

Course Title: Health and Disease Core Competencies**Coordinating Unit:** Faculty of Digital Engineering – Digital Health and Personalized Medicine**Semester:** 1 (2018/2019) **Credits:** 6**Lecturers:** Böttinger, Sachs, Drimalla, et.al.**Description:**

This course addresses the bridging module “Introduction to Principles in Medicine”. It is designed to equip students from an informatics/digital engineering background with core competencies in understanding and evaluating health and disease topics.

The course imparts a working knowledge in systems medicine, medical diagnostics and therapeutics, evidence-based medicine and good clinical practice, health behavior, preventive medicine, and taxonomy of diseases. A second teaching block is designed to cover topics in mental health and neuropsychiatric diseases, chronic diseases, infectious disorders, and concepts in alternative medicine. Students will learn to comprehend, assess and apply health and disease-related information in making and communicating decisions in the digital health context.

Learning Objectives:

- Understand the concepts, definitions, and terms differentiating health and disease in the practice of medicine
- Ability to critically assess impact of health and disease topics in engineering and implementing digital solutions
- Critically assess impact of medical challenges and opportunities in digital health context
- Learn to make and communicate assessments and decisions of health and disease issues in development and implementation of digital health solutions
- Ability to assess scope and sustainable benefits of digital tools, applications, and information in health behavior, prevention and management of disease

Applicable Module: Bridge Module ‘Introduction to Principles of Medicine’