COURSE SYLLABUS

Kravhantering och produkthantering
Requirements Engineering and Product Management
7.5 credits (7,5 högskolepoäng)

Course code: PA2591
Main field of study: Software Engineering
Disciplinary domain: Technology
Education level: Second cycle
Specialization: A1N - Second cycle, has only first cycle course/s as entry requirements

Language of instruction: English
Applies from: 2022-08-29
Approved: 2022-03-01

1. Decision

This course is established by Dean 2022-02-02. The course syllabus is approved by Head of Department of Software Engineering 2022-03-01 and applies from 2022-08-29.

2. Entry requirements

Admission to the course requires completed courses comprising at least 120 credits, of which at least 90 credits in the following areas: Software Engineering, Computer Science, Information Systems, Mechanical Engineering or Industrial Economy. In addition, the students should have participated in a course of at least 7.5 credits in Basic Systems or Software Engineering, or 7.5 credits in Systems or Software Development projects in groups.

3. Objective and content

3.1 Objective

The course focuses on basic and advanced knowledge and skills within continuous requirements engineering and product management in large-scale development of software intensive systems and products in a changing and cost sensitive reality. The course provides the students with both a theoretical and practical application of methods and techniques for requirements engineering and product management.
The course also looks at product management and its relation to innovation and requirements engineering.

3.2 Content

The course covers the following contents:
•Processes for continuous requirements engineering and product management
•Methods for continuous requirements engineering and product management
•Methods for finding the right stakeholders to the system
•Product strategies and business models, including asymmetric business models and versatile platforms
•Elicitation, specification, validation and analysis of requirements
•Quality assurance of requirements
•Release planning and prioritization of requirements
•Value-based requirements engineering
•Connecting product strategy, business model, and requirements, and subsequent development phases
•Product Management as an interface between executive management and software development

4. Learning outcomes

The following learning outcomes are examined in the course:

4.1 Knowledge and understanding

On completion of the course, the student will be able to:
• Understand and describe how requirements engineering and product management are conducted in terms of common processes and techniques.
• Understand and describe the challenges of requirement engineering and product management.

4.2 Competence and skills

On completion of the course, the student will be able to:

• Collect and document requirements in accordance with the industry standard.
• Define a product strategy with its associated business model and align the strategy with the product's requirements.

4.3 Judgement and approach
On completion of the course, the student will be able to:
• assess existing requirements engineering and product management practice in a software project or business.
• define a product strategy with associated business model and link strategy and business model to the product's requirements.

5. Learning activities
The teaching consists of lectures and video lectures to introduce topics requirements and product management. The student is expected to take an active part through discussion based on the assigned research literature, as well as opportunities to work practically with requirements engineering and product management through a project. The course ends with a written exam.

6. Assessment and grading
Modes of examinations of the course

Code	Module	Credits	Grade
2210	Project Assignment	5 credits	AF
2220	On-campus Examination	2.5 credits	AF

The course will be graded A Excellent, B Very good, C Good, D Satisfactory, E Sufficient, FX Fail, supplementation required, F Fail.

The information before a course occasion states the assessment criteria and make explicit in which modes of examination that the learning outcomes are assessed.

An examiner can, after consulting the Disability Advisor at BTH, decide on a customized examination form for a student with a long-term disability to be provided with an examination equivalent to one given to a student who is not disabled.

7. Course evaluation
The course evaluation should be carried out in line with BTH:s course evaluation template and process.

8. Restrictions regarding degree
The course can form part of a degree but not together with another course the content of which completely or partly corresponds with the contents of this course.

9. Course literature and other materials of instruction
Course materials, research articles and recommendations for further reading are provided via course's online platform.