Biomedical Engineering

Single subject course

7,5 credits

Medicinsk teknik

ETE180

Valid from: 2017 Spring semester

Determined by
Board of Studies for Chemistry, Biology and Biotechnology

Determining date
2016-10-27
Main field of study

Biomedical Engineering

Course level

First cycle

Advancement level

G1X

Prerequisites

General qualifications for undergraduate studies and english.

Intended learning outcomes

The course aim is to demonstrate the interdisciplinary field of biomedical engineering. The student should be able to illustrate different biomedical technologies used and be able to select the most appropriate technology to diagnostics and therapy. After passing the course the student should be able to:

- Show and give examples of how biomedical engineering is related to a health care process.
- Apply biomedical engineering solutions on physiological problems and questions.
- Communicate biomedical engineering solutions in new and different domains.
- Relate the advantage of biomedical engineering in relation to its costs.
- Describe and value different biomedical engineering technologies and be able to choose the most suitable for a specific diagnose or therapy.

Course content

The course is subdivided into themes:
Theme 1: Introduction - terminology - medical safety.
Theme 2: Biopotentials.
Theme 3: Biofluids and respiration.
Theme 4: Medical imaging.
Theme 5: Medical informatics and data.

Teaching and working methods

Distance education utilizing a virtual learning environment, LISAM. Cooperative education partnership with Umeå universitet.

Examination

TEN1 Home assignments and seminars U,G 7.5 credits

Grades

F, P

Subject area

Other Subjects within Technology

Disciplinary domain

Medicine

Department

Department of Biomedical Engineering (IMT)

Director of Studies

Linda Rattfält

Examiner

Göran Salerud

Course website and other links
https://www.imt.liu.se/edu/distance/

**Education components**

| Not specified | 0 h |