

# BIT (Information Systems)

Programme code: 12133300

## 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.
- Grade 11 results are used in the conditional 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.
- Tuition will be presented in English only.
- Should a candidate obtain an APS of 26 to 29, consideration for admission will be based on the results of the NBT, provided the numbers of students in designated groups have not been reached.
- Statistics and Economics require at least a 5 for Mathematics. If you have a 4 for Mathematics, you have to do STK 113 and STK 123 in the first year and if you have passed them, you may do STK 120 in the second year.
- The Data Science Management stream is not recommended for students with a 4 for Mathematics.

Minimum requirements				
Achievement level				
English Home Language or English First Additional Language		Mathematics		APS
NSC/IEB	AS Level	NSC/IEB	AS Level	
5	C	4	D	30  (26 - 29 admission based on the NBT)

\* 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.

Minimum duration of study: 3 years

Modules

	Year 1		Year 2		Year 3	
	Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2
<b>Fundamental modules</b>	AIM 101 (Academic Information Management)	ALL121 (Academic Literacy for IT)				
	UPO 112 (Academic Orientation)					
<b>Core modules</b>	INF113 (Critical thinking and problem solving)	INF 112 (Business Information Systems)	INF 271 (Systems Analysis and Design)		INF 315 (Project Management)	INF 324 (IT Trends)
	INF 154 (Programming)	INF 164 (Programming)	INF 272 (Programming)		INF 354 (Programming)	
	INF 171 (Systems Analysis and Design)		INF 214 (Databases)	INF 261 (Advanced Databases)	INF 370 (Project)	
	OBS 114 (Business Management)	OBS 124 (Business Management)		INF 225 (Networks)		
			JCP 202 (Community-based project)			
				FIL 251 (Business Ethics)		
<b>CHOOSE ONE ELECTIVE STREAM</b>						
<b>Computer Auditing</b>	FRK 111 (Financial Accounting)	FRK 121 (Financial Accounting)	FRK 211 (Financial Accounting)	FRK 221 (Financial Accounting)	IOK 311 (Internal Auditing)	IOK 321 (Internal Auditing)
	STK 110 (Statistics)	STK 120 (Statistics)	IOK 211 (Internal Auditing)	IOK 221 (Internal Auditing)		
	INF 183 (Accounting software)					
<b>Information Science</b>	INL 110 (Information Science)	INL 120 (Information Science)	INL 210 (Information Science)	INL 220 (Information Science)	INL 310 (Information Science)	INL 320 (Information Science)

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	INL 130 (Information Science)	INL 140 (Information Science)				
<b>Entrepreneurship</b>	FRK 111 (Financial Accounting)	FRK 122 (Financial Accounting)	OBS 210 (Business Management)	OBS 220 (Business Management)	OBS 310 (Business Management)	OBS 330 (Business Management)
	STK 110 (Statistics)	STK 120 (Statistics)	KOB 210 (Communication Management)			
	INF 183 (Accounting software)					
<b>E-Business</b>	FRK 111 (Financial Accounting)	FRK 122 (Financial Accounting)	OBS 211 (Design Thinking and Business Innovation)	OBS 212 (Business creation)	OBS 359 (International Business Management)	OBS 370 (Business Analytics)
	STK 110 (Statistics)	STK 120 (Statistics)	KOB 210 (Communication Management)			
	INF 183 (Accounting software)					
<b>Geography</b>	ENV 110 (Introduction to Environmental Science)	WTW 134 (Mathematics)	GGY 283 (Aspects of Human Geography)	GIS 220 (Geographical data)	GIS 310 (Geographical Information Systems)	GIS 320 (Geographical Information Systems)
	GGY 156 (Aspects of Human Geography)	GMC 110 (Cartography)		GMA 220 (Remote sensing)		
<b>Data Science Management</b>	EKN 110 (Economics)	EKN 120 (Economics)	STK 210 (Statistics)	STK 220 (Statistics)	STK 310 (Statistics)	STK 353 (The Science of Data Analytics)
	STK 110 (Statistics)	STK 120 (Statistics)				
<b>e-Taxation</b>	FRK 111 (Financial Accounting)	FRK 121 (Financial Accounting)	FRK 211 (Financial Accounting)	FRK 221 (Financial Accounting)	BEL 300 (Taxation)	
	STK 110 (Statistics)	STK 120 (Statistics)	BEL 200 (Taxation)			
	INF 183 (Accounting software)					

## Seven streams to choose from:

### 1. Computer Auditing Stream

An **information technology**, or **IT audit**, involves the analysis of an organization's information technology structure, operations, and software programs. An **IT auditor** may identify ways in which an organization's computer systems can better meet its needs, configure hardware and software programs to design new systems, and test systems to ensure that they are working properly.

The majority of IT auditors work in an office setting, primarily with computer systems. Depending on the employer, some auditors may be required to travel in order to evaluate the systems of clients. Auditors work independently most of the time, though larger projects may require some collaboration. In this stream you will take Accounting, Statistics and Auditing together with Information Systems.

### 2. Information Science Stream

Information scientists are responsible for managing the acquisition, supply and distribution of information within an organisation or section of an organisation and for making that information accessible to users. A combination of Information Science and Information Systems will equip the student to become a data scientist, knowledge manager, competitive intelligence analyst, information architect, web content manager, etc.

### 3. Entrepreneurship stream

Entrepreneurial careers transcend specific job titles, career paths, and industries. While it can mean starting a new business, entrepreneurial careers can be found (or created) in just about every field, industry, and organization! Entrepreneurs create products, services, companies, and even industries. Some work for themselves, or a family business. Others work within traditional companies. Those with entrepreneurial aspirations typically pursue one of the following career paths:

**New Venture Creation:** Launching a company, buying a business or franchise, starting a new venture in a family enterprise, or commercializing a technology.

**Careers In Existing Entrepreneurial Ventures:** Working for a startup, small business, corporate entrepreneur, strategic entrepreneurial unit, or other area, such as education, research, public policy, and accelerators.

In this stream Accounting, Statistics and Entrepreneurship modules are combined with Information Systems.

### 4. e-Business Stream

E-business managers oversee sales for businesses that market their products directly to consumers via the Internet. E-business, short for 'electronic business,' has seen rapid growth in recent years, and continued growth is predicted due to ongoing expansion of the Internet. Entry-level positions require at least a bachelor's degree. In this stream Accounting, Statistics, Communication Management and Business Management will give you the business knowledge needed whilst Information Systems will give you the ICT knowledge.

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#### 5. Geography Stream

Organizations across the globe are increasingly relying on location intelligence to make better decisions. As a result, careers in Geographical Information Systems (GIS) are in demand more than ever. Equipped with data visualization and spatial analysis skills, GIS professionals qualify for occupations in countless fields. With a combination of Information Systems and Geography modules you will be able to pursue a career in GIS.

#### 6. Data Science Management Stream

A statistician is responsible for planning, collecting, processes and analysing information and data in order to make an informed decision. Statisticians are involved in producing reliable data, the analyses of data in order to form a clear meaning, and drawing practical conclusions from the data and information at hand. Combining Information Systems and Statistics will open doors to become a data scientist, data mining specialist and data analyst in various organisations.

#### 7. e-Taxation Stream

With your background in Accounting, Statistics, Taxation and Information Systems, you will be a sought-after employee in financial institutions like banks and audit firms.

More information: [https://www.up.ac.za/media/shared/7/ZP\\_Galleries/Undergraduate/fb-ebit-2019-20-final-pdf-14.11.2018.zp171416.pdf](https://www.up.ac.za/media/shared/7/ZP_Galleries/Undergraduate/fb-ebit-2019-20-final-pdf-14.11.2018.zp171416.pdf)