

University of Pretoria Yearbook 2025

Analysis 220 (WTW 220)

Faculty of Natural and Agricultural SciencesModule credits12.00NQF Level06ProgrammesBCom StatisticsBSC (Geography) Geography and Environmental ScienceBSC Actuarial and Financial MathematicsBSC Applied MathematicsBSC ChemistryBSC Environmental and Engineering GeologyBSC MathematicsBSC MathematicsBSC MathematicsBSC Environmental and Engineering GeologyBSC MathematicsBSC MathematicsBSC MathematicsBSC MathematicsBSC MathematicsBSC MathematicsBSC MathematicsBSC MeteorologyBSC Specialising in Chemistry 4-year programmeBSC specialising in Mathematics 4-year programmeBSC specialising in Physics 4-year programmeService modulesFaculty of Engineering, Built Environment and Information TechnologyFaculty of Economic and Management SciencesPrerequisitesWTW 114 and WTW 124, WTW 211 and WTW 218Contact time1 tutorial per week, 2 lectures per weekLanguage of tuitionModule is presented in English	Qualification	Undergraduate
NQF Level06ProgrammesBCom StatisticsBSc (Geography) Geography and Environmental ScienceBSc Actuarial and Financial MathematicsBSc Applied MathematicsBSc ChemistryBSc ChemistryBSc Mathematical StatisticsBSc MathematicsBSc MathematicsBSc MathematicsBSc MathematicsBSc MathematicsBSc PhysicsBSc Specialising in Chemistry 4-year programmeBSc specialising in Mathematics 4-year programmeBSc specialising in Mathematics 4-year programmeService modulesFaculty of Engineering, Built Environment and Information TechnologyFaculty of EducationFaculty of EducationFaculty of Economic and Management SciencesPrerequisitesWTW 114 and WTW 124, WTW 211 and WTW 218Contact time1 tutorial per week, 2 lectures per week	Faculty	Faculty of Natural and Agricultural Sciences
ProgrammesBCom StatisticsBSc (Geography) Geography and Environmental ScienceBSc Actuarial and Financial MathematicsBSc Actuarial and Financial MathematicsBSc Applied MathematicsBSc ChemistryBSc Environmental and Engineering GeologyBSc Mathematical StatisticsBSc MathematicsBSc MathematicsBSc MathematicsBSc MathematicsBSc PhysicsBSc Sepecialising in Chemistry 4-year programmeBSc specialising in Mathematics 4-year programmeBSc specialising in Physics 4-year programmeBSc specialising in Physics 4-year programmeService modulesFaculty of Engineering, Built Environment and Information TechnologyFaculty of Economic and Management SciencesPrerequisitesWTW 114 and WTW 124, WTW 211 and WTW 218Contact time1 tutorial per week, 2 lectures per week	Module credits	12.00
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Faculty of Economic and Management SciencesPrerequisitesWTW 114 and WTW 124, WTW 211 and WTW 218Contact time1 tutorial per week, 2 lectures per week	Service modules	Faculty of Engineering, Built Environment and Information Technology
PrerequisitesWTW 114 and WTW 124, WTW 211 and WTW 218Contact time1 tutorial per week, 2 lectures per week		Faculty of Education
Contact time 1 tutorial per week, 2 lectures per week		Faculty of Economic and Management Sciences
	Prerequisites	WTW 114 and WTW 124, WTW 211 and WTW 218
Language of tuitionModule is presented in English	Contact time	1 tutorial per week, 2 lectures per week
	Language of tuition	Module is presented in English
Department Mathematics and Applied Mathematics	Department	Mathematics and Applied Mathematics
Period of presentation Semester 2	Period of presentation	Semester 2



Module content

*This module is recommended as an elective only for students who intend to enrol for WTW 310 and/or WTW 320. Students will not be credited for more than one of the following modules for their degree: WTW 220 and WTW 224.

Properties of real numbers. Analysis of sequences and series of real numbers. Power series and theorems of convergence. The Bolzano-Weierstrass theorem. The intermediate value theorem and analysis of real-valued functions on an interval. The Riemann integral: Existence and properties of the interval.

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.