

# University of Pretoria Yearbook 2021

# BIS Information Science (12131012)

**Department** Information Science

Minimum duration of

study

3 years

**Total credits** 425

NQF level 07

## Programme information

The increasing amount of information available and developing information needs have necessitated the training of information intermediaries to effectively facilitate the bringing together of users and the information they require.

This package focuses on the use of information technology and the processing of information products and is designed to train students in the management, retrieval and organisation of information, as well as to teach them how to add value to, package and distribute information. Students will also have the opportunity to develop knowledge and skills in the management of one of the most important resources of enterprises – information and knowledge. Two or three specialisation options are available, depending on the electives chosen.

## Admission requirements

- The closing date is an administrative admission guideline for non-selection programmes. Once a non-selection programme is fulland has reached the institutional targets, then that programme will be closed for further admissions, irrespective of the closing date. However, if the institutional targets have not been met by the closing date, then that programme will remain open for admissions until the institutional targets are met.
- 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 National Senior Certificate (NSC) 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 for 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.
- All lectures at the University of Pretoria are presented in English only.

## **Transferring students**

#### Candidates previously registered for the BSc - Extended programme

The Admissions Committee of the faculty considers applications of candidates who were previously registered for the BSc - Extended programme, on grounds of their NSC results as well as academic merit. Such students will only be considered for the four-year programme if they have passed all the prescribed modules and obtained a



minimum of 65% in the Mathematics, Physics and Chemistry modules, respectively.

## Candidates previously registered at UP or at another university

The faculty's Admissions Committee considers applications of candidates who have already completed the final NSC examination and/or were previously registered at UP or at another university, on grounds of their NSC results as well as academic merit. Candidates who were dismissed from other faculties or universities will not be considered.

## Candidates previously registered at a teacher's college or university of technology

The faculty's Admissions Committee considers the application of these candidates on the grounds of their NSC results as well as academic merit.

#### **Qualifications from countries other than South Africa**

- Citizens from countries other than South Africa and South African citizens with foreign qualifications must comply with all the other admission requirements and the prerequisites for subjects/modules.
- In addition to meeting the admission requirements, it may be expected from candidates to write the **TOEFL**, **IELTS or SAT**, if required.
- Candidates must have completed the National Senior Certificate with admission to degree studies or a
  certificate of conditional exemption on the basis of a candidate's foreign qualifications, the so-called
  "Immigrant" or "Foreign Conditional Exemption". The only condition for the "Foreign Conditional Exemption"
  that is accepted is: 'completion of the degree course'. The exemption certificate is obtainable from Universities
  South Africa (USAf). Detailed information is available on the website at click here.

**University of Pretoria website: click here** 

Minimum requirements
Achievement level
English Home Language or English
First Additional Language APS
NSC/IEB AS Level

- \* 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.

## Other programme-specific information

Because credits are not calculated in the same way in all faculties, students should note that the total number of credits required for this package is at least 425-458 depending on the choice of elective modules (as required for Group A, B or C).



## Curriculum: Year 1

Minimum credits: 120

Elective modules: Select one group of modules in consultation with the package organiser, select at least 40 credits from any modules at year level one OR select 50 credits from the INF elective group. Students who obtained at least 4(50% - 59%) for Mathematics in the NSC will be admitted to Informatics 112 and students who obtained at least 5(60 - 69%) for Mathematics in the NSC will be admitted to Informatics 154, 164 and 171.

## **Fundamental modules**

## **Academic information management 111 (AIM 111)**

Module credits	4.00
NQF Level	05
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
NQF Level	05



Faculty of Engineering, Built Environment and Information Technology

Faculty of Education

Faculty of Economic and Management Sciences

Faculty of Humanities

Service modules 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 Information Technology 121 (ALL 121)**

Module credits 6.00

NQF Level 05

Service modules Faculty of Engineering, Built Environment and Information Technology

Faculty of Economic and Management Sciences

**Prerequisites** No prerequisites.

**Contact time** 1 web-based period per week, 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Unit for Academic Literacy

**Period of presentation** Semester 2

## **Module content**

By the end of this module students should be able to cope more confidently and competently with the reading, writing and critical thinking demands that are characteristic of the field of Information Technology.

## Academic orientation 112 (UPO 112)

Module credits 0.00

NOF Level 00

**Language of tuition** Module is presented in English

**Department** EBIT Deans Office

**Period of presentation** Year



## **Core modules**

## Information science 110 (INL 110)

Module credits 12.00

NQF Level 05

Service modules Faculty of Humanities

**Prerequisites** No prerequisites.

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

**Language of tuition** Module is presented in English

**Department** Information Science

**Period of presentation** Semester 1

#### Module content

This module is an introduction to the study field of information science and its various professions. Key concepts that will be discussed include the following: the human as information processor and user; the life-cycle of information in terms of processes, products and role-players; as well as the communication of information. The social-ethical impact of globalisation is included as a key concern, with reference to Africa.

## Information science 120 (INL 120)

Module credits 12.00

NOF Level 05

Service modules Faculty of Humanities

**Prerequisites** No prerequisites.

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

**Language of tuition** Module is presented in English

**Department** Information Science

**Period of presentation** Semester 2

#### **Module content**

Organisation and representation of information. This module provides the student with an introduction to the basic principles and processes underlying the organisation and representation of information. The process of organising information in documents and on the web, in multimedia formats, by means of document image processing and in databases are dealt with. Themes on the representation of information through the creation of metadata include various general and domain specific metadata schemas such as Dublin Core as a metadata standard for the Web, as well as various other metadata schemas.

Practical classes include basic HTML and the design of Web pages incorporating and applying what was covered in theory.

## Information science 130 (INL 130)

Module credits 12.00



NQF Level	05
Service modules	Faculty of Humanities
Prerequisites	No prerequisites.
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Information Science
Period of presentation	Semester 1

Personal information management. This module focuses on personal information management within an organisational context. It deals with managing information and knowledge that is peculiar to an individual and which enables him/her to perform his/her job.

Topics include: creating an environment in which the individual can manage his/her information and knowledge; the skills needed to be able to manage personal information and knowledge; information overloading which gives rise to personal information and knowledge management, as well as the manner in which individuals can switch from personal information management to personal knowledge management; personal information and knowledge management as a career.

#### Information science 140 (INL 140)

Module credits	12.00
NQF Level	05
Service modules	Faculty of Humanities
Prerequisites	No prerequisites.
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Information Science
Period of presentation	Semester 2

#### **Module content**

Information and communication technology. This module offers a brief overview of hardware and software, telecommunications technology, LANs, WANs and intranets, the information highway, the internet and the World Wide Web, computer ethics, ICTs, e-commerce, mobile computing technology and the influence that new trends and developments have on the distribution of information.

#### **Business management 114 (OBS 114)**

Module credits	10.00
NQF Level	05



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

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.

## **Business management 124 (OBS 124)**

Module credits	10.00
NQF Level	05
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Humanities Faculty of Natural and Agricultural Sciences
Prerequisites	Admission to the examination in OBS 114
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Business Management
Period of presentation	Semester 2

#### Module content

Value chain management: functional strategies for competitive advantage; human resource management; managing diverse employees in a multicultural environment; motivation and performance; using advanced information technology to increase performance; production and operations management; financial management; corporate entrepreneurship.

## **Elective modules**

#### **Afrikaans 110 (AFR 110)**

Module credits	12.00
NQF Level	06



Faculty of Engineering, Built Environment and Information Technology

Faculty of Education

**Service modules** Faculty of Economic and Management Sciences

Faculty of Law

Faculty of Health Sciences

**Prerequisites** No prerequisites.

**Contact time** 2 discussion classes per week, 2 lectures per week

**Language of tuition** Module is presented in Afrikaans

**Department** Afrikaans

**Period of presentation** Semester 1

#### **Module content**

**Taalkundekomponent**: Inleiding tot die Afrikaanse taalkunde met klem op lees-en skryfvaardigheid.

**Letterkundekomponent**: Inleiding tot die Afrikaanse en Nederlandse letterkunde aan die hand van kortverhale en gedigte.

### **Afrikaans 120 (AFR 120)**

Module credits 12.00

NQF Level 06

Faculty of Engineering, Built Environment and Information Technology

Faculty of Education

Faculty of Economic and Management Sciences

Faculty of Law

**Prerequisites** No prerequisites.

**Contact time** 2 discussion classes per week, 2 lectures per week

**Language of tuition** Module is presented in Afrikaans

**Department** Afrikaans

**Period of presentation** Semester 2

#### Module content

Service modules

**Taalkundekomponent**: Inleiding tot die Afrikaanse sintaksis, fonetiek en taalgeskiedenis.

Letterkundekomponent:Inleiding tot die Romankuns Inleiding tot die Drama

#### Archaeology 110 (AGL 110)

Module credits 12.00

NQF Level 05

**Prerequisites** No prerequisites.

**Contact time** 1 tutorial per week, 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Anthropology and Archaeology



#### **Period of presentation** Semester 1

## **Module content**

\*Optional Field school usually in April

Introduction to Archaeology

An introduction as to how archaeologists study the past via the artefacts left behind by our ancestors. Basic introduction to archaeological theory and how it has contributed to interpretation of the past is discussed. Topics range from the origins of the human family in Africa over three million years ago to the study of more recent times.

## Archaeology 120 (AGL 120)

Module credits 12.00

NQF Level 05

**Prerequisites** No prerequisites.

**Contact time** 1 tutorial per week, 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Anthropology and Archaeology

**Period of presentation** Semester 2

#### Module content

African and world archaeology

Africa is the home of humanity in both a biological and cultural sense and we have the artefacts and sites to prove it. Topics range from the famous 3 million year-old Australopithecine 'Lucy' ancestor found in Ethiopia to the 'Out of Africa' dispersal of modern humans, and the emergence of human symbolism, rock art and the emergence of complex societies at society at Lake Chad (Daima) and southern Africa (Mapungubwe and Great Zimbabwe). The main aim is to situate events in Africa in global perspective.

#### **Introduction to tourism 110 (EFK 110)**

Module credits	12.00

NQF Level 07

Service modules Faculty of Engineering, Built Environment and Information Technology

Faculty of Education

**Prerequisites** No prerequisites.

**Contact time** 1 tutorial per week, 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Historical and Heritage Studies

**Period of presentation** Semester 1

#### Module content

Overview of the origin and nature of tourism development of South African cultural, natural and adventure tourist destinations.



## **Heritage tourism management 120 (EFK 120)**

Module credits 12.00

NQF Level 05

Service modules Faculty of Engineering, Built Environment and Information Technology

Faculty of Education

**Prerequisites** No prerequisites.

**Contact time** 1 tutorial per week, 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Historical and Heritage Studies

**Period of presentation** Semester 2

#### Module content

An introductory exploration of the relationship between heritage conservation and tourism.

## **English 110 (ENG 110)**

NQF Level 06

Faculty of Engineering, Built Environment and Information Technology

Faculty of Education

**Service modules** Faculty of Economic and Management Sciences

Faculty of Law

Faculty of Health Sciences

**Prerequisites** No prerequisites.

**Contact time** 1 discussion class per week, 2 lectures per week, 2 web-based periods per week

**Language of tuition** Module is presented in English

**Department** English

**Period of presentation** Semester 1

#### **Module content**

\*Alternative evening classes - 2 discussion classes per week Introduction to Literature in English (1)

This module introduces the study of literature by examining a number of texts representing different genres (poetry, prose, drama). The texts studied here will be mainly from the pre-twentieth century era and may include texts written in English from both Africa and other parts of the world. The aim of this module is to equip students with the critical and analytical skills required for a perceptive reading of poetry, novels and plays.

#### **English 120 (ENG 120)**

Module credits	12.00
----------------	-------

NQF Level 06



Faculty of Engineering, Built Environment and Information Technology

Faculty of Education

Service modules Faculty of Economic and Management Sciences

Faculty of Law

Faculty of Theology and Religion

**Prerequisites** No prerequisites.

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

**Language of tuition** Module is presented in English

**Department** English

**Period of presentation** Semester 2

#### Module content

\*Alternative evening classes: 2 discussion classes per week Introduction to Literature in English (2)

This module introduces the study of post-nineteenth century literature by examining a number of texts representing different genres (poetry, drama, prose). Texts will be from both Africa and other parts of the world. By the end of this module students should have the background and analytical skills to perceptively read modern and contemporary poetry, novels and plays.

## Informatics 112 (INF 112)

Module credits	10.00
NQF Level	05
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 154 (INF 154)

Module credits	10.00
NQF Level	05



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

**Contact time** 1 lecture per week, 2 practicals per week

**Language of tuition** Module is presented in English

**Department** Informatics

**Period of presentation** Semester 1

**Module content** 

Introduction to programming.

## Informatics 164 (INF 164)

Module credits 10.00

NQF Level 05

Service modules Faculty of Engineering, Built Environment and Information Technology

Faculty of Natural and Agricultural Sciences

Prerequisites INF 154

**Contact time** 1 lecture per week, 2 practicals per week

**Language of tuition** Module is presented in English

**Department** Informatics

**Period of presentation** Semester 2

Module content

Programming.

## Informatics 171 (INF 171)

Module credits 20.00

NQF Level 05

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

**Contact time** 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Informatics

Period of presentation Year



General systems theory, creative problem solving, soft systems methodology. The systems analyst, systems development building blocks, systems development, systems analysis methods, process modelling.

## Criminology 110 (KRM 110)

Module credits	12.00
NQF Level	05
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Law Faculty of Theology and Religion
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Social Work and Criminology
Period of presentation	Semester 1

#### **Module content**

Part 1: Fundamental criminology

A general introduction to criminology is provided. An overview of factors that contribute to crime, forensic criminology and forensic criminalistics are investigated.

Part 2: Violent crime

Various types of violent crimes receive attention in this section.

## Criminology 120 (KRM 120)

Module credits	12.00
NQF Level	05
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Law Faculty of Theology and Religion
Prerequisites	KRM 110
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Social Work and Criminology
Period of presentation	Semester 2



Part 1: Penology

Attention is given to the roleplayers in the criminal justice system, namely the police, judiciary and corrections.

Part 2: Crime prevention and control

The nature and extent of crime, theories to explain criminal behaviour and crime prevention and control are investigated.

The two sections will not necessarily be presented in chronological order.

## **Public administration 112 (PAD 112)**

Module credits	10.00
NQF Level	05
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Humanities
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	School of Public Management and Administration
Period of presentation	Semester 1

#### Module content

This module in public administration is designed specifically to assist students in understanding the role of public administration in a modern state, the unique characteristics of public administration, the schools and approaches in public administration and introducing the various generic administrative functions. The discipline of public administration has developed rapidly and by implication, has changed and shifted its paradigm over the years. The purpose of this module is to introduce public administration to the student as a field of study that makes a significant contribution to the effective administration and management of government institutions.

#### **Public administration 122 (PAD 122)**

Module credits	10.00
NQF Level	05
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Humanities
Prerequisites	PAD 112 GS
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	School of Public Management and Administration
Period of presentation	Semester 2
Prerequisites Contact time Language of tuition Department	Faculty of Humanities  PAD 112 GS  3 lectures per week  Module is presented in English  School of Public Management and Administration



This module in public administration will introduce the constitutional framework pertaining to public administration. The South African system of government, the functions, role and powers of the executive, legislative and judicial branches of government as well as the functioning of the three spheres of government will be discussed. The module will enable the student to understand how and where public administration is practiced.

## Psychology 110 (SLK 110)

Module credits	12.00
NQF Level	05
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Natural and Agricultural Sciences
Prerequisites	No prerequisites.
Contact time	2 discussion classes per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Psychology
Period of presentation	Semester 1

#### **Module content**

This module is a general orientation to Psychology. An introduction is given to various theoretical approaches in Psychology, and the development of Psychology as a science is discussed. Selected themes from everyday life are explored and integrated with psychological principles. This module focuses on major personality theories. An introduction is given to various paradigmatic approaches in Psychology.

## Psychology 120 (SLK 120)

Module credits	12.00
NQF Level	05
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Natural and Agricultural Sciences
Prerequisites	No prerequisites.
Contact time	2 discussion classes per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Psychology
Period of presentation	Semester 2



This module introduces the student to a basic knowledge and understanding of the biological basis of human behaviour. The module addresses the key concepts and terminology related to the biological subsystem, the rules and principles guiding biological psychology, and identification of the interrelatedness of different biological systems and subsystems. In this module various cognitive processes are studied, including perception, memory, thinking, intelligence and creativity. Illustrations are given of various thinking processes, such as problem solving, critical, analytic and integrative thinking.

## Sociology 110 (SOC 110)

Module credits	12.00
NQF Level	05
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Law
Prerequisites	No prerequisites.
Contact time	1 tutorial per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Sociology
Period of presentation	Semester 1

#### Module content

#### Invitation to Sociology

How do we understand ourselves as individuals in relation to society? How are our individual life courses and large-scale processes of social and historical change related to each other? How have our societies come to be what they are today? And how can we think of our private troubles as public issues? These questions are at the very heart of sociology as a distinctive way of thinking about and understanding the social worlds that we inhabit. This module invites students to become familiar with sociological ways of thinking about current issues and personal experiences (particularly in the southern African context), and to develop the analytical skills that are necessary in order to ask and answer critical questions about the communities, society, and world that they live in. The module will include a specific emphasis on academic reading skills.

## **Sociology 120 (SOC 120)**

Module credits	12.00
NQF Level	05
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Law
Prerequisites	No prerequisites.
Contact time	1 tutorial per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Sociology
Period of presentation	Semester 2



Thinking sociologically

Drawing from the idea of Sociology as a discipline that focuses on critical thinking, the module will introduce students to ways of questioning the obvious and the taken-for-granted. In particular, power and inequality will be problematised, with a focus on how power operates to structure racial, class and gender inequalities across institutions, ideologies and identities. The module will introduce students to the operations of power as manifested in the production of institutions, the proliferation of identities and heightened contestations among ideologies. The module will include a specific emphasis on writing skills.



## Curriculum: Year 2

Minimum credits: 160

Elective modules: Select one group of modules in consultation with the package organiser, select at least 63 credits from the INF elective group OR select 60 credits from the INF elective group.

## **Fundamental modules**

## Community-based project 202 (JCP 202)

Module credits	8.00
NQF Level	07
Service modules	Faculty of Economic and Management Sciences
Prerequisites	No prerequisites.
Contact time	1 other contact session per week
Language of tuition	Module is presented in English
Department	Informatics
Period of presentation	Year

#### Module content

This module is integrated into all undergraduate academic programmes offered by the Faculty. Main objectives: execution of a community project aimed at achieving a beneficial impact on a section of a socio-economically underprivileged community located in socio-economically deprived areas our society; awareness of personal, social and cultural values and an understanding of social issues; and development of life skills.

## **Core modules**

## Information science 210 (INL 210)

Module credits	20.00
NQF Level	06
Service modules	Faculty of Humanities
Prerequisites	AIM 101 or AIM 102 or AIM 111 and 121
Contact time	3 lectures per week, 3 practicals per week
Language of tuition	Module is presented in English
Department	Information Science
Period of presentation	Semester 1



Information seeking and retrieval. This module explores the theory and practice of effective information seeking and retrieval. It builds on supporting research paradigms such as the systems, user-centred, cognitive and sociocognitive paradigms. The focus is on the complexities of effective information seeking and retrieval within the context of information behaviour on a personal level, as well as in the context of professional, academic or everyday information needs.

## **Information science 220 (INL 220)**

Module credits	20.00
NQF Level	06
Service modules	Faculty of Humanities
Prerequisites	INL 210 or LP
Contact time	3 lectures per week, 3 practicals per week
Language of tuition	Module is presented in English
Department	Information Science
Period of presentation	Semester 2

#### Module content

Representation and organisation. Information needs to be represented and organised in a system for it to be effectively retrievable. This module deals with the representation and organisation of information on the level of individual entities (e.g. indexing), from the perspective of the users (user profiling), as well as within a document collection (taxonomies and ontologies).

## Information science 240 (INL 240)

Module credits	20.00
NQF Level	06
Service modules	Faculty of Humanities
Prerequisites	No prerequisites.
Contact time	3 lectures per week, 3 practicals per week
Language of tuition	Module is presented in English
Department	Information Science
Period of presentation	Semester 1

#### **Module content**

Social and ethical impact. This module examines moral and legal regulation practices related to information in print and digital environments. Different ethical theories are identified and applied to privacy, access to information, information poverty and censorship. The interpretation and enforcement of rules and regulations are discussed.



## **Business management 210 (OBS 210)**

Module credits	16.00
NQF Level	06
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Natural and Agricultural Sciences
Prerequisites	OBS 114 or 124 with admission to the examination in the other
Language of tuition	Module is presented in English
Department	Business Management
Period of presentation	Semester 1

#### Module content

Logistics management

The role of logistics in an enterprise; definition and scope of customer service; electronic and other logistics information systems; inventory management; materials management with special reference to Japanese systems; management of the supply chain. Methods of transport and transport costs; types and costs of warehousing; electronic aids in materials handling; cost and price determination of purchases; organising for logistics management; methods for improving logistics performance.

## **Business management 220 (OBS 220)**

Module credits	16.00
NQF Level	06
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Natural and Agricultural Sciences
Prerequisites	OBS 114 or 124 with admission to the examination in the other. Students from other Faculties are required to have 50% for Mathematics in Grade 12.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Business Management
Period of presentation	Semester 2
Language of tuition  Department	3 lectures per week  Module is presented in English  Business Management

#### **Module content**

Project management and negotiations:

Introduction Project management concepts; needs identification; the project, the project manager and the project team; types of project organisations; project communication and documentation. Planning and control: planning, scheduling and schedule control of projects; resource considerations and allocations; cost planning and performance evaluation.

Negotiation and collective bargaining: The nature of negotiation; preparation for negotiation; negotiating for purposes of climate creation; persuasive communication; handling conflict and aggression; specialised negotiation and collective bargaining in the South African context.



## **Elective modules**

## Informatics 214 (INF 214)

Module credits 14.00

NQF Level 06

Service modules Faculty of Engineering, Built Environment and Information Technology

Faculty of Natural and Agricultural Sciences

**Prerequisites** AIM 101 or AIM 111 and AIM 121

**Contact time** 2 lectures per week, 2 practicals per week

**Language of tuition** Module is presented in English

**Department** Informatics

**Period of presentation** Semester 1

#### Module content

Database design: the relational model, structured query language (SQL), entity relationship modelling, normalisation, database development life cycle; practical introduction to database design. Databases: advanced entity relationship modelling and normalisation, object-oriented databases, database development life cycle, advanced practical database design.

### Informatics 225 (INF 225)

Module credits 14.00

NQF Level 06

Service modules Faculty of Engineering, Built Environment and Information Technology

Faculty of Natural and Agricultural Sciences

Prerequisites INF 112; AIM 101 or AIM 102 or AIM 111 and AIM 121

**Contact time** 1 lecture per week, 3 practicals per week

**Language of tuition** Module is presented in English

**Department** Informatics

**Period of presentation** Semester 2

## **Module content**

An overview of systems infrastructure and integration.

#### Informatics 261 (INF 261)

Module credits 7.00

NQF Level 06

Faculty of Engineering, Built Environment and Information Technology

Service modules Faculty of Education

Faculty of Natural and Agricultural Sciences

Prerequisites INF 214



**Contact time** 1 lecture per week, 1 practical per week

**Language of tuition** Module is presented in English

**Department** Informatics

**Period of presentation** Semester 2

#### Module content

Database management: transaction management, concurrent processes, recovery, database administration: new developments: distributed databases, client-server databases: practical implementation of databases.

## Informatics 271 (INF 271)

Module credits 14.00

NQF Level 06

Service modules Faculty of Engineering, Built Environment and Information Technology

**Prerequisites** INF 164, INF 171

**Contact time** 1 discussion class per week, 1 lecture per week, 1 practical per week

**Language of tuition** Module is presented in English

**Department** Informatics

**Period of presentation** Year

#### Module content

Systems analysis. Systems design: construction; application architecture; input design; output design; interface design; internal controls; program design; object design; project management; system implementation; use of computer-aided development tools.

#### Informatics 272 (INF 272)

Module credits 14.00

NQF Level 06

Service modules Faculty of Engineering, Built Environment and Information Technology

Faculty of Natural and Agricultural Sciences

**Prerequisites** INF 164 and INF 171

**Contact time** 1 lecture per week, 2 practicals per week

**Language of tuition** Module is presented in English

**Department** Informatics

**Period of presentation** Year

#### Module content

Advanced programming.

#### Information science 230 (INL 230)



Module credits	20.00
NQF Level	06
Service modules	Faculty of Humanities
Prerequisites	No prerequisites.
Contact time	3 lectures per week, 3 practicals per week
Language of tuition	Module is presented in English
Department	Information Science
Period of presentation	Semester 1

User studies and dissemination. This module focuses on the individual as seeker, user, reader and communicator of information. Various user groups are identified and their information use and communication patterns and requirements are analysed and investigated. This module covers methods of service provision to facilitate and enhance the use and dissemination of information in accordance with the user's needs.

## **Information science 260 (INL 260)**

Module credits	20.00
NQF Level	06
Service modules	Faculty of Humanities
Prerequisites	No prerequisites.
Contact time	3 lectures per week, 3 practicals per week
Language of tuition	Module is presented in English
Department	Information Science
Period of presentation	Semester 2

#### Module content

Economics and politics of information. This module examines the economics and politics of information, with a special emphasis on South Africa's information sector. It aims to promote an understanding of the market and non-market qualities of information, and their consequences for the production, distribution and marketing of information goods and services. The ways in which information access and expression are regulated and the use of ICTs in crime and corruption is also addressed.

## Information science 270 (INL 270)

Module credits	20.00
NQF Level	06
Service modules	Faculty of Humanities
Prerequisites	No prerequisites.
Contact time	3 lectures per week, 3 practicals per week



Language of tuition Module is presented in English

**Department** Information Science

**Period of presentation** Semester 2

#### **Module content**

Indigenous knowledge and communication. This module focuses on the role and function of Indigenous Knowledge (IK) in the information and knowledge society. Various categories and contexts of IK are explored within international and local perspectives.

Issues pertaining to access and communication of IK, inter alia through Information and Communication Technology (ICT), are addressed in order to ensure sustainable development.



## Curriculum: Final year

Minimum credits: 145

## **Core modules**

## Information science: Information organisation 310 (INL 310)

Module credits 30.00 NQF Level 07

Service modules Faculty of Humanities

**Prerequisites** No prerequisites.

**Contact time** 3 lectures per week, 3 practicals per week

**Language of tuition** Module is presented in English

**Department** Information Science

**Period of presentation** Semester 1

#### Module content

Information Organisation. The module is concerned with the organisation of information in the digital environment focusing on the structure and use of document management and workflow systems, as well as distribution channels and virtual environments. The characteristics and application of the internet, intranets, as well as portals and applications use, are considered.

## Information science: Information and knowledge management 320 (INL 320)

Module credits 30.00 **NQF** Level 07 Service modules Faculty of Humanities **Prerequisites** No prerequisites. **Contact time** 3 lectures per week, 3 practicals per week Module is presented in English Language of tuition Information Science **Department** Semester 2 Period of presentation

### Module content

Information and Knowledge Management. This module focuses on information and knowledge management at an operational level and introduces information and knowledge management at a corporate strategic level. It deals with the management of information and knowledge, which enables the organisation to be competitive. In this module the focus is on four aspects, namely: the 21st century organisation, the external and internal stakeholders that have an interest in information products, as well as the infrastructure that should be in place in organisations to manage information products. The module concludes with a few topics relating to information management at a corporate strategic level.



## Information science 370 (INL 370)

Module credits 15.00

NQF Level 07

**Prerequisites** INL 210, 220 and INL 310 or registered for INL 310

**Contact time** 1 lecture per week, 2 practicals per week

**Language of tuition** Module is presented in English

**Department** Information Science

**Period of presentation** Year

**Module content** 

Experiential learning project. This module takes the form of a project and experiential training in co-operation with industry.

## **Elective modules**

## Informatics 315 (INF 315)

Module credits 15.00

NQF Level 07

Service modules Faculty of Engineering, Built Environment and Information Technology

**Prerequisites** INF 261, INF 225, INF 271

**Contact time** 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Informatics

**Period of presentation** Semester 1

#### **Module content**

A review of current trends which are relevant to the application of information systems within a business environment.

## Informatics 324 (INF 324)

Module credits 15.00

NQF Level 07

Service modules Faculty of Engineering, Built Environment and Information Technology

**Prerequisites** INF 261, INF 225, INF 271

**Contact time** 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Informatics

**Period of presentation** Semester 2



Information systems in organisations.

## Information science: Digital repositories 340 (INL 340)

Module credits 30.00

NQF Level 07

Service modules Faculty of Humanities

**Prerequisites** No prerequisites.

**Contact time** 3 lectures per week, 3 practicals per week

**Language of tuition** Module is presented in English

**Department** Information Science

**Period of presentation** Semester 2

#### **Module content**

This module deals with the construction and management of digital repositories. It also addresses the characteristics of the digital repository in a rapidly changing technological world and a challenging information society. Core aspects include: system design, relationships to hybrid libraries, digital collections and rights management, standards, virtual referencing and the development and evaluation of digital repositories.

## Information science: Socio-political aspects of information in global context 360 (INL 360)

Module credits	30.00
NQF Level	07
Service modules	Faculty of Humanities
Prerequisites	No prerequisites.
Contact time	3 lectures per week, 3 practicals per week
Language of tuition	Module is presented in English
Department	Information Science
Period of presentation	Semester 1

#### **Module content**

This module examines aspects of the information and knowledge society within local, regional and international contexts. A special focus of the module is the interaction and exchange of data, information and knowledge from communities' local knowledge system with data, information and knowledge from the global knowledge system. The module discusses the growth and role of information and communication technologies (ICTs), and their implications for development.

#### **Information science: Competitive intelligence 380 (INL 380)**

Module credits	30.00
NQF Level	07



Service modules	Faculty of Humanities
Prerequisites	No prerequisites.
Contact time	3 lectures per week, 3 practicals per week
Language of tuition	Module is presented in English
Department	Information Science
Period of presentation	Semester 2

This module provides an overview of Competitive Intelligence (CI) and focuses on the needs for CI in organisations. The ways in which organisations compete and the benefits that CI can bring to these organisations will also be covered. The growing need for CI among South African organisations will also be examined. Practical examples and case studies will be used to highlight the value of CI in organisations.

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.