Biotechnology and Bioengineering

BABS3031

6 Units of Credit

In order to bring new biotechnology products to the market, scalable bioprocesses must be developed and validated. This course covers the bioprocessing and economic principles involved in the operation, development and design of large-scale biotechnology-based processes. It includes analysis of fermentation kinetics, batch and continuous modes of operation, bioprocess optimisation, principles of fermentor scale up, downstream processing and bioprocess design, as well as principles of economic feasibility analysis. Selected bioprocesses will be used to develop an understanding of fundamental bioprocessing principles, including process scale-up. Examples will be drawn from major biotechnology sectors, including biofuels, biopharmaceutical manufacture and manufacture of other bioproducts from bacterial, yeast and mammalian hosts. Laboratory sessions and problem-solving tutorials (including computer-based classes) will supplement lecture material. At least one detailed case study will be undertaken by students which will investigate economic and technical feasibility of a bioprocess.
Faculty
Faculty of Science

School
School of Biotechnology and Biomolecular Sciences

Study Level
Undergraduate

Offering Terms
Term 2

Campus
Kensington

Delivery Mode
Fully on-site

Indicative contact hours
7

Timetable
Visit timetable website for details
Conditions for Enrolment

Prerequisite: completion of at least 48 UoC
## Exclusion Courses

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<tr>
<th>Course Code</th>
<th>Units</th>
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<tr>
<td>BABS3631</td>
<td>6 UOC</td>
<td>Biotechnology &amp; Bioengineering Advanced</td>
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<tr>
<td>BIOT3021</td>
<td>6 UOC</td>
<td>Biotechnology B</td>
</tr>
<tr>
<td>BIOT3621</td>
<td>6 UOC</td>
<td>Biotechnology B (Advanced)</td>
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</tbody>
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Course Outline

To access course outline, please visit:

BABS3031 Course Outline
Fees

Commonwealth Supported Students  $1170
Domestic Students  $5760
International Students  $5760

DISCLAIMER
Please note that the University reserves the right to vary student fees in line with relevant legislation. This fee information is provided as a guide and more specific information about fees, including fee policy, can be found on the fee website.

For advice about fees for courses with a fee displayed as "Not Applicable", including some Work Experience and UNSW Canberra at ADFA courses, please contact the relevant Faculty. Fees for courses delivered through UNSW Global are published and charged by UNSW Global and thus appear as "Not Applicable" on this site.

Where a Commonwealth Supported Students fee is displayed, it does not guarantee such places are available.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179