

## University of Pretoria Yearbook 2022

## Metallurgical fluid mechanics 310 (NTV 310)

**Qualification** Undergraduate

Faculty Faculty of Engineering, Built Environment and Information Technology

Module credits 8.00

NQF Level 07

**Programmes** BEng (Metallurgical Engineering)

BEng (Metallurgical Engineering) ENGAGE

**Prerequisites** No prerequisites.

**Contact time** 1 practical per week, 3 lectures per week

**Language of tuition** Module is presented in English

**Department** Mechanical and Aeronautical Engineering

**Period of presentation** Quarter 1

## **Module content**

Introduction: Liquids and gases, pressure, viscosity, temperature. Fluid statics and pressure measurement. Introduction to control volume method for mass, momentum and energy conservation. Bernoulli equation. Flow in pipes and channels: friction coefficients and Reynolds number, pressure drop; laminar, turbulent and transitional flow.

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