

University of Pretoria Yearbook 2020

BCom Investment Management (07130205)

Minimum duration of study	3 years
Total credits	398
NQF level	07
Contact	Mrs RS Steenkamp ronel.steenkamp@up.ac.za +27 (0)124203347

Programme information

The purpose of this degree programme is to expose students, specialising in Investment management, to the theoretical principles and practical application of investment decision-making at a high level. A multidisciplinary approach is followed and financial, economic and statistical principles are incorporated with the aim of improving the investment decision-making process. This well-structured degree has an analytic and scientific basis and is aimed at enabling students to cope with the demands of a rapidly changing local and international investment environment.

Students who achieved 70% and above in English Home Language (an A or a B), and 80% and above in English First Additional Language (only an A) in the NSC (or equivalent) will be exempted from ALL 124 and therefore do not have to register and pass this module to complete their degrees. Students who achieved 69% and below in English Home Language (a C and below), and 79% and below in English First Additional Language (a B and below) have to register for ALL 124 and pass this module in order to be awarded their degrees.

Admission requirements

- The following persons will be considered for admission: candidates who are in possession of a certificate that is deemed by the University to be equivalent to the required Grade 12 certificate with university endorsement; candidates who are graduates from another tertiary institution or have been granted the status of a graduate of such an institution; and candidates who are graduates of another faculty at the University of Pretoria.
- Life Orientation is excluded when calculating the APS.

Minimum requirements

Achievement level

English Home Language or English First Additional Language

English Home Language or English First Additional Language		Mathematics		APS
NSC/IEB	AS Level	NSC/IEB	AS Level	
5	C	6	B	34

* Cambridge A level candidates who obtained at least a D in the required subjects, will be considered for admission. International Baccalaureate (IB) HL candidates who obtained at least a 4 in the required subjects, will be considered for admission.

Additional requirements

- a. General Regulations G.1 to G.15 (with the exception of Regulation G.11.2(c)) apply to a bachelor's degree.
- b. A student may not take more than the prescribed number of modules per semester unless the Dean decides otherwise.
- c. A student may take a module not listed as an elective module only if the prior approval of the Dean has been obtained.
- d. A student who is in possession of a bachelor's degree may not present any modules passed for that degree for another field of specialisation or degree in this Faculty. (See General Regulations G.8 and G.9)
- e. A module already passed may only be repeated with the approval of the Dean.
- f. A module passed may not be taken into account for more than one degree or field of specialisation.
- g. It remains the student's responsibility to ascertain, prior to registration, whether all the modules he/she intends taking can be accommodated in the class, test and examination timetables.
- h. The Faculty of Economic and Management Sciences supports an outcomes-based education system and places a high premium on the development of specific academic competences. Class attendance in all modules and for the full duration of all programmes is therefore compulsory for all students.
- i. The Dean has the right of authorisation regarding matters not provided for in the General Regulations or the Faculty Regulations.

Other programme-specific information

Note: See the alphabetical list of modules for prerequisites of all modules.

- To continue with IVM 200, a student must pass Financial accounting 111, 121, Statistics 110, 120 and Economics 110, 120.

Specialisation modules: IVM 300.

"Major subject"

To be considered a "major subject" the equivalent of four 14-week modules, including two at 300-level, must be passed provided that:

- a module passed at 300-level shall only be recognised for degree purposes if the corresponding prescribed module(s) at 200-level has/have been passed, unless the Dean decides otherwise;
- the following modules which are offered at 300-level only, are also considered "major subjects": Labour law 311 (ABR 311), Labour relations 320 (ABV 320), and International business management 359 and 369 (OBS 359 and 369); and
- only two 14-week modules, or the equivalent thereof, that are not preceded by the 100- and 200-level modules, may be taken for degree purposes. In other words, at least four 14-week modules must be taken at 300-level that are preceded by the 100- and 200-level, except for modules offered on 200- and 300-level only.

It is thus the responsibility of students to ensure before registration, that their curricula comply with all the requirements of the applicable regulations.

Promotion to next study year

According to General Regulation G.3 students have to comply with certain requirements as set by the Faculty Board.

- a. A student must pass at least 4 core semester or 2 core year modules to be admitted to the subsequent year of study.

- b. If a student has passed less than the required minimum of 4 core semester or 2 core year modules, he/she will not be readmitted to the Faculty of Economic and Management Sciences. Such a student may apply in writing to the Faculty's Admissions Committee to be readmitted conditionally – with the proviso that the Admissions Committee may set further conditions with regards to the student's academic progress. The Faculty's Admissions Committee may deny a student's application for readmission.
- c. If a student has been readmitted conditionally, his/her academic progress will be monitored after the first semester examinations to determine whether he/she has complied with the requirements set by the Admissions Committee. If not, his/her studies will be suspended.
- d. A student whose studies have been suspended because of his/her poor academic performance has the right to appeal against the decision of the Faculty's Admissions Committee.
- e. A student may be refused promotion to a subsequent year of study if the prescribed tuition fees are not paid.
- f. A student may be refused admission to the examination, or promotion to a subsequent year of study or promotion in a module (if applicable) if he/ she fails to fulfil the attendance requirements. Class attendance in all modules and for the full duration of all programmes is compulsory for all students.

Pass with distinction

- a. A degree may be awarded with distinction provided the candidate meets the following criteria:
 - i. Completes the degree within three years;
 - ii. Obtains a Cumulative Grade Point Average (CGPA) of 75%;
 - iii. Repeated passed modules will not be considered. The initial pass mark of module will be used when calculating the GPA.
- b. A degree will only be awarded with distinction to transferees from other degrees in the Faculty of Economic and Management Sciences, other faculties and from other universities who still complete their bachelor degrees within three years (including the years registered for the other degree and credits transferred and recognised).
- c. The GPA will be not be rounded up to a whole number.
- d. Exceptional cases will be considered by the Dean.

General information

Minimum requirements for bachelor's degrees; semester and year modules; new regulations

1. Students who commenced their studies before 2015 must complete the programme in terms of the curriculum of the year in which they commenced their studies, or in terms of the curriculum of the year in which they switched to their current field of specialisation. Students who prefer to do so may, however, apply to change over to the latest curriculum, but then they should comply with all the requirements thereof and they may not revert to the regulations of an earlier year.
2. Students who are registering for a degree programme for the first time from 2015 onward must take the modules indicated under the particular field of specialisation.

Curriculum: Year 1

Minimum credits: 125

Fundamental modules

Academic information management 111 (AIM 111)

Module credits 4.00

Service modules

Faculty of Engineering, Built Environment and Information Technology
Faculty of Education
Faculty of Economic and Management Sciences
Faculty of Humanities
Faculty of Law
Faculty of Health Sciences
Faculty of Natural and Agricultural Sciences
Faculty of Theology and Religion

Prerequisites No prerequisites.

Contact time 2 lectures per week

Language of tuition Module is presented in English

Department Information Science

Period of presentation Semester 1

Module content

Find, evaluate, process, manage and present information resources for academic purposes using appropriate technology.

Academic information management 121 (AIM 121)

Module credits 4.00

Service modules

Faculty of Engineering, Built Environment and Information Technology
Faculty of Education
Faculty of Economic and Management Sciences
Faculty of Humanities
Faculty of Law
Faculty of Health Sciences
Faculty of Natural and Agricultural Sciences
Faculty of Theology and Religion
Faculty of Veterinary Science

Prerequisites No prerequisites.

Contact time 2 lectures per week

Language of tuition Module is presented in English

Department Informatics

Period of presentation Semester 2

Module content

Apply effective search strategies in different technological environments. Demonstrate the ethical and fair use of information resources. Integrate 21st-century communications into the management of academic information.

Academic literacy for Economic and Management Sciences 124 (ALL 124)

Module credits	6.00
Service modules	Faculty of Economic and Management Sciences
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Unit for Academic Literacy
Period of presentation	Semester 1 and Semester 2

Module content

This module is intended to equip students with the competence in reading and writing required in the four high impact modules: Business Management, Financial Accounting, Statistics and Economics. Students will also be equipped to interpret and draw figures and graphs and to do computations and manage relevant formulas. Students attend two lectures per week during semester two.

This module is offered by the Faculty of Humanities.

Academic orientation 107 (UPO 107)

Module credits	0.00
Language of tuition	Module is presented in English
Department	Economic and Management Sciences Deans Office
Period of presentation	Year

Core modules

Economics 110 (EKN 110)

Module credits	10.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Humanities Faculty of Natural and Agricultural Sciences
Prerequisites	No prerequisites.
Contact time	1 discussion class per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Economics

Period of presentation Semester 1

Module content

This module deals with the core principles of economics. A distinction between macroeconomics and microeconomics is made. A discussion of the market system and circular flow of goods, services and money is followed by a section dealing with microeconomic principles, including demand and supply analysis, consumer behaviour and utility maximisation, production and the costs thereof, and the different market models and firm behaviour. Labour market institutions and issues, wage determination, as well as income inequality and poverty are also addressed. A section of money, banking, interest rates and monetary policy concludes the course.

Economics 120 (EKN 120)

Module credits 10.00

Service modules Faculty of Engineering, Built Environment and Information Technology
Faculty of Education
Faculty of Humanities
Faculty of Natural and Agricultural Sciences

Prerequisites EKN 110 GS or EKN 113 GS and at least 4 (50-59%) in Mathematics in the Grade 12 examination or 60% in STK 113 and concurrently registered for STK 123

Contact time 1 discussion class per week, 2 lectures per week

Language of tuition Module is presented in English

Department Economics

Period of presentation Semester 2

Module content

This module deals with the core principles of economics, especially macroeconomic measurement the private and public sectors of the South African economy receive attention, while basic macroeconomic relationships and the measurement of domestic output and national income are discussed. Aggregate demand and supply analysis stands core to this course which is also used to introduce students to the analysis of economic growth, unemployment and inflation. The microeconomics of government is addressed in a separate section, followed by a section on international economics, focusing on international trade, exchange rates and the balance of payments. The economics of developing countries and South Africa in the global economy conclude the course.

Financial accounting 111 (FRK 111)

Module credits 10.00

Service modules Faculty of Engineering, Built Environment and Information Technology
Faculty of Education
Faculty of Law
Faculty of Natural and Agricultural Sciences

Prerequisites No prerequisites.

Contact time 4 lectures per week

Language of tuition Module is presented in English

Department Accounting



Period of presentation Semester 1

Module content

The nature and function of accounting; the development of accounting; financial position; financial result; the recording process; processing of accounting data; treatment of VAT; elementary income statement and balance sheet; flow of documents; accounting systems; introduction to internal control and internal control measures; bank reconciliations; control accounts; adjustments; financial statements of a sole proprietorship; the accounting framework.

Financial accounting 121 (FRK 121)

Module credits 12.00

Service modules

Faculty of Engineering, Built Environment and Information Technology
Faculty of Education
Faculty of Natural and Agricultural Sciences

Prerequisites FRK 111 GS

Contact time 4 lectures per week

Language of tuition Module is presented in English

Department Accounting

Period of presentation Semester 2

Module content

Property, plant and equipment; intangible assets; inventories; liabilities; presentation of financial statements; enterprises without profit motive; partnerships; companies; close corporations; cash flow statements; analysis and interpretation of financial statements.

Informatics 112 (INF 112)

Module credits 10.00

Service modules

Faculty of Engineering, Built Environment and Information Technology
Faculty of Natural and Agricultural Sciences

Prerequisites A candidate must have passed Mathematics with at least 4 (50-59%) in the Grade 12 examination; or STK 113 60%, STK 123 60% or STK 110

Contact time 2 lectures per week

Language of tuition Module is presented in English

Department Informatics

Period of presentation Semester 2

Module content

Introduction to information systems, information systems in organisations, hardware: input, processing, output, software: systems and application software, organisation of data and information, telecommunications and networks, the Internet and Intranet. Transaction processing systems, management information systems, decision support systems, information systems in business and society, systems analysis, systems design, implementation, maintenance and revision.

Informatics 183 (INF 183)

Module credits	3.00
Prerequisites	No prerequisites.
Contact time	1 practical per week
Language of tuition	Module is presented in English
Department	Informatics
Period of presentation	Year

Module content

Computer processing of accounting information.

Commercial law 110 (KRG 110)

Module credits	10.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences
Prerequisites	No prerequisites.
Contact time	1 tutorial per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Mercantile Law
Period of presentation	Semester 1

Module content

General introduction.

General principles of the law of contract: introduction to the law of contract; consensus; contractual capacity; legality and physical possibility of performance; formalities; parties to the contract; conditions and related legal concepts; special terms and the interpretation of contracts; breach of contract and the termination of the contractual relationship.

Commercial law 120 (KRG 120)

Module credits	10.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Economic and Management Sciences
Prerequisites	Examination entrance to KRG 110
Contact time	1 tutorial per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Mercantile Law
Period of presentation	Semester 2

Module content

Law of purchase and sale; law of lease; credit agreements; law of agency; law of security.

Business management 114 (OBS 114)

Module credits 10.00

Service modules Faculty of Engineering, Built Environment and Information Technology
Faculty of Education
Faculty of Humanities
Faculty of Natural and Agricultural Sciences

Prerequisites May not be included in the same curriculum as OBS 155

Contact time 3 lectures per week

Language of tuition Module is presented in English

Department Business Management

Period of presentation Semester 1

Module content

The entrepreneurial mind-set; managers and managing; values, attitudes, emotions, and culture: the manager as a person; ethics and social responsibility; decision making; leadership and responsible leadership; effective groups and teams; managing organizational structure and culture inclusive of the different functions of a generic organisation and how they interact (marketing; finance; operations; human resources and general management); contextualising Sustainable Development Goals (SDG) in each of the topics.

Statistics 122 (STC 122)

Module credits 13.00

Prerequisites At least a 60% in STK 110 or an average of 60% for either (1) WST 133, WST 143, WST 153; (2) STK 113, STK 123, STK 121; (3) STK 133, STK 134, STK121; (4) WST 133, WST 143, STK 121 (An aegrotat exam is available to students who obtained 50%-59%)

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

Language of tuition Module is presented in English

Department Statistics

Period of presentation Semester 2

Module content

Inferential concepts. Experimental and observational data. Measures of association, uncertainty and goodness of fit. Sampling error and accuracy of estimation. Introduction to linear regression, reduction of variation due to regression. Conditional distributions of residuals. Simulation based inference: conditional means and prediction intervals. Bivariate data visualisation. Supporting mathematical concepts. Statistical concepts are demonstrated and interpreted through practical coding and simulation within a data science framework.

This module is also presented as a summer school for students who initially elected and passed STK 120 with a final mark of at least 60% and then decides to further their studies in statistics as well as for students who achieved a final mark of between 40% - 49% in STC 122 during semester 2.

Statistics 110 (STK 110)

Module credits 13.00

Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Humanities Faculty of Natural and Agricultural Sciences
Prerequisites	At least 5 (60-69%) in Mathematics in the Grade 12 examination. Candidates who do not qualify for STK 110 must register for STK 113 and STK 123
Contact time	1 practical per week, 1 tutorial per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Statistics
Period of presentation	Semester 1

Module content

Descriptive statistics:

Sampling and the collection of data; frequency distributions and graphical representations. Descriptive measures of location and dispersion.

Probability and inference:

Introductory probability theory and theoretical distributions. Sampling distributions. Estimation theory and hypothesis testing of sampling averages and proportions (one and two-sample cases). Supporting mathematical concepts. Statistical concepts are demonstrated and interpreted through practical coding and simulation within a data science framework.

Curriculum: Year 2

Minimum credits: 148

Core modules

Economics 214 (EKN 214)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Humanities Faculty of Natural and Agricultural Sciences
Prerequisites	EKN 110 GS & EKN 120 OR EKN 113 GS & EKN 123; & STK 110 GS OR STK 113 & STK 123 & STK 120/121 or concurrently registered for STK 120/121 OR WST 111 & WST121 are prerequisites instead of STK 120/121 or WST 111 and concurrently registered for WST 121.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1

Module content

Macroeconomics

From Wall and Bay Street to Diagonal Street: a thorough understanding of the mechanisms and theories explaining the workings of the economy is essential. Macroeconomic insight is provided on the real market, the money market, two market equilibrium, monetarism, growth theory, cyclical analysis, inflation, Keynesian general equilibrium analysis and fiscal and monetary policy issues.

Economics 234 (EKN 234)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Humanities Faculty of Natural and Agricultural Sciences
Prerequisites	EKN 214 and STK 120/121 or WST 121 OR concurrently registered for STK 120/121 or WST 121.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 2

Module content

Macroeconomics

Application of the principles learned in EKN 214 on the world we live in. We look at international markets and dynamic macroeconomic models, and familiarise the students with the current macroeconomic policy debates. We also take a look at the latest macroeconomic research in the world. The course includes topics of the mathematical and econometric analysis of macroeconomic issues.

Financial accounting 211 (FRK 211)

Module credits 16.00

Service modules Faculty of Engineering, Built Environment and Information Technology
Faculty of Education

Prerequisites FRK 111 and FRK 121 or FRK 100/101

Contact time 4 lectures per week

Language of tuition Module is presented in English

Department Accounting

Period of presentation Semester 1

Module content

Preparation and presentation of company annual financial statements in compliance with the requirements of the Companies Act, the Framework and Statements of Generally Accepted Accounting Practice relating to the following: presentation of financial statements; revenue; investments; provisions, contingent liabilities and contingent assets; events after the balance sheet date; inventories; income taxes; leases; property, plant and equipment; impairment of assets; intangible assets; investment property, changes in accounting estimates and errors; introduction to financial instruments.

Financial accounting 221 (FRK 221)

Module credits 16.00

Service modules Faculty of Engineering, Built Environment and Information Technology
Faculty of Education

Prerequisites FRK 211 GS

Contact time 4 lectures per week

Language of tuition Module is presented in English

Department Accounting

Period of presentation Semester 2

Module content

Preparation and presentation of company annual financial statements in compliance with the requirements of Statements of Generally Accepted Accounting Practice relating to the following: employee benefits; the effects of changes in foreign exchange rates; accounting policies; earnings per share; cash flow statements; interests in joint ventures. Branch accounting. Introduction to consolidations, including basic consolidation techniques for both wholly-owned and partly-owned subsidiaries. Introduction to public sector accounting.

Investment management 200 (IVM 200)

Module credits	32.00
Prerequisites	FRK 111, FRK 121 or FRK 100 or FRK 101; STK 110, STK 120 or STC 122, EKN 110, EKN 120 and only available to BCom (Investment Management) students.
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Financial Management
Period of presentation	Year

Module content

***Only for BCom (Investment Management) students.**

Functioning of the South African financial system, interest bearing instruments: issuers, institutions and valuation, types of risk and measuring risk, types of return and measuring return, share markets, Financial Market regulation, trading activities in the equity market, share price indices, valuation of ordinary shares, and the fundamental analysis of ordinary shares, industry analysis, technical analysis of shares, investment objectives and investment process, asset allocation, local and international bond markets, bond fundamentals, valuation of bonds, mathematics of fixed interest securities, structure of interest rates and yield curves, duration, convexity introduction to derivatives.

Statistics 210 (STK 210)

Module credits	20.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Humanities Faculty of Natural and Agricultural Sciences
Prerequisites	STK 110, STC 122 or WST 111, WST 121
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Statistics
Period of presentation	Semester 1

Module content

Statistical problem solving. Causality, experimental and observational data. Probability theory. Multivariate random variables. Discrete and continuous probability distributions. Stochastic representations. Measures of association. Expected values and conditional expectation. Simulation techniques. Supporting mathematical concepts. Statistical concepts are demonstrated and interpreted through practical coding and simulation within a data science framework.

Statistics 220 (STK 220)

Module credits	20.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Humanities Faculty of Natural and Agricultural Sciences

Prerequisites	STK 210 GS
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Statistics
Period of presentation	Semester 2

Module content

Multivariate probability distributions. Sampling distributions and the central limit theorem. Frequentist and Bayesian inference. Statistical learning and decision theory. Simulation techniques enhancing statistical thinking. Supervised learning: linear regression, estimation and inference. Non-parametric modelling. Supporting mathematical concepts. Statistical algorithms. Statistical concepts are demonstrated and interpreted through practical coding and simulation within a data science framework.

Applications in data science 212 (WST 212)

Module credits	12.00
Prerequisites	WST 111, WST 121 or STK 110, STC 122
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Statistics
Period of presentation	Semester 1

Module content

Introductory machine learning concepts. Data base design and use. Data preparation and extraction. Statistical modelling using data base structures. Statistical concepts are demonstrated and interpreted through practical coding and simulation within a data science framework.

Curriculum: Final year

Minimum credits: 125

Core modules

Financial management 320 (FBS 320)

Module credits	20.00
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	FBS 210 or BLB 200/IVM 200. Only available to 07130202, 07130203, 07130204, 07130071 and 07130151
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Financial Management
Period of presentation	Semester 2

Module content

*Only for BCom (Financial Sciences, Investment Management, and Law) and BSs (Construction Management, Quantity Surveying and Real Estate) students.

Cost of capital; determination of capital requirements and the financing of a business to maintain the optimal capital structure; the investment decision and the study of financial selection criteria in the evaluation of capital investment projects; impact of inflation and risk on capital investment decisions; evaluation of leasing decisions; dividend decisions; international financial management. Valuation principles and practices: an introduction to security analysis; hybrids and derivative instruments, mergers and acquisitions.

Investment management 300 (IVM 300)

Module credits	40.00
Prerequisites	BLB 200/IVM 200 and only available to BCom (Investment Management) students.
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Financial Management
Period of presentation	Year

Module content

***Only for BCom (Investment Management) students.**

Efficient market hypothesis, portfolio management, asset allocation, construction of efficient investment portfolios, asset pricing models (CAPM and APT), equity portfolio management strategies, performance evaluation of investment portfolios, restructuring of investment portfolios, measuring of financial risk exposure, futures market in South Africa, the use of futures contracts in financial risk management, pricing and the valuation of futures contracts, swaps and forward rate agreements, option markets in South Africa and the valuation of options, option payoffs and trading strategies, warrants and convertible securities, alternative evaluation techniques, real estate investment, venture capital, rights issues and capitalisation issues, immunisation, switching and trading strategies in the bond market, fixed income portfolio strategies, CFA Institute Code of Ethics and Standards of Professional Conduct.

The science of data analytics 353 (STK 353)

Module credits 25.00

Service modules Faculty of Natural and Agricultural Sciences

Prerequisites STK 210, STK 220, WST 212 or WST 211, WST 221, WST 212

Contact time 1 practical per week, 3 lectures per week

Language of tuition Module is presented in English

Department Statistics

Period of presentation Semester 2

Module content

Data exploration. Data wrangling. Statistical coding. Algorithmic thinking. Sampling: basic techniques in probability, non-probability, and resampling methods. Text mining and analytics. Machine learning: classification and clustering. Statistical concepts are demonstrated and interpreted through practical coding and simulation within a data science framework.

Elective modules

Economics 310 (EKN 310)

Module credits 20.00

Service modules Faculty of Engineering, Built Environment and Information Technology
Faculty of Education
Faculty of Humanities
Faculty of Natural and Agricultural Sciences

Prerequisites EKN 214, EKN 234 or EKN 224, EKN 244

Contact time 1 discussion class per week, 2 lectures per week

Language of tuition Module is presented in English

Department Economics

Period of presentation Semester 1

Module content

Public finance

Role of government in the economy. Welfare economics and theory of optimality. Ways of correcting market failures. Government expenditure theories, models and programmes. Government revenue. Models on taxation, effects of taxation on the economy. Assessment of taxation from an optimality and efficiency point of view. South African perspective on public finance.

Economics 320 (EKN 320)

Module credits 20.00

Service modules Faculty of Engineering, Built Environment and Information Technology
Faculty of Education
Faculty of Humanities
Faculty of Natural and Agricultural Sciences

Prerequisites EKN 310 GS

Contact time 1 discussion class per week, 2 lectures per week

Language of tuition Module is presented in English

Department Economics

Period of presentation Semester 2

Module content

Economic analyses

Identification, collection and interpretation process of relevant economic data; the national accounts (i.e. income and production accounts, the national financial account, the balance of payments and input-output tables); economic growth; inflation; employment, unemployment, wages, productivity and income distribution; business cycles; financial indicators; fiscal indicators; social indicators; international comparisons; relationships between economic time series - regression analysis; long-term future studies and scenario analysis; overall assessment of the South African economy from 1994 onwards.

Financial accounting 311 (FRK 311)

Module credits 20.00

Service modules Faculty of Engineering, Built Environment and Information Technology

Prerequisites FRK 211, 221 and INF 281

Contact time 4 lectures per week

Language of tuition Module is presented in English

Department Accounting

Period of presentation Semester 1

Module content

Preparation and presentation of company annual financial statements in compliance with the requirements of International Financial Reporting Standards (IFRS) relating to the following: income taxes; property, plant and equipment; impairment; non-current assets held for sale; intangible assets; investment property; borrowing costs; leases; accounting policies; changes in accounting estimates and errors; segment reporting; certain aspects of financial instruments.

Financial accounting 321 (FRK 321)

Module credits 20.00

Service modules Faculty of Engineering, Built Environment and Information Technology

Prerequisites FRK 311 GS and INF 281

Contact time 4 lectures per week

Language of tuition Module is presented in English

Department Accounting

Period of presentation Semester 2

Module content

Preparation and presentation of company annual financial statements in compliance with the requirements of International Financial Reporting Standards (IFRS) relating to the following: the effects of changes in foreign exchange rates; earnings per share; related party disclosure; associates. Complex consolidation issues, including intra-group transactions; dividends; preference shares; revaluations; horizontal, vertical and mixed groups; insolvent subsidiaries; change of interest; consolidated cash flow statement.

Statistics 310 (STK 310)

Module credits 25.00

Service modules Faculty of Engineering, Built Environment and Information Technology
Faculty of Humanities
Faculty of Natural and Agricultural Sciences

Prerequisites STK 210, STK 220

Contact time 1 practical per week, 3 lectures per week

Language of tuition Module is presented in English

Department Statistics

Period of presentation Semester 1

Module content

Supervised learning. Linear and non-linear regression. Ordinary least squares and maximum likelihood estimation. Violations of the assumptions, residual analysis. Cross validation. Statistical inference. Bootstrap inference. Supporting mathematical concepts. Statistical concepts are demonstrated and interpreted through practical coding and simulation within a data science framework.

Statistics 320 (STK 320)

Module credits 25.00

Service modules Faculty of Engineering, Built Environment and Information Technology
Faculty of Economic and Management Sciences
Faculty of Natural and Agricultural Sciences

Prerequisites STK 210, STK 220 or WST 211, WST 221

Contact time 1 practical per week, 3 lectures per week

Language of tuition Module is presented in English

Department Statistics

Period of presentation Semester 2

Module content

Stationary and non-stationary univariate time series. Properties of ARIMA processes. Identification, estimation and diagnostic testing of a time series models. Forecasting. Multivariate time series. Supervised learning: introduction to generalised linear models. Modelling of binary response variables, logistic regression. Supporting mathematical concepts. Statistical concepts are demonstrated and interpreted through practical coding and simulation within a data science framework.

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.