



COURSE SYLLABUS

Product Specification and Requirements Management, 6 credits

Produktspecificering och kravhantering, 6 högskolepoäng

Course Code:	TPKS26	Education Cycle:	Second-cycle level
Confirmed by:	Dean Sep 1, 2016	Disciplinary domain:	Technology (95%) and social sciences (5%)
Valid From:	Aug 1, 2016	Subject group:	DT1
Version:	1	Specialised in:	A1F
Reg number:	JTH 2016/3548-313	Main field of study:	Product Development

Intended Learning Outcomes (ILO)

After completing the course, the student shall

Knowledge and understanding

- be familiar with the fundamental concepts of product specification
- display knowledge of the different roles engaged in product specification
- demonstrate comprehension of the methods and techniques for eliciting, capturing and documenting requirements

Skills and abilities

- demonstrate skills of engaging with product stakeholders
- demonstrate ability to prepare a product specification
- demonstrate ability to select and use modern tools for requirements management

Judgement and approach

- demonstrate ability to assess the quality of a product specification

Contents

The course serves as a retrospective of previous courses in software engineering and thus draws out the importance of requirements management as a means of ensuring successful software product delivery. It covers how to discover and capture requirements, and how to shape and structure them into a product specification. The focus is on the practical steps, models and techniques needed to obtain a complete, relevant and rigorous set of requirements to guide product development.

The course includes the following topics:

- Engaging with product stakeholders
- The roles of the product owner, the business analyst and the systems analyst
- Capturing and documenting requirements (including use cases, user stories and product backlogs)
- Using models to conduct robustness analysis

- Formal requirements specifications
- Tracking requirements, and their changes, through development to delivery
- Requirements negotiation (including QFD, Quality Function Deployment)

Type of instruction

The course will consist of lectures, seminars, exercises and practical work.

The teaching is conducted in English.

Prerequisites

Passed courses at least 90 credits within the major subject Computer Engineering, Electrical Engineering (with relevant courses in Computer Engineering) In addition, completed courses Product Development in Cross-discipline Teams I, 6 credits and (Software Product Architectures - From Chip to Enterprise, 7,5 credits and Software Product Quality Assurance, 6 credits) or (User Experience Design and Enterprise Architecture, 6 credits and IT Architecture, 7,5 credits). Proof of English proficiency is required. (or the equivalent).

Examination and grades

The course is graded 5,4,3 or Fail.

The final grading of the course is based on a weighted fusion of written exam and project work.

Registration of examination:

Name of the Test	Value	Grading
Examination	2 credits	5/4/3/U
Assignments	1 credit	U/G
Project work	3 credits	5/4/3/U

Other information

Exemption from entry requirement allowed according to the selection groups of the program, where the course is included.

Course literature

The literature list for the course will be provided one month before the course starts

Main textbook:

Software Requirements

by Karl Wiegers and Joy Beatty, Microsoft Press, 2013, 3rd Edition.

Additional literature:

User Story Mapping: Discover the Whole Story, Build the Right Product

by Jeff Patton and Peter Economy,

O'Reilly, 2014.

Agile Software Requirements: Lean Requirements for Teams, Programs, and the Enterprise

by Dean Leffingwell,

Pearson Education, 2011.

Agile Product Management with Scrum: Creating Products that Customers Love
by Roman Pichler,
Addison-Wesley, 2010.