



COURSE SYLLABUS

Agile Project, 7.5 credits

Agilt projekt, 7,5 högskolepoäng

Course Code: TAGN18	Education Cycle: First-cycle level
Confirmed by: Dean Dec 4, 2018	Disciplinary domain: Technology
Valid From: Jan 1, 2019	Subject group: DT1
Version: 1	Specialised in: G2F
	Main field of study: Computer Engineering

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding

- display knowledge of Software Engineering theory, including history, terminology, and methods
- display knowledge of the importance of software testing and test-driven development

Skills and abilities

- demonstrate the ability to manage and participate in an Agile project
- demonstrate the ability to cope with changing requirements and conditions in an Agile project
- demonstrate the ability to communicate engineering topics and issues successfully with internal (team members) and external stakeholders (customers)
- demonstrate the ability to analyse development tools (programming languages, libraries, frameworks, etc.) and technical solutions (prototypes, mock-ups, etc.) in terms of relative advantages, disadvantages, risks, qualities, etc.

Judgement and approach

- demonstrate the ability to perform retrospective analysis of software engineering projects, determining success and failure factors and the impact of methods followed
- demonstrate the ability to assess software product readiness for release to market

Contents

The course conveys to students the type of knowledge in software engineering methods, Agile methods, decision making, analysis, leadership, communication, etc. which is needed in order to work as a software engineer in Agile development projects in industry. The course also gives students the ability to apply the skills that they have gained from other courses in the program in order to develop a product or service.

The course includes the following elements:

- Evolution of Software Engineering: history, terminology, and cautionary tales

- A survey of Agile approaches
- A minimalist approach to software documentation
- SCRUM
- The Agile Project – delivering a working application
- Project retrospective
- Taking a software product to market

Type of instruction

Tuition will consist of lectures and project work.

The teaching is conducted in English.

Prerequisites

General entry requirements and completed courses 60 credits in first cycle including completed courses in either Embedded and Mobile Systems (15 credits) or Android Development (9 credits), Leadership and Project Management (6 credits), and Industrial Management, Entrepreneurship and Marketing (6 credits), or the equivalent (or the equivalent).

Examination and grades

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

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.

Registration of examination:

Name of the Test	Value	Grading
Written examination	3 credits	U/G
Project Work ¹	4.5 credits	5/4/3/U

¹ Determines the final grade of the course, which is issued only when all course units have been passed.

Course literature

Literature

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

Title: Agile and Iterative Development: A Manager's Guide

Author: Craig Larman?

Publisher: Addison-Wesley, 2003?

ISBN: 978-0-13-111155-4

Provides a thorough history of the evolution of Agile methods

Title: Software in 30 Days: How Agile Managers Beat the Odds, Delight Their Customers, and Leave Competitors in the Dust?

Author: Ken Schwaber and Jeff Sutherland?

Publisher: Wiley, 2012

ISBN: 978-1-118-20666-9?

Contains "The Scrum Guide" and illustrates putting Scrum into effective use.

Title: The Art of 'Ware

Author: Bruce F. Webster

Publisher: M&T Books (New York, 1995)

ISBN: 978-1558513969

Using the classic Chinese text "The Art of War" as a framework, this book provides a wealth of insight into the challenging business of running a software product business