

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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