluate learning, and to learn independently in a self directed manner
Content:	<p>Projects involve the application of project management and problem-solving techniques to create and deliver custom IT/CS solutions to satisfy a client's needs.</p> <p>In particular the content of the course comprises the following components:</p> <ul style="list-style-type: none"> • Clarification of the project, involving clear statements of problem identification, scope, rationale, audience and aims. • Description of the type of outcome required, including the nature of inputs and outputs, hardware and software requirements, further clarification of scope and performance requirements. Where appropriate, a survey of relevant literature. • Planning the management of the project development process, using a recognized Project Management methodology. This will typically include a high level design, a risk analysis, a cost analysis, a feasibility analysis, and a project plan/schedule. • Extending the high level design, and a feasibility analysis, into a detailed design • Implementation of the design with the chosen software and hardware. Testing performance by checking for logical and syntactical errors, and system performance against specifications. • Making judgments about the quality of the product, and the process of development including time management issues. Documentation of all phases of the project, together with manuals reports.
Literature:	will be announced at the beginning of the project
Lecture style / Teaching aids:	Presentation using the usual current media; scientific publications; project-related documents
Responsibility:	Studiengangskoordinator Studiengang Joint International Master in Computer Science
Professional competencies:	<ul style="list-style-type: none"> • formal, algorithmic, mathematical competencies: depending on subject • analytical, design and implementation competencies: depending on subject • technological competencies: depending on subject • capability for scientific work: depending on subject
Interdisciplinary competencies:	<ul style="list-style-type: none"> • project related competencies: high • interdisciplinary expertise: the addressed areas depend on the topic • social and self-competencies: leadership competence, ability to work in a team, analytical competence, judging competence, deciding competence, competence of knowledge acquisition, presentational, documentary, teaching and mentoring competence