University of Pretoria Yearbook 2017

Biochemical engineering 310 (CBI 310)

Qualification	Undergraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	16.00
Programmes	BEng Chemical Engineering
	BEng Chemical Engineering ENGAGE
Prerequisites	(CIR 211), (CHM 215)
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Module is presented in English
Academic organisation	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.