University of Pretoria Yearbook 2017

BCom Statistics (07130262)

Duration of study	3 years
Total credits	402
Contact	Mr A Swanepoel andre.swanepoel@up.ac.za +27 (0)124203559

Programme information

Statistics is an independent discipline with interdisciplinary applications. The aim of this qualification is to prepare the candidates in totality with methods that can be applied for the gathering and interpretation of data and empirical information. Statistics lay the foundation for scientific accountable conclusions, planning and estimation. Candidates are at the same time equipped with the necessary computer and communication skills. Statistics is commissioned by all disciplines where it can contribute towards scientific and technological progress.

Admission requirements

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

Minimum requirements								
Achievement level								APS
Afrikaans or English				Mathematics				
NSC/IEB	HIGCSE	AS-Level	A-Level	NSC/IEB	HIGCSE	AS-Level	A-Level	
5	3	C	C	5	3	C	C	32

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 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, with the proviso that 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); 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.

f. A module already passed may only be repeated with the approval of the Dean.
g. A module passed may not be taken into account for more than one degree or field of specialisation.
h. 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.
i. 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.
j. The Dean has the right of authorisation regarding matters not provided for in the General Regulations or the Faculty Regulations.

Other programme-specific information

- Total credits refer to minimum as required by the programme, but can be more, depending on the elective modules.
- Alternative credits as indicated in brackets are based on choosing WST as a specialisation module instead of STK, while all elective modules are selected within the Faculty of Economic and Management Sciences.
- **Only two 14-week modules on the 300-level, 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 apart from the modules offered only at 200- and 300-level.
- The number of elective modules is influenced by the inclusion of modules from other faculties and their respective credit values.

With regard to choosing elective modules:
For example: Students in Mathematical statistics who also want to be trained for the insurance industry, select, among others, the following modules as part of their core and elective modules:

WST	Mathematical statistics(1)	111, 121	211, 221	311, 321 312, 322
WTW	Mathematics(1)	114, 126(4) 128(4)	211, 220 218, 221	
COS	Computer science	132(6), 110		
FBS	Financial management	112, 122		
EKN	Economics	113, 123		
IAS	Actuarial mathematics		211, 282	382

For example: Students in **Mathematical statistics** who also want to be trained in the **Econometrics** field select, among others, the following modules as part of their core and elective modules:

WST	Mathematical statistics(1)	111, 121	211, 221	311, 321 312, 322
WTW	Mathematics(1)	114, 124(3)	211, 220 218, 221	

COS	Computer science	132(6), 110		
EKN	Economics		214, 234	310, 320 314, 325

Other students may select among others, modules from any other subject/faculty according to their own specific career requirements as part of their core and elective modules:
Note: See the alphabetical list of modules for prerequisites of all modules.
At least one of the two elective modules in which a candidate graduate must be selected from the available modules within the Economics and Management Sciences Faculty.
FRK 122 is a terminating module. Candidates will not be able to continue with Financial accounting in the second or third year.
(1) If WST modules are selected, notice must be taken of the relevant WTW prerequisites as stipulated in the yearbook.
(2) Informatics 281 is compulsory if Financial accounting 211 and 221 (FRK 211, 221) are chosen.
(3) WTW 124 is the equivalent of seven-week modules, with the exception of WTW 114 which is presented over a period of 14 weeks.
(4) Students who register for Agricultural economics at 200 and 300 level as electives will have to pass extra modules to make up the credits.
(5) It is recommended that COS 132 be taken as an elective by all students in this programme.

Specialisation modules: STK 310, 320 or WST 311, 312, 321, 322.

"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:

- 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);
- 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.

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. Transferees from other faculties and from other universities who still complete their bachelor degrees (including credits transferred and recognised from the degrees they registered for originally) within three years will be considered as exceptional cases by the Dean.
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 in 2015 must take the modules indicated under the particular field of specialisation.

Please note: 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.

Curriculum: Year 1

Minimum credits: 130

Fundamental modules

Academic information management 101 (AIM 101) - Credits: 6.00
Academic literacy for Economic and Management Sciences 124 (ALL 124) - Credits: 6.00
Academic orientation 107 (UPO 107) - Credits: 0.00

Core modules

Economics 110 (EKN 110) - Credits: 10.00
Economics 120 (EKN 120) - Credits: 10.00
Financial accounting 111 (FRK 111) - Credits: 10.00
Financial accounting 121 (FRK 121) - Credits: 12.00
Business management 114 (OBS 114) - Credits: 10.00
Business management 124 (OBS 124) - Credits: 10.00
Statistics 110 (STK 110) - Credits: 13.00
Statistics 120 (STK 120) - Credits: 13.00
Mathematical statistics 111 (WST 111) - Credits: 16.00
Mathematical statistics 121 (WST 121) - Credits: 16.00
Financial accounting 122 (FRK 122) - Credits: 12.00

Elective modules

Program design: Introduction 110 (COS 110) - Credits: 16.00
Economics 113 (EKN 113) - Credits: 15.00
Economics 123 (EKN 123) - Credits: 15.00
Informatics 112 (INF 112) - Credits: 10.00
Calculus 114 (WTW 114) - Credits: 16.00
Mathematics 134 (WTW 134) - Credits: 16.00
Imperative programming 132 (COS 132) - Credits: 16.00
Financial management 112 (FBS 112) - Credits: 10.00
Financial management 122 (FBS 122) - Credits: 10.00
Informatics 171 (INF 171) - Credits: 20.00
Mathematics 124 (WTW 124) - Credits: 16.00
Linear algebra 146 (WTW 146) - Credits: 8.00
Calculus 148 (WTW 148) - Credits: 8.00

Curriculum: Year 2

Minimum credits: 141

Core modules

Statistics 210 (STK 210) - Credits: 20.00
Statistics 220 (STK 220) - Credits: 20.00
Mathematical statistics 211 (WST 211) - Credits: 24.00
Mathematical statistics 221 (WST 221) - Credits: 24.00
Communication management 282 (KOB 282) - Credits: 5.00

Elective modules

Economics 214 (EKN 214) - Credits: 16.00
Introduction to moral and political philosophy 251 (FIL 251) - Credits: 10.00
Financial accounting 211 (FRK 211) - Credits: 16.00
Financial accounting 221 (FRK 221) - Credits: 16.00
Actuarial mathematics 211 (IAS 211) - Credits: 12.00
Financial mathematics 282 (IAS 282) - Credits: 12.00
Informatics 214 (INF 214) - Credits: 14.00
Informatics 225 (INF 225) - Credits: 14.00
Informatics 261 (INF 261) - Credits: 7.00
Introduction to agricultural economics 210 (LEK 210) - Credits: 12.00
Agricultural economics 220 (LEK 220) - Credits: 12.00
Linear algebra 211 (WTW 211) - Credits: 12.00
Calculus 218 (WTW 218) - Credits: 12.00
Analysis 220 (WTW 220) - Credits: 12.00
Linear algebra 221 (WTW 221) - Credits: 12.00
Economics 234 (EKN 234) - Credits: 16.00
Informatics 282 (INF 282) - Credits: 3.00

Curriculum: Final year

Minimum credits: 132

Core modules

Statistics 310 (STK 310) - Credits: 25.00
Statistics 320 (STK 320) - Credits: 25.00
The science of data analytics 353 (STK 353) - Credits: 25.00
Multivariate analysis 311 (WST 311) - Credits: 18.00
Stochastic processes 312 (WST 312) - Credits: 18.00
Time-series analysis 321 (WST 321) - Credits: 18.00
Actuarial statistics 322 (WST 322) - Credits: 18.00

Elective modules

Economics 310 (EKN 310) - Credits: 20.00
Economics 314 (EKN 314) - Credits: 20.00
Economics 320 (EKN 320) - Credits: 20.00
Economics 325 (EKN 325) - Credits: 20.00
Financial accounting 311 (FRK 311) - Credits: 20.00
Financial accounting 321 (FRK 321) - Credits: 20.00
Actuarial modelling 382 (IAS 382) - Credits: 20.00
Agricultural economics 310 (LEK 310) - Credits: 12.00
Agricultural economics 320 (LEK 320) - Credits: 18.00
Analysis 310 (WTW 310) - Credits: 18.00
Financial engineering 354 (WTW 354) - Credits: 18.00
Dynamical systems 382 (WTW 382) - Credits: 18.00
Numerical analysis 383 (WTW 383) - Credits: 18.00

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.