

COURSE DESCRIPTION

MEDICAL EQUIPMENT

Course title Medical Equipment	Kursustitel Medicinsk udstyr
Exam code / Course code BI2MU--KME / F27BI2MUUV	Approved 28.04.26
Level and semester BA 4th semester	Field of study Industrial Design
ECTS 12,5	Responsible Per Voss Nielsen
Exam form Semester exam Combination exam: Oral defence and design product	Assessment 7-point grading scale The exam is an overall evaluation of the presented design product and the oral defence
Censor External	Extent/duration of exam The duration of the total semester exam is 60 minutes: 20 minutes for the student's presentation 20 minutes for discussion 20 minutes for deliberation and announcement
Group exam It is not possible to take the semester exam as a group exam.	Prerequisite As a mandatory prerequisite for participation in the exam, the student must deliver a learning portfolio for the semester before a deadline set by the study administration. The learning portfolio is not part of the exam. Exchange students are exempt, and do not need to hand in a learning portfolio to participate in the exam.

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Course objective

The aim of the course is for the student to develop the ability to work with complex user understanding in the development of medical devices.

The course focuses on the interaction between patients and healthcare professionals, as well as the contextual and organizational settings in which medical devices are used. Students work with analyzing and structuring complex user situations and translating insights related to needs, safety, and dignity into coherent and plausible design proposals that can be realized in practice.

Throughout the course, students gain a general understanding of regulatory requirements, documentation, and the designer's responsibility in the development of medical devices.

Learning outcome

At the examination, the student is expected to:

Knowledge:

- *have knowledge of complex user situations in relation to medical devices, including the interaction between patients and healthcare professionals*
- *understand ethical, safety-related, and dignity-related aspects of medical device design*
- *have a general understanding of regulatory and documentation requirements within the medical device industry*

Skills:

- *be able to analyze and structure complex user journeys*
- *be able to translate user insights into concrete design principles*
- *be able to develop a plausible and realizable design proposal within a regulated context*
- *be able to justify design decisions in relation to safety, usability, and responsibility*

Competences:

- *be able to develop a design proposal that balances user needs, functional requirements, and safety considerations*
- *be able to reflect on the designer's responsibility in the development of medical devices*

Generic learning outcome

In addition to the above-mentioned course-specific learning outcomes, the student is also expected to:

- *be able to present own research and project through an oral and visual presentation, that both explains what, why and how, and contains a reflection on the process and the concrete learning along the way*
- *be able to translate design experiments – regardless of the outcome – into learning and development of their own design practice*