Course Specifications
Valid as from the academic year 2018-2019

Technology of Biochemical Industries (I700164)

Course size

<table>
<thead>
<tr>
<th>Credits</th>
<th>Study time</th>
<th>Contact hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>90 h</td>
<td>24.0 h</td>
</tr>
</tbody>
</table>

Course offerings and teaching methods in academic year 2019-2020

A (semester 1)

<table>
<thead>
<tr>
<th>Language</th>
<th>Activity</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>excursion</td>
<td>2.0 h</td>
</tr>
<tr>
<td></td>
<td>lecture</td>
<td>22.0 h</td>
</tr>
</tbody>
</table>

Lecturers in academic year 2019-2020

De Gelder, Leen

LA25 lecturer-in-charge

Offered in the following programmes in 2019-2020

<table>
<thead>
<tr>
<th>Programme</th>
<th>crdts</th>
<th>offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Science in Biochemical Engineering Technology</td>
<td>3</td>
<td>A</td>
</tr>
</tbody>
</table>

Teaching languages

English

Keywords

Biochemical technology, Bioreactor, Down-stream processing

Position of the course

Providing knowledge and insight concerning industrial biochemical production technologies

Contents

Fermentation dynamics and control, types of bioreactors, down stream processing
Animal cell cultivation
Thermal desinfection and cleaning in place

Initial competences

Microbiology
Engineering techniques I and II

Final competences

1. Insight into biochemical production systems and the required equipment and process control
2. Based on a desired product and some fixed parameters being able to suggest a production and processing scheme
3. Having insight into the monitoring and steering of biochemical production processes
4. Having knowledge concerning cleaning and desinfection methods used in biochemical industry

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Excursion, lecture

Learning materials and price

(Approved)
Course content-related study coaching

Evaluation methods
  end-of-term evaluation

Examination methods in case of periodic evaluation during the first examination period
  Written examination

Examination methods in case of periodic evaluation during the second examination period
  Written examination

Examination methods in case of permanent evaluation
  Participation

Possibilities of retake in case of permanent evaluation
  examination during the second examination period is not possible

Calculation of the examination mark
  Written exam: 100%