

# University of Pretoria Yearbook 2019

## BIT (12131020)

**Minimum duration of study** 4 years

**Total credits** 558

## 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	
5	3	C	C	5	3	C	C	30 (26-29 admission based on the NBT)

## Other programme-specific information

Note that a student who wishes to continue with an MSc(Computer Science) or MCom(Informatics) or MIS (Information Science) should take four of the five honours modules from that specific department in their fourth year of study.

## Promotion to next study year

Also consult the G Regulations.

- i. A student is promoted to the following year of study after obtaining the required credits as mentioned below:
- Second year of study after obtaining at least 70% of the credits of the first year of study.
  - Third year of study after obtaining at least 70% of the credits of the second year of study.
  - Fourth year of study after obtaining at least 70% of credits of the third year of study.
- ii. The degree is conferred if all the prescribed modules have been passed.



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# Curriculum: Year 1

**Minimum credits: 144**

## Fundamental modules

- Academic information management 101 (AIM 101) - Credits: 6.00
- Academic information management 111 (AIM 111) - Credits: 4.00
- Academic information management 121 (AIM 121) - Credits: 4.00
- Academic literacy for Information Technology 121 (ALL 121) - Credits: 6.00
- Academic orientation 112 (UPO 112) - Credits: 0.00

## Core modules

- Program design: Introduction 110 (COS 110) - Credits: 16.00
- Operating systems 122 (COS 122) - Credits: 16.00
- Imperative programming 132 (COS 132) - Credits: 16.00
- Introduction to computer science 151 (COS 151) - Credits: 8.00
- Informatics 171 (INF 171) - Credits: 20.00
- Information science 110 (INL 110) - Credits: 12.00
- Business management 114 (OBS 114) - Credits: 10.00
- Business management 124 (OBS 124) - Credits: 10.00
- Discrete structures 115 (WTW 115) - Credits: 8.00
- Mathematics 134 (WTW 134) - Credits: 16.00



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## Curriculum: Year 2

**Minimum credits: 156**

### 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

Computer organisation and architecture 284 (COS 284) - Credits: 16.00

Multimedia 210 (IMY 210) - Credits: 16.00

Multimedia 220 (IMY 220) - Credits: 16.00

Informatics 214 (INF 214) - Credits: 14.00

Informatics 271 (INF 271) - Credits: 14.00

Information science 210 (INL 210) - Credits: 20.00

Information science 240 (INL 240) - Credits: 20.00

Discrete structures 285 (WTW 285) - Credits: 12.00



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## Curriculum: Year 3

**Minimum credits: 131**

### Core modules

Software engineering 301 (COS 301) - Credits: 27.00

Artificial intelligence 314 (COS 314) - Credits: 18.00

Computer security and ethics 330 (COS 330) - Credits: 18.00

Computer networks 332 (COS 332) - Credits: 18.00

Programming languages 333 (COS 333) - Credits: 18.00

Compiler construction 341 (COS 341) - Credits: 18.00

Computer graphics 344 (COS 344) - Credits: 18.00

Multimedia: Project 300 (IMY 300) - Credits: 45.00

Informatics 315 (INF 315) - Credits: 15.00

Informatics 324 (INF 324) - Credits: 15.00

Informatics 370 (INF 370) - Credits: 35.00

Information science: Information organisation 310 (INL 310) - Credits: 30.00

Information science: Information and knowledge management 320 (INL 320) - Credits: 30.00

Community-based project 202 (JCP 202) - Credits: 8.00

## Curriculum: Final year

**Minimum credits: 127**

### Core modules

Industry-based learning 700 (SIT 700) - Credits: 52.00

### Elective modules

Computer and information security (I) 720 (COS 720) - Credits: 15.00  
Software engineering (I) 730 (COS 730) - Credits: 15.00  
Software engineering (II) 731 (COS 731) - Credits: 15.00  
Formal aspects of computing (I) 740 (COS 740) - Credits: 15.00  
Formal aspects of computing (II) 741 (COS 741) - Credits: 15.00  
Educational software development 750 (COS 750) - Credits: 15.00  
Data mining 781 (COS 781) - Credits: 15.00  
Generic programming 782 (COS 782) - Credits: 15.00  
Digital forensics and investigations 783 (COS 783) - Credits: 15.00  
Computer networks 784 (COS 784) - Credits: 15.00  
Parallel and distributed computing 786 (COS 786) - Credits: 15.00  
Spatial databases 787 (COS 787) - Credits: 15.00  
Multimedia trends 771 (IMY 771) - Credits: 15.00  
Hypermedia and mark-up languages 772 (IMY 772) - Credits: 15.00  
Multimedia technology 773 (IMY 773) - Credits: 15.00  
Animation theory and practice 777 (IMY 777) - Credits: 15.00  
Human-computer interaction 779 (IMY 779) - Credits: 15.00  
Enterprise architecture 715 (INF 715) - Credits: 15.00  
Capita selecta 716 (INF 716) - Credits: 15.00  
Electronic commerce 782 (INF 782) - Credits: 15.00  
Advanced database systems 785 (INF 785) - Credits: 15.00  
Managing projects and end-users 787 (INF 787) - Credits: 15.00  
Information systems development 788 (INF 788) - Credits: 15.00  
Capita selecta 790 (INF 790) - Credits: 15.00  
Knowledge acquisition and sharing 791 (INF 791) - Credits: 15.00  
Information and knowledge management (I) 713 (INY 713) - Credits: 15.00  
Information ethics 715 (INY 715) - Credits: 15.00  
Information and knowledge management (II) 716 (INY 716) - Credits: 15.00  
Information society 722 (INY 722) - Credits: 15.00  
Competitive intelligence (I) 726 (INY 726) - Credits: 15.00  
Competitive intelligence (II) 727 (INY 727) - Credits: 15.00  
Information communication 730 (INY 730) - Credits: 15.00

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.