

# Biosensing and Bioelectronics

## Basic information

**Professor in charge:** Tomi Laurila

**Professors:** Mervi Paulasto-Kröckel

**Administrative contact:** Study coordinator Päivi Koivunen

**Extent:** 20 credits

**Abbreviation:** -

**Code:** ELEC3046

**Target group:** Students from Masters' programme in Life Science Technologies and other Master students with sufficient prerequisites

**Language:** English

**Prerequisite knowledge:** Studies encompassing at least 60 (ECTS) credits in mathematics, chemistry/materials science, physics and computer programming, and minor ELEC3021 Bioinformation Technology or equivalent knowledge.

## Objectives

After completing the minor the student has acquired the basic understanding of biomolecular science and bioelectrical phenomena, and comprehends how to use this understanding in the development of biosensing devices and bioelectrical instruments.

## Content and structure

Code	Name	Credits	Period
Mandatory courses of the minor (20 Credits)			
<a href="#">ELECE8728</a>	Tissue-foreign body interaction	5	I-II
<a href="#">ELEC-E8734</a>	Biomedical Instrumentation	5	II
<a href="#">ELEC-E3260</a>	Biomolecules P	5	III
<a href="#">ELEC-E8726</a>	Biosensing	5	III - IV