Medical Informatics

Medical informatics is about computer applications in health care. Computer systems are important tools in most types of care activities. Usability, safety and security are important requirements for success.

The course will give you a base for applying information technology in medicine and health care. We will explain some important concepts and problem areas. Especially we will focus on what is needed for development of efficient and usable IT-systems in health care.

You will learn:
- Medical documentation, patient records and communication
- Medical terminology
- Medical knowledge representation,
- Medical image processing
- Modelling and simulation in diagnosis and therapy
- Decision-making and decision support systems
- Design of user interfaces in health care
- Standards, laws and regulations

You will also perform an assignment, where you shall analyse an health care IT-system in practical use.

We will make site visits where we will see and learn more about IT applications in health care and medicine.

Mobile systems will be important in tomorrow’s health care.

Many fields of health care lack efficient information support. In the future also such areas could benefit from efficient and usable support systems. You will learn how to develop such ideas!

Care activities are complex and today most often supported by different IT-systems

Telemedicine and the use of images are becoming more important.
Systems support creation, storing, processing, analysis and communication of images