



HI2010 Medical Information and Communication Systems 6.0 credits

Medicinska informations- och kommunikationssystem

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

Establishment

Course syllabus for HI2010 valid from Autumn 2019

Grading scale

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

Education cycle

Second cycle

Main field of study

Information and Communication Technology

Specific prerequisites

Language of instruction

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

Intended learning outcomes

This course is an introduction and survey of information and communication systems for applications in medicine, health and sports.

By the end of the course the students should have basic knowledge about:

- processing of physiological signals
- wireless sensors and mobile applications in health and sports
- health informatics
- medical information systems and communication protocols
- ICT support functions in healthcare and preventive
- program development and applications in healthcare
- the different links in the chain from a patient's medical data to an end-user of an ICT health service

Course contents

- Introduction to signal processing
- Introduction till health informatics
- Wireless sensors and mobile applications in medicine, healthcare and sports
- Data communications and application protocols in medical and health applications
- Medical information and communication systems
- ICT support in healthcare and physical training

Examination

- RED1 - Account, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Lab Work, 2.0 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.

Passed presentations (RED1; 4 credits), grade scale A-F
Passed laboratory work (LAB1; 2 credits), grade scale P/F

Final grade, grade scale A-F

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.