



University of Pretoria Yearbook 2023

Chemical engineering 123 (CIR 123)

Qualification	Undergraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	8.00
NQF Level	05
Programmes	BEng (Chemical Engineering) BEng (Chemical Engineering) ENGAGE
Prerequisites	CIR 113 GS, CHM 171 GS
Contact time	2 lectures per week, 2 tutorials per week
Language of tuition	Module is presented in English
Department	Chemical Engineering
Period of presentation	Semester 2

Module content

Chemical reaction and stoichiometry, excess reactant, conversion, yield, selectivity. Material balances with recycle streams, bypass streams and purge streams. Gases, vapours and liquids: ideal gas law, SG and density of gases, Nm³. Material balances where gases are involved. Fuels and combustion: coal analysis, combustion calculations.

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