



# CM205V Medical Technology Management and Operation in Hospital Organizations 5.0 credits

Förvaltning och drift av medicinteknisk utrustning på det stora sjukhuset

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 CM205V valid from Autumn 2022

## Grading scale

P, F

## Education cycle

Second cycle

## Main field of study

Medical Engineering

## Specific prerequisites

Bachelor's degree in engineering or biomedical science. English B

## Language of instruction

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

## Intended learning outcomes

After passing the course, the student should be able to:

- Describe the management life cycle of a medical device (from procurement to end of life)
- Describe how a large hospital can be organized with regard to management of medical equipment
- Identify collaboration challenges between administrations, operating departments, operations and suppliers of medical equipment in a major hospital
- Identify which actors in the hospital who would be involved in a procurement of a major medical technology equipment and describe different roles and responsibilities

## Course contents

The course includes the following topics:

- The organization of a large hospital with regard to the management and development of medical equipment.
- Management of surgical equipment (operating tables, integration solutions, operating microscopes, etc.)
- Management of Angio-room (MRI equipment, ultrasound, navigation equipment, etc.)
- Management of monitoring systems (anesthesia workstations, ventilators, etc)
- Management of hospital-wide equipment

## Examination

- TEN1 - Written exam, 5.0 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.