FAH3003 Advanced Traveler Information Systems 7.5 credits

Avancerade informationsystem för resenärer

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

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

Establishment

Course syllabus for FAH3003 valid from Autumn 2010

Grading scale

Education cycle

Third cycle

Specific prerequisites

The main target group is the PhD-students in the National Postgraduate School of ITS. Other students with an interest in ITS are also welcome.

Language of instruction

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

Intended learning outcomes

The course will examine the state of the art and state of practice of traveler informations systems. The focus will be on:

1. addressing the main technological and implementation challenges associated with traveler information systems
2. synthesize findings from teh literature and experience from around the world
3. propose alternative future designs

After the course teh participants should be able to:

- describe typical traveler information services and applications
- discuss technical aspects of traveler information systems
- describe potential and limitations of existing approaches
- develop and evaluate alerntive system designs and business models

Course contents

Provision of traffic information is one of the earliest applications of ITS. A number of systems and denomstration projects have been proposed and demonstraded (e.g. TRAVTEK, AD-VANDE, AUTOGUITE, ALISCOUT, VICS, EASYWAY, WISETRIP, IN-TIME, MOBITRANS, etc).

Important topics related to these systems that will be covered through presentations, reviews, guest lecturers, and group work include:

1. Introduction to traveler information systems, history and current status
2. Models and algorithms for generation of reliable traffic information
3. Data Collection Technologies
4. Information dissemination technologies
5. Detailed review of systems and their principles
6. User acceptance and related issues
7. Business models and implementation
8. Trends and future directions in traveler information systems

Course literature

Relaterad litteratur kommer att delas ut under mötena.

Examination

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.

P/F

Other requirements for final grade

The participants will be assessed based on the following elements:

- final report (technical aspects, organization and structure, completeness)
- presentation, and
- attendance and active participation in discussions during all meetings

Passing all elements above is mandatory for receiving an overalla "pass" grade in the course.

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.