University of Pretoria Yearbook 2017

BSc Information and Knowledge Systems (12133213)

Duration of study	3 years
Total credits	468

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.
- Grade 11 results are used in the provisional admission of prospective students.
- A valid qualification with admission to degree studies is required.
- Minimum subject and achievement requirements, as set out below, are required. On first-year level a student has a choice between Afrikaans and English as language medium. In certain cases, tuition may be presented in English only, for example in electives, where the lecturer may not speak Afrikaans or in cases where it is not economically or practically viable.
- Should a candidate obtain an APS of 26 to 29, consideration for admission will be based on the results of the NBT, provided the quotas regarding student numbers have not been reached.

Minimum requirements								
Achievement level								
Afrikaans or English				Mathematics				APS
NSC/IEB	HIGCSE	AS-Level	A-Level	NSC/IEB	HIGCSE	AS-Level	A-Level	
4	3	D	D	5	3	C	C	30 (26-29 admission based on the NBT)

Promotion to next study year

General

a. A student must pass all the modules of the first year of study, before he or she is permitted to register for any module of the third year of study. Module prerequisites remain applicable. Exceptions to this rule will be considered by the relevant Head of Department and the Dean.
b. A student must pass all the modules of the second year of study, before he or she is permitted to register for any module of the fourth year of study (in the case of a four-year degree). Module prerequisites remain

applicable. Exceptions to this rule will be considered by the relevant Head of Department and the Dean.

  c. A new first-year student, who has failed in all the prescribed modules of the programme at the end of the first semester, will not be permitted to proceed to the second semester in the School of Information Technology.
  d. A student who has not passed at least 70% of the credits of the current year of study after the November examinations will not be re-admitted to the School of Information Technology.
  e. Students who fail a module for a second time, forfeit the privilege of registering for any modules of an advanced year of study.
  f. Students whose academic progress is not acceptable can be suspended from further studies.

Procedure: Exclusion from and re-admission to further studies in the School of Information Technology

  a. A student who is excluded from further studies in terms of the stipulations of the abovementioned regulations will be notified in writing by the Dean or admissions committee of the School of Information Technology at the end of the relevant semester.
  b. A student who has been excluded from further studies may apply in writing to the admissions committee of the School of Information Technology on level 6 in the Engineering building I for re-admission.
  c. Written applications for re-admission to the second semester must be submitted at least 7 days before lectures resume for the second semester.
  d. Written applications for re-admission to the new academic year must be submitted before 12 January.
  e. Late applications will be accepted only in exceptional circumstances after approval by the Dean.
  f. Should a student not be re-admitted to further studies by the admissions committee of the School of Information Technology, he/she will be informed in writing.
  g. A student who is not re-admitted by the admissions committee of the School of Information Technology has the right to appeal to the Appeals Committee: Admissions in the Administration building, room 3-13.
  h. Any decision taken by the Appeals Committee: Admissions is final.
  i. Should the student be re-admitted by the Admissions Committee, strict conditions will be set which the student must comply with in order to proceed with his/her studies.
  j. A student, who is repeating his or her year, may be permitted by the Dean, on recommendation of the relevant head(s) of department, to register for modules of the following year of study in addition to the outstanding modules he or she has failed, providing that he or she complies with the prerequisites of these modules and no timetable clashes occur. In no semester may the total credits for which a student registers, exceed the normal number of credits per semester by more than 16 credits, except with special permission from the relevant Head of Department.

Pass with distinction

A degree (undergraduate) in the School of IT is conferred with distinction on a student who did not repeat any module of his/her final year, obtained a weighted average of at least 75% in all the prescribed modules for the final year, provided that a subminimum of 65% is obtained in each of these modules and provided that the degree is completed in the prescribed minimum period of time. Ad hoc cases will be considered by the Dean, in consultation with the head of the relevant department.

Curriculum: Year 1

Minimum credits: 140

Fundamental modules

Academic information management 101 (AIM 101) - Credits: 6.00
Academic literacy for Information Technology 121 (ALL 121) - Credits: 6.00
Academic orientation 101 (UPO 101) - Credits: 0.00

Core modules

Program design: Introduction 110 (COS 110) - Credits: 16.00
Introduction to computer science 151 (COS 151) - Credits: 8.00
Discrete structures 115 (WTW 115) - Credits: 8.00
Mathematics 134 (WTW 134) - Credits: 16.00
Imperative programming 132 (COS 132) - Credits: 16.00
Operating systems 122 (COS 122) - Credits: 16.00

Elective modules

Marketing Management 120 (BEM 120) - Credits: 10.00
Biometry 120 (BME 120) - Credits: 16.00
Plant biology 161 (BOT 161) - Credits: 8.00
Philosophy 110 (FIL 110) - Credits: 12.00
Philosophy 120 (FIL 120) - Credits: 12.00
Financial accounting 111 (FRK 111) - Credits: 10.00
Aspects of human geography 156 (GGY 156) - Credits: 8.00
Southern African geomorphology 166 (GGY 166) - Credits: 8.00
Cartography 110 (GMC 110) - Credits: 10.00
Introductory genetics 161 (GTS 161) - Credits: 8.00
Introduction to history of music 110 (IMG 110) - Credits: 10.00
Informatics 154 (INF 154) - Credits: 10.00
Informatics 164 (INF 164) - Credits: 10.00
Commercial law 110 (KRG 110) - Credits: 10.00
Commercial law 120 (KRG 120) - Credits: 10.00
Criminology 110 (KRM 110) - Credits: 12.00
Introduction to microbiology 161 (MBY 161) - Credits: 8.00
Molecular and cell biology 111 (MLB 111) - Credits: 16.00
Music education 170 (MPE 170) - Credits: 10.00
Business management 114 (OBS 114) - Credits: 10.00
Business management 124 (OBS 124) - Credits: 10.00
Psychology 110 (SLK 110) - Credits: 12.00
Psychology 120 (SLK 120) - Credits: 12.00
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
Numerical analysis 123 (WTW 123) - Credits: 8.00
Mathematics 134 (WTW 134) - Credits: 16.00

Mathematical modelling 152 (WTW 152) - Credits: 8.00
Dynamical processes 162 (WTW 162) - Credits: 8.00
Financial accounting 122 (FRK 122) - Credits: 12.00
Introduction to environmental sciences 101 (ENV 101) - Credits: 8.00
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: 170

Core modules

Data structures and algorithms 212 (COS 212) - Credits: 16.00
Software modelling 214 (COS 214) - Credits: 16.00
Netcentric computer systems 216 (COS 216) - Credits: 16.00
Introduction to database systems 221 (COS 221) - Credits: 16.00
Concurrent systems 226 (COS 226) - Credits: 16.00
Computer organisation and architecture 284 (COS 284) - Credits: 16.00
Discrete structures 285 (WTW 285) - Credits: 12.00
Theoretical computer science 210 (COS 210) - Credits: 8.00

Elective modules

Introductory geographic information systems 283 (GGY 283) - Credits: 14.00
Geographic data analysis 220 (GIS 220) - Credits: 14.00
Remote sensing 220 (GMA 220) - Credits: 14.00
Molecular genetics 251 (GTS 251) - Credits: 12.00
Genetic diversity and evolution 261 (GTS 261) - Credits: 12.00
Introduction to history of music 210 (IMG 210) - Credits: 15.00
Multimedia 210 (IMY 210) - Credits: 16.00
Multimedia 220 (IMY 220) - Credits: 16.00
Informatics 261 (INF 261) - Credits: 7.00
Informatics 272 (INF 272) - Credits: 14.00
Commercial law 200 (KRG 200) - Credits: 24.00
Bacteriology 251 (MBY 251) - Credits: 12.00
Mycology 261 (MBY 261) - Credits: 12.00
Music technology 302 (MCS 302) - Credits: 18.00
Business management 210 (OBS 210) - Credits: 16.00
Business management 220 (OBS 220) - Credits: 16.00
Statistics 210 (STK 210) - Credits: 20.00
Statistics 220 (STK 220) - Credits: 20.00
Consumer behaviour 212 (BEM 212) - Credits: 16.00

Curriculum: Final year

Minimum credits: 144

Core modules

Software engineering 301 (COS 301) - Credits: 27.00
Computer networks 332 (COS 332) - Credits: 18.00
Programming languages 333 (COS 333) - Credits: 18.00
Multimedia 310 (IMY 310) - Credits: 30.00
Computer security and ethics 330 (COS 330) - Credits: 18.00

Elective modules

Artificial intelligence 314 (COS 314) - Credits: 18.00
Database systems 326 (COS 326) - Credits: 18.00
Computer graphics 344 (COS 344) - Credits: 18.00
Geographic information systems 310 (GIS 310) - Credits: 24.00
Spatial analysis 320 (GIS 320) - Credits: 22.00
Informatics 354 (INF 354) - Credits: 15.00
Information and communications technology law 420 (KUB 420) - Credits: 10.00
Capita selecta: Music 402 (MCS 402) - Credits: 40.00
Business management 310 (OBS 310) - Credits: 20.00
Business management 320 (OBS 320) - Credits: 20.00
International business management 359 (OBS 359) - Credits: 20.00
International business management 369 (OBS 369) - Credits: 20.00
Genome evolution and phylogenetics 354 (GTS 354) - Credits: 18.00
Population and evolutionary genetics 367 (GTS 367) - Credits: 18.00
Plant genetics and crop biotechnology 361 (BTC 361) - 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.