

COURSE DETAIL

NEUROENGINEERING

Country

Sweden

Host Institution

Lund University

Program(s)

Lund University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Bioengineering

UCEAP Course Number

117

UCEAP Course Suffix**UCEAP Official Title**

NEUROENGINEERING

UCEAP Transcript Title

NEUROENGINEERING

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course gives a broad overview of neural engineering concepts and principles for recording outgoing and generating ingoing neural signals. The course gives insights into existing and future neural interfaces, neural prostheses, and neurorobotics. It covers principles and technologies of neuroengineering applications, including basic human neuroanatomy and physiology, brain stimulator, spinal cord stimulation, functional electrical stimulation (FES), neural-machine interface for motor prosthesis control, artificial vision, and auditory devices for augmented sensory perception.

Language(s) of Instruction

English

Host Institution Course Number

BMEF20

Host Institution Course Title

NEUROENGINEERING

Host Institution Campus

Host Institution Faculty

Faculty of Engineering

Host Institution Degree

Host Institution Department

Biomedical Engineering

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