



IV2032 Kravhantering 7,5 hp

Requirements Engineering

När kurs inte längre ges har student möjlighet att examineras under ytterligare två läsår.

Fastställande

Kursplan för IV2032 gäller från och med VT09

Betygsskala

A, B, C, D, E, FX, F

Utbildningsnivå

Avancerad nivå

Huvudområden

Särskild behörighet

Undervisningsspråk

Undervisningsspråk anges i kurstillfällesinformationen i kurs- och programkatalogen.

Lärandemål

Requirements engineering (RE) plays a fundamental role within the systems development process. The goal of this course is to bring in the concepts, methods and techniques needed in the eliciting, analyzing, documenting, validating, and managing requirements for complex information systems. It explains how requirements engineering fits into a broader systems

development process, and provides an understanding of the main challenges in requirements engineering nowadays.

The students will learn how to:

- Identify stakeholders and their influence on the system requirements.
- Specify functional requirements using different modeling methods.
- Identify and classify non-functional requirements, influences and constraints.
- Negotiate and prioritize requirements.
- Validate requirements.
- Document and trace requirements using computer-based tools.
- Manage changing requirements and establish traceability of changes.
- Practice the different roles in the requirement engineering process, by working in groups.
- Analyze the practical use of the latest scientific contributions within the RE subject.

Kursinnehåll

Since requirements management is a multidisciplinary field and closely related to areas such as general management, project and product management, product marketing, and industrial design, students from a variety of disciplines can benefit from this course. The following subjects will be handled during the course:

- Roles and actors in the requirement engineering process.
- Classification of requirements.
- Contemporary methods for collecting and analyzing stakeholder requirements.
- Techniques for validation of quality of collected requirements.
- Computer-based tools for documenting and managing requirements.
- Techniques for linking requirements to design models and vice-versa.

Kursupplägg

Lectures, lessons and project work.

Kurslitteratur

Preliminary:

Gerald Kontonya and Ian Sommerville: Requirements Engineering: Processes and Techniques, John Wiley & Sons, 2002, 0471972088

Course outline, lecture slides, reading articles

Examination

- PRO1 - Projektarbete, 3,5 hp, betygsskala: P, F
- TEN1 - Tentamen, 4,0 hp, betygsskala: A, B, C, D, E, FX, F

Examinator beslutar, baserat på rekommendation från KTH:s handläggare av stöd till studenter med funktionsnedsättning, om eventuell anpassad examination för studenter med

dokumenterad, varaktig funktionsnedsättning.

Examinator får medge annan examinationsform vid omexamination av enstaka studenter.

The course is examined through a project and a written exam.

The written exam concerns the grades F, Fx, E, D, C, B, and A, and for the project P or F are applied.

For the course as a whole, the final grade is based on the grade of the exam. The student needs also to pass the project.

Etiskt förhållningssätt

- Vid grupparbete har alla i gruppen ansvar för gruppens arbete.
- Vid examination ska varje student ärligt redovisa hjälp som erhållits och källor som använts.
- Vid muntlig examination ska varje student kunna redogöra för hela uppgiften och hela lösningen.