CM206V MT and IT Systems Integration in Hospital Organizations 5.0 credits

MT- och IT-system i det integrerade och digitala sjukhuset

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

Establishment

Course syllabus for CM206V 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 a workflow from the time the patient meets his first remit to discharge
- Apply ITIL processes for different steps in an integrated MT / IT system, examples can be change management, incidents and problem solving / follow-up
- Describe what the management of an integrated MT / IT system over the life cycle
- Plan maintenance in, for example, a 365/24 patient-critical system
- Identify and troubleshoot a critical monitoring system within IVA/ICU operations.

Course contents

The course includes the following topics:

- IT system; Data management and network support infrastructure
- MT Systems; Challenges for medical equipment, network interconnection and IT system data storage in operations and research
- System integration; Integrated solutions at Karolinska University Hospital
- Security and privacy; Applicable standards and regulations

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.

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.