Bachelor Project 2

Code
IT-BPR2

Version
2.0

Offered by
ICT Engineering

ECTS
15

Prerequisites
BPR1 is expected to be approved before BPR2 begins.

Main purpose
The purpose of the Bachelor Project 2 is to evolve the student's ability to solve a relevant Software Engineering problem and document the solution. In a group, students must be able to analyse, design, implement and test complex problems and be able to carry out well-documented and tested solutions.

Each bachelor project group must consist of 2-3 students. One-person groups are not allowed!

Knowledge
After having completed this course, the students must master the knowledge about:

- Searching and scoping relevant project information
- Project and team work planning
- Communication and documentation skills
- Testing

Skills

After having completed this course, the student must master to:

- Identify and justify problems and their context
- Select and argue for choice of method and reflect critical and said methods
- Find and assess relevant literature within the problem domain
- Present the result for an audience of engineers

Competences
After having completed this course, the students must be able to:

- Describe and delimit a large Software Engineering Project
- Select and use relevant theories and methods to solve the problem
- Plan and structure the project within the BPR2 time frame
- Initiate the preliminary steps in a system development process, leading to a clearly defined requirements capture, use cases as well as object and behavior analysis.
- Work successfully in a project group with the objective of solving a well-defined engineering problem.

Topics

Teaching methods and study activities

Supervision, theory and independent work, project documentation and presentation.

The Bachelor Project (BPR2) is based on an Software Engineering problem with a project description made in the BPR1 course.

The BPR2 project must contain:

Data collection
Brainstorm techniques
Project methods
Reference/citation model and literature search
Document version control
Requirements: How can you test the requirements, which test results do you expect for each test case.
Analysis: Risk analysis (technology challenges, error implementations, Data loss, delays in order fulfillments), Actor/persona description, Use cases
Design: System architecture, Class diagram, Layer model, Mockup model, Usability, GUI, Exceptions
Implementation: Coding of project
Test: Unit test, Integration test, System test, Accept test
Automatic build servers – including automated tests
Project results
Evaluation/discussion of project results
Time schedule and milestones
Work flow management
Group dynamics
Report writing
Presentation techniques

The Project Report must have the following extent:
20-30 pages per student plus appendices.

Resources

To be announced on Itslearning.

Evaluation

Examination

Exam prerequisites:
Passed all other courses of the bachelor programme.

Type of exam:
Oral group exam with individual assessment.
Exam is based on the project report(s), uploaded in WISEflow according to deadline.
Group presentation of the project (20 minutes) followed by a joint examination of 20 minutes times

the number of group members, including voting.
Individual grades are given on the basis of an overall assessment of the submitted work as well as the individual´s performance during the examination.
External assessment.

Tools allowed:
N/A

Re-exam:
Based on the feedback the students have received after the ordinary exam, they must prepare a new project, or the failed project must be improved.
There is no supervisor attached when (re)doing the project.

Grading criteria
Grading according to the 7-point grading scale.

Additional information

Responsible
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Course type
Compulsory Course for all ICT Engineering
Project
7. semester
Web 6 og 7

Keywords
Bachelor project