EH2790 Requirements Engineering, Introductory Course 4.5 credits

Kravhantering, introduktionskurs

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for EH2790 valid from Autumn 2013

Grading scale

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

Education cycle

Second cycle

Main field of study

Electrical Engineering

Specific prerequisites

För fristående kursstuderande: 120hp samt engelska B eller motsvarande

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

Upon course completion, a participants shall be able to:

- Explain and give examples of the context of requirements engineering. Specifically to
- Explain the significance of the early phases in development and procurement projects
- Explain the difference between market driven and customer driven development
- Explain what signifies requirements engineering in a development and a procurement project.
- To explain and give examples of common process phases of requirements engineering and for each process phase explain and give examples of common
- Participants and stakeholders
- Documents
- Activities
- Methods
- Tools
- Describe and apply methods for modeling systems and system environments from technical as well as business oriented perspective and based on such models to
- Elicit system requirements
- Determine system constraints
- Explain methods for formal evaluations of tender offers from system suppliers.
- Analyze and appreciate the utility of using different methods, or combination of methods, for requirements elicitation given a set of circumstances.
- Apply established methods and tools for requirements elicitation from different stakeholders
- Apply rules of documentation for requirements specifications
- Describe and apply methods for requirements analysis and negotiation, specifically to
- Describe available methods for requirements prioritization and to apply at least one of these methods.
- Apply methods and tools for requirements management from a life-cycle perspective, i.e. from the birth of the development/procurement project to the delivery and operations of the product.

Course contents

The main topics of the course are:

- The role of Requirements Engineering in the software development process.

- The role of Requirements Engineering in the software procurement process
- The difference between the User Needs Statement and the requirements specification
- The concept of stakeholders
- Creation of a vision statement for a system and identify stakeholders
- The difference, and be able to identify, design constraints and requirements.

Examination

- SEM1 - Lectures, 1.5 credits, grading scale: P, F
- PRO2 - Project, 1.5 credits, grading scale: P, F
- PRO1 - Project, 1.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.