

# University of Pretoria Yearbook 2021

## Biochemical engineering 310 (CBI 310)

**Qualification** Undergraduate

**Faculty** [Faculty of Engineering, Built Environment and Information Technology](#)

**Module credits** 16.00

**NQF Level** 07

**Programmes** [BEng Chemical Engineering](#)

[BEng Chemical Engineering ENGAGE](#)

**Prerequisites** (CIR 211), (CHM 215), (WTW 256), MPR 213

**Contact time** 3 practicals per week, 4 lectures per week

**Language of tuition** Module is presented in English

**Department** Chemical Engineering

**Period of presentation** Semester 1

### Module content

Characterisation and taxonomy of biological material. Biochemistry and the chemistry of life. Biological growth requirements, metabolism, growth kinetics and product formation. Enzyme chemistry and kinetics, basic stoichiometry of biological reactions as well as mass - and energy balances for these processes using a chemical engineering approach. Biological reactor, operation and downstream processing.

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.