CM1004 Programme Integrating course in Medical Engineering 3.0 credits

Programsammanhållande kurs i medicinsk teknik

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 CM1004 valid from Autumn 2023

Grading scale

P, F

Education cycle

First cycle

Main field of study

Medical Engineering

Specific prerequisites

Language of instruction

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

Intended learning outcomes

The aim of the course is to introduce and explain the engineering role and the meaning of the various objectives of the engineering education. The course should also serve as a course in which the educational program's structure is clarified, the various upcoming courses in the education are presented and the connection between the courses in the education program and the degree objectives is emphasized.

Having passed the course, the student should be able to:

use academic calendars, course syllabuses, intended learning outcomes and grading criteria to plan their studies on both short and long view

plan and carry out assignments in stipulated time

make well justified specialisation and course choices

review critically and reflect on both the set-up and implementation of the education as well as their own study achievements

reflect on different topics relevant for the education and the professional role, such as progression in subject knowledge and generic skills, plagiarism, own responsibility, study technique, procrastination, internationalisation, health, minorities and equality, student influence and quality of education

identify their need for additional knowledge and continuously develop their competence

analyze and evaluate social and ethical consequences of applications of medical engineering

account for some important events in the history of medical engineering

carry out an academic study of a given topic and present it orally and in writing

in order to

obtain an overall picture of the education and thereby better understanding of the importance of each individual course

make informed choices both during the education and thereafter

influence the development of the program.

Course contents

Introduction to socially and economically sustainable development as well as ethical aspects in the field of technology

Group work and group dynamics

Information retrieval, basic science theory and source criticism

Oral and written presentation technique

How do course syllabuses, intended learning outcomes, grading criteria, and examination work at KTH?

Programme objectives, general skills, the main thread of the programme, lifelong learning.

Minorities and equality, ergonomics and mental health, internationalisation, the professional role.

The structure of the Medical Engineering programme, possible choices, Master's (120 credits) programmes, employability.

Evaluation of the programme, quality development, student influence.

Study experience, plagiarism and own responsibility, procrastination, self-reflection- what do I want with my education?

History of medical engineeering

Examination

- SEM1 - Seminars and assignments, 1.0 credits, grading scale: P, F
- SEM2 - Seminars and assignments, 1.0 credits, grading scale: P, F
- SEM3 - Seminars and assignments, 1.0 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.

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.