

# University of Pretoria Yearbook 2020

## Mine design and research 422 (PMZ 422)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	<a href="#">Faculty of Engineering, Built Environment and Information Technology</a>
<b>Module credits</b>	32.00
<b>Programmes</b>	<a href="#">BEng Mining Engineering</a> <a href="#">BEng Mining Engineering ENGAGE</a>
<b>Prerequisites</b>	PMY 410, PSZ 410, PEE 410. PNB 400, Finalists only
<b>Contact time</b>	4 lectures per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Mining Engineering
<b>Period of presentation</b>	Semester 2

### Module content

This module entails the completion of an engineering project from concept to delivery. The student must demonstrate mastery of a mining engineering project. The module focuses on the formulation of a mining engineering problem, the development of appropriate extraction methodologies, project planning and management and then completion of a technical project of a given nature, scope and complexity. Students are required to design a mine at the conceptual business case level. Students are given a surface plan and borehole data from which they have to design a mine in teams of 3 – 5 students. They have access to a mining engineer in industry to assist with advice. The design has to incorporate a market analysis, layout design, working method, surface layout, environmental impacts and financial analysis. The design is submitted in book form and each team member has to do a presentation of the design.

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