COURSE SYLLABUS

Produkthantering och kravhantering för digitala miljöer
Product and Requirements Management for Digital Environments
7.5 credits (7,5 högskolepoäng)

Course code: PA2578
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

Subject area: Computer Technology
Language of instruction: English
Applies from: 2020-08-31
Approved: 2020-03-01

1. Decision

This course is established by Dean 2019-11-25. The course syllabus is approved by Head of Department of Software Engineering 2020-03-01 and applies from 2020-08-31.

2. Entry requirements

At least 90 credits of which at least 60 credits are within a technical subject.

3. Objective and content

3.1 Objective

The goal of this course is to offer substantial training in continuous requirements engineering and product management for a digital environment. This includes an understanding of how digitalisation changes the environment that companies and government organisations are operating in and what products and services are going to be transformed into digital forms. The course revisits the business models that digitalisation offers for software-intensive products and services and help participants to increase the understanding of how to increase the economic and organisational benefits from digitalisation. The course prepares the students to handle requirements for software-intensive products in digital environments using cost-efficient methods and processes. The course discusses the challenges that large-scale requirements engineering brings. The course connects to the industrial practice of requirements engineering and product management for software-intensive products and services.

3.2 Content

The course includes four modules
1. Digitalisation in work environment – possibilities and challenges associated with digitalisation in the working environment and the relationship between digitalisation and business models, products, and services offered.
2. Value, strategy, and business models – how digitalisation impact the identification and quantification of value in your environment and how to plan product strategies for software-intensive products and services.
3. Requirements engineering and prioritization – processes, methods, and templates used for managing and prioritizing requirements.
4. Product and release management – processes and method for creating product strategies and realising them in a series of product releases with desired functionality and quality.

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:
• Be able to explain the challenges and possibilities that digitalisation brings.
• Be able to explain how digitalisation is going to impact business models and routines.
• Be able to explain the challenges with requirements management and software product management.
• Be able to explain the challenges with planning and delivering software-intensive products and services.

4.2 Competence and skills

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

• Be able to analyse the possibilities and challenges from digitalisation of their working
• Apply business modeling techniques for planning software-intensive products and services
• Apply appropriate techniques and methods for large-scale requirements engineering
• Be able to plan the content of software-intensive products and their delivery strategy
• Be able to analyze important value aspects that digitalization impacts and changes

4.3 Judgement and approach

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

• Describe and clarify the challenges associated with and be able to apply the appropriate techniques and methods to overcome the challenges associated with continuous requirements engineering and product management. Both in terms of processes and techniques.

• Describe and clarify how digitalisation impacts their working environment and organisation they belong to and if it can lead to new processes, products, or increased revenue or product quality.

5. Learning activities

The teaching takes the form of online lectures, recorded video material, together with written material, literature, and research literature. The tasks are designed to help the student reflect on past experiences, literature, and research articles, and relate these to each other. During the course, communication, feedback, and discussions with teachers and other participants will take place via e-mail, the course's learning platform, and online meetings. The examination takes place through written reports. Instruction is given in English.

6. Assessment and grading

Modes of examinations of the course

Code	Module	Credits	Grade
2010	Written assignment 1	2.5 credits	GU
2020	Written assignment 2	2.5 credits	GU
2030	Written assignment 3	2.5 credits	GU

The course will be graded G Pass, UX Fail, supplementation required, U Fail.

The course-PM for each course revision should include 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

Material such as research articles and other course materials is provided via the course's online platform and recommendations for further reading.

10. Additional information

This course replaces the course PA2543