UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Engineering, Built Environment and Information Technology

Fakulteit Ingenieurswese, Bou-omgewing en Inligtingtegnologie / Lefapha la Boetšenere, Tikologo ya Kago le Theknolotši ya Tshedimošo

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Departmental Brochure

Department of Informatics

2025

Information Systems are developed by people for people

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1 WELCOME

A warm welcome to you as a student in the Department of Informatics! We hope you are going to enjoy your studies this year!

Informatics (Information Systems) studies the application and use of the computer and information systems within the organisation. Our students' strength lies in their broad background of the economic and management sciences, which implies that the world of business is nothing sinister to them. The use of information technology by organisations is growing exponentially and new, more complex and challenging software applications are explored and developed on a daily basis. It has the benefit that, in addition to the work of an informatics / Information Systems specialist being extremely interesting, there will only be a very small chance that the qualified Informatics / Information Systems specialist will ever be without work.

South Africa is an advanced user of information technology, and work opportunities for graduates have never been problematic. The world of work and environment that we prepare you for through the degree in Informatics (Information Systems), is international and a substantial number of our students are successful when they, in the process of expanding their professional skills, seek temporary employment overseas. We also take great care to ensure that our curriculum is in line with the curricula of overseas universities and we take part in and participate in overseas conferences where educational approaches and curricula are presented and discussed.

We offer two undergraduate degrees in the department: BCom (Informatics Information Systems) and BIT (Information Systems). Our degree BCom (Informatics Information Systems) is the only Information Systems degree in Africa that is internationally accredited by ABET (see www.abet.org). The BIT (Information Systems) can only be accredited when we have graduates from the program.

The basic premise of the Department (see paragraph 2.3: The teaching approach of the Department of Informatics) state the 12 departure points of this Department. These represent our undertaking to you as a student. From you, we expect dedication and an understanding of the seriousness of your studies (although we have all been students and appreciate that there must be time for your studies, as well as a time to play and relax!).

My best wishes to you: may you find pleasure in gaining this knowledge while you explore and debate these very relevant topics further!

Prof Hanlie Smuts
Head: Department of Informatics

Students must visit the UP-student portal (ClickUP) for module notes and announcements at least twice a week. **http://www.up.ac.za**	

This brochure contains general information that is applicable to all modules in the Department of Informatics. It is very important that you ***read this brochure thoroughly*** and that you consult it during the year if you have any questions or problems. In addition to this brochure, you will also receive a study guide on the web (ClickUP) for the specific modules that you have registered for.

2 Approach, purpose and structure

2.1 University of Pretoria graduate attributes[1]

The University of Pretoria aspires to produce graduates with attributes that will enable them to develop further as individuals, members of different communities of practice and citizens of their own countries and the world. The depth of student engagement and the level of a qualification will influence the degree to which attributes are realised. At the highest level, the following are the aspirational characteristics of University of Pretoria graduates:

Basic values, skills and orientation to the world.
University of Pretoria graduates:

- behave ethically and with integrity
- respect the humanity and dignity of others and eschew all forms of unfair discrimination
- value cultural diversity, social equality, social justice and social responsibility
- value transformation for the betterment of society
- respect the environment and value the sustainable use of environmental resources
- are adaptable self-directed lifelong learners who function autonomously and confidently
- as individuals and take responsibility for their own decisions and development
- have an entrepreneurial orientation to life

Social skills
University of Pretoria graduates:

- have good interpersonal skills
- are able to communicate competently with a range of people and communities in diverse
- social and cultural settings
- are able to work collaboratively and cooperatively in teams

Cognitive skills
University of Pretoria graduates:

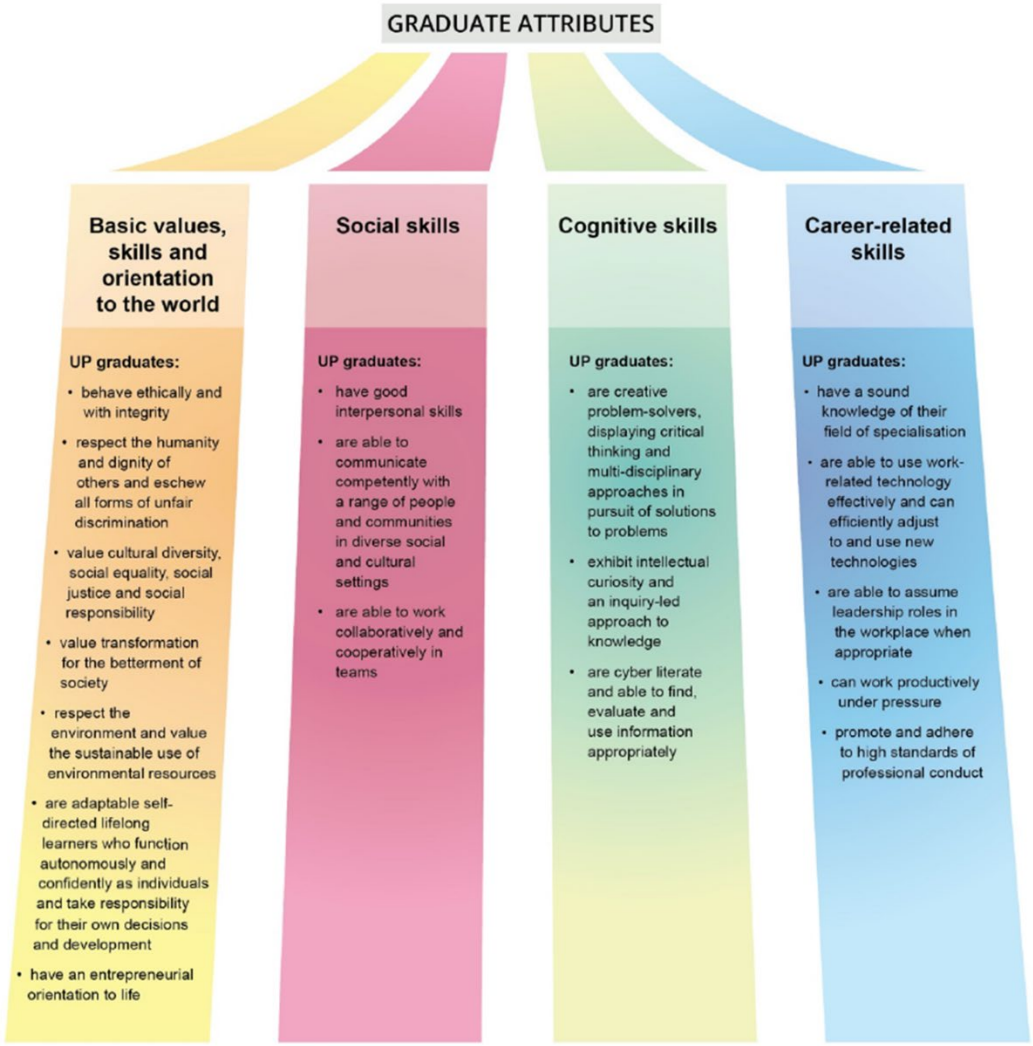
- are creative problem-solvers, displaying critical thinking and multi-disciplinary
- approaches in pursuit of solutions to problems
- exhibit intellectual curiosity and an inquiry-led approach to knowledge

[1] Extracted from the University of Pretoria Revised List of Graduate Attributes, Office of the Vice-Principal: Academic

- are cyber literate and able to find, evaluate and use information appropriately

Career-related skills
University of Pretoria graduates:

- have a sound knowledge of their field of specialisation
- are able to use work related technology effectively and can efficiently adjust to and use
- new technologies
- are able to assume leadership roles in the workplace when appropriate
- can work productively under pressure
- promote and adhere to high standards of professional conduct



These graduate attributes inform our approach to teaching and learning in the Department of Informatics.

2.2 Description of the Informatics (Information Systems) discipline

Modern organisations cannot function without information and the technology with which they gather, store, compute and make available the information. The successful application of technology is, however, more than just writing computer programs. Computer programs are important, but an understanding of the business within which the organisation functions and an understanding of the use of information and information technology to support the objectives of the organisation, are far more important. This can clearly be seen in the description of the discipline:

> *Informatics is a multi-disciplinary subject, where information, information systems, and the integration thereof into the organisation, are studied for the benefit of the entire system (individual, organisation and community).*

The Informatics / Information Systems specialist is therefore, in the first instance, a businessperson and, in the second instance, a technologist. As a systems analyst, the Informatics / Information Systems specialist will know the organisation where he/she works, because information systems that are designed and implemented are very often the core of the business processes and activities. As an end user supporter, the Informatics / Information Systems specialist will act as technology consultant and facilitator, and in those capacities will play an important liaison role in the organisation. As a manager of information systems, the Informatics / Information Systems specialist will be responsible for the strategic application of information systems and information technology, for example to help the organisation to exploit new markets using technology. In all of these different roles, the Informatics / Information Systems specialist needs to have exceptional people skills, apart from the technological skills, because he/she will frequently be confronted with moral and ethical issues surrounding the application of technology (for example the invasion of privacy).

Informatics / Information Systems specialists can also, if that is where their interests lie, choose to exchange roles and concentrate on technology as such. To prepare students for this, the second and third year focus on network management and database design and administration. However, the main focus will still be people and the organisation, rather than technology itself.

The study of Informatics (Information Systems) can also prepare students to be skilled and knowledgeable users of information technology. This will be the case if a student typically does only part of the undergraduate Informatics (information Systems) syllabus, majoring in Accounting or Marketing or any other subject. Because information technology plays an important role in any organisation, no accountant, marketer or any other occupation, can be without knowledge on the use of information technology in his/her specific subject.

2.3 BCom (Informatics Information Systems) and BIT (Information Systems)

Our program educational objectives (PO) for the BCom (Informatics Information Systems) program and BIT (Information Systems) are:

PO_01: The Informatics / Information Systems graduate must have a broad business understanding and real-world perspective to be Information Systems enablers in organisations and understand the strategic significance of Information Systems.
PO_02: The Informatics / Information Systems graduate must have strong analytical and critical thinking skills to be able to apply both traditional and old concepts and skills.
PO_03: The Informatics / Information Systems graduate must design and implement information technology solutions that enhance organisational performance.
PO_04: The Informatics / Information Systems graduate must exhibit strong ethical principles and have good interpersonal communication and team skills.
PO_05: The Informatics / Information Systems graduate must have skills in basic statistical and mathematical models to be used in analysing data.
PO_06: The Informatics / Information Systems graduate must understand that systems consist of people, hardware, software and data.

The BCom (Informatics Information Systems) students should be able to do the following when they graduate (linked to the Program Objectives and the UP-Graduate Attributes (UPGA)). These objectives/attributes are also applicable to BIT (IS).

ABET_01: Analyse a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.

- PO_01: The Informatics / Information Systems graduate must have a broad business understanding and real-world perspective to be Information Systems enablers in organisations and understand the strategic significance of Information Systems.
- PO_02: The Informatics / Information Systems graduate must have strong analytical and critical thinking skills to be able to apply both traditional and old concepts and skills.
- PO_05: The Informatics / Information Systems graduate must have skills in basic statistical and mathematical models to be used in analysing data.
- PO_06: The Informatics / Information Systems graduate must understand that systems consist of people, hardware, software and data.

  UPGA_02: UP graduates have intellectual curiosity and an inquiry-led approach to knowledge. They formulate questions and hypotheses and apply systematic and analytically rigorous methods to develop evidence; collect, evaluate, synthesise and interpret data; and reach valid conclusions. They apply knowledge to create innovative solutions and communicate this knowledge effectively.

  UPGA_05: UP graduates rapidly conceptualise issues and synthesise knowledge creatively to provide solutions for current and future-orientated challenges. They conduct context-focused, solution-orientated inquiries using critical, creative and logical thinking. They use a systems approach to manage change in complex situations, using diverse global perspectives to improve understanding of causes of and solutions to local problems.

ABET_02: Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.

- PO_01: The Informatics / Information Systems graduate must have a broad business understanding and real-world perspective to be Information Systems enablers in organisations and understand the strategic significance of Information Systems.
- PO_02: The Informatics / Information Systems graduate must have strong analytical and critical thinking skills to be able to apply both traditional and old concepts and skills.
- PO_06: The Informatics / Information Systems graduate must understand that systems consist of people, hardware, software and data.

  UPGA_02: UP graduates have intellectual curiosity and an inquiry-led approach to knowledge. They formulate questions and hypotheses and apply systematic and analytically rigorous methods to develop evidence; collect, evaluate, synthesise and interpret data; and reach valid conclusions. They apply knowledge to create innovative solutions and communicate this knowledge effectively.

ABET_03: Communicate effectively in a variety of professional contexts.

- PO_03: The Informatics / Information Systems graduate must design and implement information technology solutions that enhance organisational performance.

- PO_04: The Informatics / Information Systems graduate must exhibit strong ethical principles and have good interpersonal communication and team skills.

  UPGA_07: UP graduates communicate constructively and sensitively with a range of people and communities in diverse social, cultural, geographical and workplace contexts using appropriate language (oral, written and listening) as well as numerical, graphical and presentation skills. They effectively use relevant information to advance lifelong learning and execute work tasks and are able to gather and synthesise data and summarise key issues. They have up-to-date digital knowledge and experience of technology generally and in their fields.

ABET_04: Recognise professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.

- PO_04: The Informatics / Information Systems graduate must exhibit strong ethical principles and have good interpersonal communication and team skills.

  UPGA_03: UP graduates are emerging or established leaders in a profession with a broad understanding of theory and practice related to their fields, who understand economic and business realities as well as their own working environment and can manage change. They behave ethically and with integrity within the profession and its culture. They promote accepted professional values. They integrate expertise or experience and communicate these in different contexts locally and globally with a view to transformation.

  UPGA_06: UP graduates have a sense of social responsibility, respect human rights and dignity and exhibit informed civic, cultural and environmental awareness. They work with value-led behaviour for public good, social justice and environmental sustainability. They make an active social and civic contribution, and advocate transformation locally, nationally and globally.

ABET_05: Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.

- PO_03: The Informatics / Information Systems graduate must design and implement information technology solutions that enhance organisational performance.
- PO_04: The Informatics / Information Systems graduate must exhibit strong ethical principles and have good interpersonal communication and team skills.
- PO_06: The Informatics / Information Systems graduate must understand that systems consist of people, hardware, software and data.
  UPGA_04: UP graduates are team players with the relevant intra- and inter-personal skills to work collaboratively and co-operatively in multi-disciplinary and diverse contexts. They interact constructively and create opportunities for shared learning. They have conflict management skills and negotiate constructive outcomes. They provide opportunities for and develop individuals, teams and communities, and value networking.

ABET_06: Support the delivery, use, and management of information systems within an information systems environment.

- PO_01: The Informatics / Information Systems graduate must have a broad business understanding and real-world perspective to be Information Systems enablers in organisations and understand the strategic significance of Information Systems.
- PO_03: The Informatics / Information Systems graduate must design and implement information technology solutions that enhance organisational performance.

- PO_06: The Informatics / Information Systems graduate must understand that systems consist of people, hardware, software and data.

  UPGA_01: UP graduates function autonomously/ independently and confidently as individuals, within the work environment locally and globally, and as citizens in a developing country. They demonstrate initiative in overcoming life and work challenges, devise ways to improve their own performance and take responsibility for their own decisions and development. They have a lifelong learning disposition.

2.4 The teaching approach of the Department of Informatics

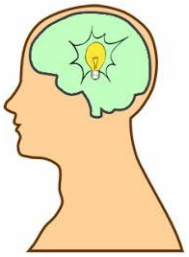
This department feels that it is important to comply with the declared policy of the University, namely to ensure that education centres on the student. The aim is to enable students to study increasingly independently, as they progress with their studies. The responsibility of the lecturers is to **facilitate learning**, rather than transfer knowledge. This vision is realised in our approach in the following manner:

- The lecturers ***create*** learning opportunities that the students *can* ***utilise***.
- The lecturers ***create*** assessment opportunities that the students ***must utilise***.

The student is actively involved in the learning process and therefore ought to

- Think and form an own opinion;
- Communicate and voice this opinion;
- Take action - that is, refine and adapt this opinion according to input received by him/her;
- Be personally responsible for acquiring own knowledge since recent research indicates that the more involved the student becomes in his/her studies, the more and the quicker he/she will learn;
- Learn how to think critically, solve problems and work in teams.

We accept that students:



- Are a selected, *intelligent group of people.*
- Can *read*, and that classes should not be a repetition of what is written in the textbook.
- Have *opinions* on topics discussed during lectures. We are interested in hearing those opinions, especially because we, as lecturers, do not have all the answers.
- May *differ* from us, and may know more about certain topics than we do.
- Would like to be *personally responsible* for developing their own knowledge.

The Department does lecturer evaluations each semester. You will therefore get an opportunity to express your views on a particular subject and lecturer. We consider these evaluations of the utmost importance and feedback will be given to the class representatives and the Head of Department.

2.4.1 The basic points of departure of the Department of Informatics can be summarised as follows:

1. We see Informatics / Information Systems as an interdisciplinary subject area where information, information systems and the integration thereof into the organisation are studied to the benefit of the entire system (individual, society and organisation).

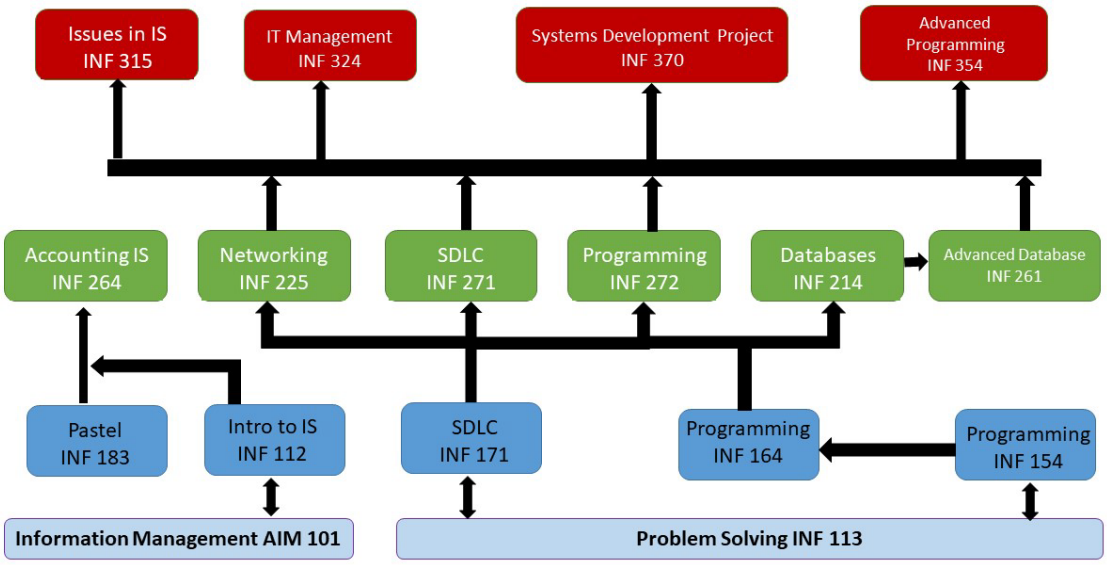
2. Our specialist teaching programme form students into professional Informatics / Information Systems specialists who are ready for the working world and can function in the global and multinational context of today's information dependent organisations.
3. Our curriculum is focused on three basic, important abilities: The ability to think independently, the ability to integrate relevant details and knowledge, and the ability to act as a knowledgeable partner to clients from outside the computer domain.
4. Our curriculum strikes a balance between factual knowledge that can be taught and knowledge that is meant to make action possible that can only be learnt in practice.
5. We follow a student-centred approach, and expect from our students to be independent and lifelong learners. Lecturers do not act only as presenters and distributors of teaching services, but also as mentors and facilitators of the learning process.
6. We respect the individuality of our students - not only on a personal level, but also in connection with their background and working abilities, and we undertake to give advice to them personally in accordance with their special needs.
7. Our teaching is focused on introducing students to a dynamic science for a dynamic market. To ensure the confidence of all stakeholders in our curriculum, we regularly undertake surveys using employers of our graduated students and alumni to determine whether our curriculum still complies with the requirements of the working world. Although we are sensitive to the requirements of the outside world, we still have the academic right to follow a long-term vision in the compilation of our curriculum.
8. We set an example to our students and instill in them a respect for the ethical and moral consequences of their behaviour in the computer and information world.
9. Our teaching aims to prepare students following the entire teaching programme for a career as systems analyst/designer and expert supporter of end users. We expect from students who do not follow the entire programme, to function as end users and we adjust our teaching accordingly.
10. We measure our standards against those of world-class departments.
11. We believe that information systems are developed for people by people.
12. We do not see technology as an end in itself. At the same time we adhere to the principle that appropriate technology can increase the quality of work and living.

2.5 The structure of the undergraduate program

The subject Informatics / Information Systems is spread over three years on the undergraduate level. During this period 15 modules of 14 or 28 weeks are completed. INF 113/171/154/164, INF271/272, INF315, INF 324, INF 354 and INF 370), constitute the specialist stream taken by students with Informatics as their main subject. This stream concentrates on problem solving, technical analysis, design and the construction of systems. The aim is to develop expert system builders.

Informatics 112, 214, 261 and 225 are the modules that focus on databases and systems architecture. Many BCom students choose these modules to prepare themselves better for today's working environment. Informatics 264 is a module taken only by BCom (Accounting) students.

The following is a short summary of what each Informatics module offers you:



SDLC = Systems Development Life Cycle

At first year level:

INF112, AIM101
This module concerns the role, application and impact of information technology and information systems on society and organisations. The most important tools found in an information technology environment, including hardware, telecommunications and software, are addressed. Consequently information technology is discussed as a tool for the design of solutions in organisations and society, after which, application software and end-user computing are addressed. This includes themes such as personal productivity tools, word processing, spreadsheets and databases. The student is also given practical exposure through the AIM101 module to computer packages that link up with the theoretical themes.

INF113/171/154/164
These modules focus on problem solving as an integral part of general systems learning. Students are encouraged to use tools that develop their creativity. We distinguish between hard and soft problems within a system, and we teach our students soft systems methodology, as well as the traditional approach to systems analysis. Different information systems development tools and techniques are studied to purposefully address and solve problems experienced in **information systems.** When a student has completed these modules, he/she should be able to apply systems analysis techniques to problem situations and develop a workable solution for all the components of the problem. An introduction to programming is given using the programming language C#.

At second year level:

INF214/261/225
Two themes are dealt with in these modules, namely database management systems and systems architecture. This will enable the student to understand how data ought to be managed as a company resource by means of a database. These modules contains a theoretical and practical component.

INF264

This module concentrates on the role of information systems in the organisation, as well as the emergence of financial information systems. Only practical applications are done in this module and they are oriented towards accounting. It is presented to all BCom (Accounting) students.

INF271/272
In these modules, we concentrate on information systems analysis and information systems design. It is largely an extension and expansion of INF171/154/164. Much attention is paid to practical information systems technology methodologies. As part of these modules we present programming skills in fourth generation languages.

At third year level:

INF315
This module will give the student knowledge about human-computer interaction and team work.

INF324
The module covers current trends that are relevant to the application of information systems within a business environment.

INF370
An extensive project is completed through which the student in a small group gets the opportunity to develop and implement an information system, thus completing the full system development life cycle.

INF354
Advanced programming principles are established.

2.6 The nature and structure of the lectures

2.6.1 Theory

The format of the lectures will be based on the student centred model. Lectures will not concentrate on merely transferring knowledge in a ***one-way*** fashion. Rather, *amongst other things,* the lecture time will be used to:

- Create a complete view and framework that the student can use to structure the material of the study unit;
- Integrate the different study units by means of horizontal learning objectives;
- Highlight and discuss various issues;
- Provide insight by investigating certain issues in more detail, and
- Interactively deal with problems that students may have with the study material.

The lectures will be interactively presented, and **students** are expected to be **prepared** for classes. Thus, the lectures are learning opportunities created by the lecturer for the student.

After the completion of each study unit theme, an opportunity for discussion questions will be given. Students will be expected to take part when these questions are discussed. Where applicable, a topic with practical examples will be deliberated and applied.

2.6.2 Practical

Practical work for the AIM modules is presented at the IT Labs on the campus. Other practical work is done in the Informatorium. This laboratory is situated on the ground level of the Information

Technology building. It can be used from Monday to Saturday 07:30 - 19:00. Experience has shown that students master the practical module much faster if they use the computer packages themselves. You are thus encouraged to thoroughly practice and familiarise yourself in your own time with what you have learnt in class.

3 Administrative procedures

3.1 Introduction

This section of your information brochure provides you with answers to the typical *When, Where, Who* and *What* questions with regard to the functioning of the department. Information concerning the department, student structures and the handling of general problems, are included in this section.

3.2 Department

3.2.1 Location of the Department of Informatics

The department is on the fifth floor of the Information Technology building (IT). The Help desk at the entrance to the department will be able to help and direct you. They operate from 08:00 – 15:30, Monday to Friday.

3.2.2 Departmental structure

It is important that you approach your lecturer if you have any uncertainties regarding any aspect of the module. If you are not satisfied, you can contact the module coordinator *for your module*. He/she will refer the case, if necessary, to the Head of Department. You can contact the head of the department directly by making an appointment at the departmental secretary, Ms. C Pieterse-Mahlangu, in the IT building at room 5-78 or telephonically at 012-420-3798.

Students with serious learning problems can telephonically contact Student Counselling and Learning Development. Please let your lecturer know, if necessary, so that they can provide you with the necessary support. This situation is handled in strict confidence.

3.2.3 Departmental enquiries

The departmental *secretary, Ms C Pieterse-Mahlangu,* may be contacted at:

Office: IT building, room 5-78
Tel.: 012-420-3798
E-mail: cathy.pieterse@up.ac.za
Hours: 08:00 to 16:00

The person responsible for *processing student marks, Mr. Tsholo Nkoane,* may be contacted at:

Office: IT building, room 5-88
Tel.: 012-420-3369
E-mail: tsholo.nkoane@up.ac.za
Hours: 08:00 to 13:00

The person responsible for *postgraduate students, Mrs. R van der Merwe,* may be contacted at:
Office: IT building, room 5-78

Tel.: 012-420-6321
E-mail: rhona.vandermerwe@up.ac.za
Hours: 08:00 to 16:00

3.3 Student structures

3.3.1 Role and tasks of class representatives

A group according to a method decided by the group must choose class representatives. Those chosen to be class representatives must take responsibility for tasks that include the following:

- Continual informal discussions with fellow students to determine if there are any problems regarding the study material, module or lecturer.
- Formally talk to the class once a month with the same purpose (the lecturer will provide time).
- Form a balanced and impartial collective opinion of a certain problem that represents the average opinion(s) of fellow students, and not necessarily his/her own.
- Continual interaction with the lecturer to convey said opinions of fellow students to the lecturer.
- A formal meeting with the lecturer, at least once a month, to convey the opinion(s) of fellow students to the lecturer.
- Convey feedback from the discussion with the lecturer to the class.
- A formal meeting at least once a semester with the head of department, to give and receive feedback regarding certain cases. The list of these cases will be available to the class representatives beforehand.
- The conveyance of the feedback from the meeting with the head of department to the class.
- The supplying and coordination of study material to students where necessary.
- Maintain a record of important announcements so that students, who cannot attend class on a certain day, can obtain the information from the class representative.
- Support the lecturer in organising social gatherings between lecturers and students.

The class representative plays an important role and must be chosen with care.

3.3.2 Role and task of tutors

The departmental tutors have an office in the IT building, level 5 at the help desk. They are there to help you - make use of them!

- The tutor system serves to advance the academic development of all students and to promote the successful performance and adjustment of students, thereby lessening the dropout rates.
- This tutor system is not an isolated support system, but rather requires input from student, lecturer and tutor.
- This tutor system is not a replacement of the existing academic system. It is a part of the wider structure that is focused on the academic support of the student.
- The tutor system is focused on the student centred learning model, with specific emphasis on problem solving.

- Any student with a need for academic assistance may go and see tutors on own initiative at any time during their consulting hours.
- Numerous criteria are used to identify students needing tutoring, and these will differ from module to module. The following are *some* criteria used:

    - Results of assignments, class tests and module tests;
    - Students with language barriers;
    - Students simultaneously taking two Informatics modules on two different year levels;
    - Students that require more background knowledge of the module and/or subject area;
    - Students repeating the module;
    - Students who will possibly gain a distinction in the subject.

3.4 Use of the library

The office of the subject librarian for Informatics is on the fifth level of the Library. She/he can help you in your search for sources and references. But, you have to make sure that you have done a thorough search on your own, before consulting her/him.

3.5 Application for exemption from academic commitments

If you are absent from any module test you must apply for exemption within THREE working days after the date of the test. This application should be handed to the secretary *personally*. Apologies that were not handed to the secretary in person will *not be valid*. Apologies are only accepted for module tests. No apologies will be accepted for class tests or assignments or practicals - you forfeit the marks.

The application form is available from the Informatics help desk or departmental secretary.

IMPORTANT:

The following are valid excuses from academic commitments:

- Illness, for which a valid medical certificate is needed as proof. The following must be specified by the **doctor** on the certificate:
    - The patient has been examined by him/her (not the patient has informed him/her)
    - The nature of the illness
    - Period of absence
    - Signature and date
- Death/funeral of a member of your family, for which a valid funeral letter or death certificate is required.

If we have any suspicion that a student uses this exemption because he/she has not prepared sufficiently for the specific academic commitment, we will institute disciplinary action against the student.

3.6 Mark enquiries

Marks of the department are processed centrally. Mark enquiries can be made to Mr. T. Nkoane, IT Building 5-88. Marks are displayed regularly on ClickUP. It is **your responsibility to check your marks and report any errors to your module coordinator**.

NB: These enquiries must not be left until the end of the module. Marks must be corrected within 14 days after the results have been displayed on ClickUP. No alterations will be made to your marks after this date.

3.7 Handling of assignments

You must keep a hard and electronic copy of all assignments that you submit in case it went missing.

3.8 PLAGIARISM

The Merriam Webster dictionary defines plagiarism as:

> ...to steal and pass off (the ideas or words of another) as one's own: use (another's production) without crediting the source
>
> ..to commit literary theft: present as new and original an idea or product derived from an existing source

http://www.m-w.com/ [Accessed 03 September 2024]

The Encyclopædia Britannica defines plagiarism as:

> ...the act of taking the writings of another person and passing them off as one's own.
>
> ...the fraudulence is closely related to forgery and piracy—practices generally in violation of copyright laws.

"plagiarism" Encyclopædia Britannica http://www.britannica.com/eb/article?eu=61807 [Accessed September 3, 2024].

- Plagiarism is illegal and you can be expelled from the university if you plagiarise.
- With all information available on the World Wide Web, it is probably very tempting to cut and paste parts of articles for assignments and so on, but remember that this is illegal and that the lecturers can find the sites very easily themselves.

How to avoid plagiarism:
There are a number of sites on the World Wide Web that deal with issues around plagiarism:

- Plagiarism: What It is and How to Recognise and Avoid it
  http://www.indiana.edu/~wts/wts/plagiarism.html
- Avoiding Plagiarism http://sja.ucdavis.edu/avoid.htm#mexamples

You may use material written by other people, but then the thing to do is to cite the material:
Guide to Citation Style Guides
http://bailiwick.lib.uiowa.edu/journalism/cite.html

CITATION STYLES, PLAGIARISM & STYLE MANUALS
http://www.lib.berkeley.edu/TeachingLib/Guides/Citations.html

Harvard Style:
Harvard Referencing
http://lisweb.curtin.edu.au/guides/handouts/harvard.html
References/Bibliography HARVARD STYLE
http://www.library.uq.edu.au/training/citation/harvard.html

Information brochures on this topic are also available at the Library and on the UP web site.

3.9 General problems and questions

3.9.1 Homework

May I hand in my assignments late?

No late assignments will be accepted.

Practical assignments
Depending on your module, practical assignments must be completed in the practical period or in your own time. No late assignments will therefore be accepted except if the lecturer had announced in class that the assignments have to be handed in after the period.

Other assignments
Assignments received after the date of submission will not be accepted.

May I work together with other students when it comes to homework and other assignments?

You may only work together with other students if the assignment specifies that the work must be done in a group. Some assignments must be done in groups and you have to comply with the rules for the particular module.

What type of proof must I keep with regard to assignments submitted?

A copy of all assignments must be kept. All marked answer sheets and assignments must be kept in a safe place. In the case of practical work, the file on which the work was done must not be deleted and also be stored on diskette/CD/flash disk. No adjustment to marks will be made without the original assignment/test paper or a copy of the assignment.

Where do I search for assignments that were not returned to me?

Answer sheets and marked assignments may be returned to you in class and the unclaimed ones or those not returned in class are placed in the post boxes at the Informatics help desk on level 5 for two weeks.

Where are assignments handed in?

Details of the date, time and place will be announced when the assignment is due. There are post boxes for assignments on level 5 at the stair hall.

3.9.2 Cancellation

How do I cancel my module?

A letter is available from administration in which the university is formally informed about the cancellation of your module. See the information under the heading "Termination of registration" in the General Rules and Regulations: 2023.

Whom must I notify if I cancel a module?

Administration and your lecturer.

Can I change my degree?

Yes. Contact administration.

3.9.3 Marks

May I enquire about marks?

Yes. You have two weeks to check your marks from the date that it is made available.

Where do I enquire about marks?

If there are any mistakes (incorrect marking, incorrect adding of marks, et cetera) concerning your assignment or other work, you must contact your module coordinator. He / she will make the necessary adjustments. Remember to bring the relevant assignment with you.
If you only want to know what marks are available to you, consult the link Marks in ClickUP. You can also enquire at Mr. T. Nkoane, IT Building, room 5-88. He can only make adjustments to your marks if it is authorised by your module coordinator.

How long is the period of time I have to enquire about marks?

Two weeks after the marks were published. If you do not have your mark adjusted in this period, the mark will remain unchanged.

Is there an existing procedure to adjust marks that were added up incorrectly?

Contact your module coordinator. If there is an error, the module coordinator will make the necessary adjustments. Remember to bring the assignment concerned with you.

When will marks be made available after the marking of tests and assignments?

Normally within two weeks from the day of assessment.

Where are results published?

Marks (module and class tests) are published regularly on ClickUP - please check regularly. NO EXAMINATION RESULTS MAY BE GIVEN TO STUDENTS BY THE DEPARTMENT.

3.9.4 Tests

Is it worthwhile to write an aegrotat test?

Aegrotat tests (if you have missed writing a test due to illness) normally cover more study material than the normal tests and, therefore, disrupt your study schedule. Avoid writing these tests if possible. These may also be oral tests.

When do I write tests and exams?

The dates for tests and exams will be indicated on your student portal and on ClickUP. You can also consult the University Calendar. It is your own responsibility to determine when tests and aegrotat tests are written.

Is a supplementary exam automatically awarded?

It is a university regulation that supplementary examinations are not granted automatically. Supplementary examinations can be considered when students have a final mark between 40% and 49% and have obtained the required sub minimum for the theory and practical components of the module. No student who has not obtained the sub minimum of 40% in the examination will be granted a supplementary examination.

Are there any tips for the test?

The contents of test and exam papers are usually discussed in general in class before the test or exam. No tips are given before the test or exam. The previous year's examination papers are available in the library.

How do I handle clashes on my test timetable?

The Department of Informatics keeps to the official test timetable. If other departments move their tests so that a clash occurs, you have to bring it to their attention. Clashes must be reported at the beginning of the module or at least **seven days before the test or exam**.

3.9.5 Financing

Where do I get information concerning bursaries and loans?

At the Student Service Centre and on the UP web site.

3.9.6 Practical

Do I need my own computer for Informatics?

No, you don't. There are sufficient computers available in the Informatorium.

If I want to purchase my own computer, what is the basic configuration that I need?

The minimum configuration of a computer with at least 8 Gb RAM, Core i7 and 1 TB hard disk, is currently considered as an entry computer.

Where can I enquire about problems with my network password?

Ask the LAN-administrator in the Informatorium.

Where is the Informatorium?

The Informatorium is on the ground level of the IT building. The entrance is on the Lynnwood Road side of the building.

How do I register for practical?

You register separately for each module. Information will appear in your study guide for the module or on the notice boards or on ClickUP.

Where and when will my practical examination marks be displayed?

Practical examination marks form part of your final examination mark and are released by administration.

3.9.7 Personal

Where can I apply for assistance with personal problems?

Your lecturer is available to assist you and, if necessary, refer you to the correct specialist service at the university. See your study guide.

3.9.8 Illness

Is there a fixed format for my aegrotat letters?

See paragraph 3.5

Where do I submit my aegrotat letters?

At the secretary or help desk, except for examinations - submit your medical certificates to the Faculty administration.

3.9.9 Contact with lecturers and the department

When can I consult with my lecturer?

Consulting hours are available on ClickUP, the help desk and appear at the entrance to the department or you can make an appointment.

What complaint procedure exists in the department?

See paragraph 3.2.2.

Where can I apply for assistance with study problems?

See paragraph 3.2.2.

Where are information and notices for students published?

All notices are pinned up on the notice board on level 5 and are also announced in class and on ClickUP.

3.9.10 Study material

Which textbooks do I need?

See the study guide for the module.

May I photocopy my textbook?

Textbooks may under no circumstances be photocopied. It is a criminal offence under the copyright law.

4 Assessment

This section concerns the methods, venues and times of assessment as well as the allocation of marks, problems that arise around assessment and prizes for particular achievements.

4.1 Introduction

Assessment is an important component of the student-centred model. In this model, regular opportunities should be created for students to assess themselves. This involves more than just passing tests and exams. It involves constant work in order to maintain a sustained level of learning - **with insight**. **Assessment is therefore performed on a regular basis.**

4.2 Assessment

4.2.1 Methods of assessment

The following methods of assessment are used in the modules:

* Theoretical module test(s)
* Theoretical class tests
* Several theoretical assignments
* Practical module test(s)
* Practical class tests
* Several practical class assignments
* Practical assignments
* Practical examination
* Theory examination
* Case studies
* Projects
* Papers
* Class activities

4.2.2 Class Attendance

Class attendance is compulsory. Students not attending classes satisfactorily will not under any circumstances receive favourable consideration if their marks do not justify admission to the exam, supplementary examination and so forth. From time to time class tests, group work, case studies, et cetera will be done in class as part of the assessment. This will not always be announced beforehand. No excuses will be accepted if you missed one of these opportunities and you will receive no marks for them.

Experience shows that the pass rate of students who do not attend classes tends to be very POOR.

4.2.3 Guidelines to preparation for assessment

4.2.3.1 Preparation for theory

You must prepare by systematically working through and mastering the learning objectives as described in the study guide for your module. If you experience a problem in achieving these objectives, discuss it with your lecturer. To be able to answer insight and application questions, you must also be able to interpret the content as part of a whole. It therefore goes without saying that class attendance is important.

4.2.3.2 Preparation for practical

The practical portion of the module is based on ability as well as theory. Proficiency is only learned by **practice**, and therefore you must practice often. In this part of the module, we expect the student to teach himself / herself a large portion of the knowledge that must be mastered. We cannot practice for you; you must do it yourself. The lecturer will only act as facilitator in creating learning opportunities.

4.2.4 Feedback on assessment

Feedback regarding written assessments will be given to you within approximately TWO WEEKS. Ensure that you learn from your mistakes.

5 Study guidelines

5.1 Study material

In most modules, there are only ENGLISH textbooks available. The department will make additional study material available, where necessary. Notes not provided by your lecturer, are not recommended.

5.1.1 Prescribed books

See ClickUP pages for your module.

5.2 Definition of terms

5.2.1 Terms that test your knowledge

Describe	**:**	To indicate how some process flows or how a topic is portrayed ***without own comment or insight***. Also: give an overview.
Define	**:**	To produce a ***pointed description*** of a ***term or concept***.
Illustrate	**:**	To make a diagrammatic representation of a subject. Also: draw and complete, sketch.
List	**:**	To produce from ***memory*** a brief version of ***facts or main ideas***. Also: name.

5.2.2 Terms that test your insight

Argue/
Justify **:** To show the ***essence*** of the issue by highlighting the core ideas, and to support this with facts that do not necessarily relate to the given issue.

Integrate **:** To clearly show how the different ***principal thoughts relate and agree to each other***.

Interpret **:** To ***comment*** on ***available facts*** with the aid of ***examples*** which indicate a ***personal interpretation***.

Contrast **:** To explain the ***differences and similarities between different terms and concepts***.

Paraphrase **:** To explain a ***term or concept*** in your ***own words***.

Differentiate **:** To explain the ***differences between subjects***.

Explain **:** To present a ***subject*** with your ***own interpretation***.

5.2.3 Terms that test application

Apply **:** To ***use key thoughts and facts*** in ***new situations***.

Identify **:** To ***recognise*** and write down required items or elements from a given problem statement.