KURSPLAN
Produktutveckling i interdisciplinära team - 1, 9 högskolepoäng

Product Development in Cross-discipline Teams – 1, 9 credits

Kurskod:	TP1S28	**Utbildningsnivå:**	Avancerad nivå
Fastställd av:	VD 2018-04-06	**Utbildningsområde:**	Tekniska området
Gäller fr.o.m.:	2018-08-01	**Ämnesgrupp:**	DT1
Version:	1	**Fördjupning:**	A1F

Lärandemål

After a successful course, the student shall:

Kunskap och förståelse
- demonstrate comprehension of practical aspects of Agile software product development
- display knowledge of some existing tools for supporting continuous integration and testing

Färdighet och förmåga
- demonstrate the ability to deliver working code in an iterative and incremental fashion
- demonstrate the ability to maintain test suites as requirements and as quality control
- demonstrate the ability to form cross-discipline teams for software product development

Värderingsförmåga och förhållningssätt
- demonstrate the ability to select appropriate completion criteria for an evolving software product
- demonstrate the ability to identify, plan and implement enhancements to an existing software product
- demonstrate an understanding of the role of inspections and retrospectives in improving software product development

Innehåll

The course supports student teams in the specification and delivery of a software product. The requirement for the product may originate from an external company or organisation, from a need internal to the University, or from an original idea from the students. The software product will be developed through an Agile lifecycle, with clearly defined intermediate deliverable points. The course covers the following aspects of software delivery:
- Requirements, design and test specification
- Prototype development and unit testing
- Test-driven development (TDD) and paired programming
- Simplest design, continuous redesign and refactoring
- Integration and system testing
- Behaviour-driven development and acceptance testing

Undervisningsformer

The course will consist primarily of practical work, supported by review seminars and preparation of a written and oral final report. Students will work in teams. The teaching is conducted in English.

Undervisningen bedrivs på engelska.

Förkunskapskrav

Passed courses totaling 180 credits in first cycle, with at least 90 credits in Computer Engineering, Electrical Engineering (with relevant courses in Computer Engineering), or equivalent. The bachelor degree should comprise a minimum of 15 credits in Mathematics. Completed courses in Software Engineering - A Product Perspective (or equivalent). Proof of English proficiency is required.

Examination och betyg

Kursen bedöms med betygen 5, 4, 3 eller Underkänd.

The final grade for the course is based on a balanced set of assessments. The final grade will only be issued after satisfactory completion of all assessments.

Poängregistrering av examinationen för kursen sker enligt följande system:

Examinationsmoment	Omfattning	Betyg
Projektarbete - A	3 hp	5/4/3/U
Projektarbete - B	3 hp	5/4/3/U
Inlämningsuppgift	1 hp	5/4/3/U
Rapport och presentation	2 hp	5/4/3/U

Övrigt

This course will be run part-time over Semester 1 and 2. The code base developed during PDCT Part 1 will be extended and enhanced in PDCT Part 2.

Kurslitteratur

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

The literature list will be announced in the beginning of the course.