



University of Pretoria Yearbook 2024

Calculus 158 (WTW 158)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	16.00
NQF Level	05
Programmes	<i>BEng (Chemical Engineering) 4-year programme</i> <i>BEng (Chemical Engineering) 5-year programme</i> <i>BEng (Civil Engineering) 4-year programme</i> <i>BEng (Civil Engineering) 5-year programme</i> <i>BEng (Computer Engineering) 4-year programme</i> <i>BEng (Computer Engineering) 5-year programme</i> <i>BEng (Electrical Engineering) 4-year programme</i> <i>BEng (Electrical Engineering) 5-year programme</i> <i>BEng (Electronic Engineering) 4-year programme</i> <i>BEng (Electronic Engineering) 5-year programme</i> <i>BEng (Industrial Engineering) 4-year programme</i> <i>BEng (Industrial Engineering) 5-year programme</i> <i>BEng (Mechanical Engineering) 4-year programme</i> <i>BEng (Mechanical Engineering) 5-year programme</i> <i>BEng (Metallurgical Engineering) 4-year programme</i> <i>BEng (Metallurgical Engineering) 5-year programme</i> <i>BEng (Mining Engineering) 4-year programme</i> <i>BEng (Mining Engineering) 5-year programme</i>
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	60% for Mathematics in Grade 12
Contact time	1 tutorial per week, 4 lectures per week
Language of tuition	Module is presented in English
Department	Mathematics and Applied Mathematics
Period of presentation	Semester 1



Module content

*This module is designed for first-year engineering students. Students will not be credited for more than one of the following modules for their degree: WTW 158, WTW 114, WTW 134, WTW 165.

Introduction to vector algebra. Functions, limits and continuity. Differential calculus of single variable functions, rate of change, graph sketching, applications. The mean value theorem, the rule of L'Hospital. Indefinite integrals, integration.

General Academic Regulations and Student Rules

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations. The G Regulations are updated annually and may be amended after the publication of this information.

Regulations, degree requirements and information

The faculty regulations, information on and requirements for the degrees published here are subject to change and may be amended after the publication of this information.

University of Pretoria Programme Qualification Mix (PQM) verification project

The higher education sector has undergone an extensive alignment to the Higher Education Qualification Sub-Framework (HEQSF) across all institutions in South Africa. In order to comply with the HEQSF, all institutions are legally required to participate in a national initiative led by regulatory bodies such as the Department of Higher Education and Training (DHET), the Council on Higher Education (CHE), and the South African Qualifications Authority (SAQA). The University of Pretoria is presently engaged in an ongoing effort to align its qualifications and programmes with the HEQSF criteria. Current and prospective students should take note that changes to UP qualification and programme names, may occur as a result of the HEQSF initiative. Students are advised to contact their faculties if they have any questions.