



University of Pretoria Yearbook 2021

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, Nm^3 . Material balances where gases are involved. Fuels and combustion: coal analysis, combustion calculations.

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