

University of Pretoria Yearbook 2022

Hydrometallurgy 322 (NHM 322)

Qualification Undergraduate

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

Module credits 16.00

NQF Level 07

Programmes [BEng \(Metallurgical Engineering\)](#)

[BEng \(Metallurgical Engineering\) ENGAGE](#)

Prerequisites (NPT 220)

Contact time 3 lectures per week, 3 practicals per week

Language of tuition Module is presented in English

Department Materials Science and Metallurgical Engineering

Period of presentation Semester 2

Module content

Merits of hydrometallurgy relative to other extraction methods. Unit processes in hydrometallurgy. Chemical principles of hydrometallurgy. Chemistry of important metals and lixiviants. Application of chemical principles to: leaching; purification and upgrading of leach solutions (precipitation, solvent extraction, ion exchange, activated carbon); product recovery from solution (precipitation, reduction). Relevant analytical methods.

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