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

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<th>Code</th>
<th>Name</th>
<th>Credits</th>
<th>Period</th>
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<tbody>
<tr>
<td>ELECE8728</td>
<td>Tissue-foreign body interaction</td>
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<td>ELEC-E8734</td>
<td>Biomedical Instrumentation</td>
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<td>II</td>
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<td>III</td>
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<tr>
<td>ELEC-E8728</td>
<td>Biosensing</td>
<td>5</td>
<td>III-IV</td>
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Mandatory courses of the minor (20 Credits)