

**FACULTIES OF THE UNIVERSITY
OF PRETORIA**

HUMANITIES

NATURAL AND AGRICULTURAL SCIENCES

LAW

THEOLOGY

ECONOMIC AND MANAGEMENT SCIENCES

VETERINARY SCIENCE

EDUCATION

HEALTH SCIENCES

ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY

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**FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND
INFORMATION TECHNOLOGY**

SECTION I

(separate publication)

SCHOOL OF ENGINEERING

- Industrial and Systems Engineering
- Chemical Engineering
- Electrical, Electronic and Computer Engineering
- Engineering and Technology Management
- Mechanical and Aeronautical Engineering
- Materials Science and Metallurgical Engineering
- Mining Engineering
- Civil and Biosystems Engineering

SECTION II

(this publication)

SCHOOL FOR THE BUILT ENVIRONMENT

- Architecture
- Construction Economics
- Town and Regional Planning

SCHOOL OF INFORMATION TECHNOLOGY

- Informatics
- Information Science
- Computer Science

SCHOOL FOR THE BUILT ENVIRONMENT

TABLE OF CONTENTS

| | Page |
|--|-----------|
| ACADEMIC PERSONNEL | 1 |
| GENERAL INFORMATION | 3 |
| Admission..... | 3 |
| Selection..... | 3 |
| Statement of symbols | 3 |
| Medium of instruction..... | 3 |
| Bursaries and loans | 3 |
| Accommodation..... | 3 |
| Welcoming day and academic information week..... | 3 |
| Prescribed books | 3 |
| Amendment of regulations and fees | 4 |
| NEW SYSTEM OF TUITION | 4 |
| GLOSSARY OF TERMS | 4 |
| DEGREES IN THE SCHOOL FOR THE BUILT ENVIRONMENT | 5 |
| REGULATIONS FOR BACHELOR'S DEGREES | 6 |
| Admission to degree study | 6 |
| Requirements for specific modules..... | 7 |
| Language skills..... | 8 |
| Computer and Information Literacy..... | 8 |
| Registration for a specific year | 8 |
| Module credits for unregistered students | 8 |
| Examinations | 8 |
| DEGREES IN ARCHITECTURE..... | 11 |
| BSc(Arch)..... | 12 |
| B(Arch) | 14 |
| MArch(Prof)..... | 15 |
| MArch by research..... | 17 |
| PhD | 18 |
| DEGREES IN INTERIOR ARCHITECTURE..... | 18 |
| BSc(Int) | 19 |
| B(Int)..... | 21 |
| MInt(Prof)..... | 22 |
| MInt by research..... | 24 |
| PhD | 25 |
| DEGREES IN LANDSCAPE ARCHITECTURE..... | 26 |
| BSc(LArch)..... | 26 |
| ML(Prof) | 29 |
| ML by research..... | 31 |
| PhD | 32 |

| | |
|--|----|
| DEGREES IN CONSTRUCTION ECONOMICS | 33 |
| BSc(QS) | 34 |
| BSc (Construction Management)..... | 37 |
| BSc(Real Estate)..... | 39 |
| Honours programmes | 41 |
| Master's programmes | 44 |
| Doctoral programmes | 45 |
| DEGREES IN TOWN AND REGIONAL PLANNING | 46 |
| BT&RP | 46 |
| MT&RP..... | 51 |
| PhD..... | 52 |
| SYLLABI FOR DEGREE PROGRAMMES IN THE SCHOOL FOR THE BUILT ENVIRONMENT | 53 |
| PRIZES AND MEDALS | 80 |
| SCHOOL OF INFORMATION TECHNOLOGY | 83 |

**FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND
INFORMATION TECHNOLOGY**

SCHOOL FOR THE BUILT ENVIRONMENT

ACADEMIC PERSONNEL AS AT 30 SEPTEMBER 2002

DEAN

Prof R.F. Sandenbergh, PrEng, MEng DEng(Pret) GSAIMM LSAKorrl FSAAE

CHAIRMAN

Prof H.M. Siglé, BSc(QS) PhD(Pret) PREP(Unisa) GBR LVBR L.Akad.SA

Department of Architecture

| | |
|---|---------------------|
| Le Roux, S.W., MArch PhD(Pret) Prof Arch | Professor (Head) |
| Fisher, R.C., MArch PhD(Pret) Prof Arch | Professor |
| Bakker, K.A., MArch PhD(Pret) Prof Arch..... | Associate Professor |
| De Villiers, A.J., MArch PhD(Pret) Prof Arch..... | Associate Professor |
| Kemp, J.T., MArch(Pret) Prof Arch | Associate Professor |
| Wegelin, H.W., MArch(Pret) Prof Arch | Associate Professor |
| Breedlove, G., BL(Pret) MLA (Texas A & M) Pr LArch | Senior Lecturer |
| Reynders, H.J., BArch(Pret) Prof Arch DSA | Senior Lecturer |
| Vosloo, P.T., BSc(Boukund) BArch ML(Pret) Pr LArch MILASA | Senior Lecturer |
| Young, G.A., BArch BL(Toronto) Pr LArch..... | Senior Lecturer |
| Botes, N., BArch(Pret) Prof Arch..... | Lecturer |
| Comrie, H.P., BArch(Pret) MUD(Wits) Prof Arch..... | Lecturer |
| Hindes, C.N., BL(Pret) | Lecturer |
| Osman, A.O.S., MSc(Arch) (Khartoum) | Lecturer |
| Saidi, F.E., B(Arch) (Copperbelt) MLD(Newcastle- upon-Tyne)..... | Lecturer |
| Setshedi, G., Dip Arch Eng (AUT)..... | Lecturer |
| Steenkamp, A.C., MArch(Pret)..... | Lecturer |
| Van Rensburg, R.J., BArch(Pret) | Lecturer |
| Van Wyk, F.A., BL(Pret) Pr LArch..... | Lecturer |

Department of Construction Economics

| | |
|--|-------------------------|
| Brümmer, D.G., MSc(QS)(Pret) PhD(Pret) Dip Arb PrQS PMAQS | Professor (Head) |
| Preller, F.T., MSc(QS) PhD(UFS) AEP(Unisa SBL) EPGC(Stanford) PrQS PMAQS FRICS AAArb..... | Extraordinary Professor |
| Cloete, C.E., BA(Hons) BSc MSc PhD(Pret) BTh MBL (Unisa) LIEPSA LCIQB | Professor |
| Visser, R.N., MSc(QS) PhD(Pret) PrQS PMAQS..... | Associate Professor |
| Basson, G.A.J., PrEng BSc BEng(Hons) PMP..... | Senior Lecturer |
| Maritz, M.J., MSc(QS)(Pret) Sert Arb PrQS PMAQS | Senior Lecturer |
| Cruywagen, J.H.H., MSc(QS) PrQS PMAQS | Lecturer |
| De Beer, J.G., MSc(Cons) MCIQB..... | Lecturer |
| Edwardes, E., BSc BSc(QS) PrQS PMAQS | Lecturer |
| Jansen van Rensburg, Z., MSc(Real Estate) PrQS PMAQS. | Lecturer |
| Le Roux, F., BCom STR(UOFS) BCompt(Hons) HOD(Unisa) CFA(SA) | Lecturer |

Pienaar, J.S., BSc(QS)(Pret) PREP(Unisa) Lecturer
Pieterse, E.I., MSc(QS) PrQS PMAQS Lecturer

Department of Town and Regional Planning

Oranje, M.C., BT&RP MT&RP PhD(Pret) Professor (Head)
Badenhorst, M.S., SS(SA) O(SA) BSc(T&RP)(Pret) MPhil
DPhil(RAU) LSABI MITESSA LIBSA MTUP
MISoCaRP LAKad Professor
Schoonraad, M.D., BT&RP(Pret) MUD(Wits) Senior Lecturer
Meyer, E., BT&RP(Pret)..... Lecturer
Van Huyssteen, E., SS(SA) BT&RP MT&RP(Pret)
LSABI MISoCaRP Lecturer

Head: Student Administration

Jones, E.

GENERAL INFORMATION

Admission

Any person who wishes to register at the University for the first time or after an interruption of studies, should apply or reapply for admission. Application for admission to all undergraduate programmes closes on 30 June.

Selection

A selection procedure takes place prior to admission to the following programmes in the School for the Built Environment:

(a) All undergraduate programmes

(b) Postgraduate programmes

MArch(Prof), MInt(Prof), ML(Prof), MSc(QS) with coursework and MSc(Construction Management) degrees, MSc(Project Management), MSc(Real Estate): A restricted number of students are admitted for taught programmes. MSc and PhD by research are subject to approval. Applications close on 30 September.

Statement of symbols

When registering at this University for the first time, an undergraduate candidate must submit a statement of symbols obtained for subjects in the Grade 12 examination. Postgraduate students are required to submit an academic record.

Medium of instruction

In conducting its business, the University uses two official languages, namely Afrikaans and English. In formal education, the medium of instruction is either Afrikaans or English, or both of these languages, provided that there is a demand and that it is academically and economically justifiable. However, it remains the student's responsibility to ascertain on an annual basis in which language a programme and any further level of such programme is presented. In respect of administrative and other services, a student has the right to choose whether the University should communicate with him or her in Afrikaans or English.

Bursaries and loans

Particulars of bursaries and loans are available on request.

Accommodation

Applications for accommodation in university residences for a particular year may be submitted as from April 1 of the preceding year. Applications will be considered while vacancies exist, and prospective students are advised to apply well in advance. Please note that admission to the University does not automatically mean that lodging will also be available.

Welcoming day and academic information week

Details of the welcoming day to which all parents are cordially invited, and the subsequent academic information week during which all new first-year students **must** be present, are obtainable from the Dean of Students, University of Pretoria 0002.

Prescribed books

Lists of prescribed books are not available. The lecturers will supply information regarding prescribed books to students at the commencement of lectures.

Amendment of regulations and fees

The University retains the right to amend the regulations and to change tuition fees without prior notification.

NEW SYSTEM OF TUITION

In 2000, the University of Pretoria started to phase in a new system of tuition and learning which corresponds with the required guidelines of SAQA (the South African Qualifications Authority) and the NQF (National Qualifications Framework). In this system, programmes are offered which are outcomes-based, student-centred and market-orientated. The new system was implemented in the School for the Built Environment during 2001. Students who were registered at the School for the Built Environment before or during 2000, will be able to complete the relevant qualification. A student who was registered for a degree qualification before 2000 may, in consultation with the Programme Manager and the Chairman: School for the Built Environment, be permitted to transfer to one of the new programmes. In certain instances it will be essential that students, on the recommendation of the Programme Manager and the Chairman: School for the Built Environment, transfer to a new programme. The student will, however, have to comply with all the requirements of the new qualification.

GLOSSARY OF TERMS

academic year: Duration of the academic year as determined by the University Council.

admissions regulation: A regulation compiled by the Dean concerning the admission of students to a specific School, which includes a provision regarding the selection process.

course: See module

credit (or credit value): A value unit linked to learning activities, calculated in accordance with the SAQA norm of **1 credit = 10 notional hours (learning hours)**. Credits are linked to modules and whole qualifications.

curriculum: A series of modules which form a programme, grouped together over a specified period of time and in a certain sequence according to the regulations.

examination mark: The mark a student obtains for an examination in a module, including practical examinations where applicable.

extended study programme: A study programme for a degree or diploma that is completed over a longer period than the minimum duration of the particular degree or diploma.

final mark: The mark calculated on the basis of the semester/year mark and the examination mark which a student obtains in a particular module according to a formula that is determined from time to time in the regulations for each module with the proviso that should no semester/year mark be required in a module, the examination mark serves as the final mark.

GS: A combined (final) mark (semester/year mark plus examination mark) of 40 - 49%.

learning outcome: The end product of a specified learning process, i.e. the learning result (specific skills) that one intends to achieve at the end of the learning process.

level of a module: The level (year) of a module, which is indicated in the module code and which gives an indication of the complexity of the module.

module: An independent, defined learning unit, designed to result in a specific set of learning outcomes, and which is a component of a programme.

module code: Consists of an equal number of letters and digits, which indicate the name of the module, the year of study, the period of study and the level of the module.

notional hours (learning hours): The notional number of hours students should spend in mastering the learning content of a particular module or programme. The total number of learning hours for a module consists of the time needed for lectures, tutorials and practicals (contact hours), as well as for self-tuition, examination preparation and any other activity required by the study programme. **(notional hours = credits x10)**

NQF: National Qualifications Framework. This is a national framework in which all SAQA-registered qualifications are listed, arranged on eight levels in accordance with the complexity of the qualification.

programme: This is a comprehensively planned, structured and coherent set of teaching and learning units (modules), designed to attain a specific set of predetermined learning outcomes at a specific exit level, which culminates in a student being awarded a particular qualification (diploma, degree).

qualification: In outcomes-based education, a qualification is a diploma or a degree which is obtained after attaining the learning outcomes as specified in a coherent learning programme, expressed as an accumulation of credits at specific levels.

SAQA : South African Qualifications Authority. This body has been established by law and has as its purpose the registration of qualifications, programmes and unit standards, in order to ensure that specific national and international criteria are achieved.

semester/year mark: The mark a student obtains during the course of a semester or a year for tests, class-work, practical work or any other work in a particular module as approved by regulation.

student-centred learning: Teaching and learning methodology, which facilitates the student's total own responsibility for the learning process. A prerequisite is that lectures, tutorials and practicals be adapted so that active participation by students is always achieved.

syllabus: Summary of the contents of a module.

DEGREES IN THE SCHOOL FOR THE BUILT ENVIRONMENT

The information regarding degree programmes here published are subject to change and may be amended prior to the commencement of the academic year in 2003.

The following degrees are awarded in the School for the Built Environment (minimum duration in brackets):

DEPARTMENT OF ARCHITECTURE

- (i) Baccalaureus Scientiae in Architecture – BSc(Arch) (3 years)
- (ii) Baccalaureus Scientiae in Interior Architecture – BSc(Int)(3 years)
- (iii) Baccalaureus Scientiae in Landscape Architecture – BSc(LArch) (3 years)
- (iv) Baccalaureus Honores in Architecture - BArch(Hons)
- (v) Baccalaureus Honores in Interior Architecture - BInt(Hons)
- (vi) Baccalaureus Honores in Landscape Architecture - BL(Hons)
- (vii) Master of Architecture (Professional) – MArch(Prof) (2 years)
- (viii) Master of Architecture – MArch (1 year)
- (ix) Master of Interior Architecture(Professional) – MInt(Prof) (2 years)
- (x) Master of Interior Architecture – MInt (1 year)
- (xi) Master of Landscape Architecture(Professional) – ML(Prof) (2 years)
- (xii) Master of Landscape Architecture – ML (1 year)
- (xiii) Philosophiae Doctor – PhD with specialization in Architecture (1 year)

- (xiv) Philosophiae Doctor – PhD with specialization in Interior Architecture (1 year)
- (xv) Philosophiae Doctor – PhD with specialization in Landscape Architecture (1 year)

DEPARTMENT OF CONSTRUCTION ECONOMICS

- (xvi) Baccalaureus Scientiae (Quantity Surveying) – BSc(QS) (3 years)
- (xvii) Baccalaureus Scientiae (Quantity Surveying) – BSc(QS) (5 years)
- (xviii) Baccalaureus Scientiae (Construction Management) – BSc(Construction Management) (3 years)
- (xix) Baccalaureus Scientiae (Construction Management) – BSc(Construction Management) (5 years)
- (xx) Baccalaureus Scientiae (Real Estate) – BSc(Real Estate) (3 years)
- (xxi) Magister Scientiae (Quantity Surveying) – MSc(QS) (1 year); Coursework (2 years)
- (xxii) Magister Scientiae (Construction Management) – MSc(Construction Management) (1 year) Coursework (2 years)
- (xxiii) Magister Scientiae (Real Estate) – MSc(Real Estate) (1year) Coursework (2 years)
- (xxiv) Magister Scientiae (Project Management) – MSc(Project Management) (1 year) Course work (2 years)
- (xxv) Philosophiae Doctor – PhD (1 year)

DEPARTMENT OF TOWN AND REGIONAL PLANNING

- (xxvi) Bachelor of Town and Regional Planning – BT&RP (4 years)
- (xxvii) Master of Town and Regional Planning – MT&RP (1 year) Coursework (2 years)
- (xxviii) Philosophiae Doctor with specialisation in Town and Regional Planning – (2 years)

REGULATIONS FOR BACHELOR'S DEGREES

B.1 Admission to study

General Regulations G.1 to G.15 are applicable to all bachelor's degrees. Where the General Rules have vested authority in the Faculty to determine its own provisions, these provisions appear in this publication.

- (a) To register for a first bachelors' degree at the University, a candidate must, in addition to the required grade 12 certificate with university endorsement, comply with the specific admission requirements for particular programmes and fields of study as prescribed in the admission regulations and the regulations of the faculty.
- (b) The following persons may also be considered for admission:
 - (i) A candidate who is in possession of a certificate which is deemed by the University to be equivalent to the required grade 12 certificate with university endorsement.
 - (ii) A candidate who is a graduate from another tertiary institution or has been granted the status of a graduate of such an institution.
 - (iii) A candidate who passes an entrance examination, which is prescribed by the University from time to time.

Note: A conditional exemption certificate does not grant admission to bachelor's study. However, in certain circumstances some of the faculties do

accept a conditional exemption on the basis of mature age and prior learning. Candidates are advised to contact the specific faculty administration in this regard.

- (c) The Senate may limit the number of students allowed to register for a programme, in which case the Dean concerned may, at his discretion, select from the students who qualify for admission, those who may be admitted.
- (d) Subject to faculty regulations and the stipulations of General Regulations G.1.3 and G.62, a candidate will only be admitted to postgraduate studies if he or she is already in possession of a recognised bachelor's degree.

B.2 Requirements for specific modules

A grade 12 examination certificate with endorsement with at least 40% (E symbol) in Mathematics and Physical Science on higher grade, or at least 50% (D symbol) in the final grade 12 examination for admission to all undergraduate study directions in the School for the Built Environment, with the exception of Town and Regional Planning in which case the requirement in Physical Science does not apply.

A candidate who has:

- (a) obtained at least 40% in Mathematics at higher grade or 50% at standard grade in the grade 12 examination, or at least 50% in Statistics 113, 123 will be admitted to (i) the modules in Banking, Informatics (except INF 153, 154, 163, 164, 253 and 263) or Statistics, and (ii) modules in Marketing Management, Economics, Financial Management and Financial Accounting at 200 level.;
- (b) registered, may write an exemption test for module FRK 151 on the work covered in grade 12 (matric) for the subject Accountancy. Should this test be passed, the student will be exempted from module FRK 151 and will be allowed to continue with module FRK 181 immediately. This module entails computer applications for Accountancy and is presented during the full first semester (14 weeks). Should the student fail the exemption test, he or she can continue with FRK 151, which entails introductory computer-supported accountancy and a few lectures. The student who failed to pass the exemption test will continue with FRK 181 in the second semester after having passed FRK 151 in the first semester. For degree purposes, credit will be given for any one of FRK 151, 152, 121 and 211, provided that FRK 181 has been passed;
- (c) obtained at least 50% in Mathematics at higher grade, or 60% at standard grade in the grade 12 examination, or at least 40% in Mathematics higher grade or 50% in Mathematics standard grade in grade 12, as well as a minimum of 60% in Computer Studies higher grade, or 70% in Computer Studies standard grade in grade 12, or an average of at least 60% in Statistics 110*, 120*, or an average of at least 60% in {(Statistics 113*, 123*) and (Statistics 120*)}, will be admitted to Informatics 153, 154, 163, 164, 253 and 263 (*a minimum of 50% is required in each module);
- (d) passed the grade 12 examination in Mathematics with at least 40% at higher grade or at least 50% at standard grade, obtains admission to the modules GLY 151 and 152 in Geology;
- (e) passed the grade 12 examination in Mathematics with at least 40% at higher grade or at least 50% at standard grade, or at least 50% in Geography at higher grade, obtains admission to the modules GGY 153, 154, 132, 162 and 163 in Geography.

A student who follows a module which is presented in another faculty, must acquaint him/herself and comply with the admission requirements of the module in question, subminima requirements for tests/examinations, supplementary examination periods, etc.

B.3 Language skills

Language skills is presented as part of specific study programme requirements. All first-year students who wish to register with the University are required to write the language skills test. On grounds of the results of this test, students who pass the test will be required to register for one or more language modules. Students who do not pass the test will be required to register for the LSO modules in order to obtain sufficient credits for degree purposes.

B.4 Computer and Information Literacy

Computer and Information Literacy is presented as compulsory modules, but exemption may be obtained by writing an exemption test.

B.5 Registration for a specific year

A student registers for all the modules he or she intends taking in that specific year (first-semester, second-semester modules and year modules) at the beginning of an academic year. Changes to a curriculum at the beginning of the second semester may be made only with the approval of the Dean.

B.6 Module credits for unregistered students

There are students who attend lectures, write tests and examinations and in this manner earn "marks", but who have neither registered for modules nor have registered as students. These marks will not be communicated to any student before he/she has provided proof of enrolment. A student cannot obtain any credits in a specific academic year for a module "passed" in this manner during a previous academic year and for which he/she was not registered. This arrangement applies even where the student is prepared to pay the tuition fees.

B.7 Examinations

7.1 Examinations, projects and essays

- (a) An examination in a module may be written and/or oral. Projects and essays are prepared and examined as stipulated in the study guide of the module, in accordance with the regulations and procedures as described in 7.3 below.
- (b) The examinations for modules of the first semester are held in May/June, while all other examinations (second-semester modules and year modules) are held in October/November.

7.2 Examination admission

A minimum semester/year mark of 40% is required in order to be admitted to the examination in a specific module, with the exception of first-year modules at first-year level where a minimum semester mark of 30% is required for admission to an examination. In addition, all other examination admission requirements, applicable to the relevant module, must have been met.

7.3 Pass requirements

Refer also to General Regulations G.11.1(a) and G.12.2.2

No supplementary examination are awarded in Design (all ONT-modules) in the Department of Architecture.

- (a) In order to pass a module, a student must obtain an examination mark of at least 40% and a final mark of at least 50%. A student passes a module with distinction if a final mark of at least 75% is obtained. The final mark is compiled from the semester/year mark and the examination mark.
- (b) Calculation of the final mark: The semester/year mark must account for no less than 40% and no more than 60% of the final mark, with the exception of modules like design and research projects and essays, as well as in modules where the development of general skills is the primary learning activity, where appropriate alternative norms are determined individually by schools or departments. The specific details and/or formula for the calculation of the final mark are given in the study guide of each programme. Also, a schedule listing this information for all the modules presented in each school will be compiled, for approval by the Dean.
- (c) Calculation of the semester/year mark. The semester/year mark is compiled from formative assessment of learning activities such as assignments, presentations, practicals and group projects, as well as from class tests and semester tests. For each module the specific formula for the calculation of the semester/year mark is determined by the lecturer(s) responsible for the presentation of the module and the details are given in the study guide of the module. Also, a schedule listing this information for all the modules presented in each school will be compiled, for approval by the Dean. Refer also to General Regulation G.11.1(b).
- (d) In some modules, specific requirements in respect of certain components of the semester/year mark may be set, in order for a student to pass the module (for example that satisfactory performance in and attendance at practical classes are required). Thus, even if a pass mark is obtained in the module, a pass is not granted unless these requirements are met. For such modules these specific requirements are given in the study guide of the module. Also, a schedule listing this information for all such modules presented in each school will be compiled, for approval by the Dean.
- (e) A student must comply with the sub-minimum requirements in subdivisions of certain modules. For such modules these specific requirements are given in the study guide of the module. Also, a schedule listing this information for all such modules presented in each school will be compiled, for approval by the Dean.
- (f) A student may be promoted (exempted from the examination) in certain modules if a specified semester/year mark (minimum 65%) is obtained. For such modules these specific requirements are given in the study

guide of the module. Also, a schedule listing this information for all such modules presented in each school will be compiled, for approval by the Dean. Refer also to General Regulation G.10.3.

7.4 Ancillary examinations

Refer to General Regulation G.12.3.

7.4.1 No ancillary examination are awarded in Design (all ONT-modules) in the Department of Architecture.

7.5 Supplementary examinations

In the School for the Built Environment, supplementary examinations are only granted in first-semester modules at first-year level, while no other supplementary examinations are granted in modules of the remaining years of study. However, no supplementary examination are granted in the first year module Design 100. Also refer to General Regulation G.12.4.

7.6 Special examinations (including the aegrotat)

Refer also to General Regulation G12.5

7.7 Other special examinations

Refer also to General Regulation G.12.6

- (a) The Dean may, at the recommendation of the head of the department concerned, grant a special examination in a module to a student who failed such module in the final year of study, and consequently either does not comply with degree requirements, or is unable to continue with studies in the final semester in a meaningful way. A student may at most, be admitted to one special examination in a year module or two special examinations in semester modules.
- (b) To be taken into consideration for a special examination, a student should have obtained a minimum final mark of 40% and should also have complied with all other examination admission requirements which are applicable to the relevant module.
- (c) A student must apply to the Dean in writing before consideration will be given to admission to a special examination. The Head of the Department decides when the special examination will take place and may prescribe work which should be satisfactorily completed before a student may write the examination.
- (d) The pass mark required for a special examination is 50%, a higher mark is not allocated and the semester/year mark is not taken into consideration.

7.8 Re-marking of examination scripts

Refer to General Regulation G.14

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| DEGREES IN THE DEPARTMENT OF ARCHITECTURE |
|--|

The following degrees are offered in the Department:

| | | Code |
|--|---------------------|-------------|
| Architecture | | |
| Baccalaureus Scientiae in Architecture | BSc(Arch) | 12132002 |
| Master of Architecture (Professional) | MArch(Prof) | 12252005 |
| Master of Architecture (by research) | MArch (by research) | 12252002 |
| Philosophiae Doctor | PhD | 12262002 |
| Interior Architecture | | |
| Baccalaureus Scientiae in Interior Architecture | BSc(Int) | 12132008 |
| Master of Interior Architecture (Professional) | MInt(Prof) | 12252007 |
| Master of Interior Architecture (by research) | MInt (by research) | 12252004 |
| Philosophiae Doctor | PhD | 12262001 |
| Landscape Architecture | | |
| Baccalaureus Scientiae in Landscape Architecture | BSc(LArch) | 12132004 |
| Master of Landscape Architecture (Professional) | ML(Prof) | 12252008 |
| Master of Landscape Architecture (by research) | ML (by research) | 12252003 |
| Philosophiae Doctor | PhD | 12262003 |

| |
|--------------------------------|
| DEGREES IN ARCHITECTURE |
|--------------------------------|

Architecture entails the design of buildings and the spaces between those buildings. It is the art and science that is employed in order to create a livable environment, thus contributing towards the spiritual and material prosperity of the country. Architects are often independent thinkers, individualists and innovators. Although they are employed by organisations involved with development, investment, research, marketing, the industry or even education, many architects prefer to be independent consultants and entrepreneurs. BSc(Arch) is regarded as an exit level that enables the graduate to register as a candidate Senior Architectural Technologist at the South African Council for the Architectural Profession. A Senior Architectural Technologist is a professional person registered by the SACAP in terms of the Act on the Architectural Profession (Act 44 of 2000). Such practitioners provide assistance in the practices of the disciplines of architecture, interior architecture and urban design where their responsibilities would be the documentation of projects, project administration and site management.

In order to gain practical experience students are advised to work in the offices of an architect or a landscape architect during the university recesses.

A graduate wishing to become a professional architect must apply for and pursue a further two years of full-time studies in the professional degree programme.

The Master of Architecture (Professional) degree will be recognised by the South African Council for the Architectural Profession as qualifying the graduate to register as a Candidate Professional Architect in terms of the Act on the Architectural Profession (Act 44 of 2000).

**B.8 BACCALAUREUS SCIENTIAE IN ARCHITECTURE
[BSc(Arch)] (Code 12132002)**

(a) Admission requirements

See General Information B.1 and B.2. in this publication.

(b) Duration

The minimum period of study is three years full-time. Candidates wishing to become professional architects must hereafter register for the two year full-time MArch(Prof) degree programme.

(c) Curriculum

Unless the Dean, in consultation with the head of the department decides otherwise, the following applies:

Total credits: 382

| Code | Module | Prerequisites | Credits |
|---|---|---------------|---------|
| First year of study | | | |
| First semester | | | |
| AAL 110 | Earth Studies 110 | - | 8 |
| KON 110 | Construction 110 | - | 10 |
| OMG 110 | History of the Environment 110 | - | 6 |
| OML 110 | Environmental Studies 110 | - | 4 |
| ONT 100 | Design 100 | - | 25 |
| For students tested as language proficient (See Regulation B.3.)* | | | |
| AFR 159 | Afrikaans 159 | | 6 |
| or | | | |
| ENG 151 | Introduction to Poetry 151 | | 6 |
| AFR 160 | Afrikaans 160 | | 6 |
| or | | | |
| ENG 152 | Critical Language Skills 152 | | 6 |
| Second semester | | | |
| CIL 120 | Information Technology 120 | - | 10 |
| KON 120 | Construction 120 | KON 110 GS | 10 |
| OMG 120 | History of the Environment 120 (<i>Capita selecta</i> from 122) | - | 4 |
| OML 120 | Environmental Studies 120 | OML 110 GS | 4 |
| ONT 100 | Design 100 | - | 25 |
| STU 120 | Theory of Structures 120 | - | 13 |
| For students tested as language proficient (See Regulation B.3.)* | | | |
| LCC 153 | Afrikaans 153 | | 6 |
| or | | | |
| ENG 153 | Introduction to Prose 153 | | 6 |
| AFR 162 | Afrikaans 162 | | 6 |
| or | | | |
| ENG 154 | Introduction to Drama 154 | | 6 |

*Students who have to follow language proficiency modules must register for EOT 151, 152, 153, and 154 offered by the Unit for Language Skills Development. (See Regulation B.3.) These students must obtain 12 additional credits in language modules as approved by the Head of Department of Architecture.

Second year of study

First semester

| | | | |
|---------|--------------------------------|--------------|-----------|
| AAL 210 | Earth Studies 210 | AAL110 | 10 |
| KON 211 | Construction 211 | KON 110, 120 | 10 |
| OKU 210 | Design Communication 210 | - | 8 |
| OMG 210 | History of the Environment 210 | - | 4 |
| OML 210 | Environmental Studies 210 | OML 110, 120 | 4 |
| ONT 211 | Design 211 | ONT 100 | 18 |
| STU 211 | Theory of Structures 211 | STU 120 | <u>10</u> |
| | Total | | <u>64</u> |

Second semester

| | | | |
|---------|---|------------|-----------|
| GGY 363 | Environmental Geomorphology 363 | - | 4 |
| GKD 225 | General Soil Science 225 | - | 4 |
| KON 220 | Construction 220 | KON 211 GS | 10 |
| OKU 220 | Design Communication 220 | - | 8 |
| OMG 220 | History of the Environment 220 (<i>Capita selecta</i> from 224) | - | 4 |
| OML 220 | Environmental Studies 220 | OML 210 GS | 4 |
| ONT 220 | Design 220 | ONT 211 GS | 18 |
| STU 221 | Theory of Structures 221 | STU 211 GS | <u>10</u> |
| | Total | | <u>62</u> |

Third year of study

First semester

| | | | |
|---------|--------------------------------|--------------|-----------|
| BER 410 | Business Law 410 | - | 8 |
| GGY 283 | Introductory GIS 283 | - | 6 |
| KON 310 | Construction 310 | KON 211, 220 | 10 |
| OMG 310 | History of the Environment 310 | - | 4 |
| OML 310 | Environmental Studies 310 | OML 210, 220 | 4 |
| ONT 310 | Design 310 | ONT 211, 220 | 16 |
| STU 311 | Theory of Structures 311 | STU 211, 221 | <u>10</u> |
| | Total | | <u>58</u> |

Second semester

| | | | |
|---------|--------------------------------|---------------------------|-----------|
| AAL 320 | Earth Studies 320 | AAL 210 | 10 |
| KON 321 | Construction 321 | KON 310 GS, ONT 310 GS | 15 |
| OMG 320 | History of the Environment 320 | - | 4 |
| OML 320 | Environmental Studies 320 | OML 310 GS | 4 |
| ONT 320 | Design 320 | ONT 310 GS KON 310 GS | 16 |
| PRS 320 | Practice Management 320 | - | 8 |
| STU 321 | Theory of Structures 321 | STU 311 GS | <u>10</u> |
| | Total | | <u>67</u> |

The programme is set out below:

| Year | Semester | PRS | STU | AAL | KON | ONT | OML | OMG | OKU |
|------|----------|------------|-----|--------------------------|-----|-----|-----|-----|------------|
| | | 1 | 1 | | - | 110 | 110 | 100 | 110 |
| 1 | 2 | CIL 120 | 120 | - | 120 | 120 | 120 | | LANG |
| 2 | 1 | - | 211 | 210 | 211 | 211 | 210 | 210 | 210 |
| | 2 | - | 221 | GGY 363 GKD 225 | 220 | 220 | 220 | 220 | 220 |
| 3 | 1 | BER 410 | 311 | - | 310 | 310 | 310 | 310 | GGY 283 |
| | 2 | 320 | 321 | 320 | 321 | 320 | 320 | 320 | - |

(d) Promotion to next year of study

A student is promoted to a subsequent year of study after acquiring all the prerequisite module credits of the preceding year of study.

A student is deemed to be in the year of study for which he or she is registered in Design.

If the student is not registered for Design the highest passed year of Design determines the year of study.

(e) Concurrent presentation

Design 320 and Construction 321 must initially be examined in the same year.

(f) Degree with distinction

The BSc(Arch) degree is conferred with distinction on a student who at first registration, simultaneously passes both Design 320 and Construction 321 with distinction (minimum 75%) with the proviso that the degree is completed within the minimum prescribed time and all other final-year modules are passed on first registration.

| |
|---|
| B.9 BACCALAUREUS IN ARCHITECTURE (BArch) (Code 12132003) |
|---|

(a) Transitional measures

Students not having full credits for fifth-year modules, are required to register for modules as prescribed by the head of department.

B.10 MASTER OF ARCHITECTURE (Professional)
[MArch(Prof)] (Code 12252005)

Also consult General Regulations G.30 to G.44.

The Master of Architecture (Professional) is a taught Master's degree for the purposes of registration as a Candidate Professional Architect with the South African Council for the Architectural Profession in terms of Act 44 of 2000 and is done by coursework, projects and a design investigation treatise and design project and discourse.

(a) Admission requirements

A candidate for the degree programme Master of Architecture (Professional):

- (1) must be a graduate with a BSc(Arch) degree or an equivalent university degree (e.g. BAS, B Building Arts, etc.)
or
- (2) must have a recognized four-year tertiary qualification.
 Such a candidate may be required, at the discretion of the head of department, to:
 - (i) do a language proficiency test;
 - (ii) do a computer literacy test
 - (iii) register for supplementary modules;**or**
- (3) must be deemed adequate by the head of department in consultation with the Dean and obtain (where necessary) the approval of the Senate and comply with whatever additional requirements may be prescribed.
 Candidates mentioned in (1), (2) and (3) above,
 - (i) should preferably have had practical experience and/or have done and recorded an extended study excursion;
 - (ii) are interviewed for selection;
 - (iii) must present a portfolio and/or design journal which demonstrates the requisite level of proficiency and competency and is a record of their experience within the discipline;
 - (iv) are selected on merit.

Note: The number of candidates admitted to this programme is restricted.

(b) Duration

The minimum period of study is two years full-time. However, candidates in possession of a suitable four-year (or more) university qualification with a design component, or in possession of a postgraduate qualification in the design discipline of the built environment professions may, at the discretion of the head of department and with the approval of the Dean, complete the Master's degree within one year of full-time study by obtaining a minimum of 128 credits of which 44 for the Design Project and Discourse are compulsory. The head of department may, with the Dean's consent prescribe coursework and/or a project topic and/or supplementary modules for additional credits.

(c) Curriculum

Unless the head of department, in consultation with the Dean, decides otherwise, the following applies:

| MArch(Prof) (1) | 1st Year 1st Quarter | 1st Year 2nd Quarter | 1st Year 3rd Quarter | 1st Year 4th Quarter |
|------------------------|--|--|---|--|
| Practice Component | CPD 711 6 credits | CPD 721 6 credits POU 720 2 credits | CPD 731 6 credits | Elective 6 credits |
| Theory Component | RFS 711 6 credits | RFS 721 6 credits | RFS 731 6 credits | Elective 6 credits |
| Project Component | RFP 711 20 credits | RFP 721 20 credits | RFP 731 20 credits | Elective 20 credits |
| MArch(Prof) (2) | 2nd Year 1st Quarter | 2nd Year 2nd Quarter | 2nd Year 3rd Quarter | 2nd Year 4th Quarter |
| Practice Component | CPD 810 Contract Documents 10 credits | CPD 820 Project and Investment Economics 10 credits (or elective) | CPD 830 Professional and Employee Ethics 10 credits | CPD 841 Professional Bodies and Matters 10 credits |
| Theory Component | DIT 801 Design Investigation Treatise 44 credits | | | |
| Project Component | DPD 801 Design Project and Discourse 44 credits | | | |

(d) Admission to examinations and pass requirements

The minimum pass mark is 50%. A minimum of 40% is required in the examination, with a minimum final mark of 50% to pass. If a module is not evaluated by examination a minimum coursework mark of 50% is required. If the module is not evaluated by coursework a minimum examination mark of 50% is required.

(e) Promotion to final year of study

Students are admitted to the second year of study if they have obtained 98 credits and passed all the project components and compulsory modules of the first year of study.

(f) Design topic

The topic of the final design project (DIT 801 & DPD 801) must be approved by the head of department.

(g) Awarding of degree

The degree is awarded to those students who obtained the prescribed credits (128 for those in the one year full-time programme, 256 for those in the two-year full-time programme).

(h) Degree with distinction

The degree is conferred with distinction on those students registering for the first time and obtaining a distinction (75%) simultaneously for both the Design Investigation Treatise (DIT 801) and the Design Project and Discourse (DPD 801) with the proviso that the degree is completed within the minimum prescribed time and all other final year modules are passed on first registration.

(i) Awarding of BArch(Hons) degree (Code 12242003)

Candidates who have been registered for the first year of study for the Magister in Architecture by coursework [MArch(Prof)] and who have successfully completed the first year of study and decided to discontinue their studies, may request that the degree Baccalaureus Honores in Architecture [BArch(Hons)] be conferred. The degree will be awarded with distinction if the student obtains an average of 75% (with a minimum of 70% for one of the two modules) for the prescribed project components Research Field Project 711(RFP 711) and Research Field Project 751 (RFP 751) and a distinction in one of the other prescribed courses.

**B.11 MAGISTER IN ARCHITECTURE (by research)
[MArch](by research)] (Code 12152002)**

Also consult General Regulations G.30 to G.44.

By virtue of a dissertation and examination.

Architecture 800: ARG 800 – Dissertation: ARG 890

Total credits : 200

(a) Admission requirements

Candidates who wish to research a topic within the discipline of architecture and who are in possession of

- (i) a BArch or equivalent degree of four years or more,
or
- (ii) an honours degree in architecture, BArch(Hons), or equivalent,
or
- (iii) a three-year degree with Design as major component and who successfully complete supplementary modules with weighting equivalent of an honours degree as prescribed by the Head of Department
or
- (iv) who are deemed adequate by the Head of Department in consultation with the Dean and obtaining (where necessary) the approval of the Senate and complying with whatever additional requirements may be prescribed,
are admitted to studies for the Masters degree in Architecture (by research).

(b) Duration and curriculum

After a minimum of one year of registration, the student is to submit a dissertation for examination and sit for an oral examination on the dissertation in the related field of study.

(c) Awarding of the degree

The Master of Architecture degree is conferred on students obtaining a minimum of 50% for both the dissertation and oral examination.

(d) Degree with distinction

The Master of Architecture degree is conferred with distinction on students obtaining a minimum of 75% for both the dissertation and the oral examination.

| |
|---|
| B.12 PHILOSOPHIAE DOCTOR [PhD] (Code 12262002) |
|---|

Also consult General Regulations G.15, G.52 and G.55.

Architecture 900: ARG 900 – Thesis: ARG 990

- (a) Candidates who have obtained a Master's degree in Architecture are admitted to doctoral studies.
- (b) Candidates in possession of a Master's degree by coursework may, at the discretion of the head of department, be required to do supplementary coursework prior to commencing studies.
- (c) A PhD student must submit a thesis which deals with a topic from the discipline of architecture and which provides proof of advanced original research and/or creative work which makes a real and substantial contribution to the knowledge and/or practice of architecture.
- (d) A student must submit at least one draft article to a recognised journal for publication, before or concurrent with the submission of the thesis. The draft article must be based on the research undertaken for the thesis and must be acceptable to the supervisor.
- (e) The doctoral examination, either written or oral, is compulsory, and covers the content of the thesis as well as the field of study on which the thesis is based.

| |
|---|
| DEGREES IN INTERIOR ARCHITECTURE |
|---|

Interior Architecture is the art and science of the design of designated spaces. It focuses on the needs of the user and the harmony between architectural spaces and the detailed design of spaces and life-style products. Graduates will have the ability to design interiors and products. Attention is given to the design process, building and material technology, building climate, ergonomics, history and visual communication within the interdependent context of society, economics, politics and technology. It is very important that students have the ability to visualise spaces, think three-dimensionally and solve problems creatively.

In order to gain practical experience, students are advised to work in the offices of an architect/interior architect during university recesses.

It is recommended that those graduates wishing to practice as interior designers, pursue further studies in this field. Such students are advised to apply for admission to the honours degree programme in Interior Architecture which entails one year of full-time study.

A graduate wishing to become a Professional Interior Architect are advised to register for the MIInt(Prof) degree.

**B.13 BACCALAUREUS SCIENTIAE IN INTERIOR ARCHITECTURE
[BSc(Int)] (Code 12132008)**

(a) Admission requirements

See General Information B.1 and B.2. in this publication.

(b) Duration

The minimum period of study is three years full-time. Candidates wishing to become Professional Interior Architects must hereafter register for the two year full-time MInt(Prof) degree programme. Those candidates wishing to become interior and product designers must hereafter register for the one year full-time honours degree programme in Interior Architecture [Blnt(Hons)].

(c) Curriculum

Total Credits: 386

| Code | Module | Prerequisite | Credits |
|---|---|---------------------|----------------|
| First year of study | | | |
| First semester | | | |
| AAL 110 | Earth Studies 110 | - | 8 |
| KON 110 | Construction 110 | - | 10 |
| OMG 110 | History of the Environment 110 | - | 6 |
| OML 110 | Environmental Studies 110 | - | 4 |
| ONT 100 | Design 100 | - | 25 |
| For students tested as language proficient (See Regulation B.3.)* | | | |
| AFR 159 | Afrikaans 159 | | 6 |
| | or | | |
| ENG 151 | Introduction to Poetry 151 | | 6 |
| AFR 160 | Afrikaans 160 | | 6 |
| | or | | |
| ENG 152 | Critical Language Skills 152 | | 6 |
| Second semester | | | |
| CIL 120 | Information Technology 120 | | 10 |
| KON 120 | Construction 120 | KON 110 GS | 10 |
| OMG 120 | History of the Environment 120 (<i>Capita selecta</i> from 122) | - | 4 |
| OML 120 | Environmental Studies 120 | OML 110 GS | 4 |
| ONT 100 | Design 100 | - | 25 |
| STU 120 | Theory of Structures 120 | - | 13 |
| For students tested as language proficient (See Regulation B.3.)* | | | |
| LCC 153 | Afrikaans 153 | | 6 |
| | or | | |
| ENG 153 | Introduction to Prose 153 | | 6 |
| AFR 162 | Afrikaans 162 | | 6 |
| | or | | |
| ENG 154 | Introduction to Drama 154 | | 6 |

*Students who have to follow language proficiency modules must register for EOT 151, 152, 153, and 154 offered by the Unit for Language Skills Development. (See Regulation B.3.) These students must obtain 12 additional credits in language modules as approved by the Head of Department of Architecture.

Second year of study

First semester

| | | | |
|---------|---|--------------|-----------|
| AAL 210 | Earth Studies 210 | AAL 110 | 10 |
| KON 211 | Construction 211 | KON 110, 120 | 10 |
| OKU 210 | Design Communication 210 | - | 8 |
| OMG 210 | History of the Environment 210 | - | 4 |
| OML 210 | Environmental Studies 210 | OML 110, 120 | 4 |
| ONT 213 | Design 213 | ONT 100 | 18 |
| TKS 251 | Basic Textiles: Utility Aspects 251 | - | 7 |
| TKS 252 | Basic Textiles: Fibres and Yarns 252 | TKS 251 GS | <u>7</u> |
| | Total | | <u>68</u> |

Second semester

| | | | |
|---------|---|------------|-----------|
| AAL 223 | Earth Studies 223 | - | 8 |
| KON 223 | Construction 223 | KON 211 GS | 10 |
| OKU 220 | Design Communication 220 | - | 8 |
| OMG 220 | History of the Environment 220 (<i>Capita selecta</i> from 224) | - | 4 |
| OML 220 | Environmental Studies 220 | OML 210 GS | 4 |
| ONT 223 | Design 223 | ONT 213 GS | 18 |
| TKS 261 | Basic Textiles: Fabric Structure 261 | TKS 252 GS | 7 |
| TKS 262 | Basic Textiles: Finishes and Dyeing Processes 262 | TKS 261 GS | <u>7</u> |
| | Total | | <u>66</u> |

Third year of study

First semester

| | | | |
|---------|--------------------------------|--------------|-----------|
| BER 410 | Business Law 410 | - | 8 |
| KON 313 | Construction 313 | - | 10 |
| MST 313 | Material Studies 313 | - | 6 |
| OMG 310 | History of the Environment 310 | - | 4 |
| OML 310 | Environmental Studies 310 | OML 210, 220 | 4 |
| ONT 313 | Design 313 | ONT 213, 223 | 16 |
| OKU 313 | Design Communication 313 | OKU 210, 220 | 10 |
| | Total | | <u>58</u> |

Second semester

| | | | |
|---------|--------------------------------|------------|----|
| AAL 320 | Earth Studies 320 | AAL 210 | 10 |
| KON 323 | Construction 323 | KON 313 GS | 15 |
| MST 323 | Material Studies 323 | - | 3 |
| OMG 320 | History of the Environment 320 | - | 4 |
| OML 320 | Environmental Studies 320 | OML 310 GS | 4 |
| ONT 323 | Design 323 | ONT 313 GS | 16 |
| PRS 320 | Practice Management 320 | - | 8 |

TKS 361

New Uses of Textiles 361

TKS 251,
TKS 252,
TKS 261,
TKS 262

Total

3
63

The programme is set out below:

| Year | Semester | PRS | MST | AAL | KON | ONT | OML | OMG | OKU |
|------|----------|------------|----------------------------|-----|-----|-----|-----|-----|------|
| 1 | 1 | - | - | 110 | 110 | 100 | 110 | 110 | Lang |
| | 2 | - | STU 120 | - | 120 | | 120 | 120 | Lang |
| 2 | 1 | - | TKS 251 & 252 | 210 | 211 | 213 | 210 | 210 | 210 |
| | 2 | - | TKS 261 & 262 | 223 | 223 | 223 | 220 | 220 | 220 |
| 3 | 1 | BER 410 | 313 | - | 313 | 313 | 310 | 310 | 313 |
| | 2 | 320 | TKS 361 & MST 323 | 320 | 323 | 323 | 320 | 320 | |

(d) Promotion to next year of study

A student is promoted to a subsequent year of study after acquiring the prerequisite number of module credits of the preceding year of study.

A student is deemed to be in the year of study for which he or she is registered in Design.

If the student is not registered for Design, the highest passed year of Design determines the year of study.

(e) Concurrent presentation

Design 323 and Construction 323 must initially be examined in the same year.

(f) Degree with distinction

The degree is conferred with distinction on a student who, at first registration, simultaneously passes both Design 323 and Construction 323 with distinction

(minimum 75%) with the proviso that the degree is completed within the minimum prescribed time and all other final-year modules are passed on first registration.

(g) Transitional measures

Students who have not obtained the total number of credits for fifth-year modules, are required to register for modules as prescribed by the head of department.

| |
|--|
| B.14 BACCALAUREUS IN INTERIOR DESIGN (BInt) (Code 12132006) |
|--|

(a) Transitional measures

Students who have not obtained the total number of credits for fifth-year modules, are required to register for modules as prescribed by the head of department.

| |
|---|
| B.15 MAGISTER IN INTERIOR ARCHITECTURE (Professional) [MInt(Prof)] (Code 12252007) |
|---|

Also consult General Regulations G.30 to G.44.

The Master of Interior Architecture (Professional) is done by coursework, projects and a design investigation treatise and design project and discourse.

(a) Admission requirements

Candidates for the degree programme Master of Interior Architecture (Professional):

(1) must be a graduate with a BSc(Int) degree or an equivalent university degree (e.g. BAS, B Building Arts, etc.)

or

(2) must have a recognized four-year tertiary qualification. Such candidates may be required, at the discretion of the head of department to:

- (i) do a language proficiency test;
- (ii) do a computer literacy test;
- (iii) register for supplementary modules.

or

(3) must be deemed adequate by the head of department in consultation with the Dean and obtain (where necessary) the approval of the Senate and comply with whatever additional requirements may be prescribed.

Candidates mentioned in (1), (2) and (3) above:

- (i) should preferably have had practical experience and/or have done and recorded an extended study excursion;
- (ii) are interviewed for selection;
- (iii) must present a portfolio and/or design journal which demonstrates the requisite level of proficiency and competency and is a record of their experience within the discipline;
- (iv) are selected on merit.

Note: The number of candidates admitted to this programme is restricted.

(b) Duration

The a minimum period of study is two years full-time. However, candidates in possession of a suitable four-year (or more) university qualification with a design component, or a postgraduate qualification in the design disciplines of the built environment professions may, at the discretion of the head of department and with the approval of the Dean, complete the Master's degree within one year of full-time study after obtaining a minimum of 128 credits of which 44 for the Design Project and Discourse are compulsory. The head of department may, with the Dean's consent, prescribe coursework and/or a project topic and/or supplementary modules for additional credits.

(c) Curriculum

Unless the head of department, in consultation with the Dean, decides otherwise, the following applies:

| MInt(Prof) (1) | 1st Year 1st Quarter | 1st Year 2nd Quarter | 1st Year 3rd Quarter | 1st Year 4th Quarter |
|---------------------------|--|--|---|--|
| Practice Component | CPD 713 6 credits | CPD 723 6 credits POU 720 2 credits | CPD 733 6 credits | Elective 6 credits |
| Theory Component | RFS 713 6 credits | RFS 723 6 credits | RFS 733 6 credits | Elective 6 credits |
| Project Component | RFP 713 20 credits | RFP 723 20 credits | RFP 733 20 credits | Elective 20 credits |
| MInt(Prof) (2) | 2nd Year 1st Quarter | 2nd Year 2nd Quarter | 2nd Year 3rd Quarter | 2nd Year 4th Quarter |
| Practice Component | CPD 810 Contract Documents 10 credits | CPD 820 Project and Investment Economics 10 credits (or elective) | CPD 830 Professional and Employee Ethics 10 credits | CPD 843 Professional Bodies and Matters 10 credits |
| Theory Component | DIT 803 Design Investigation Treatise 44 credits | | | |
| Project Component | DPD 803 Design Project and Discourse 44 credits | | | |

(d) Examinations and pass requirements

The minimum pass mark is 50%. A minimum of 40% is required in the examination, with a minimum final mark of 50% to pass. If a module is not evaluated by examination a minimum coursework mark of 50% is required.

If the module is not evaluated by coursework, a minimum examination mark of 50% is required.

(e) Promotion to final year of study

Students are admitted to the second year of study if they have obtained 98 credits and passed all the project components and compulsory modules of the first year of study.

(f) Design topic

The topic of the final design project (DIT 803 & DPD 803) must be approved by the head of department.

(g) Awarding of degree

The degree is awarded to those students who have obtained the prescribed credits (128 for the one year full-time programme, 256 for the two-year full-time programme).

(h) Degree with distinction

The degree is conferred with distinction on those students registering for the first time and obtaining a distinction (minimum 75%) simultaneously for both the Design Investigation Treatise (DIT 803) and the Design Project and Discourse (DPD 803) with the proviso that the degree is completed within the minimum prescribed time and all other final year modules are passed on first registration.

(i) Awarding of BInt(Hons) degree (Code 12242006).

Candidates who have been registered for the first year of study for the Master of Interior Architecture by coursework [MInt(Prof)] and who have successfully completed the first year of study and then decide to discontinue their studies, may request that the degree Baccalaureus Honores in Interior Architecture [BInt(Hons)] be conferred. The degree will be awarded with distinction if the student obtains an average of 75% (with a minimum of 70% for one of the two modules) for the prescribed project components Research Field Project 713 (RFP 713) and Research Field Project 753 (RFP 753) and a distinction in one of the other prescribed modules.

| |
|---|
| B.16 MASTER OF INTERIOR ARCHITECTURE (by research) [MInt (by research)](Code 12252004) |
|---|

Also consult General Regulations G.30 to G.44.

By virtue of a dissertation and examination.

Interior 800: INT 800 – Dissertation: INT 890

Total credits : 200

(a) Admission requirements

Candidates who wish to research a topic within the discipline of interior architecture and who are

- (i) in possession of a BInt or equivalent degree of four years or more
or

- (ii) in possession of an honours degree in Interior Architecture, BInt(Hons), or equivalent
or
- (iii) in possession of a three-year degree with Design as major component and who successfully complete supplementary modules with weighting equivalent of an honours degree as prescribed by the head of department
or
- (iv) deemed adequate by the head of department in consultation with the Dean and who obtain (where necessary) the approval of the Senate and comply with whatever additional requirements may be prescribed are admitted to studies for the degree Master of Interior Architecture (by research).

(b) Duration and curriculum

After a minimum of one year of registration the student submits a dissertation for examination and sits for an oral examination of the dissertation in the related field of study.

(c) Awarding of the degree

The Master of Interior Architecture degree is conferred on students obtaining a minimum of 50% for both the dissertation and oral examination.

(d) Degree with distinction

The Master of Interior Architecture degree is conferred with distinction on students obtaining a minimum of 75% in both the dissertation and the oral examination.

| |
|---|
| B.17 PHILOSOPHIAE DOCTOR [PhD] (Code 12262001) |
|---|

Also consult General Regulations G.15, G.52 and G.55.

Interior Architecture 900: INT 900 – Thesis: INT 990

- (a) Candidates who have obtained a Master's degree in Interior Architecture are admitted to doctoral studies.
- (b) Candidates who have obtained a Master's degree by coursework may, at the discretion of the head of department, be required to do supplementary coursework prior to commencement of the studies.
- (c) A PhD student must submit a thesis which deals with a topic from the discipline of interior architecture and which provides proof of advanced original research and/or creative work which makes a real and substantial contribution to the field of knowledge and/or practice of interior architecture.
- (d) A student must submit at least one draft article to a recognised journal for publication, before or concurrent with the submission of the thesis. The draft article must be based on the research undertaken for the thesis and must be acceptable to the supervisor.
- (e) The doctoral examination, either written or oral, is compulsory and covers the content of the thesis as well as the field of study on which the thesis is based.

DEGREES IN LANDSCAPE ARCHITECTURE

Landscape architecture is the science and art of the design of outside areas for the use and enjoyment of man. Parks, game reserves, recreational areas and marinas are only a few of the environments which the landscape architect designs. He creates urban oases in the form of plazas and pedestrian routes, and design environments around shopping centres and residential developments. The landscape architect can join a private firm, start an own business, or accept employment in central, provincial or local government in departments that handle water usage and research, forestry, environmental affairs, sport and recreation, fisheries, or nature conservation.

In order to gain practical experience students are advised to work in the offices of an architect or a landscape architect during the university recesses.

BSc(LArch) is a three-year degree and is regarded as an exit level that enables the graduate to register as a Candidate Landscape Architectural Technologist who is a professional person registered by the South African Council of the Landscape Architectural Profession in terms of the Act on the Landscape Architectural Profession (Act 45 of 2000). Such practitioners provide assistance in the practices of the disciplines of Landscape Architecture and Urban Design where their responsibilities would be the documentation of projects, project administration and site management. A graduate wishing to become a Professional Landscape Architect must apply for and pursue a further two years of full-time study in the relevant professional degree programme.

The Master of Landscape Architecture (Professional) degree is recognised by the South African Council for the Landscape Architectural Profession as qualifying the graduate to register as a Candidate Professional Landscape Architect in terms of Act 45 of 2000.

B.18 BACCALAUREUS SCIENTIAE IN LANDSCAPE ARCHITECTURE [BSc(LArch)] (Code 12132004)

(a) Admission requirements

See General Information B.1 and B.2. in this publication.

(b) Duration

The minimum period of study is three years full time. Candidates wishing to become Professional Landscape Architects must hereafter register for the two year full-time ML(Prof) degree programme.

(c) Curriculum

Total credits : 382

Unless the Dean, in consultation with the head of department, decides otherwise, the following curriculum applies:

| Code | Module | Prerequisites | Credits |
|-----------------------|--------------------------------|---------------|---------|
| First semester | | | |
| AAL 110 | Earth Studies 110 | - | 8 |
| KON 110 | Construction 110 | - | 10 |
| OMG 110 | History of the Environment 110 | - | 6 |
| OML 110 | Environmental Studies 110 | - | 4 |
| ONT 100 | Design 100 | - | 25 |

For students tested as language proficient (See Regulation B.3.)*

| | | | |
|---------|------------------------------|--|---|
| AFR 159 | Afrikaans 159 | | 6 |
| | or | | |
| ENG 151 | Introduction to Poetry 151 | | 6 |
| AFR 160 | Afrikaans 160 | | 6 |
| | or | | |
| ENG 152 | Critical Language Skills 152 | | 6 |

Second semester

| | | | |
|---------|---|------------|----|
| CIL 120 | Information Technology 120 | | 10 |
| KON 120 | Construction 120 | KON 110 GS | 10 |
| OMG 120 | History of the Environment 120 (<i>Capita selecta</i> from 122) | - | 4 |
| OML 120 | Environmental Studies 120 | OML 110 GS | 4 |
| ONT 100 | Design 100 | - | 25 |
| STU 120 | Theory of Structures 120 | - | 13 |

For students tested as language proficient (See Regulation B.3.)*

| | | | |
|---------|---------------------------|--|---|
| LCC 153 | Afrikaans 153 | | 6 |
| | or | | |
| ENG 153 | Introduction to Prose 153 | | 6 |
| AFR 162 | Afrikaans 162 | | 6 |
| | or | | |
| ENG 154 | Introduction to Drama 154 | | 6 |

*Students who are required to follow language proficiency modules must register for EOT 151, 152, 153, and 154 offered by the Unit for Language Skills Development. (See Regulation B.3.) These students must obtain 12 additional credits in language modules as approved by the Head of Department of Architecture.

Second year of study

First semester

| | | | |
|---------|--------------------------------|--------------|-----------|
| AAL 210 | Earth Studies 210 | AAL 110 | 10 |
| KON 212 | Construction 212 | KON 110, 120 | 10 |
| OKU 210 | Design Communication 210 | - | 8 |
| OMG 210 | History of the Environment 210 | - | 4 |
| OML 210 | Environmental Studies 210 | OML 110, 120 | 4 |
| ONT 212 | Design 212 | ONT 100 | 18 |
| PWT 212 | Plant Science 212 | - | <u>10</u> |
| | Total | | <u>64</u> |

Second semester

| | | | |
|---------|---|------------|-----------|
| GGY 363 | Environmental Geomorphology 363 - | | 4 |
| GKD 225 | General Soil Science 225 | - | 4 |
| KON 220 | Construction 220 | KON 212 GS | 10 |
| OKU 220 | Design Communication 220 | - | 8 |
| OMG 220 | History of the Environment 220 (<i>Capita selecta</i> from 224) | - | 4 |
| OML 220 | Environmental Studies 220 | OML 210 GS | 4 |
| ONT 222 | Design 222 | ONT 212 GS | 18 |
| PWT 222 | Plant Science 222 | PWT 212 GS | <u>10</u> |
| | Total | | <u>62</u> |

Third year of study

First semester

| | | | |
|---------|--------------------------------|--------------|-----------|
| BER 410 | Business Law 410 | - | 8 |
| GGY 283 | Introductory GIS 283 | - | 6 |
| KON 310 | Construction 310 | KON 212, 220 | 10 |
| OMG 310 | History of the Environment 310 | - | 4 |
| OML 310 | Environmental Studies 310 | OML 210, 220 | 4 |
| ONT 312 | Design 312 | ONT 212, 222 | 16 |
| PWT 312 | Plant Science 312 | PWT 212, 222 | <u>10</u> |
| | Total | | <u>58</u> |

Second semester

| | | | |
|---------|--------------------------------|---------------------------|-----------|
| AAL 320 | Earth Studies 320 | AAL 210 | 10 |
| KON 322 | Construction 322 | KON 310 GS, ONT 312 GS | 15 |
| OMG 320 | History of the Environment 320 | - | 4 |
| OML 320 | Environmental Studies 320 | OML 310 GS | 4 |
| ONT 322 | Design 322 | ONT 312 GS KON 310 GS | 16 |
| PRS 320 | Practice Management 320 | - | 8 |
| PWT 322 | Plant Science 322 | PWT 312 GS | <u>10</u> |
| | Total | | <u>67</u> |

The programme is set out below:

| Year | Semester | PRS | PWT | AAL | KON | ONT | OML | OMG | OKU |
|------|----------|------------|------------|--------------------------|-----|-----|-----|-----|------------|
| 1 | 1 | - | | 110 | 110 | 100 | 110 | 110 | LANG |
| | 2 | - | STU 120 | - | 120 | | 120 | 120 | LANG |
| 2 | 1 | - | 212 | 210 | 212 | 212 | 210 | 210 | 210 |
| | 2 | - | 222 | GGY 363 GKD 225 | 220 | 222 | 220 | 220 | 220 |
| 3 | 1 | BER 410 | 312 | - | 310 | 312 | 310 | 310 | GGY 283 |
| | 2 | 320 | 322 | 320 | 322 | 322 | 320 | 320 | - |

(d) Promotion to next year of study

A student is promoted to a subsequent year of study after acquiring all the prerequisite module credits of the preceding year of study.

A student is deemed to be in the year of study for which he or she is registered in Design.

If the student is not registered for Design the highest passed year of Design determines the year of study.

(e) Concurrent presentation

Design 322 and Construction 322 must initially be examined in the same year.

(f) Degree with distinction

The BSc(LArch) degree is conferred with distinction on a student who, at first registration, simultaneously passes Design 322 and Construction 322 with distinction (minimum 75%) with the proviso that the degree is completed within the minimum prescribed time and all other final-year modules are passed on first registration.

**B.19 MASTER OF LANDSCAPE ARCHITECTURE (Professional)
[ML(Prof)] (Code 12252008)**

Also consult General Regulations G.30 to G.44.

The Master of Landscape Architecture (Professional) is a taught Master's degree for the purpose of registration as a Candidate Professional Landscape Architect with the South African Council for the Landscape Architecture Profession in terms of Act 45 of 2000 and is done by coursework, projects and a design investigation treatise and design project and discourse.

(a) Admission requirements

Candidates for the degree programme Master of in Landscape Architecture (Professional):

- (1) must be a graduate with a BSc (LArch) degree or an equivalent university degree (e.g. BAS, B Building Arts, etc.)
or
- (2) must have a recognised four-year tertiary qualification.
Such candidates may be required, at the discretion of the head of department, to:
 - (i) do a language proficiency test
 - (ii) do a computer literacy test
 - (iii) register for supplementary modules.

or
- (3) must be deemed adequate by the head of department in consultation with the Dean and obtain (where necessary) the approval of the Senate and comply with whatever additional requirements may be prescribed

Candidates mentioned in (1), (2) and (3):

- (i) should preferably have had practical experience and/or have done and recorded an extended study excursion;
- (ii) are interviewed for selection;

- (iii) must present a portfolio and/or design journal which demonstrates the requisite level of proficiency and competency and is a record of their experience within the discipline;
- (iv) are selected on merit.

Note: The number of candidates admitted to this programme is restricted.

(b) Duration

The minimum period of study is two years full-time. However, candidates in possession of a suitable four-year (or more) university qualification with a design component, or a postgraduate qualification in the design disciplines of the built environment professions may, at the discretion of the head of department and with the approval of the Dean, complete the Master's degree within one year of full-time study after obtaining a minimum of 128 credits of which 44 for the Design Project and Discourse are compulsory. The head of department, with the Dean's consent, prescribe coursework and/or a project topic and/or supplementary modules for additional credits.

(c) Curriculum

Unless the head of department, in consultation with the Dean, decides otherwise, the following applies:

| ML(Prof) (1) | 1st Year 1st Quarter | 1st Year 2nd Quarter | 1st Year 3rd Quarter | 1st Year 4th Quarter |
|---------------------|--|--|---|--|
| Practice Component | CPD 712 6 credits | CPD 722 6 credits POU 720 2 credits | CPD 732 6 credits | Elective 6 credits |
| Theory Component | RFS 712 6 credits | RFS 722 6 credits | RFS 732 6 credits | Elective 6 credits |
| Project Component | RFP 712 20 credits | RFP 722 20 credits | RFP 732 20 credits | Elective 20 credits |
| ML(Prof) (2) | 2nd Year 1st Quarter | 2nd Year 2nd Quarter | 2nd Year 3rd Quarter | 2nd Year 4th Quarter |
| Practice Component | CPD 810 Contract Documents 10 credits | CPD 820 Project and Investment Economics 10 credits (or elective) | CPD 830 Professional and Employee Ethics 10 credits | CPD 842 Professional Bodies and Matters 10 credits |
| Theory Component | DIT 802 Design Investigation Treatise 44 credits | | | |
| Project Component | DPD 802 Design Project and Discourse 44 credits | | | |

(d) Examinations and pass requirements

The minimum pass mark is 50%. A minimum of 40% is required in the examination, with a minimum final mark of 50% to pass. If a module is not evaluated by

examination a minimum coursework mark of 50% is required. If the module is not evaluated by coursework a minimum examination mark of 50% is required.

(e) Promotion to final year of study

Students are admitted to the second year of study if they have obtained 98 credits and passed all the project components and compulsory modules of the first year of study.

(f) Design topic

The topic of the final design project (DIT 802 & DPD 802) must be approved by the head of department.

(g) Awarding of degree

The degree is awarded to those students who have obtained the prescribed credits (128 for the one year full-time programme, 256 for the two-year full-time programme).

(h) Degree with distinction

The degree is conferred with distinction on those students registering for the first time and obtaining a distinction (75%) simultaneously for both the Design Investigation Treatise (DIT 802) and the Design Project and Discourse (DPD 802) with the proviso that the degree is completed within the minimum prescribed time and all other final-year modules are passed on first registration.

(i) Awarding of BL(Hons) degree (Code 12242004)

Candidates who have been registered for the first year of study for the Master of Landscape Architecture (by coursework) [ML(Prof)] and who have successfully completed the first year of study and then decided to discontinue their studies, may request that the degree Baccalaureus Honores in Landscape Architecture [BL(Hons)] be conferred. The degree will be awarded with distinction if the candidate obtains an average of 75% (with a minimum of 70% for one of the two modules) for the prescribed project components Research Field Project 712 (RFP 712) and Research Field Project 752 (RFP 752) and a distinction in one of the other prescribed modules.

**B.20 MASTER OF LANDSCAPE ARCHITECTURE (by research)
 [(ML) (by research)] (Code 12252003)**

Also consult General Regulations G.30 TO G.44.

By virtue of dissertation and examination.

Landscape Architecture 800: LAN 800 – Dissertation: LAN 890

Total credits : 200

(a) Admission requirements

Candidates wishing to research a topic within the discipline of landscape architecture and who are

- (1) in possession of a BL or equivalent degree of four years or more,

- or**

(2) in possession of an honours degree in Landscape Architecture, BL(Hons), or equivalent
- or**

(3) in possession of a three-year degree with Design as major component and successfully complete supplementary modules with weighting equivalent of an honours degree as prescribed by the head of department
- or**

(4) deemed adequate by the head of department in consultation with the Dean and who obtains (where necessary) the approval of the Senate and complies with whatever additional requirements may be prescribed, are admitted to studies for the degree Master of Landscape Architecture (by research).

(b) Duration and curriculum

After a minimum of one year of registration the student submits a dissertation for examination and sits for an oral examination on the dissertation in the related field of study.

(c) Awarding of the degree

The Master of Landscape Architecture degree is conferred on a student obtaining a minimum of 50% for both the dissertation and oral examination.

(d) Degree with distinction

The Master of Landscape Architecture degree is conferred with distinction on a student obtaining a minimum of 75% in both the dissertation and the oral examination.

| |
|---|
| <p>B.21 PHILIOSOPHIAE DOCTOR [PhD] (Code 12262003)</p> |
|---|

Also consult General Regulations and G.15, G.52 and G.55.

Landscape Architecture 900: LAN 900

– **Thesis: LAN 990**

- (a)** Candidates who have obtained a Master's degree in landscape architecture are admitted to doctoral studies.
- (b)** Candidates who obtained a Master's degree by coursework may, at the discretion of the head of department, be required to do supplementary coursework prior to commencement of the studies.
- (c)** A PhD student must submit a thesis, which deals with a topic from the discipline of landscape architecture and which provides proof of advanced original research and/or creative work which makes a real and substantial contribution to the field of knowledge and/or practice of landscape architecture.
- (d)** A student must submit at least one draft article to a recognised journal for publication, before or concurrent with the submission of the thesis. The draft article must be based on the research undertaken for the thesis and must be acceptable to the supervisor.
- (e)** The doctoral examination, either written or oral, is compulsory, and encompasses the content of the thesis as well as the field of study on which the thesis is based.
- (f)** A student who obtains a minimum of 50% for both the thesis and examination is awarded the degree.

| |
|--|
| DEGREES IN CONSTRUCTION ECONOMICS |
|--|

(a) Admission requirements

Also see General Information B.1 and B.2. in this publication.

(b) Duration

The minimum duration of study is three years full-time.

(c) Examinations and promotion

- (i) A student is promoted to the following study year after completing the under-mentioned number of credits :

| <u>Quantity Surveying and Construction Management</u> | <u>Real Estate</u> |
|---|--------------------|
|---|--------------------|

- | | | |
|-------------------------|-------------|-------------|
| ▪ Second year of study: | 115 credits | 111 credits |
| ▪ Third year of study: | 276 credits | 270 credits |
- (ii) The Dean may, on the recommendation of the head of department, allow a student, who qualifies for promotion to a subsequent year of study, but who has not passed all the modules of that year, to carry over these modules to the next or a later year provided no clashes occur on the timetable.
- (iii) Students who wish to take modules in advance not prescribed for a particular year of study, or who must repeat modules, may only register for modules in more than two consecutive years of study with the approval of the head of the department.
- (iv) A student who complies with all the requirements for the degree with the exception of one year module or two semester modules, in which a final mark of at least 40% has been obtained, may be admitted to a special examination in the module(s) concerned, at the start of the ensuing semester.
- (v) The degree is awarded if all the prescribed modules have been passed:
BSc(Quantity Surveying): 468 credits; BSc(Construction Management): 464 credits; BSc(Real Estate): 475 credits.
- (vi) On the recommendation of the head of department, the Dean may in exceptional circumstances deviate from the abovementioned stipulations, provided that no timetable clashes occur.

(d) Degree with distinction

The degree is conferred with distinction on a student who has obtained an average of at least 75% for all the prescribed modules of the final year, or who has obtained at least 75% in two of the following modules (75% average where the module is composed of two semester modules) and subject to the average of all other modules not being less than 65%:

(i) BSc(Quantity Surveying)

- (aa) Quantities 300
(bb) Construction Information Technology 300
(cc) Quantity Surveying Practice 300
(dd) Building Services 312 and 322 (average 75%)
(ee) Building Science 310 and 320 (average 75%)

(ii) BSc(Construction Management)

- (aa) Construction Quantities 300

- (bb) Construction Information Technology 300
- (cc) Construction Management 310 en 320 (average 75%)
- (dd) Building Services 312 en 322 (average 75%)
- (ee) Building Science 310 en 320 (average 75%)

(iii) BSc(Real Estate)

- (aa) Property Marketing 310 en 322 (average 75%)
- (bb) Property Law 310 en 320 (average 75%)
- (cc) Construction Information Technology 300
- (dd) Building Services 312 en 322 (average 75%)
- (ee) Building Science 310 en 320 (average 75%)

(e) Curriculum

The curricula for the BSc(Quantity Surveying), BSc(Construction Management) and BSc(Real Estate) degree programmes are extended over three study years in semester modules and year modules with the prerequisites and module credits as indicated.

The symbol GS after a module indicates a combined (final) mark (semester/year mark plus examination mark) of 40 - 49%. required for admission to the module in the first column.

*** Language**

The language skills of students registering for the first time at this University will be tested at the beginning of the year. Dependent on these results, every student in the Department of Construction Economics must:

- obtain 12 credits in the language skills modules EOT 151, 152, 153, 154 offered by the Unit for Language Skills Development;
or
- obtain 12 credits through a combination of language skills modules offered by the Unit for Language Skills Development and modules offered by the School of Languages (in consultation with the relevant head of department);
or
- obtain 12 credits in modules offered by the School of Languages and/or any other modules approved by the head of department.

**** Computer literacy**

A student may obtain credits for the relevant modules by successfully completing the exemption tests at the beginning of the academic year.

| |
|---|
| B.22 BACCALAUREUS SCIENTIAE (QUANTITY SURVEYING) [BSc(QS)] (Code 12132014) |
|---|

The examinations for the BSc(Hons)degree in Quantity Surveying are approved by the Minister as prescribed examinations in terms of the stipulations of the Quantity Surveying Profession Act (Act No. 49, 2000).

Quantity surveying is the science that delivers specialised financial and contractual services and advice to clients in the building and construction industry, as well as in related industries. The quantity surveyor is an independent and professional consultant who works with architects, consulting engineers, and the building contractor, in order to

protect the interests of the client, while at the same time also looking after the interests of the contractor and sub-contractor. There are many employment opportunities in the building and construction sector, government departments, in the property sector, banks and manufacturing industry. Most of the qualified quantity surveyors, however, work in the private sector where they find employment with quantity surveying practices, or open their own practices after registration with the South African Council for Quantity Surveyors.

(a) Curriculum

Total credits required: 468

| Code | Module | Prerequisites | Credits |
|-----------------------------|---------------------------------------|-------------------|-----------|
| First year of study | | | |
| First semester | | | |
| BGG 111 | Building Organisation 111 | - | 8 |
| BOU 131 | Building Drawings 131 | - | 6 |
| BWT 110 | Building Science 110 | - | 9 |
| GBD 112 | Building Services 112 | - | 9 |
| FRK 151 | Financial Accounting 151 | Par. B.2 | 5 |
| FRK 152 | Financial Accounting 152 | Par. B.2, FRK 151 | 5 |
| FRK 181 | Financial Accounting 181 | Par. B.2, FRK 151 | 3 |
| CIL 171** | Computer and Information Literacy 171 | Par. B.2 | 3 |
| CIL 172** | Computer and Information Literacy 172 | Par. B.2 | 3 |
| EOT 151* | Language Skills 151 | - | 3 |
| EOT 152* | Language Skills 152 | - | 3 |
| SLK 151 | Psychological Perspectives 151 | - | 6 |
| SLK 152 | Cognitive Processes 152 | - | 6 |
| STU 112 | Theory of Structures 112 | - | <u>12</u> |
| | Total | | <u>81</u> |
| Second semester | | | |
| BOU 120 | Building Drawings 120 | BWT 110 GS | 8 |
| BWT 120 | Building Science 120 | BWT 110 GS | 9 |
| GBD 122 | Building Services 122 | GBD 112 GS | 9 |
| HVH 120 | Quantities 120 | BWT 110 GS | 12 |
| OMG 122 | History of the Environment 122 | - | 14 |
| CIL 173** | Computer and Information Literacy 173 | Par. B.2 | 3 |
| CIL 174** | Computer and Information Literacy 174 | Par. B.2 | 3 |
| SLK 155 | Environmental Psychology 155 | - | 6 |
| STU 122 | Theory of Structures 122 | STU 112 GS | 12 |
| EOT 153* | Language Skills 153 | - | 3 |
| EOT 154* | Language Skills 154 | - | <u>3</u> |
| | Total | | <u>82</u> |
| Second year of study | | | |
| First semester | | | |
| BWT 210 | Building Science 210 | BWT 110/120 GS | 9 |
| EKN 110 | Economics 110 | Par.B.2 | 10 |

Built Environment 2003

| | | | |
|---------|--------------------------|----------------|-----------|
| GBD 212 | Building Services 212 | - | 9 |
| HVH 200 | Quantities 200 | HVH 120 GS | |
| | | BWT 110/120 GS | 12 |
| STK 110 | Statistics 110 | Par. B.2 | 13 |
| STU 212 | Theory of Structures 212 | STU 122 GS | 9 |
| TRN 213 | Site Surveying 213 | - | |
| | Total | | <u>74</u> |

Second semester

| | | | |
|---------|--------------------------------|--------------------|-----------|
| BWT 220 | Building Science 220 | BWT 210 GS | 9 |
| EKN 120 | Economics 120 | EKN 110 GS | 10 |
| FRK 121 | Financial Accounting 121 | FRK 151, 152 GS | 11 |
| | | | 9 |
| GBD 222 | Building Services 222 | | |
| HVH 200 | Quantities 200 | HVH 120 GS | |
| | | BWT 110/120 GS | 12 |
| OMG 224 | History of the Environment 224 | OMG 122 GS | 14 |
| STK 161 | Statistics 161 | - | 13 |
| STU 222 | Theory of Structures 222 | STU 212 GS | 9 |
| | Total | | <u>87</u> |

Third year of study

First semester

| | | | |
|---------|--|---------------------------------------|-----------|
| BER 410 | Business Law 410 | - | 12 |
| BRK 300 | Quantity Surveying Practice 300 | - | 15 |
| BWT 310 | Building Science 310 | - | 9 |
| GBD 312 | Building Services 312 | - | 9 |
| HVH 300 | Quantities 300 | BWT 220 GS | |
| | | HVH 200 GS | |
| | | GBD 122 GS | 12 |
| KIT 300 | Construction Information Technology 300 | CIL 171,172, 173, 174/ Par. B.2 | 12 |
| STU 312 | Theory of Structures 312 | STU 222 GS | 9 |
| | Total | | <u>78</u> |

Second semester

| | | | |
|---------|--|---------------------------------------|-----------|
| BRK 300 | Quantity Surveying Practice 300 | - | 15 |
| BWT 320 | Building Science 320 | - | 9 |
| GBD 322 | Building Services 322 | GBD 312 GS | 9 |
| HVH 300 | Quantities 300 | BWT 220 GS | |
| | | HVH 200 GS | |
| | | GBD 122 GS | 12 |
| KIT 300 | Construction Information Technology 300 | CIL 171,172, 173, 174/ Par. B.2 | 12 |
| STU 322 | Theory of Structures 322 | | 9 |
| | Total | | <u>66</u> |

B.23 BACCALAUREUS SCIENTIAE (CONSTRUCTION MANAGEMENT)
[BSc(Construction Management)](Code 12132015)

The examinations of the BSc(Hons) degree in Construction Management are recognised by the South African Building Institute as prescribed examinations for membership of that institute.

Construction management is the field of study meant for the person who wishes to become part of the dynamic process of infrastructure development, especially the construction of buildings. The construction manager is a professional business person who acts as manager for undertakings in the building, construction and property industry as well as related support services. Career opportunities cover a wide spectrum, and construction managers find employment as main and sub-contractors in the building and construction industry, as project managers or investment experts with financial institutions and property developers, as property experts who offer broker services and compile packages, as managers of building and property portfolios for investors, as suppliers of material and equipment to the building and construction industry, as consultants for financial services in the construction and related sectors, or as private entrepreneurs working in these fields.

(a) Curriculum

Total credits required: 464

| Code | Module | Prerequisites | Credits |
|----------------------------|---------------------------------------|----------------------|------------------|
| First year of study | | | |
| First semester | | | |
| BGG 111 | Building Organisation 111 | - | 8 |
| BOU 131 | Building Drawings 131 | - | 6 |
| BWT 110 | Building Science 110 | - | 9 |
| FRK 151 | Financial Accounting 151 | Par. B.2 | 5 |
| FRK 152 | Financial Accounting 152 | Par. B.2, FRK 151 | 5 |
| FRK 181 | Financial Accounting 181 | Par. B.2, FRK 151 | 3 |
| GBD 112 | Building Services 112 | - | 9 |
| CIL 171** | Computer and Information Literacy 171 | Par. B.2 | 3 |
| CIL 172** | Computer and Information Literacy 172 | Par. B.2 | 3 |
| SLK 151 | Psychological Perspectives 151 | - | 6 |
| SLK 152 | Cognitive Processes 152 | - | 6 |
| STU 112 | Theory of Structures 112 | - | 12 |
| EOT 151* | Language Skills 151 | - | 3 |
| EOT 152* | Language Skills 152 | - | 3 |
| | Total | | <u>81</u> |
| Second semester | | | |
| BOU 120 | Building Drawings 120 | BWT 110 GS | 8 |
| BWT 120 | Building Science 120 | BWT 110 GS | 9 |
| GBD 122 | Building Services 122 | GBD 112 GS | 9 |
| HVH 120 | Quantities 120 | BWT 110 GS | 12 |
| OMG 122 | History of the Environment 122 | - | 14 |
| CIL 173** | Computer and Information Literacy 173 | Par. B.2 | 3 |

| | | | |
|-----------|---------------------------------------|------------|-----------|
| CIL 174** | Computer and Information Literacy 174 | Par. B.2 | 3 |
| EOT 153* | Language Skills 153 | - | 3 |
| EOT 154* | Language Skills 154 | - | 3 |
| SLK 155 | Environmental Psychology 155 | - | 6 |
| STU 122 | Theory of Structures 122 | STU 112 GS | <u>12</u> |
| | Total | | <u>82</u> |

Second year of study

First semester

| | | | |
|---------|--------------------------|----------------|-----------|
| BWT 210 | Building Science 210 | BWT 110/120 GS | 9 |
| EKN 110 | Economics 110 | Par.B.2 | 10 |
| GBD 212 | Building Services 212 | - | 9 |
| HVH 200 | Quantities 200 | HVH 120 GS | |
| | | BWT 110/120 GS | 12 |
| STK 110 | Statistics 110 | Par. B.2 | 13 |
| STU 212 | Theory of Structures 212 | STU 122 GS | 9 |
| TRN 213 | Site Surveying 213 | - | <u>12</u> |
| | Total | | <u>74</u> |

Second semester

| | | | |
|---------|--------------------------------|--------------------|-----------|
| BWT 220 | Building Science 220 | BWT 210 GS | 9 |
| EKN 120 | Economics 120 | EKN 110 GS | 10 |
| FRK 121 | Financial Accounting 121 | FRK 151, 152 GS | 11 |
| | | | 9 |
| GBD 222 | Building Services 222 | | |
| HVH 200 | Quantities 200 | HVH 120 GS | |
| | | BWT 110/120 GS | 12 |
| OMG 224 | History of the Environment 224 | OMG 122 GS | 14 |
| STK 161 | Statistics 161 | - | 13 |
| STU 222 | Theory of Structures 222 | STU 212 GS | 9 |
| | Total | | <u>87</u> |

Third year of study

First semester

| | | | |
|---------|---|--------------------------------------|-----------|
| ABR 311 | Labour Law 311 | - | 6 |
| BER 410 | Business Law 410 | - | 12 |
| BWT 310 | Building Science 310 | - | 9 |
| GBD 312 | Building Services 312 | | 9 |
| KBS 310 | Construction Management 310 | - | 12 |
| KSH 300 | Construction Quantities 300 | HVH 200 GS, BWT 220 GS | 10 |
| KIT 300 | Construction Information Technology 300 | CIL 171,172, 173, 174/ Par B.2 | 12 |
| STU 312 | Theory of Structures 312 | STU 222 GS | <u>9</u> |
| | Total | | <u>79</u> |

Second semester

| | | | |
|---------|-----------------------|------------|---|
| BWT 320 | Building Science 320 | | 9 |
| GBD 322 | Building Services 322 | GBD 312 GS | 9 |

| | | | |
|---------|--|-------------------------------------|-----------|
| KBS 320 | Construction Management 320 | KBS 310 GS | 12 |
| KSH 300 | Construction Quantities 300 | HVH 200 GS, BWT 220 GS | 10 |
| KIT 300 | Construction Information Technology 300 | CIL 171,172, 173,174/ Par B.2 | 12 |
| STU 322 | Theory of Structures 322 | | <u>9</u> |
| | Total | | <u>61</u> |

| |
|---|
| B.24 BACCALAUREUS SCIENTIAE (REAL ESTATE) [BSc(Real Estate)] (Code 12132016) |
|---|

Real Estate is a field of study for the person who plans a dynamic career in the property industry. Career opportunities stretch across a wide spectrum and comprise amongst others investment consultations at financial institutions, rendering brokerage services as a real estate expert, property development, development facilitation, property management, management of property portfolios, facilities management, property finance, marketing of existing property and property development projects, or acting as a private entrepreneur in any of the aforementioned.

(a) Curriculum

Total credits required: 475

| Code | Module | Prerequisites | Credits |
|----------------------------|--|-------------------|-----------|
| First year of study | | | |
| First semester | | | |
| BGG 111 | Building Organisation 111 | - | 8 |
| BOU 131 | Building Drawings 131 | - | 6 |
| BWT 110 | Building Science 110 | - | 9 |
| CIL 171** | Computer and Information Literacy 171 | Par. B.2 | 3 |
| CIL 172** | Computer and Information Literacy 172 | Par. B.2 | 3 |
| EOT 151* | Language Skills 151 | - | 3 |
| EOT 152* | Language Skills 152 | - | 3 |
| FRK 151 | Financial Accounting 151 | Par. B.2 | 5 |
| FRK 152 | Financial Accounting 152 | Par. B.2, FRK 151 | 5 |
| FRK 181 | Financial Accounting 181 | Par. B.2, FRK 151 | 3 |
| GBD 112 | Building Services 112 | - | 9 |
| SLK 151 | Psychological Perspectives 151 | - | 6 |
| SLK 152 | Cognitive Processes 152 | - | 6 |
| BEM 110 | Marketing Management 110 | - | <u>10</u> |
| | Total | | <u>79</u> |
| Second semester | | | |
| BOU 120 | Building Drawings 120 | BWT 110 GS | 8 |
| BWT 120 | Building Science 120 | BWT 110 GS | 9 |
| GBD 122 | Building Services 122 | GBD 112 GS | 9 |
| HVH 120 | Quantities 120 | BWT 110 GS | 12 |

Built Environment 2003

| | | | |
|-----------|---------------------------------------|----------|-----------|
| OMG 122 | History of the Environment 122 | - | 14 |
| CIL 173** | Computer and Information Literacy 173 | Par. B.2 | 3 |
| CIL 174** | Computer and Information Literacy 174 | Par. B.2 | 3 |
| SLK 155 | Environmental Psychology 155 | - | 6 |
| BEM 161 | Marketing Management 161 | - | 5 |
| BEM 162 | Marketing Management 162 | - | 5 |
| EOT 153* | Language Skills 153 | - | 3 |
| EOT 154* | Language Skills 154 | - | 3 |
| | Total | | <u>80</u> |

Second year of study

First semester

| | | | |
|---------|-------------------------|----------------|-----------|
| BWT 210 | Building Science 210 | BWT 110/120 GS | 9 |
| EEB 212 | Property Management 212 | - | 9 |
| EKN 110 | Economics 110 | Par.B.2 | 10 |
| GBD 212 | Building Services 212 | - | 9 |
| HVH 200 | Quantities 200 | HVH 120 GS | |
| | | BWT 110/120 GS | 12 |
| STK 110 | Statistics 110 | Par. B.2 | 13 |
| TRN 213 | Site Surveying 213 | - | <u>12</u> |
| | Total | | <u>74</u> |

Second semester

| | | | |
|---------|--------------------------------|--------------------|-----------|
| BWT 220 | Building Science 220 | BWT 210 GS | 9 |
| EEK 222 | Property Economics 222 | - | 6 |
| EKN 120 | Economics 120 | EKN 110 GS | 10 |
| FRK 121 | Financial Accounting 121 | FRK 151, 152 GS | 11 |
| GBD 222 | Building Services 222 | - | 9 |
| HVH 200 | Quantities 200 | HVH 120 GS | |
| | | BWT 110/120 GS | 12 |
| OMG 224 | History of the Environment 224 | OMG 122 GS | 14 |
| STK 161 | Statistics 161 | - | <u>13</u> |
| | Total | | <u>84</u> |

Third year of study

First semester

| | | | |
|---------|---|--------------------------------------|-----------|
| BER 410 | Business Law 410 | - | 12 |
| BWT 310 | Building Science 310 | - | 9 |
| EBM 312 | Property Marketing 312 | - | 9 |
| EDR 310 | Property Law 310 | - | 6 |
| GBD 312 | Building Services 312 | - | 9 |
| KBS 310 | Construction Management 310 | - | 12 |
| KSH 300 | Construction Quantities 300 | HVH 200 GS, BWT 220 GS | 10 |
| KIT 300 | Construction Information Technology 300 | CIL 171,172, 173, 174/ Par B.2 | |
| | Total | | <u>12</u> |
| | | | <u>79</u> |

Second semester

| | | | |
|---------|--|--------------------------------------|-----------|
| BWT 320 | Building Science 320 | - | 9 |
| EBM 322 | Property Marketing 322 | EBM 312 GS | 9 |
| EDR 320 | Property Law 320 | EDR 310 GS | 9 |
| GBD 322 | Building Services 322 | GBD 312 GS | 9 |
| KBS 320 | Construction Management 320 | KBS 310 GS | 12 |
| KSH 300 | Construction Quantities 300 | HVH 200 GS, BWT 220 GS | 10 |
| KIT 300 | Construction Information Technology 300 | CIL 171,172, 173, 174/ Par B.2 | 12 |
| STU 322 | Theory of Structures 322 | - | <u>9</u> |
| | Total | | <u>79</u> |

HONOURS PROGRAMMES**(a) Admission requirements**

Subject to the stipulations of the General Regulations, a BSc(QS), BSc(Construction Management) or BSc(Real Estate) degree or equivalent qualification as well as practical experience which is deemed adequate by the head of the department is required for admission. It may be required of students to pass ancillary undergraduate modules during the first year of study.

(b) Duration

The minimum period of study is two years.

(c) Promotion and complying with degree requirements

- (i) A student is promoted to the second year after acquiring all the prerequisite credits for modules completed in the first year of study.
- (ii) A degree is awarded when all prescribed modules have been passed.

(d) Degree with distinction

The degree is conferred with distinction when a student has obtained an average of at least 75% simultaneously for all the prescribed modules of the final year, or who has obtained at least 75% in two of the modules as indicated below (75% average where the module is composed of two semester modules) and subject to the average of all the other modules not being less than 65%.

(i) BSc(Hons)(Quantity Surveying)

- (aa) Quantity Surveying Practice 700
- (bb) Construction Contract Law 730 and 740 (average 75%)
- (cc) Management Practice 730 and 740 (average 75%)
- (dd) Feasibility Studies 700
- (ee) Treatise 785

(ii) BSc(Hons)(Construction Management)

- (aa) Financial Management 701
- (bb) Construction Contract Law 730 and 740 (average 75%)
- (cc) Construction Management 730 and 740 (average 75%)
- (dd) Feasibility Studies 700
- (ee) Treatise 785

(iii) **BSc(Hons)(Real Estate)**

- (aa) Property Investment 710 and 720 (average 75%)
- (bb) Construction Contract Law 730 and 740 (average 75%)
- (cc) Construction Management 730 and 740 (average 75%)
- (dd) Feasibility Studies 700
- (ee) Treatise 785

(e) **Curriculum**

The curricula for the BSc(Hons)(Quantity Surveying), BSc(Hons)(Construction Management) and BSc(Hons)(Real Estate) degrees are extended over two study years in semester modules and year modules with the prerequisites and module credits as indicated.

The symbol GS after a module indicates a combined (final) mark (semester/year mark plus examination mark) of 40 - 49% required for admission to the module in the first column.

B.25 BACCALAUREUS SCIENTIAE HONORES (QUANTITY SURVEYING)
[BSc(Hons)(QS)] (Code 12242014)

| Code | Module | Prerequisite | Credits |
|-----------------------------|-------------------------------------|--------------|-----------|
| First year of study | | | |
| First semester | | | |
| BTP 700 | Management Practice 700 | - | 12 |
| BKR 700 | Building Cost Estimation 700 | - | 6 |
| BRK 710 | Quantity Surveying Practice 710 | - | 8 |
| BWT 710 | Building Science 710 | - | 9 |
| EOW 710 | Property Financial Mathematics 710- | - | 9 |
| HVH 700 | Quantities 700 | - | <u>6</u> |
| | Total | | <u>50</u> |
| Second semester | | | |
| BTP 700 | Management Practice 700 | - | 12 |
| BKR 700 | Building Cost Estimation 700 | - | 6 |
| BHU 720 | Housing 720 | - | 9 |
| HVH 700 | Quantities 700 | - | 6 |
| EOW 720 | Introduction to Property Law 720 | - | 9 |
| KKR 720 | Construction Contract Law 720 | - | <u>9</u> |
| | Total | | <u>51</u> |
| Second year of study | | | |
| First semester | | | |
| BTP 730 | Management Practice 730 | BTP 710 GS | 10 |
| BRK 700 | Quantity Surveying Practice 700 | HVH 700 GS | 10 |
| KKR 730 | Construction Contract Law 730 | - | 10 |
| BRK 785 | Treatise 785 | - | 5 |
| EOW 700 | Feasibility Studies 700 | EOW 710 GS | |
| | | EOW 720 GS | <u>12</u> |
| | Total | | <u>47</u> |

Second semester

| | | | |
|---------|--|------------|-----------|
| BTP 740 | Management Practice 740 | BTP 730 GS | 12 |
| BOE 720 | Building Economy 720 | BRK 710 GS | |
| | | BKR 700 GS | 8 |
| BRK 700 | Quantity Surveying Practice 700 | HVH 700 GS | 10 |
| KKR 740 | Construction Contract Law 740 | KKR 730 GS | 7 |
| BRK 785 | Treatise 785 | - | 5 |
| EOW 700 | Feasibility Studies 700 | EOW 710 GS | |
| | | EOW720 GS | <u>12</u> |
| | Total | | <u>54</u> |
| POU 720 | Practical Development Feasibility 720 | - | 2 |

**B.26 BACCALAUREUS SCIENTIAE HONORES (CONSTRUCTION MANAGEMENT)
[BSc(Hons)(Construction Management)] (Code 12242015)**

| Code | Module | Prerequisites | Credits |
|-----------------------------|-------------------------------------|---------------|-----------|
| First year of study | | | |
| First semester | | | |
| BWT 710 | Building Science 710 | - | 9 |
| EOW 710 | Property Financial Mathematics 710- | | 9 |
| FMT 700 | Financial Management 700 | - | 10 |
| KBS 710 | Construction Management 710 | - | 10 |
| KSH 700 | Construction Quantities 700 | - | <u>5</u> |
| | Total | | <u>43</u> |
| Second semester | | | |
| BHU 720 | Housing 720 | - | 9 |
| FMT 700 | Financial Management 700 | - | 10 |
| EOW 720 | Introduction to Property Law 720 | - | 9 |
| KBS 720 | Construction Management 720 | KBS 710 GS | 10 |
| KSH 700 | Construction Quantities 700 | - | 5 |
| KKR 720 | Construction Contract Law 720 | - | <u>9</u> |
| | Total | | <u>52</u> |
| Second year of study | | | |
| First semester | | | |
| BEV 700 | Industrial Safety 700 | - | 7 |
| FMT 701 | Financial Management 701 | FMT 700 GS | 10 |
| KBS 730 | Construction Management 730 | - | 10 |
| KKR 730 | Construction Contract Law 730 | - | 10 |
| KBS 785 | Treatise 785 | - | 5 |
| EOW 700 | Feasibility Studies 700 | EOW 710GS | |
| | | EOW 720 GS | <u>12</u> |
| | Total | | <u>54</u> |

Second semester

| | | | |
|---------|--|--------------------------|-----------|
| BEV 700 | Industrial Safety 700 | - | 7 |
| EOW 700 | Feasibility Studies 700 | EOW 710 GS EOW 720 GS | 12 |
| FMT 701 | Financial Management 701 | FMT 700 GS | 10 |
| KBS 740 | Construction Management 740 | KBS 730 GS | 12 |
| KKR 740 | Construction Contract Law 740 | KKR 730 GS | 7 |
| KBS 785 | Treatise 785 | - | <u>5</u> |
| | Total | | <u>53</u> |
| POU 720 | Practical Development Feasibility 720 | - | 2 |

MASTER'S PROGRAMMES

Subject to the stipulations of Regulations G.1.3, G.30 and G.62, a BSc(Hons) degree or equivalent qualification and practical experience which is deemed adequate by the head of the department, is required for admission. Supplementary undergraduate modules may be prescribed during the first year of study. The degree may be obtained in one of two ways, namely by virtue of a dissertation and an examination or by virtue of a taught curriculum and a treatise. The requirements for the two options are set out below.

(a) By virtue of a dissertation and examination

(i) Duration and curriculum

- (aa) The degree is conferred on the basis of a dissertation and examination on the field of study of the dissertation and/or divisions of the field of study as required by the head of the department/supervisor.
- (bb) The minimum duration is one year during which the student works under supervision of the head of the department/supervisor.

(ii) Examination and pass requirements

The minimum pass mark is 50% for both the dissertation and the examination. The degree is conferred with distinction when a student obtains at least 75% in the examination and the dissertation.

(b) By virtue of a curriculum with coursework and a treatise

(i) Duration and curriculum

- (aa) The degree can be obtained by successfully completing a curriculum with coursework and a treatise.
- (bb) The minimum period of study is two years part-time.
- (cc) The curriculum is compiled in consultation with the head of the department.

(ii) Admission to the examination and pass requirements

- (aa) A minimum of 40% is required in the examination, with a minimum final mark of 50% to pass.
- (bb) Examination requirements are set out in the departmental study manuals.

- (cc) The minimum pass mark is 50%.
- (dd) The topic of the treatise must be approved by the head of department and a minimum of 50% is required to pass.
- (ee) The degree is conferred with distinction on a student who obtains a weighted average of at least 75% in half of the required modules, at least 75% in the treatise, and at least 65% in the remaining modules .

B.27 MAGISTER SCIENTIAE (QUANTITY SURVEYING)
MSc(QS) per dissertation and examination (Code 12252010)
MSc(QS) per coursework and treatise (Code 12252011)
MSc Applied Science (Code 12252018)

- (a) Examination: BRK 800 – Dissertation: BRK 890
- (b) Treatise: BRK 895

B.28 MAGISTER SCIENTIAE (CONSTRUCTION MANAGEMENT)
MSc(Construction Management) per dissertation and examination (Code 12252012)
MSc(Construction Management) per coursework and treatise (Code 12252013)
MSc Applied Science (Code 12252019)

- (a) Examination: KBS 800 – Dissertation: KBS 891
- (b) Treatise: KBS 892

B.29 MAGISTER SCIENTIAE (REAL ESTATE)
MSc(Real Estate) per dissertation and examination (Code 12252020)
MSc(Real Estate) per coursework and treatise (Code 12252015)
MSc Applied Science (Code 12252017)

- (a) Examination: EMW 800 – Dissertation: EMW 890
- (b) Treatise: EMW 892

B.30 MAGISTER SCIENTIAE (PROJECT MANAGEMENT)
MSc(Project Management) per dissertation and examination (Code 12252021)
MSc(Project Management) per coursework and project (Code 12252014)
MSc Applied Science (Code 12252016)

- (a) Examination: PRB 800 – Dissertation: PRB 890
- (b) Treatise: PRB 892

DOCTORAL PROGRAMMES

Also consult General Regulations G.15, G.52 and G.55.

- (a) No student will be admitted to the study for a doctor's degree unless he or she holds an applicable Master's degree.

- (b) A PhD student must submit a thesis which deals with a topic from the list of subject disciplines.
- (c) The doctoral examination, either written or oral, is **compulsory**, and covers the content of the thesis as well as the sections of the field of study on which the thesis is based.

**B.31 PHILOSOPHIAE DOCTOR
[PhD] (Code 12262014)**

Quantity Surveying 900: BRK 900 – Thesis: BRK 990

**B.32 PHILOSOPHIAE DOCTOR
[PhD] (Code 12262015)**

Construction Management 900: KBS 900 – Thesis: KBS 990

**B.33 PHILOSOPHIAE DOCTOR
[PhD] (Code 12262016)**

Real Estate 900: EMW 900 – Thesis: EMW 990

DEGREES IN TOWN AND REGIONAL PLANNING

Town and Regional Planning is primarily about the planning, design, implementation and management of public interventions in the development and use of land from site to supranational level so as to widen choice, promote equity and ensure sustainable development. The guiding motive of the profession is the generation of viable alternatives to present settlement types. At the current juncture in South Africa's history, town and regional planning is a key profession in the rectification of the spatial and other imbalances in both urban and rural areas, as well as the improvement of inefficient and under-performing living environments.

The ideal town and regional planner is a creative person who is able to put forward innovative solutions to complex problems, a mediator who is able to reconcile diverse points of view, a strategic thinker and a good manager. Given the enormous backlogs in the fields of housing and social services and the misery in which many South Africans find themselves, planners also need a strongly developed sense of social and environmental justice and be committed to human development.

While the majority of town and regional planners act as private consultants to the public and the private sector, they are also employed by all three spheres of government, research agencies such as the CSIR and the HSRC, non-Governmental organisations, community-based organisations, major financial institutions and property development groups.

**B.34 BACCALAUREUS IN TOWN AND REGIONAL PLANNING
[BT&RP](Code 12132022)**

(a) Admission requirements

See General Information B.1 and B.2 in this publication.

(b) Curriculum

Total credits : 640

| Code | Module | Prerequisites | Credits |
|------------------------|--|---------------|-----------|
| First year | | | |
| First semester | | | |
| CIL 171 | Computer Literacy 171 | - | 3 |
| CIL 172 | Computer Literacy 172 | - | 3 |
| EKN 110 | Economics 110 | - | 10 |
| EOT 151** | Language Skills 151 | - | 3 |
| EOT 152** | Language Skills 152 | - | 3 |
| GGY 132 | Cartographic Skills 132 | - | 4 |
| STK 110 | Statistics 110 | Par B.2 | 13 |
| TPA 110 | Site Analysis and Assessment 110 | - | 16 |
| TRP 110 | Introduction to Planning 110 | - | 12 |
| TRP 111 | Planning and Settlement Histories before the Industrial Revolution 111 | - | <u>12</u> |
| | Total | | <u>79</u> |
| Second semester | | | |
| CIL 173 | Computer Literacy 173 | - | 3 |
| CIL 174 | Computer Literacy 174 | - | 3 |
| EKN 120 | Economics 120 | - | 10 |
| EOT 153** | Language Skills 153 | - | 3 |
| EOT 154** | Language Skills 154 | - | 3 |
| GGY 162 | Remote Sensing 162 | - | 4 |
| GGY 164 | Physical Geography of South Africa 164 | - | 8 |
| TPA 120 | Settlement Analysis and Assessment 120 | - | 16 |
| TPS 120 | Principles of Settlement Design 120 | - | 12 |
| TRP 121 | Planning and Settlement Histories since the Industrial Revolution 121 | - | <u>12</u> |
| | Total | | <u>74</u> |

** The language skills of students registering for the first time at this University will be tested at the beginning of the year. Dependent on these results, every student in the Department of Town and Regional Planning must:

- obtain 12 credits in the language skills modules EOT 151, 152, 153, 154 offered by the Unit for Language Skills Development;
- or
- obtain 12 credits through a combination of language skills modules offered by the Unit for Language Skills Development and modules offered by the School of Languages (in consultation with the relevant head of department);
- or
- obtain 12 credits in modules offered by the School of Languages and/or any other modules approved by the head of department.

Second year

First semester

| | | | |
|---------|--|---|-----------|
| GGY 283 | Introductory GIS 283 | - | 12 |
| PAD 251 | Public Administration 251 | | 8 |
| PAD 252 | Public Administration 252 | | 8 |
| TPA 210 | Plan and Policy Analysis and Assessment 210 | - | 12 |
| TPD 210 | Development Planning 210 | - | 12 |
| TPS 210 | Settlement Design Concepts 210 | TPA 110, 120 TRP 110,111, 121,TPS 120 | 16 |
| TPU 210 | Land Use Management Theory 210 | - | <u>16</u> |
| | Total | | <u>84</u> |

Second semester

| | | | |
|---------|--|--------------------|-----------|
| GGY 264 | Urban Social Morphology 264 | - | 12 |
| TPD 220 | Theory of Strategic and Integrated Development Planning 220 | TRP 110 TPD 210 | 16 |
| TPS 220 | Settlement Establishment and Housing Delivery 220 | TPS 210 TPU 210 | 16 |
| TPU 261 | Urban Land Development Economics 261 | - | 8 |
| TPU 262 | Land Use Management Practice 262 | TPU 210, 261† | <u>8</u> |
| | Total | | <u>60</u> |

Third year

First semester

| | | | |
|---------|--|--|-----------|
| EOW 710 | Property Financial Management 710 | - | 9 |
| MDS 310 | Municipal Services Provision 310 | - | 6 |
| TPD 310 | Participatory Planning 310 | - | 12 |
| TPE 351 | Research Methodology for Planning 310 | TRP 110 | 6 |
| TPS 310 | Spatial Concepts 310 | TPS 210, GGY 283 TPD 220, TPU 262 | 16 |
| TRP 310 | Institutional and Legal Structures for Planning 310 | - | <u>12</u> |
| | Total | | <u>67</u> |

Second semester

| | | | |
|---------|----------------------------------|---|----|
| EOW 720 | Introduction to Property Law 720 | | 9 |
| GGY 362 | Natural Resource Management 362 | - | 18 |
| SOC 258 | Population Studies 258 | - | 10 |
| SVB 321 | Transport Planning 321 | - | 6 |
| TPD 320 | Local Economic Development 320 | - | 12 |

| | | | |
|---------|---|---|------------------------|
| TPS 320 | Metropolitan, District and Local Spatial Planning 320 | TPS 210, GGY 283, TPD 220, TPU 262, TPS 310 | |
| | Total | | <u>16</u> <u>71</u> |

AND ELECTIVE MODULES

of at least 26 credits from the following modules during the 2nd and 3rd year of study:

First semester

| | | | |
|---------|--|-------------|----|
| EKN 251 | Economics 251 | EKN 110,120 | 8 |
| EKN 252 | Economics 252 | EKN 110,120 | 8 |
| EKN 310 | Economics 310 | EKN 210,220 | 20 |
| GIS 310 | Geographic Information Systems 310 | GGY 283 | 24 |
| MAD 351 | Municipal Administration 351 | MAD 262 | 10 |
| MAD 352 | Municipal Administration 352 | MAD 351 | 10 |
| RES 261 | Methods of critical thinking and inquiry | RES 151 | 10 |
| RES 361 | Research methodology and methods | - | 15 |
| SOC 352 | Social Theory 352 | - | 15 |

Second semester

| | | | |
|---------|-------------------------------|---------|-----------|
| EKN 220 | Economics 220 | EKN 210 | 16 |
| EKN 320 | Economics 320 | EKN 310 | 20 |
| MAD 361 | Municipal Administration 361 | MAD 352 | 10 |
| MAD 362 | Municipal Administration 362 | MAD 361 | 10 |
| GIS 320 | Spatial Analysis 320 | GIS 310 | 24 |
| GGY 263 | Urban Modelling 263 | - | 12 |
| SOC 355 | Rural and Urban Sociology 355 | - | <u>15</u> |

Fourth year

First semester

| | | | |
|---------|--|---|-----------|
| EOW 700 | Feasibility Studies 700 | EOW 710, 720 | 12 |
| PFF 412 | Professional Practice 412 | - | 8 |
| SVC 410 | Transport Engineering 410 | - | 6 |
| TPE 410 | Essay 410 | TPE 351 | 20 |
| TPI 451 | Planning Interventions: Urban Areas 451 | TPS 310, 320 TRP 310, TPD 310, 320 | 16 |
| TPI 452 | Planning Interventions: Peri-Urban and Rural Areas 452 | TPS 310, 320 TRP 310 TPD 310, 320 | 16 |
| TRP 410 | Cities and Regions of the Future 410 | TPS 320 | <u>16</u> |
| | Total | | <u>94</u> |

Second semester

| | | | |
|---------|--|--------------------------|-----------|
| BHU 720 | Housing 720 | - | 9 |
| EOW 700 | Feasibility Studies 700 | EOW 710, 720 | 12 |
| TPE 420 | Essay 420 | TPE 410 | 20 |
| TPI 453 | Planning Interventions: Metropolitan Areas 453 | TPS 310, 320 TRP 310, | |
| | | TPD 310, 320 | 16 |
| TPI 454 | Planning Interventions: Supranational, National and Regional Scale 454 | TPS 310, 320 TRP 310, | |
| | | TPD 310, 320 | 16 |
| TRP 420 | Planning Futures 420 | TRP 410 | <u>16</u> |
| | Total | | <u>89</u> |
| POU 720 | Practical Development Feasibility 720 | - | 2 |

(c) Promotion and examinations

- (i) A student is promoted to the year of study mentioned below after obtaining the number of credits indicated:
 - Second year of study after obtaining 128 credits.
 - Third year of study after obtaining 228 credits.
 - Fourth year of study after obtaining 448 credits.
- (ii) The degree is conferred when all the prescribed module credits have been passed (minimum 640 credits).
- (iii) A student who qualifies for promotion to a subsequent year of study, but who has not yet passed all the modules of the present year of study, may be permitted by the Dean, on the recommendation of the head of department, to carry over these modules to the subsequent year of study or to a later year of study on condition that no timetable clashes occur and that the prescribed number of module credits are not exceeded.
- (iv) Students who wish to take modules in advance which are not prescribed for a particular year of study, or who are repeating modules, may not register for modules in more than two consecutive years of study without the approval of the head of department.
- (v) A student who complies with all the requirements for the degree with exception of one year module or two semester modules in which a final mark of at least 40% has been obtained, may be admitted to a special examination in the module(s) concerned during the ensuing semester.
- (vi) In exceptional circumstances, the Dean, on the recommendation of the head of department, may deviate from the abovementioned stipulations, provided that no timetable clashes occur.
- (vii) Students who cannot be promoted from the first to the second year of study, must reapply for admission. Only three places are allocated to first-year repeaters.

(d) Degree with distinction

The degree is conferred with distinction when a student complies with all the prescribed requirements and has passed the following modules of the fourth year simultaneously with an average of at least 75% and a weighted average of 70% in all the prescribed modules of the final year of study:

- (i) Cities and Regions of the Future – TRP 410
- (ii) Planning Futures – TRP 420

- (iii) Planning Interventions: Urban Areas – TPI 451
- (iv) Planning Interventions: Peri-Urban and Rural Areas – TPI 452
- (v) Planning Interventions: Metropolitan Areas – TPI 453
- (vi) Planning Interventions: Supranational, National and Regional Scale – TPI 454
- (vii) Essay – TPE 410, 420

**B.35 MASTER OF TOWN AND REGIONAL PLANNING
(MT&RP)**

Also consult the General Regulations.

(a) Code 12252022: By virtue of an examination and a dissertation.

Subject to the stipulations of General Regulations G.30, G.37 en G.38 the BT&RP degree or an acceptable qualification, as well as practical experience deemed adequate by the head of the department are required for admission to the study for the MT&RP degree.

- (i) The Master's degree [MT&RP] is conferred by virtue of a dissertation as well as related assignments as prescribed by the head of department including an academic article for publication and an examination in the field of the dissertation and/or sections thereof as required by the head of the department/supervisor.
- (ii) Supplementary undergraduate modules for the MT&RP degree may be prescribed for students who have not obtained a BT&RP degree.
- (iii) The minimum passmark is 50% in both the dissertation and examination and the degree is conferred with distinction on a student who obtains at least 75% in both the examination and dissertation.
- (iv) The minimum duration of study is one academic year, during which a student will work under supervision of the head of department/supervisor.

Examination: SSB 800 – Dissertation: SSB 890 (240 credits)

(b) Code 12252023: By virtue of coursework and a treatise.

Subject to the stipulations of General Regulations G.30, G.37 en G.38, the BT&RP degree or an equivalent qualification is required for admission to the MT&RP degree programme.

This Master's degree is obtained by virtue of coursework and a treatise. Supplementary undergraduate modules for the MT&RP degree may be prescribed for students who have not obtained a BT&RP degree. A minimum final mark of 50% is required and the degree is conferred with distinction on a student who obtains a weighted average of at least 75% in the examinations of all the prescribed core modules as well as the treatise.

(c) Duration:

The minimum duration of study is two years.

| Code | Module |
|-------------|---------------|
|-------------|---------------|

| | |
|---------|--|
| TPE 810 | Treatise 810 (100 credits) The head of the department must approve topic of the treatise. |
|---------|--|

For students with an undergraduate qualification in Town and Regional Planning, modules to the value of at least 60 credits need to be taken from the following core modules:

For students without an undergraduate qualification in Town and Regional Planning, modules to the value of at least 120 credits need to be taken from the following core modules:

| | |
|---------|---|
| TPU 810 | Land Use Management and Land Development 810 (20 credits) |
| TPS 810 | Sustainable Settlement Planning and Design 810 (20 credits) |
| TPS 820 | Design for Safety 820 (10 credits) |
| TPD 820 | Integrated Development Planning 820 (20 credits) |
| TPI 810 | Urban Restructuring 810 (25 credits) |
| TPI 820 | Rural Restructuring 820 (25 credits) |

Remaining credits must be taken from the core modules above and/or the following level 7 or 8 and/or modules in consultation with the head of the department:

Modules can be taken from the master's and honours degree programmes in:

- Civil and Transportation Engineering (School of Engineering);
- Environment and Society (School of Environmental Sciences);
- Public Management (School of Public Management);
- Rural Development (School of Agriculture and Rural Development);
- Economics (Faculty of Economic and Management Sciences);
- Modules in Research Methodology; and/or
- Other modules as approved by the head of the department.

Modules of a total of 140 credits must be taken

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| B.36 PHILOSOPHIAE DOCTOR [PhD] (Code 12262022) |
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Also consult General Regulations G.15, G.52 en G.55.

- (a) A candidate is admitted to doctoral studies only if he or she holds a Master's degree.
- (b) A student for the PhD degree must submit a thesis as well as an academic article(s) dealing with a topic in the field of study.
- (c) An oral and/or written doctoral examination is required dealing with the contents of the thesis as well as the subject matter of the discipline on which it is based.

Examination: SSB 900 – Thesis: SSB 990 (400 credits)

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| <p>SYLLABI FOR DEGREE PROGRAMMES IN THE SCHOOL FOR THE BUILT ENVIRONMENT</p> |
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Note:

- (i) Syllabi are arranged alphabetically according to module code.
- (ii) Unless otherwise indicated, the number of lectures, practicals and studio sessions refer to the number presented per week.

(AAL 110) Earth Studies 110 (3 lectures)

Macro-environment:

Basic ecology: ecosystems, structures and constituents.

Ecodynamics: cycles in ecosystems, man within the ecosystem, the environment resources, field ecology.

(AAL 210) Earth Studies 210 (3 lectures + ½ studio session)

Meso-environment:

Climate: atmospheric constituents and processes, weather systems, heat radiation and transfer, solar charts, sun movement and heat gain control.

Air: airflow patterns around structures, natural ventilation.

Water vapour: diffusivity, transfer, and condensation.

Heat: thermal comfort and comfort indices, thermal performance of materials and structures, time lag, decrement and periodic heat transfer.

(AAL 223) Earth Studies 223 (2 lectures + ½ studio session)

The impact of social, economic and political systems on, and the multidisciplinary approach to design decision making for *inclusive environments* and *barrier free environments*. The application of this understanding in developing communities.

(AAL 320) Earth Studies 320 (3 lectures + ½ studio session)

Environmental filters and forecasting techniques:

Sound: the physical nature of sound, physiology of hearing, sound and noise sources, transfer, absorption and isolation, noise control; measurement, levels, frequency analysis, A-loading, room acoustics, reverberation periods.

Light: properties of natural light, design criteria, daylight factors, diffusion, quality, energy requirements and saving.

Mechanical systems: energy demand and efficiency, energy dissipation.

(ABR 311) Labour Law 311 (3 lectures)

Basic principles of the employment contract. Collective Labour Law (including collective bargaining and trade unions).

Statutory conditions of employment. Individual labour disputes. Collective labour disputes. Settlement procedures. Social security provisions.

(BEM 110) Marketing Management 110 (3 lectures)

(Offered by the Department of Marketing and Communication Management – Faculty of Economic and Management Sciences)

Fundamentals of marketing management and marketing instruments

General overview of marketing management, including the marketing concept, the process of marketing management, evolution of marketing and the marketing environment. Consumer entity, market segmentation, positioning and marketing

information. Perspective of various marketing instruments in the marketing mix, for example, product decisions, distribution decisions, marketing communication decisions and pricing decisions.

(BEM 161) Marketing Management 161 (3 lectures)

(Offered by the Department of Marketing and Communication Management – Faculty of Economic and Management Sciences)

Sales decisions

The selling process, selling techniques, management of the sales corps and the management of sales promotions. A professional approach to selling techniques and the selling process, the position of personal sales in the execution of the marketing task; integration of various sales management tasks – recruitment, selection, training, remuneration and evaluation of the sales process and ethics of sales practices.

(BEM 162) Marketing Management 162 (3 lectures)

(Offered by the Department of Marketing and Communication Management – Faculty of Economic and Management Sciences)

Introduction to the marketing of professional services

Acquiring basic marketing skills will enhance the capabilities of professionals in *inter alia* the accounting profession. This module provides an overview of the seven marketing instruments of a professional services marketing mix. The focus will fall on the practical implications of the characteristics of intangible products and the pricing, promotion, placement, physical evidence, process and people dimensions of professional services.

(BER 410) Business Law 410 (4 lectures)

(Offered by Department of Mercantile Law – Faculty of Law)

Introduction to law; general principles of contract law; specific contracts: purchase contracts, employment contracts, job contracting, representative law; general aspects of business law; dispute resolution – mediation and arbitration.

(BEV 700) Operational Safety 700 (2 lectures)

Study and development of sensitivity for industrial safety, accident prevention and total loss control. An approved certificate in first aid has to be submitted before this module will be awarded.

(BGG 111) Building Organisation 111 (2 lectures)

The structure of the building industry and the role of building disciplines and related parties.

(BHU 720) Housing 720 (2 lectures)

Concepts, principles of refuge and home; development philosophy and theories; history, present context and tendencies of migration, settlement, urbanisation and housing; statutory, policy and planning frameworks and paradigms; process of housing; housing development management; financing and property rights options; types of housing and densities; housing product, norms and standards; management and maintenance of housing stock; consumer questions.

(BKR 700) Building Cost Estimation 700 (4 lectures)

Pricing and tendering; elements of a price; pricing of various trades; estimating methods; escalation; analysis of building cost; preliminaries, cost planning; capital sources; norms; equipment.

(BOE 720) Building Economics 720 (2 lectures)

Advanced estimating of building cost and specialist installations; price forecasting and cost indices; cost reporting; cost analysis; cost modelling; computer applications and simulation; limits of confidence and probability; databases; expert systems.

(BOU 120) Building Drawing 120 (1 lecture + 1 practical)

Preparation of technical drawings of simple buildings including services for local authorities.

(BOU 131) Building Drawing 131 (1 lecture + 1 practical)

Geometrical construction and polygons. Orientation of lines and flat surfaces in space. True lengths and inclinations. Projections on oblique planes. Projections of solids. Sections through solids. Lines of penetration, curves, unfoldings, isometric projections; perspective drawings, shadows and contours.

(BRK 300) Quantity Surveying Practice 300 (3 lectures)

Computer systems; measuring assignments with the assistance of computer programs; practical training; pricing; payment certificates; final accounts.

(BRK 700) Quantity Surveying Practice 700 (3 lectures)

Model preliminaries; different types of bills of quantities; civil engineering works; 'Standard system' evaluation, contract administration; project administration; external relations and marketing of services; conditions of appointments and fee accounts; professional indemnity; report writing; Quantity Surveyors' Act; assignment.

(BRK 710) Quantity Surveying Practice 710 (2 lectures)

Model preambles; abstracting and billing; quantities of materials; inclusive quantities; successive contracts; final accounts; contract price adjustments; mensuration; analysis of prices; economical design; analysis of building costs; cost management of construction projects.

(BRK 785) Treatise 785

An essay on a subject approved by the head of department should be handed in during the final year of study.

(BTP 700) Management Practice 700 (3 lectures)

Introduction to communication and its implementation in practice. General functions and management of office administration.

Budgets, cash-flow schedules and financial statements for the quantity surveying practice. Interpretation of financial statements and general finances.

(BTP 730) Management Practice 730 (3 lectures)

Overview of general management; project management in the building and property industries.

(BTP 740) Management Practice 740 (3 lectures)

Marketing and strategic management; external relations; tasks, responsibilities, and the rights of a director, partner, member and share-holder in a business, business ethics.

(BWT 110) Building Science 110 (2 lectures)

Introduction to the construction of simple buildings with specific reference to different construction methods.

(BWT 120) Building Science 120 (2 lectures)

Study of materials used in the construction of simple buildings.

(BWT 210) Building Science 210 (2 lectures)

Erection and construction of multi-storey buildings with specific reference to the role of each trade.

(BWT 220) Building Science 220 (2 lectures)

Site management and temporary site work, building equipment; specialised foundations; material study of glass, plastics, glues, rubber, mastics, bonding agents, fibre cement and bituminous products.

(BWT 310) Building Science 310 (2 lectures)

Erection and construction of specialised buildings with specific reference to the role of specialist trades.

(BWT 320) Building Science 320 (2 lectures)

Studies of all types of metal; paint; epoxies and waterproofing; theory of the state of comfort of buildings.

(BWT 500) Building Science 500 (1 lecture + 2 studio sessions in the first semester and 5 studio sessions in the second semester)

Preparation of complete technical documentation for the erection of the type of building as described in the design essay under Design 500. Integration of foreknowledge in BWT, GBK, STU and PRS.

(BWT 710) Building Science 710 (2 lectures)

Technology – a critical review; innovation in construction; sustainability in the urban environment; technical evaluation of innovative construction material and methods; maintenance, repair, conservation, restoration, and re-design and re-use of buildings and services.

(CIL 120) Information Technology (1 lecture + 2 practicals)

Computer architecture and hardware: an overview of the different types of computers, information vs data, representation of data, computer architecture, and peripherals. System software: operating systems, compilers, utility software. Applications software: databases, spreadsheets, word processing, graphics software. Information literacy: formulating search strategies, searching CD-ROMs and searching the internet. Analysis, organizing and synthesis of information.

(CIL 171) Computer and Information Literacy 171 (2 lectures)

Keyboard and mouse skills, email, basic Internet and Web skills, basic theoretical introduction to hardware and software. Microsoft Windows as operational system.

(CIL 172) Computer and Information Literacy 172 (2 lectures)

Word-processing programmes: creation, editing and formatting of documents, outline editing, automatic numbering and footnotes, tables and columns, insertion of multimedia, data exchanges etc. Presentation programmes: creation of presentations, together with figures, text animation and the insertion of multimedia.

(CIL 173) Computer and Information Literacy 173 (2 lectures)

Spreadsheet programmes: Basic spreadsheet skills including formulas and diagrams.
Database programmes: Basic database skills including searches, compilation of reports.

(CIL 174) Computer and Information Literacy 174 (2 lectures)

Search strategy formulation: the use of Boolean operators, natural language and controlled language; searches on CD-ROM and the Internet; the evaluation of Internet search engines; the analysis, organization and synthesizing of information; resources study.

(EBL 710) Property Investment 710 (2 lectures)

The nature and scope of property investment, objectives of property investors, participants of the property investment process, the investment decision-making process, investment criteria, investment time horizons, decision-making approaches.

(EBL 720) Property Investment 720 (2 lectures)

Investment strategy, the investment analysis process, ownership entities, listed investments, the role of the institutions, tax aspects.

(EBM 312) Property Marketing 312 (2 lectures)

The South African property market, the estate agent, property market analysis and segmentation.

(EBM 322) Property Marketing 322 (2 lectures)

Property marketing strategies, marketing budget, the consumer decision-making process and negotiation.

(EDF 710) Property Finance 710 (4 lectures)

Principles of property finance, sources and types, cost of capital and capital budgets.

(EDR 310) Property Law 310 (2 lectures)

Immovable property, interests in immovable property, acquisition of rights in immovable property, servitudes and mineral rights, the property clause in the SA Constitution, real securities measurement of land and registration of rights in immovable property.

(EDR 320) Property Law 320 (2 lectures)

Purchase agreement on immovable property, sale of land on instalments, lease of immovable property, applicable legislation (alienation of land, sectional titles, share block schemes, time-sharing), statutory control over immovable property, statutory control over estate agents.

(EDW 710) Property Valuation 710 (2 lectures)

The concept of value, the valuator, standard of valuations, the Surveyor General, local authorities, ground use plans, township planning schemes, calculation of areas, records of the valuator.

(EDW 720) Property Valuation 720 (2 lectures)

Factors influencing the value of different types of property, appreciation and depreciation, different approaches to valuation, value of improvements, valuation of residential properties, the valuation report, practical valuation of a residential property.

(EEB 212) Property Management 210 (3 lectures)

Role and function of property management, the management relationship, property maintenance, risk management and property management budgets.

(EEK 222) Property Economics 222 (2 lectures)

Location objectives, urban location models, urban ground uses and markets, supply, demand and competition for urban ground, population and urbanisation, urban markets, (residential, retail, office and industrial).

(EKN 110) Economics 110 (3 lectures)

Conceptualise the context and the interrelationships of the different sectors in South African economy. The functioning of international trade and exchange rates, government economics and policy, the labour market, monetary economics and policy, economic development, environmental economics with specific reference to the South African context. The impact of national and international decisions and events on the South African economy.

(EKN 120) Economics 120 (3 lectures)

The economic environment and problem: working and course of the South African economy; functioning and interrelationships of the different economic sectors. Macro-economic theory and analysis. Analyse and interpret economic performance criteria: economic growth, inflation, job creation, balance of payments and exchange rate stability, income distribution. Calculate and interpret core economic indicators.

Basic micro-economic principles: demand analysis (consumer theory), supply analysis (producer theory). Market analysis: market equilibrium, price determination, market forms, market failure, calculate and interpret price, income and cross elasticities.

(EKN 220) Economics 220 (3 lectures)

International economic insight is provided into: international economic relations and history, theory of international trade, international capital movements, international trade politics, economic and customs unions and other forms of regional co-operation and integration, international monetary relations, foreign exchange markets, exchange rate issues and the balance of payments, as well as open economy macro-economic issues.

(EKN 251) Economics 251 (3 lectures)

From Wall and Bay Streets to Diagonal Street - a thorough understanding of the mechanisms and theories explaining the workings of the economy is essential. Macro-economic insight is provided into: the real market, the money market, two market equilibrium, monetarism, growth theory, conjuncture analysis, inflation, Keynesian general equilibrium analysis and fiscal and monetary policy issues.

(EKN 252) Economics 252 (3 lectures)

Micro-economic insight is provided into: consumer and producer theory, general micro-economic equilibrium, pareto-optimality and optimality of the price mechanism, welfare economics, market forms and the production structure of South Africa.

(EKN 310) Economics 310 (3 lectures)

Welfare economics (optimality of the market mechanism, general equilibrium, market failure and the role of the government); general macro-economic policy: public finance theory and fiscal policy, monetary policy, public debt management policy; international trade and balance of payments adjustment policies; modern macro-economic policy considerations and development. Macro-economic policy – implementation in South

Africa: monetary policy, fiscal policy, competition policy, labour policy, South African development issues and policies.

(EKN 320) Economics 320 (3 lectures)

The identification, collection and interpretation process of relevant economic data; the national accounts (i.e. income and production accounts, the national financial account, the balance of payments and input-output tables); economic growth; inflation; employment, unemployment, wages, productivity and income distribution; business cycles; financial indicators; fiscal indicators; social indicators; international comparisons; relationships between economic time series-regression analysis; long-term future studies and scenario analysis; overall assessment of the South African economy over the period from 1960 onwards.

**(EOT 151) Language Skills 151 (2 lectures)
(Offered by the Unit for Language Skills Development)**

Knowledge of basic grammar and basic vocabulary is revised, using documentary texts that are thematically subject related. In terms of skills the focus is placed on the development of the receptive skills (listening and reading) on text level, while the development of the productive skills (speaking and writing) will also receive attention, but only on paragraph level.

**(EOT 152) Language Skills 152 (2 lectures)
(Offered by the Unit for Language Skills Development)**

Knowledge of general academic vocabulary is developed by means of general academic texts, which are thematically subject related. A foundation is laid in the knowledge of text grammar and argumentation forms. All four the linguistic skills (listening, reading, speaking and writing) are practised on text level.

**(EOT 153) Language Skills 153 (2 lectures)
(Offered by the Unit for Language Skills Development)**

Knowledge of subject specific vocabulary is developed, using subject specific academic and scientific texts. Basic knowledge of text grammar and argumentation forms is broadened. Specific attention is given to the application of the two receptive skills (listening and reading) for academic purposes.

**(EOT 154) Language Skills 154 (2 lectures)
(Offered by the Unit for Language Skills Development)**

The focus is on developing and applying the four linguistic skills on text level for academic purposes. The two productive skills (speaking and writing) will receive special attention.

(EOW 700) Feasibility Studies 700 (3 lectures)

Investment in property; objectives of the developer; feasibility studies; capital investment, income and operating expenses; cash-flow studies; discounted studies; sensitivity studies; decision-making approaches; financing; tax; life-cycle costing; risk analysis; calculation of residual land and income values; presentations by students; assignment.

(EOW 710) Financial Mathematics 710 (2 lectures)

Application of the principles of interest calculations on the building industry; introduction to financial valuation techniques, nett present values and internal rate of return.

(EOW 720) Introduction to Property Law 720 (2 lectures)

Review of property development; rights over immovable property; private legal circumscription of ownership; real securities; the registration of rights; zoning regulations.

(EOW 785) Treatise 785

An essay on a subject approved by the head of department should be handed in during the final year of study.

(FMT 700) Financial Management 700 (4 lectures)

Budget estimates, cash-flow schedules and financial statements as well as the handling of contract accounts as introduction to financial management.

(FMT 701) Financial Management 701 (4 lectures)

The application of cost-accounting, budgets and cash-flow schedules, and financial statements in general financial management.

(FRK 121) Financial Accounting 121 (4 lectures)

Elements of financial statements in detail. The conceptual framework. Income statements, balance sheets, cashflow statements; financial statements of analysis and interpretation of clubs, partnerships, close corporations. Introduction to companies.

(FRK 151) Financial Accounting 151 (4 lectures)

Computer-assisted training

The nature and function of accounting. The development of accounting, financial position, financial result. The recording process. Processing of accounting data. Elementary income statement and balance sheet.

(FRK 152) Financial Accounting 152 (4 lectures)

Flow of documents. Accounting systems. Introduction to internal control and internal control measures. Bank reconciliations. Control accounts. Adjustments. Financial statements of a sole proprietor.

(FRK 181) Financial Accounting 181 (2 lectures)

Computer processing of accounting information.
(Offered in first and second semester.)

(GBD 112) Building Services 112 (2 lectures)

Sanitary services; soil and waste drainage for simple, multi-storied and multi-purpose buildings; local sewage by-laws; construction of all types of sewage and sanitary fittings; storm-water drainage and construction.

(GBD 122) Building Services 122 (2 lectures)

Sanitary services; hot and cold-water supply to simple and multi-storied buildings; local by-laws; water reticulation to town development; different hot-water systems; water purification systems; sewage for town development; rainwater disposal.

(GBD 212) Building Services 212 (2 lectures)

Climatic conditions, human comfort zones, characteristics of buildings, airconditioning, energy efficiency,

(GBD 222) Building Services 222 (2 lectures)

Airconditioning and energy measurement; mechanical work; lifts and other mechanical services, waste handling; kitchens and cooling rooms.

(GBD 312) Building Services 312 (2 lectures)

Theory of electricity; regulations of electricity-supply authorities; electrical installations; distribution of electricity.

(GBD 322) Building Services 322 (2 lectures)

Principles of illumination; illumination installations; lightning security; security systems; communication systems.

(GGY 132) Cartographic Skills 132 (1 practical)

Principles of cartography. Map reading, analysis and interpretation; introductory survey techniques

(GGY 162) Remote Sensing 162 (1 practical)

Use, interpretation and analysis of satellite imagery, aerial photography and other remotely sensed data.

(GGY 164) Physical Geography of South Africa 164 (4 lectures)

Introduction to the physical geography of South Africa including climate and weather patterns, landscape evolution and topographical incidence. Landscaping processes within arid, semi-arid and coastal environments; fluvial systems and processes; mountain environments.

(GGY 263) Urban Modelling 263 (4 lectures + 2 practicals)

Theoretical constructs for the single and multi-nodal forms of the western city. Modelling the inter-urban settlement system, and intra-urban tertiary activity. Presentation skills; geographic communication; analysis and statistical interpretation of spatial data.

(GGY 264) Urban Social Morphology 264 (4 lectures + 2 practicals)

The structure and spatial distribution of class, income, ethnicity, age and other demographic variables in urban environments in South Africa and other parts of the world. Qualitative and quantitative analyses of social change and transformation in cities, including segregation, desegregation and gentrifying. Other themes include urban perception, urban living, social area analysis, and spatial strategies for social integration.

(GGY 283) Introductory GIS 283 (4 lectures + 2 practicals)

Introduction to Geographic Information Systems (GIS), types of GIS, data input, data analysis, and output and associated technology. GIS applications and data analysis techniques in practicals comprise theoretical concepts presented in lectures. The practical application of GIS is emphasised rather than mastering software.

(GGY 362) Natural Resource Management 362 (4 lectures + 2 practicals)

The biosphere as an environmental system; environmental degradation due to mismanagement; principles and approaches to sustainable resource management; ecosystem management in South Africa; solutions to environmental degradation; terrain potential and impact assessment. Special emphasis is placed on tourism as a land-use.

(GGY 363) Environmental Geomorphology 363 (4 lectures + 2 practicals)

Interactions of geomorphic processes within the physical and built environments; themes such as geomorphology and environmental change, slope processes and the environment, geomorphic risks and hazards, soil erosion and conservation, geomorphology in environmental management, weathering in urban environments, preservation of buildings, and deterioration and preservation of indigenous rock art. Practicals involve fieldwork and subsequent laboratory analysis.

(GIS 310) Geographic Information Systems 310 (3 lectures + 1 practical)

Advanced theory and practice of Geographic Information Systems; GIS applications; design and implementation of GIS applications.

(GIS 320) Spatial Analysis 320 (3 lectures + 1 practical)

Introduction to spatial analysis techniques classification, interpolation, extrapolation, georeferencing, topology, visualisation, networks, spatial interaction, spatial statistics and general spatial systems analysis.

(GKD 225) General Soil Science 225 (3 lectures + 1 practical)

(Offered by the Department of Plant Production and Soil Science – Faculty of Natural and Agricultural Sciences.)

Origin and development of soil, weathering and soil formation processes. Profile differentiation and morphology. Physical characteristics: texture, structure and soil water. Chemical characteristics: Clay minerals, ion exchange, pH and soil fertility. Soil classification.

Practical work: Laboratory evaluation of simple soil characteristics. Field practical work on soil formation in the Pretoria area.

(HVH 120) Quantities 120 (4 lectures)

Introduction to quantity surveying; methodology of measuring; working up processes; measuring of simple building elements. Detail study of the "Standard System" as required for the work in Quantities 120.

(HVH 200) Quantities 200 (4 lectures)

Measuring of simple building elements and of single-storied buildings; measuring of concrete structures; adjustment of foundations on sloping sites. Detail study of the "Standard System" as necessary for the work in Quantities 200.

(HVH 300) Quantities 300 (4 lectures)

Measurement of meoltions, simple concrete structures (on flat or sloping sites), carpentry and joinery, structural steelwork, sundry metalwork, plumbing and drainage, simple electrical work, different types of concrete structures, pavings and fences. Theory of monetary allowances in bills of quantities. Detail study of the "Standard System" as requirement for the work in Quantities 300. Assignment.

(HVH 700) Quantities 700 (4 lectures)

The measuring of alterations, geotechnical engineering works, advanced building components and services, precast concrete, rubble walling, stonework, advanced electrical services, mechanical work, landscaping and roadwork. Detail study of the "Standard System" as required for the work in Quantities 700. Assignment.

(KBS 310) Construction Management 310 (3 lectures)

Introduction to communication and its application on the theory and practice of management. General functions and techniques of management. Office administration.

(KBS 320) Construction Management 320 (3 lectures)

Use of equipment and site establishment. Purchase management and handling of materials.

(KBS 710) Construction Management 710 (3 lectures)

Work study, programming techniques, allotment and analysis of costs.

(KBS 720) Construction Management 720 (3 lectures)

Production management, operational management techniques and productivity.

(KBS 730) Construction Management 730 (3 lectures)

Review of general management. Project management in the building and property industry.

(KBS 740) Construction Management 740 (3 lectures)

Marketing strategic management, public relations, responsibilities and rights of directors, partners, members and share holders of companies.. Business ethics.

(KBS 785) Treatise 785

An essay on a subject approved by the head of department has to be completed during the final year of study.

(KIT 300) Construction Information Technology 300 (4 lectures)

Orientation in the use of electronic technologies and aids in the construction and property industries; application thereof by way of case studies.

(KKR 720) Construction Contract Law 720 (4 lectures)

Arbitration; legislation and uses; law of delict; negligence and damage to property; property rights; building contracts; types and tendering procedures; value-added tax.

(KKR 730) Construction Contract Law 730 (4 lectures)

Building contracts: consultants; workmanship; contract amount; defects; insurance; time for completion; contract cancellation; payment certificates; dispute resolution.

(KKR 740) Construction Contract Law 740 (2 lectures)

Subcontracts: consultants; main contractor; subcontractor; workmanship; contract amount; defects; insurance; time for completion; contract completion; payment certificates; dispute resolution

(KON 110) Construction 110 (2 lectures + 1 studio session)

Drawing conventions: Surveying, map projections, distance measurement with tape, levelling instrument, practical contour plan and site sections.

Site: Site and structure data collection and interpretation. Contours, cut-and-fill. Storm water. Typical city site: city block, shape, title, services.

Introduction to materials: properties, movement, binding, thermal properties, water resistance, durability, appearance, production, economy. Concrete (part 1), Clay bricks, mortar, bond. Concrete blocks, modular co-ordination. Building stone.

(KON 120) Construction 120 (2 lectures + 1 studio session)

Single-storeyed buildings: Preparation for building work. Setting out, foundations, foundation walls, filling. Damp proofing. Surface beds, steps, level differences, stoeps. Superstructure walls, stability, hearths, chimneys, and gable walls. Building in of windows, doors, services. Thresholds, windowsills, lintels. Timber roof structures and finishes: profiled sheet metal, concrete tiles and thatch. Plaster and screeds. Ceilings. Windows, doors, ironmongery. Fasteners. Introduction to timber and steel as construction materials.

(KON 211) Construction 211 (3 lectures + ½ studio session)

Double-storeyed buildings: Reinforced concrete, steel and timber-framed structures. Off-shutter concrete. Load-bearing masonry. Low-pitch roofs and waterproofing, other pitched-roof finishes. Lightweight partitioning. Glass. Joinery. Small precast elements.

(KON 212) Construction 212 (3 lectures + ½ studio session)

Water courses: Design and construction. Site slope analysis and contour manipulation. *Stormwater:* run-off calculations. Hydraulic structures.

(KON 220) Construction 220 (3 lectures + ½ studio session)

Soil mechanics: foundations, basement construction and waterproofing.

Site structures: geotextiles and geomembranes, stairs, walls, retaining walls, fences, ramps, gabions, prefabricated retaining blocks. Built planters, lapas, braais. Pavilions, decks.

Elementary site and building services: water, sewerage, electricity, stormwater, telephone, security, TV cables, irrigation.

(KON 223) Construction 223 (3 lectures + ½ studio session)

Interior construction systems: suspended ceilings, dry wall construction, access floors.

Health and safety: regulations and applications.

Fire: regulations and application.

Human transportation systems: types, applications.

Security: macro design environment, systems.

Signage: design and reticulation.

Gas: natural and LPG, requirements, regulations, applications.

(KON 310) Construction 310 (3 lectures + ½ studio session)

Roads: design and construction, materials and finishes, kerbing. Water features: design and construction. Street furniture. Construction equipment.

Site and building services: stormwater catch drain, stormwater lines, water lines, electricity, telephone, security, television cables, irrigation, french drains.

(KON 313) Construction 313 (3 lectures + ½ studio session)

Building and site services: Water, stormwater catch drain, stormwater lines,, sanitary plumbing and pipe systems above ground and indoors, underground sewer systems, electricity, telephone, television, security, irrigation

Artificial lighting: light, lamp types, luminaires; lighting requirements

Product design: Design of a luminaire (in ONT 313): the preparation of technical documentation

(KON 321) Construction 321 (1 lecture + 2½ studio sessions)

Integration of the foregoing coursework. Introduction to construction norms and standards, technical drawing practice and specifications. Cost estimates, feasibility and payability.

Advanced materials: ceramics, polymers, adhesives, paint, metals.

Design of a small commercial building (in ONT 321) and the preparation of its construction drawings.

(KON 322) Construction 322 (1 lecture + 2½ studio sessions)

Integration of the foregoing coursework. Introduction to construction norms and standards, technical drawing practice and specifications. Cost estimates, feasibility and payability.

Advanced materials: Ceramics, polymers, adhesives, paint, metals.

Design of a landscape : the preparation of its construction drawings.

(KON 323) Construction 323 (1 lecture + 2½ studio sessions)

Construction: Introduction to the relationship between structure, secondary elements and finishing.

Building construction methods and processes: Building and structure types, role players in the industry. Regulatory Boards and restrictive legislation. Components and finishing of elementary structures. Building construction methods and processes, and building and structure types.

Construction methodology and detailing of purpose-designed elements.

Technical documentation – aim and legal implications. Measurement of existing structures, observation and preparation of documentation. Design and technical documentation of a basic element.

(KSH 300) Construction Quantities 300 (4 lectures)

Standard system for measuring of building work and practical implementation in measuring; quantities of materials, inclusive quantities, price analysis; use of computer technology for this; abstracting and billing; measuring with the aid of computer technology; sundry additional building contract documentation; successive contracts.

(KSH 700) Construction Quantities 700 (4 lectures)

Preliminaries; different types of bills; civil engineering works; advanced pricing; tender documentation; analysis of building costs; economical designs; building cost estimates; practical contract administration and cost management – internal and external; computer application for this purpose.

(KSH 710) Construction Quantities 710 (3 lectures)

Model preambles, different types of bills of quantities, measurement of Civil Engineering work.

(MAD 361) Municipal Administration 361 (3 lectures)

Co-operative Governance.

(MAD 362) Municipal Administration 362 (3 lectures)

Planning on regional and local government level.

(MDS 310) Municipal Services Provision 310 (2 lectures)

Municipal water and electricity supply; sewerage; stormwater handling; the processing of solid waste; the control of air and noise pollution.

(MST 313) Material Studies 313 (3 lectures + ½ studio session)

The application of material studies in third generation reconstituted materials including plastics, metal and glass and human factor processes like lighting design. The module

has evolved within the contexts of sustainability, conservation, product design and future design trends.

(MST 323) Material Studies 323 (3 lectures + ½ studio session)

Material studies and the application of technical textiles in artificial environments.

(OKU 210) Design Communication 210 (3 lectures + ½ studio session)

Visual literacy: visual media analysis, interpretation and criticism. Photography and video techniques and presentation. Video-graphic computer skills.

(OKU 220) Design Communication 220 (3 lectures + ½ studio session)

CAD and 3-dimensional CAD.

(OKU 313) Design Communication 313 (2 lectures + 1 studio session)

Advanced graphic and presentation techniques.

(OMG 110) History of the environment 110 (2 lectures + ½ studio session)

Approaches and guidelines to the study and application of history of the environment. Understanding of the process of endemic construction and its monumentalisation, settlement and urbanization of various ages and environments. The history of the environment of the Mediterranean up until Hellenistic Bronze Ages.

(OMG 120) History of the Environment 120 (2 lectures + ½ studio session)

Capita selecta from OMG 122

The history of the environment of the Mediterranean civilisations up until Emperor Justinian 565 AD.

(OMG 122) History of the Environment 122 (3 lectures)

Introduction as background to the twentieth century (1 lecture).

The history of the environment of the Mediterranean civilisations up until Emperor Justinian 565 AD (2 lectures).

(OMG 210) History of the Environment 210 (2 lectures)

The history of the environment and the link between mediaeval Northern Europe, the Mediterranean region and the northern border areas of the Indian ocean from the time of Emperor Justinian 565 AD up until the fall of Constantinople in 1453 AD, as well as contemporary China and Japan.

(OMG 220) History of the Environment 220 (2 lectures)

Capita selecta from OMG 224

History of the environment of the West from the rounding of the southern Cape Point of Africa in 1488 AD.

(OMG 224) History of the Environment 224 (3 lectures)

(Offered by the Department of Architecture)

History of the environment of the West from the rounding of the southern Cape Point of Africa in 1488 AD (2 lectures).

History of contemporary South African environment (1 lecture).

(OMG 310) History of the Environment 310 (2 lectures)

A brief history of the environment of Asia and the Americas before European colonization. History of the environment of Africa between the tropics within global context up until the present.

(OMG 320) History of the Environment 320 (2 lectures)

History of the environment of Southern Africa from the proto human – old Stone Age – until the present.

(OML 110) Environmental Studies 110 (2 lectures)

Introduction to contemporary thought with emphasis on perception and interpretation as functions of culture. Development of a vocabulary to describe and illustrate the discipline of design. Development of an individual design framework within the ethos of the Department.

(OML 120) Environmental Studies 120 (2 lectures)

The study of anthropometry and ergonomics.
Design methodology: proportional systems, scale, colour, textures, etc. within the designed environment.

(OML 210) Environmental Studies 210 (2 lectures)

Normative stances as function of a theoretical frame of reference. The contemporary theory pertaining to space and place as central principles to the environmental design disciplines.

(OML 220) Environmental Studies 220 (2 lectures)

The designer as visual thinker – perception, ideograms, recording techniques and visual notes, ground-figure analysis, the graphic image as generator.

(OML 310) Environmental Studies 310 (2 lectures)

A hermeneutic analysis of design theory and products of the recent past and the meta-language of its description. The viewing of culture, philosophy and science as ecosystem of the designer. Conservation: legislation, policy and practice.

(OML 320) Environmental Studies 320 (2 lectures)

Ecosystemic thinking for the designer in terms of culture, science and environment.
The designer as critic – analysis of precedents, report writing about personal design within the context of the discipline.

(ONT 100) Design 100 (5 studio sessions)

Introductory design module. Design principles, skills and techniques. Integration with supporting modules. Small-scale design projects as illustration of design methodology, environmental influences (physical, social, cultural, historical), space requirements and creative interpretation.
Acquisition of skills in design communication through imagination, intuition and conceptual thinking.

(ONT 211) Design 211 (5 studio sessions)

The process of design through the integration of supporting coursework. The design of simple public spaces and buildings other than domestic with the emphasis on planning, plan-making, structure and economy.

Skills: Programming, impact studies, site analysis, time management, advanced graphic techniques, reprographic techniques.

(ONT 212) Design 212 (5 studio sessions)

Applied design methodology and design principles through master planning of urban parkland systems and recreational sites, sports clubs, campus planning, memorial sites, bio-parklands, sustainable landscapes, golf courses, marinas.

Skills: Brief, impact studies, site analysis, time management, advanced graphic techniques, reprographic techniques.

(ONT 213) Design 213 (5 studio sessions)

Projects are aimed at self-discovery, the development of creativity and the translation and communication of concepts. Application of ergonomic principles, the space planning of commercial building types and corporate image.

(ONT 220) Design 220 (6 studio sessions)

The product of design through the integration of supporting coursework. Design of double-storeyed domestic and public structures, statutory and user requirements; planning and form-giving processes.

Skills: Setting and solving of design problems, model building, advanced colour presentation, report writing.

(ONT 222) Design 222 (6 studio sessions)

Site Planning: Application of design processes, philosophies, principles and standards and technology to plazas, atriums, roof gardens, office parks, industrial landscapes, pedestrian routes, commercial centres, institutions, mass housing, sustainable gardens.

Skills: Setting and solving of design problems, model building, advanced colour presentation, report writing.

(ONT 223) Design 223 (4 studio sessions)

The gathering of information, the principles involved in the preparation of measured drawings and the application of such knowledge in the field of conservation and re-use of buildings.

(ONT 310) Design 310 (5 studio sessions)

The process of design through the integration of supporting coursework. The design of spaces and buildings with the emphasis on lateral thinking, restoration and adapted technologies; interior and industrial design.

Skills: Technology-backed reprographic techniques, competitions and exhibitions, decision making and time planning.

(ONT 312) Design 312 (5 studio sessions)

Ecological planning: The process of design through the integration of supporting coursework. The design of exterior spaces from small-scale ecological designs to regional scale problems through a diversity of approaches responsive to the integral values and nature of the site and the region, and social needs interpreted as environmental values within the parameters of available natural resources for human use, survival and sustainability.

Skills: Technology-backed reprographic techniques, competitions and exhibitions.

(ONT 313) Design 313 (5 studio sessions)

The module focuses on the abstract concepts involved in design theory and the translation of ritual and technology in the design process of architectural space, lifestyle projects and the interfaces involved in our artificial environment.

(ONT 320) Design 320 (5 studio sessions)

The product of design through the integration of supporting coursework. The design of a project in urban context with a complex program up to a full set of design and detail drawings for construction drawings and specifications in KON 321. Statutory requirements, feasibility and payability studies.

(ONT 322) Design 322 (5 studio sessions)

The product of design through the integration of supporting coursework. The design of a project in urban context with a complex program up to a full set of design and detail drawings for construction drawings and specifications in KON 322. Statutory requirements, feasibility and payability studies.

(ONT 323) Design 323 (5 studio sessions)

The module develops around seminar sessions in the studio related to design theory and is applied in various design projects aimed at the development of creativity and the translation and communication of concepts, as well as the integration of knowledge obtained in all the modules that constitute the programme.

The module focuses on the abstract concepts involved in design theory and the translation of such in the related fields of product and set design, exhibition design and conservation strategies.

(PAD 251) Public Administration 251 (3 lectures)

Organisational dynamics.

Organisation and management concepts. Theories and bureaucratisation. Organisational culture. Organisation and the external environment. Departmentalisation in the various governmental spheres. Delegation. Communication. Public service and infrastructure. Organisational change and development. Organisational behaviour. Organisational conflict. Political and organisational analysis. Group dynamics. Structural design of organisations. Organisation development.

(PAD 252) Public Administration 252 (3 lectures)

Public policy studies

Role players in public policy. Policy and programme formulation. Decision-making and problem-solving. Legislation and public policy. Policy-making process. Public opinion. Policy implementation. Policy effectiveness and evaluation. Policy alternatives. The press and public policy. Decision-making analysis in the public sector. Policy making and governance. Quantitative tools for policy making. Policy analysis. Analytical policy studies. Tools of policy analysis.

(POU 720) Practical Development Feasibility (Seminar conducted over three days)

The feasibility of a project is investigated by groups comprising students of the various fields of study in the Built Environment. The findings are submitted to a panel of evaluators at a seminar offered by the University.

(PRF 412) Professional Practice 412 (2 lectures)

Professional conduct and practice addressing issues such as ethics and accountability; overview of the planning profession and organisations; introduction to business

management; practical discussion of topics such as marketing, client service, promotion, administration and time management.

(PRS 320) Practice Management 320 (3 lectures)

The structure of the built environment in South Africa; basic principles and techniques of value management, project management and financial management; methodology of measuring; building cost estimates; feasibility studies; economic design; contract administration; valuation of buildings.

(PWT 212) Plant Science 212 (3 lectures + ½ studio session)

Introductory Botany and basic principles of planting design. Plant physiology; plant classification; identification of genera and species recognition in habitat; use of plants in the creation of space (residential applications); plant form, growth and character; planting techniques and handling. Field ecology.

(PWT 222) Plant Science 222 (3 lectures + ½ studio session)

The use of shrubs, woody and herbaceous plants for landscape purposes; strategies for the use of plants in the creation of commercial and urban contexts; thematic use of plants (permaculture, xerophytes, roof gardens etc.). Field ecology.

(PWT 312) Plant Science 312 (3 lectures + ½ studio session)

Ecological Planting Design: the relationship of ecological theory to planning and design; sustainable bio-diversity and ecological integrity; ecological principles of planting design; application of biotechnology to landscape engineering; environmental conservation and management (wetlands, rehabilitated landscapes). Field ecology.

(PWT 322) Plant Science 322 (3 lectures + ½ studio session)

Environmental conservation and resource management; environmental evaluation (terrain models etc.); environmental impact assessment; environmental auditing. Field ecology.

(RES 261) Methods of critical thinking and inquiry (2 lectures)

** Requires RES 151*

The module focuses on different basic methods of inquiry in the humanities. The purpose of this module is to equip students with the necessary competence to

- select and apply central procedures, operations and techniques;
- identify and solve well-defined problems using relevant methods of inquiry;
- critically analyse and synthesize information, and present the information using skills effectively; and
- present and communicate information coherently and reliably, using academic conventions and formats appropriately.

Students will also develop an awareness of ethically sound research using different approaches.

(RES 361) Research methodology and methods 361 (2 lectures)

The module is concerned to discuss epistemological questions regarding the meaning of knowledge and how to attain it. In so doing, it is based towards the social sciences and humanities, and will seek specifically to analyse the assumptions upon which scientific methods are based and to relate the latter's concrete investigations.

(SLK 151) Psychological perspectives 151 (2 lectures)

Compulsory introduction module

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 and occupational fields are explored and integrated with psychological principles.

(SLK 152) Cognitive processes 152 (2 lectures)

Compulsory introduction module

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.

(SLK 155) Environmental Psychology 155 (2 lectures)

This module deals with the reciprocal relationship between people and the natural and built environment. Environment-behaviour theories are explored and evaluated, as well as environmental stressors (e.g. noise), environmental disturbances (e.g. natural disasters and air pollution), and territoriality and personal space related to crowding and high density. The urban environment is discussed, with particular emphasis on its effects on the city dweller. Attention is given to the use of design principles to create more liveable spaces. Finally, strategies that encourage environmentally responsible behaviour are outlined.

(SOC 258) Population Studies 258 (2 lectures, 1 tutor)

Sources of demographic data. Growth of the world population. Differences in the age and gender structures in the more and less developed countries and regions of the world. Determinants of mortality. Mortality trends in the world and in South Africa. Determinants of fertility. Fertility transition from a global perspective and trends in South Africa. Determinants of migration. International and internal migration. Migration trends in South Africa. Populations projections.

(SOC 352) Social Theory 352 (2 lectures)

Recent integrative developments in sociological theory, contemporary theories of modernity, structuralism, poststructuralism and postmodern social theory, as well as metatheorizing are discussed

(SOC 355) Sociology 355 (3 lectures + 1 attendance)

Rural and urban sociology 355

More advanced social and demographic methods, such as linear modelling, panel studies, action research and survival modelling and longitudinal studies are also included. Practical exercises are included.

(STK 110) Statistics 110 (3 lectures + 1 hour practical)

Descriptive Statistics

Sampling and the collection of data, frequency distributions and graphical representations. Descriptive measures of location and dispersion.

Probability and inference

Introductory probability theory and theoretical distributions. Sampling distributions. Estimation theory and hypothesis testing of sampling averages and proportions (one and two sample cases). Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques.

(STK 120) Statistics 120 (3 lectures + 1 hour practical)

Multivariate Statistics

Analysis of variance, categorical data analysis, distribution-free methods, curve fitting, regression and correlation, the analysis of time series and indices.

Statistical and economical applications of quantitative techniques

Systems of linear equations: drafting, matrices, solving and application. Optimization: linear functions (two and more independent variables), non-linear functions (one and two independent variables). Marginal and total functions. Stochastic and deterministic variables in statistical and economical context: producers' surplus, consumers' surplus, distribution functions, probability distributions and probability density functions. Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques.

(STK 161) Statistics 161 (3 lectures.+ 1 hour practical per week) (Third quarter)

Multivariate Statistics:

Analysis of variance, categorical data analysis, distribution-free methods, curve fitting, regression and correlation, the analysis of time series and indices. Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques.

(STU 112) Theory of Structures 112 (4 lectures + 1 practical)

(Offered by the Department of Civil and Biosystems Engineering)

Balance of particles; balance of fixed bodies; forces in trussing; elementary differentiation and integration; properties of structure parts; elasticity.

(STU 120) Theory of Structures 120 (3 lectures + 1 studio session)

(Offered by the Department of Civil and Biosystems Engineering)

Structure: definition, form and requirements. Descriptive geometry, projections and developed planes. Principles of structural mechanics: forces and loads; stress, strain and elasticity; shear forces and bending moments; equilibrium and stability. Introduction to structural materials. Elementary structural elements and frames. Site visits and practical classes.

(STU 122) Theory of Structures 122 (4 lectures + 1 practical)

(Offered by the Department of Civil and Biosystems Engineering)

Shear force and bending moment; stresses of beams; deflection of beams; yielding of materials; torsion; compiled axial bending stress; columns and supports.

(STU 211) Theory of Structures 211 (3 lectures + ½ studio session)

(Offered by the Department of Civil and Biosystems Engineering)

Design principles and calculations. Timber structures: physical and strength properties, design and computation of elements; floor, wall and roof structures; bracing and integrity. Load-bearing masonry: materials and standards, design and computation of wall elements; slenderness and lateral support; supports and integrity. Simple foundations. Site visits and assignments.

(STU 212) Theory of Structures 212 (3 lectures)

(Offered by the Department of Civil and Biosystems Engineering)

Structural steel: load bearing, pressure and yielding properties; Construction wood: load-bearing, pressure and yielding properties, design and trussing. Joints and pressures on structures.

(STU 221) Theory of Structures 221 (3 lectures + ½ studio session)
(Offered by the Department of Civil and Biosystems Engineering)

Design principles and calculations. Steel structures: physical and strength properties, design and computation of elements; floor, wall and roof structures; bracing and integrity. Reinforced concrete structures: materials and standards, design and computation of beams, slabs and columns. Simple frames. Integrity. Appropriate foundations. Site visits and assignments.

(STU 222) Theory of Structures 222 (3 lectures)
(Offered by the Department of Civil and Biosystems Engineering)

Concrete as construction material; reinforced concrete: design of yielding and pressure sections; yielding schedule; reinforced concrete structure systems; stressed concrete, properties and design of simple bending schedules; design of stress-bearing brickwork.

(STU 311) Theory of Structures 311 (3 lectures + ½ studio session)
(Offered by the Department of Civil and Biosystems Engineering)

Design principles, calculations and tables. Typical and complete structures in timber, masonry, steel and reinforced concrete; specific applications. Industrial structures and multi-storeyed buildings. Retaining walls and basements. Site visits and assignments.

(STU 312) Theory of Structures 312 (3 lectures)
(Offered by the Department of Civil and Biosystems Engineering)

Light steel industrial buildings; multi-storeyed steel buildings; design of concrete retaining walls; foundations: floating foundations, problems with foundations; design of boxing required; preliminary structure design; bridge elements; reservoirs.

(STU 321) Theory of Structures 321 (3 lectures + ½ studio session)
(Offered by the Department of Civil and Biosystems Engineering)

Design principles and tables. Modern structural materials, prefabrication, pre- and post-stressed structural elements, transport. Advanced structures: cable, arch, dome, vault, shell, tent, folded plate and others. Special foundations. Case studies. Dismantling of structures. Scale models and structural analysis.

(STU 322) Theory of Structures 322 (3 lectures)
(Offered by the Department of Civil and Biosystems Engineering)

Road design; paving; stormwater reticulation; bulk sewage works; bulk water supply.

(SVC 410) Transportation Engineering 410 (2 lectures)

The traditional transport study: trip generation, trip distribution, modal distribution and trip assignment; data requirements; land-use modelling; the town and regional planner's contribution to transport planning.

(SVC 310) Transportation Engineering 310 (2-lectures)
(Presented by the School of Engineering)

Introduction to transportation engineering; institutional, social, economic and environmental aspects of transport; public transport; design of pedestrian facilities; railway engineering; airport engineering, introduction to the transportation planning process.

(TKS 251) Basic Textiles 251 (3 lectures + 1 practical)

Utility aspects

Basic components of textiles, consumer decision making, utility aspects that include durability, comfort, maintenance, health / safety / protection and aesthetic aspects.

(TKS 252) Basic Textiles 252 (3 lectures + 1 practical)

Fibres and yarns

Fibre structure and performance including textile chemistry, fibre morphology and formation, fibre properties, classification and identification. Yarn structure and performance (including spun yarns, filament yarns, blended yarns, compound and novelty yarns).

(TKS 261) Basic Textiles 261(3 lectures + 1 practical)

Fabric structures

Introduction to fabric structures. Woven fabric, knitted fabrics, non-woven structures and compound fabrics. [Prerequisite: TKS 252 GS]

(TKS 262) Basic Textiles 262 (3 lectures + 1 practical)

Finishings and Dyeing Processes

Introduction to the finishing of fabrics. Preparatory and final finishings. Finishes for special end-purposes: durability, comfort and protection; ease of maintenance; aesthetic appeal. Dyed and printed fabrics. [Prerequisite: TKS 261 GS]

(TKS 361) Textiles 361 (2 lectures)

Technical textiles [Prerequisite: TKS 251, 252, 261 and 262]

(TPA 110) Site Analysis and Assessment 110 (2 lectures + 1 practical)

Analysis and assessment of sites for planning purposes. Covers the analysis of context and natural (e.g. climate, geology), man-made (e.g. zoning, potential land value, land use and activity), and sensory elements (e.g. *genius loci*) of a site to determine the appropriate use of a site as well as the character of future development. Skills and techniques to communicate the analysis and assessment graphically.

(TPA 120) Settlement Analysis and Assessment 120 (2 lectures + 1 practical)

Analysis and assessment of settlements for planning purposes in terms of normative criteria, i.e. principles of good settlement forms and processes; aspects to be taken into consideration in settlement analysis, such as urban form, land use, transportation, socio-economic development, housing, local government; analysis instruments such as indicators, visual analysis, density analysis and citizen satisfaction surveys.

(TPA 210) Plan and Policy Analysis and Assessment 210 (3 lectures)

Analysis and assessment of plans and policy frameworks from a planning and development perspective. Analysis and assessment of substantive and communicative content. Deconstruction of text, norms and values, planning and development approaches. The role of planners and the democratisation of planning.

(TPD 210) Development Planning 210 (3 lectures)

Introduction to development problems, perspectives on and concepts of development. Approaches to development planning and development studies. Application of development proposals from local to national levels. International and local perspectives and case studies. Critical evaluation of development initiatives, and aspects such as culture, gender, diversity and sustainability. Role players in the development process.

(TPD 220) Theory of Strategic Integrated Development Planning 220 (3 lectures)

Theories of and processes in strategic planning, forward planning, integrated development planning; origins and intentions of these concepts. International and local perspectives and case studies. Policy framework for Integrated Development Planning in the South African context; role players in integrated development planning processes, with specific reference to the role of the planner.

(TPD 310) Participatory Planning 310 (3 lectures)

Introduction to the concept, theories, aims and processes of participatory planning; participatory planning techniques and methods; democratisation of planning and the communicative nature of planning; role of the planner and other role players; evaluation, design and implementation of participatory planning processes.

(TPD 320) Local Economic Development 320 (3 lectures)

Local economic development strategies and instruments. Local development initiatives. The direct and indirect roles of local government, the private sector and the public in local economic development.

The role of networks, linkages, locality, marketing and information for local areas within the global economy. Government programmes and initiatives that can influence and promote local economic development.

(TPD 820) Integrated Development Planning 820 (20 credits)

Introduction to development and development planning theories; the integrated development planning process; legal, institutional and policy frameworks in which integrated planning functions in South Africa; implementation of integrated development plans; case studies of integrated development planning; simulations of integrated development planning exercises.

(TPE 351) Research Methodologies for Planners 351 (2 lectures)

Introduction to research, the changing nature of research and the application thereof in different phases in planning processes. Qualitative, quantitative and participatory research methods and techniques. Preparation of research programmes. The role of communication, information and the planner in research.

(TPE 410) Essay 410 (20 credits)

Identification and description of research problem. Literature study, research methodologies and programme. A study proposal in the prescribed format on a topic as approved by the head of the department.

(TPE 420) Essay 420 (20 credits)

Design, plan and undertake research. The collection, synthesis and interpretation of data, in terms of the study proposal in TPE 410, as well as the written and verbal communication of findings.

(TPI 451) Planning Interventions: Urban Areas 451 (2 lectures + 1 practical)

The drafting of urban development and design frameworks to ensure development or redevelopment of urban areas in a relevant, social and environmentally accountable way. Specific focus on rehabilitation of declining city centres, fast growing edge cities, and underdeveloped parts of urban areas. Critique on and improvements on current practice; simulated planning exercise.

(TPI 452) Planning Interventions: Peri-Urban and Rural Areas 452 (2 lectures + 1 practical)

Introduction to planning and management of small towns, rural settlements, and peri-urban/rural districts; examples of planning interventions in rural areas; approaches to rural development, techniques and methods for planning in rural areas. Critique on and improvements on current practice; simulated planning exercise.

(TPI 453) Planning Interventions: Metropolitan Areas 453 (2 lectures + 1 practical)

Introduction to planning at metropolitan level; examples of planning interventions at metropolitan level; approaches to and examples of the delivery of housing, infrastructure and facilities; tensions in resource allocation and prioritising of development in metropolitan areas; institutional requirements and implications of planning and management of metropolitan development; critiques and improvements on current practice; simulated planning exercise.

(TPI 454) Planning Interventions: Supranational, National and Provincial Scale 454 (2 lectures + 1 practical)

Introduction to planning at provincial, national and supranational scale. Approaches to planning and development of regions and provinces. Past and present examples of planning on each of these scales. Planners' roles in planning exercises at these scales; institutional requirements and implications of planning at these scales. Critiques and improvements on current practice; simulated planning exercise.

(TPI 810) Urban Restructuring 810 (25 credits)

Definition and rationale of urban restructuring; urban processes and outcomes; problems in urban areas, for example inner city decay, fringe development, housing, services backlog, the dysfunctional Apartheid landscape and dependency on private transport; types of intervention (inter alia spatial, economic and social) in order to accomplish restructuring in South Africa; policy and legislation regarding urban restructuring in South Africa; international case studies; impact of globalisation on South African cities; simulated exercise in urban restructuring.

(TPI 820) Rural Restructuring 820 (25 credits)

Definition and rationale of rural restructuring; problems of rural settlements; rural urban linkages and their significance; problems facing rural settlements, for example the absence of an economic base and necessary infrastructure; conflict between development needs and conservation, tourism, limited access to land; types of interventions (inter alia spatial, economic and institutional) in order to accomplish rural restructuring; policy and legal structures for rural restructuring in South Africa; international case studies; simulated exercise in rural restructuring.

(TPS 120) Principles of Settlement Design 120 (2 lectures + 1 practical)

Introduction into the goals and principles of settlement design. Characteristics and measures of a good living-environment; the design elements of a good living-environment; settlement design within both urban and rural contexts. Aspects that will be covered include settlement structure (open space and movement systems), sense, symbolism and legibility, accessibility, diversity and opportunity, sustainability, safety, justice and equity.

(TPS 210) Settlement Design Concepts 210 (2 lectures + 1 practical)

The skills and techniques to design a layout of a new settlements, or part of an existing settlement. It includes design for the provision of housing for both high and low income

groups, as well as commercial and social facilities, open space systems, transportation systems and services. Design sustainable and equitable areas. Site analysis and assessment; development of alternative concepts; the detail design including the division of erven, infrastructure network, land development control and design guidelines.

(TPS 220) Settlement Establishment and Housing Delivery 220 (2 lectures + 1 practical)

Institutional and legal frameworks in which township establishment and housing provision takes place; user and site requirements; housing typologies and densities; engineering services; role players; financing; township establishment in terms of current legislation; simulated exercise; the detail design including the division of erven, infrastructure network, land development control and design guidelines.

(TPS 310) Spatial Concepts 310 (2 lectures, 1 practical, 16 credits)

Spatial concepts regarding the development and planning of settlements. Morphological development processes such as decentralisation, counter urbanisation, residential infill and succession, urban sprawl. Spatial structuring elements, e.g. corridors, nodes, compact cities, mixed use.

(TPS 320) Metropolitan, District and Local Area Spatial Planning 310 (2 lectures + 1 practical)

Practice of strategic and integrated spatial planning and design; design and plan an integrated development planning process; components of an integrated development plan such as vision, situational analysis, goals and objectives, strategies and projects, spatial framework, monitoring framework; role of public participation, communication and geographic information systems within spatial planning processes; simulated exercise of spatial planning on metropolitan, district and local level.

(TPS 810) Sustainable Settlement Planning and Design 810 (20 credits)

Normative principles for sustainable settlement planning and design; design theory; planning and design processes; simulated urban and rural settlement planning and design exercise.

(TPS 820) Design for Safety 820 (10 credits)

Normative principles for the planning and design for safety in the built environment; environmental criminology; the role of design in the prevention of crime; design principles for safer buildings, streets and areas. Case studies and design exercise.

(TPU 210) Land Use Management Theory 210 (3 lectures)

A brief history of land use management in South Africa; critiques of land use management; rationales for land use management; the link between land use management and integrated urban development management; the characteristics of an appropriate land use management system for present-day South Africa; the current land use management system in the Gauteng province; the land use management system in selected developing and developed countries; ethics in land use management; the future of land use management systems.

(TPU 261) Economics of Land Development 261 (3 lectures)

The economics of settlements, including issues such as economic advantages; locational choices of urban land uses; density and intensity of development; the effects of densities, location and transportation economics on land values; implications of zoning; the cost of urban growth, whether by densification or sprawl.

The property market; the functioning of the property market; the key role players; how decisions are taken; urban planning, local government and the property market.

(TPU 262) Land Use Management Practice 262 (3 lectures)

Generic components of land use applications and land development related applications and application procedures; practical exercises in the lodging, processing and evaluation of land use management applications, policy-preparation in terms of land use management systems; appeals.

(TPU 810) Land Use Management and Land Development 810 (20 credits)

Definition and rationale of land use management; typology of land use management systems; international and South African examples of land use management systems, including the relevant institutional and legal frameworks; preparation, submission, processing and evaluation of land use and township establishment applications in terms of present legislation; guidelines for decision making in land use and township establishment applications.

(TRN 213) Site Surveying 213 (2 lectures + 1 practical)

General surveying; instruments, their handling and adjusting; surveying systems and simple calculations; determining of levels; setting out of the works; tacheometry and plotting; scales, planimetry; areas and volumes; construction surveying; aerial photography.

(TRP 110) Planning and Settlement Histories before the Industrial Revolution 110 (3 lectures, 12 credits)

An in-depth analysis of city building and urban and regional planning in pre-modern times. The influence on settlement design and planning within the social, political and economic context of the Pre-historic; Classic (Roman and Greek); Feudal and Mercantile eras. Aspects such as visions of ideal cities, settlement patterns, the treatment of public space, the development of the edge of the settlement, functional zones and segregation are covered. Attention is given to the function, role, character, practice and beneficiaries of planning and the role of planners.

(TRP 120) Planning and Settlement Histories since the Industrial Revolution 120 (3 lectures, 12 credits)

An in-depth analysis of city building and urban and regional planning in modern and post-modern times with special emphasis on the South African example. The influence on settlement design and planning within the social, political and economic context of Industrial and Post-industrial eras. Aspects such as visions of ideal cities, settlement patterns, the treatment of public space, the development of the edge of the settlement, functional zones and segregation are covered. Attention is given to the function, role, character, practice and beneficiaries of planning and the role of planners.

(TRP 310) Institutional and Legal Structures for Planning 310 (3 lectures)

Overview of South African institutional and legal structures for planning and development, on national and provincial scale. Relevant legislation and policies that influence planning. Specific reference to the legal frameworks guiding land development, the environment, municipal management and development, housing, transport, water, and Human Rights.

(TRP 410) Cities and Regions of the Future 410 (3 lectures)

The future as a concept: the importance of thinking about, and planning for the future. The multiplicity of futures and the relation between the past, the present and the future.

The practice of exploring and thinking about the future: past and present perspectives on the future. Techniques/methods of predicting and/or shaping the future: application of these techniques/methods.

(TRP 420) Planning Futures 420 (3 lectures)

Planning in the future: definitions, rationales, focus areas, processes and systems. Future planners' roles and work places, values and ethics.

MEDALS AND PRIZES IN THE SCHOOL FOR THE BUILT ENVIRONMENT

| Name | Donor | Award |
|---|--|--|
| Department of Architecture | | |
| Archneer Prize | Achneer CC | Best mark in any Environmental Studies module. |
| Cowin, Glennie and Jury Inc Prize | Cowin, Glennie and Jury Inc Architects | Best documentation of a project submitted for the BArch. |
| David Haddon Prize | The Institute of South African Architects | Student in Quantity Surveying or Architecture with the best achievement in Construction Contract Law. |
| Sheila Kirtley McIntosh Prize | The late William Gordon McIntosh | Student in Architecture in any year of study with the highest average in all the prescribed modules for the particular year. |
| Protea Prize | Protea Bookshop | Best mark in any History of the Environment module. |
| Robert Gustav Schmickl Prize | Family Schmickl | Best progress with postgraduate studies. |
| ILASA Book Prize | Institute of Landscape Architects in South Africa | Best Design student in each of the study years in the Landscape Architecture Programme. |
| Louis Mook Design Bursary | Family Mook and Dept of Architecture | Best progress towards a distinction in Design at first year level. |
| PIA Prize | Pretoria Institute for Architecture | Best Design student in Architecture in each of the study years. |
| Twlce International Prize | Twlce International | Best final-year Interior Architecture Project. |
| Department of Construction Economics | | |
| Information regarding various prizes and medals are available upon request at the Department of Construction Economics. | | |
| Department of Town and Regional Planning | | |
| Prize of the SA Planning Institution | SA Planning Institution | Best final-year student in Town and Regional Planning. |
| PLAN Associates Prize | PLAN Associates | Final-year student with the best essay (TPE 420) for the BT&RP degree. |
| Not limited to the Faculty of Engineering, Built Environment and Information Technology | | |
| S ₂ A ₃ Bronze Medal | The South African Society for the Promotion of Science | The medal is awarded to a student who has completed an exceptionally meritorious master's study in a field traditionally linked to the activity of the SA Society for the Promotion of Science (S ₂ A ₃). |

| Name | Donor | Award |
|--|------------------------|--|
| Medal of the Vice Chancellor and Principal | University of Pretoria | The award consists of a silver medal as well as a cash prize and is awarded to candidates for outstanding academic achievement during the undergraduate years of study for any first bachelor's degree in a faculty. |

SCHOOL OF INFORMATION TECHNOLOGY

TABLE OF CONTENTS

| | Page |
|--|-------------|
| ACADEMIC PERSONNEL | 85 |
| GENERAL INFORMATION | 87 |
| Admission..... | 87 |
| Selection..... | 87 |
| Statement of symbols | 87 |
| M-score..... | 87 |
| Medium of instruction..... | 87 |
| Bursaries and loans | 87 |
| Accommodation | 87 |
| Welcoming day and academic information week..... | 88 |
| Prescribed books | 88 |
| Amendment of regulations and fees..... | 88 |
| GLOSSARY OF TERMS | 88 |
| NEW SYSTEM OF TUITION AND LEARNING | 89 |
| DEGREES CONFERRED IN THE SCHOOL OF INFORMATION TECHNOLOGY | 89 |
| REGULATIONS | 91 |
| Admission to undergraduate study | 91 |
| Requirements for specific modules | 92 |
| Registration for a specific year..... | 93 |
| Renewal of registration..... | 93 |
| Change field of study | 93 |
| Registration of modules | 94 |
| Module credits for unregistered students | 94 |
| Minimum period of study | 94 |
| Computer and Information literacy..... | 94 |
| Language proficiency..... | 94 |
| Examinations | 94 |
| Degree with distinction..... | 96 |
| CURRICULA OF INFORMATION TECHNOLOGY PROGRAMMES | 97 |
| Bachelor of Information Technology..... | 97 |
| Information Technology Special..... | 101 |
| Master of Information Technology..... | 103 |
| Doctor of Philosophy in Information Technology..... | 104 |
| Department of Informatics | |
| <i>Faculty of Economic and Management Sciences</i> | |
| BCom with specialization in Informatics..... | 104 |
| Department of Information Science | |
| BIS with specialization in Library Science..... | 107 |
| BIS with specialization in Information Science..... | 108 |

| | |
|--|-----|
| BIS with specialization in Multimedia | 110 |
| BIS with specialization in Publishing | 112 |
| BIS with specialization in Information and Knowledge Management | 115 |
| BIS (Hons) with specialization in Library Science..... | 117 |
| BIS (Hons) with specialization in Information Science..... | 117 |
| BIS (Hons) with specialization in Multimedia..... | 118 |
| BIS (Hons) with specialization in Publishing | 119 |
| BA (Hons) with specialization in Information Science for Development | 119 |
| MIS with specialization in Library Science (Research) | 120 |
| MIS with specialization in Information Science (Research) | 121 |
| MIS with specialization in Multimedia (Research) | 121 |
| MIS with specialization in Publishing (Research) | 121 |
| MIS with specialization in Library Science (Coursework) | 121 |
| MIS with specialization in Information Science (Coursework) | 121 |
| MIS with specialization in Multimedia (Coursework) | 121 |
| MIS with specialization in Publishing (Coursework) | 121 |
| MA with specialization in Development Communication (Coursework)..... | 121 |
| MA with specialization in Development Communication (Research)..... | 121 |
| DPhil with specialization in Library Science..... | 123 |
| DPhil with specialization in Information Science..... | 123 |
| PhD with specialization in Publishing..... | 123 |

Department of Computer Science

| | |
|------------------------------------|-----|
| BSc (Computer Science)..... | 124 |
| BSc (Hons) (Computer Science)..... | 130 |
| MSc (Computer Science)..... | 131 |
| PhD (Computer Science)..... | 132 |

SYLLABI FOR MODULES WHICH FALL UNDER THE:

| | |
|---|-----|
| School of Information Technology..... | 133 |
| Faculty of Economic and Management Sciences..... | 155 |
| Faculty of Humanities | 165 |
| Faculty of Natural and Agricultural Sciences..... | 179 |
| Faculty of Law..... | 184 |

MEDALS AND PRIZES IN THE SCHOOL OF INFORMATION TECHNOLOGY ... 185

**FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND
INFORMATION TECHNOLOGY**

The Faculty of Engineering, Built Environment and Information Technology comprises three schools namely the School of Engineering, the School for the Built Environment and the School of Information Technology. The School of Information Technology consists of three departments namely the Department of Informatics, the Department of Information Science and the Department of Computer Science.

**ACADEMIC PERSONNEL OF THE SCHOOL OF INFORMATION TECHNOLOGY
AS AT 30 SEPTEMBER 2002**

DEAN

Prof R.F. Sandenbergh, PrEng, MEng DEng(Pret) GSAIMM LSAKorrl

CHAIRPERSON OF THE SCHOOL

Prof C De Villiers, BSc (PU for CHE) BSc (Hons) DCom (Pret) MEd
 DTO HED (Unisa) LRVSA LIRWIT MIAIM MACM

Department of Informatics

| | |
|---|-------------------------|
| De Villiers, C., BSc(PU for CHE) BSc(Hons) DCom(Pret) Med DTO HED(Unisa) LRVSA LIRWIT MIAIM MACM | Professor (Head) |
| Burger, A.P., BSc(Hons)(RAU) PhD(Unisa) | Extraordinary Professor |
| Roode, J.D., BSc(Hons) MSc(Fsk) MSc(Maths)(PU for CHE) PhD(Leiden) GRVSA LONSA MACM LIRWIT CAIS | Extraordinary Professor |
| Smith, A.J., BA(PU for CHE) BSc(Hons) MSc(Unisa) DCom(Pret)..... | Extraordinary Professor |
| Alexander, P.M., BSc(Hons) MSc(UNISA) PhD(IT)(Pret)..... | Senior lecturer |
| Crafford, E.H., BCom(Hons) MCom(Pret) | Senior lecturer |
| Joubert, P., BSc BCom(Hons) MCom(Pret) | Senior Lecturer |
| Leonard, A.C., BSc(Hons)(PU for CHE) MSc(Unisa) DCom(Pret) LRVSA | Senior Lecturer |
| Matthee, M.C., BSc(Hons) MSc(Math) DCom(Pret)..... | Senior Lecturer |
| Phahlamohlaka, L.J., BSc(Zululand) MSc(Dalhousie University Canada)..... | Senior Lecturer |
| Badenhorst, H., BCom(Accoun)(Pret) BCom(Hons)(Unisa)..... | Lecturer |
| Kroeze, J.H., BA(Hons) MA PhD ThB(PU for CHE) | Lecturer |
| Le Roux, J.G., BSc(Hons) MCom(Pret)..... | Lecturer |
| Lotriet, H.H., PrEng BEng(Hons)(Pret) MEng(Stell) PhD(Eng)(Stell) | Lecturer |
| Lutu, P.E.N., BSc(Hons) MSc(University Manchester)..... | Lecturer |
| Masoeu, M.A., BSc(Hons)(Ind.Psych) BSc(Hons)(CS) (PU for CHE) | Junior Lecturer |
| Motha, W.M., HDE(Commerce)(Peninsula Technikon) BCom(Inf) BCom(Hons)(Inf)(Pret)..... | Junior Lecturer |
| Pretorius, J., BA(Ed) BA(Hons)(Geography)(Pret)..... | Junior Lecturer |
| Venter, E., BCur BCom(Hons)(Inf)(Pret)..... | Junior Lecturer |

Department of Information Science

| | |
|--|-------------------------|
| Bothma, T.J.D., BA(Pret) MA DLitt et Phil(Unisa)..... | Professor (Head) |
| Boon, J.A., BA(PU for CHE) BA(Bibl)(Hons)(Pret) MBIBL DLitt et Phil(RAU) HD(Bibl)(Pret) | Extraordinary Professor |
| De Bruin, H., BBIBL(Hons)(Unisa) MBIBL(Pret) DBIBL(UF) | Extraordinary Professor |
| Groenewald, H.J. BA BEd BA(Hons) MA DPhil HED(UF) | Extraordinary Professor |
| Lor, P.J., BA(Hons)(Bibl)(Stell) MBIBL DPhil(Pret)..... | Extraordinary Professor |
| Malan, C.W., MA DLitt(UF) HED(Pret) | Extraordinary Professor |
| Britz, J.J., BA BD BBIBL(Hons) DD(Pret) | Professor |
| Fourie, I., MBIBL(UF) DLitt et Phil(RAU) DTE(Unisa) | Associate Professor |
| Snyman, M.E., BA MA DLitt(Pret) HED(Unisa) | Associate Professor |
| Snyman, M.M.M., BA(Bibl) BBIBL(Hons)(Pret) PD(Inf Sc) M(Bibl) DLitt et Phil(RAU) | Associate Professor |
| Cosijn, E., BA(Hons) MA PD(Inf Sc)(RAU)..... | Senior Lecturer |
| De Wet, K., BA(Hons) BBIBL MA(Pret) DLitt(UNW) HED(Pret) | Senior Lecturer |
| Galloway, F.C.J., BA BA(Hons) MA DLitt(UF) | Senior Lecturer |
| Jacobs, D., BSc BEd(Madras) MSc(Bombay) HDLIS BA(Hons)(UNITRA) BBIBL(Hons) MIS PhD(Natal) | Senior Lecturer |
| Botha, D.F., BBIBL(Hons)(Stell) MIS(Unisa) | Lecturer |
| Downes-Webb, L.E., BA HED(Pret) | Lecturer |
| Holmner, M.A., BA(Hons) MA(Pret)..... | Lecturer |
| Penzhorn, C.E., BA(Log) BBIBL(Hons) MIS(Pret) HD(Bibl)(Unisa)..... | Lecturer |
| Sewdass, N., BIS(Unisa) BBIBL(Hons) MBA(UK)..... | Lecturer |
| Squier, M.M., BIS(Unisa) BIS(Hons)(Pret) | Lecturer |
| Thompson, J.E., BA BEd MIS HD(Bibl) HED(Natal) | Lecturer |

Department of Computer Science

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|--|-------------------------|
| Eloff, J.H.P., BSc BSc Hons MSc Phd(RAU)..... | Professor (Head) |
| Bishop, J.M., BSc BSc(Hons)(Rhodes) MSc(Natal) PhD(Southampton) | Professor |
| Kourie, D.G., Dipl Datametrics(Unisa) BSc BSc(Hons) MSc(Pret) MSc(Unisa) PhD(Lancaster) | Professor |
| Barnard, E., BEng(Pret) BSc(Hons)(Wits) MSc(Wits) PhD(Carnegie Mellon) | Extraordinary Professor |
| Grant, T.J., BSc PhD(Maastricht)..... | Extraordinary Professor |
| Van den Heever, R.J., BSc BSc(Hons) MSc(Pret) MS(Stanford) MEng PhD(Calif)..... | Extraordinary Professor |
| Watson, B.W., H.J.B.(Math)(Waterloo) PhD(Eindhoven)..... | Professor |
| Engelbrecht, A.P., BSc BSc(Hons) MSc PhD(Stell) | Associate Professor |
| Meyer, T.A., BSc BSc(Hons) MSc(RAU) PhD(Unisa)..... | Associate Professor |
| Van den Bergh, F., BSc BSc(Hons) MSc PhD(Pret)..... | Senior Lecturer |
| Jolliffe, R.M., BSc(Hons)(Strathclyde) PGCE(Univ of London).. | Lecturer |
| Marshall, L., BSc BSc(Hons)(Pret)..... | Lecturer |
| Pieterse, V., BSc HED(Pret) BSc(Hons)(Maths)(UNISA) MSc (Pret)..... | Lecturer |
| Schoeman, L., BSc(Stell) BSc(Hons)(Unisa) MSc(RAU)..... | Lecturer |

Head: Student Administration

Jones, E.

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|----------------------------|
| GENERAL INFORMATION |
|----------------------------|

Admission

Any person who wishes to register at the University for the first time, or after an interruption of studies, should apply or reapply for admission. Application for admission to all undergraduate programmes closes on 30 September. Visit the website (<http://sit.up.ac.za>) for application details concerning the postgraduate programmes.

Selection

A selection procedure takes place prior to admission to the degree programmes in the School of Information Technology. The number of students admitted to the undergraduate programmes in the School may be limited. Postgraduate selection takes place in accordance with departmental policy.

Statement of symbols

When registering at this University for the first time, an undergraduate candidate must submit a statement of symbols obtained for subjects in the final Grade 12 examination.

M-score

Degrees may differ in their m-score requirement for admission for the specific degree. The M-score is calculated as follows:

| Symbol | Higher Grade | Standard Grade |
|-------------------------|--------------|----------------|
| A-symbol (80% and more) | 5 | 4 |
| B-symbol (70% to 79%) | 4 | 3 |
| C-symbol (60% to 69%) | 3 | 2 |
| D-symbol (50% to 59%) | 2 | 1 |
| E-symbol (40% to 49%) | 1 | 0 |

Medium of instruction

In conducting its business, the University uses two official languages, namely Afrikaans and English. In formal tuition, the medium of instruction is either Afrikaans or English, or both of these languages; provided that there is a demand and that it is academically and economically justifiable. However, it remains the student's responsibility to ascertain on an annual basis whether modules in a programme are to be presented in Afrikaans and/or in English.

In respect of administrative and other services, a student has the right to choose whether the University should communicate with him or her in Afrikaans or English.

Bursaries and loans

Particulars of bursaries and loans are available on request.

Accommodation

Applications for accommodation in university residences for a particular year may be submitted as from April 1 of the preceding year. Applications will be considered while vacancies exist, and prospective students are advised to apply well in advance. Please note that admission to the University does not automatically mean that lodging will also be available.

Welcoming day and academic information week

Details about the welcoming day, to which all parents are cordially invited, and about the subsequent academic information week, which all new first-year students **should** attend, are obtainable from the Dean of Students, University of Pretoria 0002.

Prescribed books

Lists of prescribed books are not available. The lecturers will supply information regarding prescribed books to students at the commencement of lectures.

Amendment of regulations and fees

The University retains the right to amend the regulations and to change tuition fees without prior notification.

GLOSSARY OF TERMS

academic year: The duration of the academic year, which is determined by the University Council.

admissions regulation: A regulation compiled by the Dean concerning the admission of students to a specific School, which includes a provision regarding the selection process.

credit (or credit value): A value unit linked to learning activities, calculated in accordance with the SAQA norm of **1 credit = 10 notional hours (learning hours)**. Credits are linked to modules and qualifications.

curriculum: A series of modules which form a programme, grouped together over a specified period of time and in a certain sequence according to the regulations.

examination mark: The mark a student obtains for an examination in a module, including practical examinations where applicable.

extended study programme: A study programme for a degree or diploma that is completed over a longer period than the minimum duration of the particular degree or diploma.

final mark: The mark calculated on the basis of the semester/year mark and the examination mark which a student obtains in a particular module according to a formula that is determined from time to time in the regulations for each module with the proviso that should no semester/year mark be required in a module, the examination mark serves as the final mark.

GS: A combined (final) mark (semester/year mark plus examination mark) of 40 - 49%.

learning outcome: The end product of a specified learning process, i.e. the learning result (specific skills) that one intends to achieve at the end of the learning process.

level of a module: The academic level (year) of a module, which is indicated in the module code and which gives an indication of the complexity of the module.

LP: With the lecturer's permission.

module: An independent, defined learning unit, designed to result in a specific set of learning outcomes, and which is a component of a programme.

module code: Consists of an equal number of letters and digits, which indicate the name of the module, the year of study, the period of study and the level of the module.

notional hours (learning hours): The notional number of hours students should spend in mastering the learning content of a particular module or programme. The total number of learning hours for a module consists of the time needed for lectures, tutorials and practicals (contact hours), as well as for self-tuition, examination preparation and any other activity required by the study programme. (**notional hours = credits x10**)

NQF: National Qualifications Framework. This is a national framework in which all SAQA-registered qualifications are listed, arranged on eight levels in accordance with the complexity of the qualification.

programme: This is a comprehensively planned, structured and coherent set of teaching and learning units (modules), designed to attain a specific set of predetermined learning outcomes at a specific level, which culminates in a student being awarded a particular qualification (diploma, degree).

qualification: In outcomes-based education, a qualification is a diploma or a degree which is obtained after attaining the learning outcomes as specified in a coherent learning programme, expressed as an accumulation of credits at specific levels.

SAQA: South African Qualifications Authority. This body has been established by law and has as its purpose the registration of qualifications, programmes and unit standards, in order to ensure that specific national and international criteria are achieved.

semester/year mark: The mark a student obtains during the course of a semester or a year for tests, class-work, practical work or any other work in a particular module as approved by regulation.

student-centred learning: Teaching and learning methodology, which facilitates the total own responsibility for the learning process. A prerequisite is that lectures, tutorials and practicals be adapted so that active participation by students is always achieved.

syllabus: Summary of the contents of a module.

weighted average: The weighted average is composed of the marks of the various modules, weighted with the credits of each module as a fraction of the total number of credits for the quarter, semester or year.

NEW SYSTEM OF TUITION AND LEARNING

In 2000, the University of Pretoria started to phase in a new system of tuition and learning which corresponds with the required guidelines of SAQA (the South African Qualifications Authority) and the NQF (National Qualifications Framework). In this system, programmes are offered which are outcomes-based, student-centred and market-orientated.

DEGREES CONFERRED IN THE SCHOOL OF INFORMATION TECHNOLOGY

The rules for degrees here published are subject to change and may be amended prior to the commencement of the academic year in 2003.

The Faculty of Engineering, Built Environment and Information Technology comprises three schools namely the School of Engineering, the School for the Built Environment and the School of Information Technology.

The School of Information Technology consists of three departments namely the Department of Informatics, the Department of Information Science and the Department of Computer Science. Two Faculties offer the degrees that fall under the School of Information Technology. This implies that although the Department of Informatics falls under the School of Information Technology, the degree BCom(Informatics) is conferred by the Faculty of Economic and Management Sciences (see below for further details).

Faculty of Engineering, Built Environment and Information Technology

The following degrees are offered by the Faculty:

- (a) Bachelor of Information Technology (BIT)
- (b) Master of Information Technology (MIT)
- (c) Doctor of Philosophy in Information Technology

The diploma in IT, conferred by the Faculty of Engineering, Built Environment and Information Technology, will be phased out. Refer to the Information Technology Special.

Department of Informatics

The following degrees are conferred by the Faculty of Economic and Management Sciences:

- (a) Baccalaureus Commercii with specialization in Informatics
- (b) Magister Commercii with specialization in Informatics
- (c) Magister Philosophiae with specialization in Informatics
- (d) Doctor Commercii with specialization in Informatics
- (e) Philosophiae Doctor specializing in Informatics

Department of Information Science

The following degrees are conferred by the Faculty of Engineering, Built Environment and Information Technology:

- (a) Baccalaureus Informationis Scientiae – BIS
 - (i) with specialization in Library Science
 - (ii) with specialization in Information Science
 - (iii) with specialization in Multimedia
 - (iv) with specialization in Publishing
 - (v) with specialization in Information and Knowledge Management
- (b) Baccalaureus Informationis Scientiae Honores
 - (i) with specialization in Library Science
 - (ii) with specialization in Information Science
 - (iii) with specialization in Multimedia
 - (iv) with specialization in Publishing
- (c) Magister Informationis Scientiae (Research)
 - (i) with specialization in Library Science
 - (ii) with specialization in Information Science
 - (iii) with specialization in Multimedia
 - (iv) with specialization in Publishing
- (d) Magister Informationis Scientiae (Coursework)
 - (i) with specialization in Library Science
 - (ii) with specialization in Information Science
 - (iii) with specialization in Multimedia
 - (iv) with specialization in Publishing
- (e) Doctor Philosophiae (DPhil)
 - (i) with specialization in Library Science
 - (ii) with specialization in Information Science
- (f) Philosophiae Doctor (PhD)
 - (i) with specialization in Publishing

The following degrees are conferred by the Faculty of Humanities:

- (a) Baccalaureus Artium Honores with specialization in Information Science for Development
- (b) Magister Artium (research) with specialization in Development Communication
- (c) Magister Artium (coursework) with specialization in Development Communication

Department of Computer Science

The following degrees conferred by the Faculty of Agricultural and Natural Sciences will be phased out:

- (a) Baccalaureus Scientiae with specialization in Information Technology:
 - (i) Information and Knowledge Systems
 - (ii) Computer Systems
 - (iii) Computer Science
- (b) Baccalaureus Honores Scientiae with specialization in Computer Science
- (c) Magister Scientiae with specialization in Computer Science
- (d) Philosophiae Doctor with specialization in Computer Science

The following degrees are offered by the Faculty of Engineering, Built Environment and Information Technology:

- (a) Baccalaureus Scientiae in Computer Science
- (b) Baccalaureus Scientiae Honores in Computer Science
- (c) Magister Scientiae in Computer Science
- (d) Philosophiae Doctor in Computer Science

REGULATIONS

The rules for degrees here published are subject to change and may be amended prior to the commencement at the academic year in 2003.

IT.1 Admission to undergraduate study

(a) General

General Regulations G.1 to G.15 are applicable to bachelor's degrees.

- (i) To register for a first bachelor's degree at the University, a candidate must, in addition to the required Grade 12 certificate with university exemption, comply with the specific admission requirements for particular programmes and fields of study as prescribed in the admission regulations and the faculty regulations of the departments.
- (ii) The following persons may also be considered for admission:
 - * A candidate who is in possession of a certificate which is deemed by the University to be equivalent to the required Grade 12 certificate with university exemption.
 - * A candidate who has passed the UP Foundation Year.
 - * A candidate who is a graduate from another tertiary institution or has been granted the status of a graduate of such an institution.
 - * A candidate who passes an entrance examination, which is prescribed by the University from time to time.

Note: A conditional exemption certificate does not grant admission to bachelor's study. However, in certain circumstances some of the faculties do accept a conditional exemption on the basis of mature age and prior learning. Candidates are advised to contact the specific faculty administration in this regard.

- (iii) The Senate may limit the number of students allowed to register for a programme, in which case the Dean concerned may, at his or her discretion, select from the students who qualify for admission those who may be admitted.
- (iv) Subject to faculty regulations and the stipulations of General Regulations G.1.3 and G.62, a candidate will only be admitted to postgraduate bachelor's degree studies, if he or she is already in possession of a recognised bachelor's degree.

IT.2 Requirements for specific modules

A candidate who has:

- (a) passed the Grade 12 examination in Mathematics with at least 40% at higher grade or at least 50% at standard grade, will be admitted to the modules GLY 151 and 152 in Geology;
- (b) passed the Grade 12 examination in Mathematics with at least 50% at higher grade, will be admitted to WTW 114, WTW 134 and WTW 158 in Mathematics, and to WST 110 in Mathematical Statistics (for the degree programme in Financial Mathematics, 60% in Mathematics higher grade is recommended);
- (c) passed the Grade 12 examination in Mathematics with at least 40% at higher grade or at least 50% at standard grade, (or at least 50% in Statistics 113 and 123), will be admitted to (i) a module in the subjects Banking, Informatics (excluding INF 153,154, 163, 164 and 271, 272) or Statistics and (ii) modules in Economics, Marketing Management, Financial Management and Financial Accounting on 200 level;
- (d) registered, may write an exemption test for module FRK 151 on the work covered in Grade 12 (matric) for the subject Accountancy. Should this test be passed, the student will be exempted from module FRK 151 and will be allowed to continue with module FRK 181 immediately. This module entails computer applications for Accountancy and is offered during the full first semester (14 weeks). Should the student fail the exemption test, he or she can continue with FRK 151, which entails introductory computer-supported accountancy and a few lectures. The student, who failed to pass the exemption test for FRK 151, will continue with FRK 181 in the second semester after having passed FRK 151 in the first semester. For degree purposes, credit will be given for any one of FRK 151, 152, 121 and 211, provided that FRK 181 has also been passed.
- (e)
 - i) passed the Grade 12 examination with an M-score of at least 18 and at least 60% (C) in Mathematics at higher grade, may register for the module COS 130, provided that he/she does not qualify for COS 110.
 - ii) registered for any programme that requires an introductory module in computer programming may register for COS 160, provided that he/she does not qualify for admission to COS 110 or COS 130.

- iii) (1) passed the Grade 12 examination in Computer Studies with at least 50% (D) at higher grade, as well as in Mathematics with at least 50% (D) at higher grade, obtains admission to the module COS 110 in Computer Science; **or**
- (2) passed COS 130, obtains admission to the module COS 110 in Computer Science; **or**
- (3) passed COS 160 and COS 151 as well as Mathematics with at least 50% (D) at higher grade obtains admission to the module COS 110 in Computer Science; **or**
- (4) passed COS 160 and COS 151 and has been admitted to the module WTW 101 obtains admission to the module COS 110 in Computer Science.
- iv) A student may not obtain credits for both COS 130 and COS 160.
- (f) passed the Grade 12 examination in Mathematics with at least 40% (E) at higher grade or 50% (D) at standard grade, or passed Geography with at least 50% at higher grade, will be admitted to GGY 153, 154, 132, 162 and 163 in Geography;
- (g) passed the Grade 12 examination in Mathematics with at least 50% (D) at higher grade or 60% (C) at standard grade, or passed Mathematics at higher grade with at least 40% or at standard grade with at least 50% (D) as well as Computer Studies with at least 60% (C) at higher grade or 70% at standard grade, or who obtained an average of at least 60% in Statistics 110* and 120*, or who obtained an average of at least 60% in (Statistics 113*, 123*) and in Statistics 120* will be admitted to Informatics 153, 154, 163, 164, 271 and 272 (*at least 50% must be obtained in each module).

Please note :

- i) *...the Grade 12 examination...* refers to the final matriculation examination.
- ii) A student who takes a module presented by another faculty must take note of the admission requirements of such module, subminima required in examination papers, supplementary examinations, etc.

IT.3 Registration for a specific year

A student registers for all the modules he or she intends taking in that specific year (quarter modules, first and second semester modules and year modules) at the beginning of an academic year.

IT.4 Renewal of registration

Should a student who is repeating a year of study, fail to comply with the requirements for promotion to a subsequent year of study at the end of the year of repetition, he or she will forfeit his or her right of readmission. Students, who forfeit the right of readmission, may apply in writing to the Admissions Committee for readmission to the Faculty. Details regarding promotion appear in the regulations of the relevant fields of study.

IT.5 Change of field of study

Transfer from one field of study to another may only take place with the Dean's approval, after consultation with the relevant head of department.

IT.6 Registration of modules

- (a) Final dates are set for the change of modules (cancellation or addition) for each academic year. These dates are available from the Student Administration offices. With the approval of the Dean students may change the modules they are register for only within the first two weeks after commencement of the module.
- (b) A student may not register for a module of a subsequent year if a timetable clash occurs with a module of a previous year which has not yet been passed and which is prescribed for his or her field of study, unless exemption is obtained from class attendance in the latter module.
- (c) Should a student register for modules of the second semester at the beginning of a year of study, and it becomes evident at the end of the first semester that he or she does not comply with the prerequisites of the second semester modules, the registration of such modules will be cancelled. It is also the student's responsibility to ensure at the beginning of the second semester that the cancellation has been brought about.

IT.7 Module credits for unregistered students

There are students who attend lectures, write tests and examinations and in this manner earn "marks", but who have neither registered for modules nor registered as students. These marks will not be communicated to any student before he/she has provided proof of enrolment. A student cannot obtain any credits in a specific academic year for a module "passed" in this manner during a previous academic year and for which he/she was not registered. This arrangement applies even where the student is prepared to pay the tuition fees.

IT.8 Minimum study period

The minimum period of study for the degree is indicated at the relevant degree programme.

IT.9 Computer and Information Literacy

Computer and Information literacy is offered as compulsory modules, but exemption may be granted to students who pass an exemption test.

IT.10 Language Proficiency

It is expected of every new undergraduate student who wishes to register at the University of Pretoria, to complete a language proficiency test. Students who pass will be granted exemption from the compulsory EOT modules. BIS students are referred to their specific programme for possible additional requirements.

IT.11 Examinations

11.1 Examinations, projects and essays

- (a) An examination in a module may be written and/or oral. Projects and essays are prepared and examined as stipulated in the study guide of the module, in accordance with the regulations and procedures as described in 11.2 below.
- (b) The examinations for modules of the first semester are held in May/June, while all other examinations (third and fourth term modules, second-semester modules and year modules) are held in October/November.

11.2 Examination admission

A minimum semester/year mark of 40% is required in order to be admitted to the examination in a specific module, with the exception of a first-year module at first-year level where a minimum semester mark of 30% is required for admission to the final examination. In addition, all other examination admission requirements, applicable to the relevant module, must have been met.

11.3 Pass requirements

Refer also to General Regulations G.10.2, G.11.1(a) and G.12.2.2

- (a) In order to pass a module a student must obtain an examination mark of at least 40% and a final mark of at least 50%. A student passes a module with distinction if a final mark of at least 75% is obtained. The final mark is compiled from the semester/year mark and the examination mark.
- (b) Calculation of the final mark: The semester/year mark must account for no less than 40% and no more than 60% of the final mark, with the exception of modules like design and research projects and essays, as well as in modules where the development of general skills is the primary learning activity, where appropriate alternative norms are determined individually by schools or departments. The specific details and/or formula for the calculation of the final mark are given in the study guide of each module.
- (c) Calculation of the semester/year mark: The semester/year mark is compiled from formative assessment of learning activities such as assignments, presentations, practicals and group projects, as well as from class tests and semester tests. For each module the specific formula for the calculation of the semester/year mark is determined by the lecturer(s) responsible for the presentation of the module and the details are given in the study guide. Refer also to General Regulation G.11.1(b).
- (d) In some modules specific requirements in respect of certain components of the semester/year mark may be set, in order for a student to pass the module (for example that satisfactory performance in and attendance at practical classes are required). Thus, even if a pass mark is obtained in the module, a pass is not granted unless these requirements are met. For such modules these specific requirements are given in the study guide.
- (e) A student must comply with the sub-minimum requirements in subdivisions of certain modules. For such modules these specific requirements are given in the study guide of the module.
- (f) A student may be promoted (exempted from the examination) in certain modules should a specified semester/year mark (minimum 65%) be obtained. For such modules these specific requirements are given in the study guide of the module. Refer also to General Regulation G.10.3.

11.4 Ancillary examinations

Refer to General Regulation G.12.3.

11.5 Supplementary examinations

Refer to General Regulation G.12.4.

In the School of Information Technology all supplementary examinations are considered and granted in accordance with the stipulations of General Regulation G.12.4 and in accordance with the faculty regulations of the faculty in which the module is offered.

11.6 Special examinations (including the aegrotat)

Refer to General Regulation G.12.5.

11.7 Other special examinations

Refer also to General Regulation G.12.6.

- (a) The Dean may, at the recommendation of the head of the department concerned, grant a special examination in a module to a student who failed that module in the final year of study, and consequently either does not comply with degree requirements, or is unable to continue with studies in the final semester in a meaningful way. A student may at most, be admitted to one special examination in a year module or two special examinations in semester modules or four special examinations in quarter modules.
- (b) To be taken into consideration for a special examination, a student should have obtained a minimum final mark of 40% and should also have complied with all other examination admission requirements which are applicable to the relevant module.
- (c) A student must apply in writing to the Dean before consideration will be given to admission to a special examination. The head of the department decides when the special examination will take place and may prescribe work which should be satisfactorily completed before a student may write the examination.
- (d) The pass mark required for a special examination is 50%, a higher mark is not allocated and the semester/year mark is not taken into consideration.

11.8 Re-marking of examination scripts

Refer to General Regulation G.14.

IT.12 Degree with distinction

See each degree for specific requirements.

CURRICULA OF THE INFORMATION TECHNOLOGY PROGRAMMES

**IT.13 BACHELOR OF INFORMATION TECHNOLOGY (BIT)
(Code 02130082)**

This degree is conferred by the Faculty of Engineering, Built Environment and Information Technology.

Programme organiser:

Dr M Mathee, Education and Law Building, Room 5-58, Tel: (012) 420 3365

e-mail: mmathee@hakuna.up.ac.za

Degree with distinction

The B.IT degree is conferred with distinction on a student who passes all modules in the fourth year of study in a single academic year, and obtains a weighted average of at least 75% in these modules, providing that a subminimum of 65% is obtained in each of these modules.

Admission requirements

A Grade 12 certificate with university endorsement; and

- a) a minimum M-score of 18 in the final Grade 12 examinations; and
- b) a final mark of at least 60% in Mathematics at higher grade in the Grade 12 examinations; and
- c) at least 60% in Computer Studies at higher grade in the final Grade 12 examinations;

or

EPE111/COS130 (either in the previous year at the University or after attending the module offered during the Summer School).

or

Candidates who do not comply with the above requirements, but who have passed COS151 and COS160 in a prior year of study, will be considered for admission into the B.IT program. Such potential B.IT candidates should therefore initially register for any other program for which they qualify and ensure that they include the two abovementioned modules in their curriculum as well as any other B.IT modules for which they qualify.

Curriculum

The list of required modules is given below in a proposed study programme. The degree is awarded upon successful completion of a minimum of 654 credits, of which at least 184 are required at first-year level, at least 132 at second-year level, at least 178 at third-year level, and at least 160 at fourth-year level. Note: The module credits set out below are in accordance with SAQA requirements and may differ from those set out in other fields of study.

Note:

Minimum requirement

GS Code followed by GS: XYZ 151 GS A combined (final) mark of 40 - 49%.

† Code followed by †: XYZ 151† Concurrent registration

Deviations from these requirements are only permitted with the approval of the Dean, after consultation with the relevant head(s) of department(s).

(a) First year of study (minimum of 184 credits)**Fundamental modules (University requirements- 24 credits)**

| Code | Module | Prerequisites | Credits |
|--|-----------------------------------|---------------|---------|
| Passing of an exemption examination on computer literacy or | | | |
| CIL 171 | Computer and Information Literacy | | 3 |
| CIL 172 | Computer and Information Literacy | | 3 |
| CIL 173 | Computer and Information Literacy | | 3 |
| CIL 174 | Computer and Information Literacy | | 3 |

| Code | Module | Prerequisites | Credits |
|---|----------------------|---------------|---------|
| Passing of an exemption examination or | | | |
| EOT 151 | Language Proficiency | | 3 |
| EOT 152 | Language Proficiency | | 3 |
| EOT 153 | Language Proficiency | | 3 |
| EOT 154 | Language Proficiency | | 3 |

and

| | | | |
|--|--|--|-------|
| Any two ENG modules (min 12, max 20 credits) according to the requirements set by the Department of English. | | | 12-20 |
|--|--|--|-------|

| Code | Module | Prerequisites | Credits |
|---------|--------------------------------|-----------------------|---------|
| COS 110 | Program Design: Introduction | Par IT.2, IT.3 | 16 |
| COS 283 | Netcentric Computing | COS 110 or LP | 12 |
| COS 284 | Computer Architecture | COS 110 or LP | 12 |
| EKN 110 | Economics and | | 10 |
| EKN 120 | Economics | EKN 110 GS | 10 |
| | or | | |
| OBS 110 | Business Management and | | 10 |
| OBS 120 | Business Management | OBS 110 GS | 10 |
| | or | | |
| OBS 113 | Entrepreneurship and | | 10 |
| OBS 123 | Entrepreneurship | OBS 110, 113 GS or LP | 10 |
| FRK 151 | Financial Accounting | Par IT.3 | 5 |
| FRK 152 | Financial Accounting | FRK 151, Par IT.3 | 5 |
| FRK 181 | Financial Accounting | Par IT.3, FRK 151 | 3 |
| FRK 121 | Financial Accounting | FRK 151, 152 GS | 11 |
| INF 153 | Informatics | Par IT.3 | 5 |

| Code | Module | Prerequisites | Credits |
|---------|------------------------|---------------|---------|
| INF 163 | Informatics | INF 153 GS | 5 |
| INL 111 | Information Science | | 6 |
| INL 112 | Information Science | | 6 |
| STK 110 | Statistics | Par IT.3 | 13 |
| STK 120 | Statistics | Par IT.3 | 13 |
| WTW 115 | Discrete Structures | Par IT.3 | 8 |
| WTW 152 | Mathematical Modelling | Par IT.3 | 8 |

(b) Second year of study (minimum 132 credits)

| Code | Module | Prerequisites | Credits |
|---------|--------------------------------|--|---------|
| COS 212 | Data Structures and Algorithms | COS 110 or LP | 12 |
| COS 213 | Advanced Programming | COS 212 | 12 |
| FIL 151 | Philosophy | | 6 |
| FIL 153 | Philosophy | | 6 |
| COS 222 | Operating Systems | COS 110 or LP | 12 |
| INF 214 | Informatics | CIL 171, 172, 173, 174 | 14 |
| INF 271 | Informatics | CIL 171, 172, 173, & 174, INF 163, Par IT.3 | 14 |
| INF 272 | Informatics | CIL 171, 172, 173, & 174, INF 164 | 14 |
| INL 211 | Information Science | CIL 174 | 10 |
| INL 212 | Information Science | INL 211 | 10 |
| INL 221 | Information Science | | 10 |
| WTW 285 | Discrete Structures | WTW 115 | 12 |

(c) Third year of study (minimum 178 credits)

| Code | Module | Prerequisites | Credits |
|-----------|-----------------------------|---|---------|
| BER 410 | Business Law | | 12 |
| COS 301 | Software Engineering | COS 213 or LP | 18 |
| or | | | |
| INF 370 | Information Systems Project | INF 261, 262, 271, 272, Par IT.3 or LP | 30 |
| COS 332 | Computer Networks | COS 213 or LP | 18 |
| or | | | |
| INF 314 | Informatics | INF 261, 262, 271, 272 or LP | 15 |

| Code | Module | Prerequisites | Credits |
|---------------------------------------|----------------------------------|------------------------------|---------|
| INF 324 | Informatics | INF 261, 262, 271, 272 or LP | 15 |
| INL 311 | Information Science | | 15 |
| INL 321 | Information Science | | 15 |
| INY 271 | Advanced Marked-up Language (1) | | 10 |
| INY 272 | Advanced Marked-up Language (2) | | 10 |
| INY 311 | Multimedia | | 15 |
| At least two of the following: | | | |
| FIL 251 | Philosophy | | 10 |
| FIL 253 | Philosophy | | 10 |
| FIL 254 | Philosophy | | 10 |
| At least two of the following: | | | |
| COS 343 | Trends in Information Technology | COS 110 or LP | 18 |
| COS 314 | Artificial Intelligence | COS 213, WTW 128 or LP | 18 |
| COS 333 | Programming Languages | COS 110 or LP | 18 |
| COS 341 | Compiler Construction | COS 212 or LP | 18 |
| COS 344 | Computer Graphics | COS 213, WTW 126 or LP | 18 |
| INF 354 | Informatics | INF 261, 262, 271, 272 | 15 |

(d) Fourth year of study (minimum 160 credits)

| Code | Module | Prerequisites | Credits |
|---|--|---------------|---------|
| SIT 700 | Industry-based learning | | 80 |
| Four modules (minimum 80 credits) from the following, of which at most 2 may be from a particular discipline: | | | 80 |
| Information Science | | | |
| INY 772 | Information Management | | 32 |
| INY 773 | Information Retrieval and Organisation | | 32 |
| INY 774 | Multimedia | | 32 |
| INY 775 | Information Philosophy, Law and Ethics | | 32 |
| Informatics | | | |
| INF 782 | Electronic Business | | 20 |
| INF 785 | Advanced Data Base Systems | | 20 |

| Code | Module | Prerequisites | Credits |
|-------------------------|--------------------------------------|---------------|---------|
| INF 787 | Management of Projects and End Users | | 20 |
| INF 788 | Development and Information Systems | | 20 |
| INF 789 | Information Systems Implementation | | 20 |
| INF 790 | Electronic Business Applications | | 20 |
| INF 791 | Knowledge Acquisition and Sharing | | 20 |
| Computer Science | | | |
| GRF 780 | Graphics | | 20 |
| KMI 780 | Artificial Intelligence | | 20 |
| PIN 780 | Software Engineering | | 20 |
| PGT 780 | Theory of Programming Languages | | 20 |
| FAC 751 | Formal Aspects of Programming | | 20 |
| RNW 780 | Networks | | 20 |
| VRS 780 | Distributed Computer Systems | | 20 |

(e) Requirements for promotion to the following year of study

Also consult General Regulations.

- (i) A student is promoted to the following year of study after obtaining the required credits as mentioned below:
- Second year of study after obtaining at least 50% of the credits of the first year of study.
 - Third year of study after obtaining at least 50% of the credits of the second year of study.
 - Fourth year of study after obtaining at least 50% of credits of the third year of study.
- (ii) The degree is conferred when all prescribed modules have been passed.

| | |
|--------------|--|
| IT.14 | INFORMATION TECHNOLOGY SPECIAL (Code: 02180004) |
|--------------|--|

(a) Admission requirements

Candidates in possession of the following qualifications will be admitted to this programme:

Grade 12 certificate with university endorsement

and

at least 40% for Mathematics at higher grade or at least 50% for Mathematics at standard grade.

A candidate who does not comply with the requirements may do an admissions test and will be considered on the grounds of the results.

The Dean may, in conjunction with the Chairperson of the School of Information Technology, consider admission to this programme on account of extraordinary circumstances.

(b) Duration of this bridging year

The minimum duration is one-year full-time study (103 credits).

(c) Year of study (minimum 103 credits)

Fundamental modules (University requirements- 24 credits)

| Code | Module | Prerequisites | Credits |
|---|-----------------------------------|---------------|---------|
| Passing of an exemption examination on computer literacy or | | | |
| CIL 171 | Computer and Information Literacy | | 3 |
| CIL 172 | Computer and Information Literacy | | 3 |
| CIL 173 | Computer and Information Literacy | | 3 |
| CIL 174 | Computer and Information Literacy | | 3 |

| Code | Module | Prerequisites | Credits |
|--|----------------------|---------------|---------|
| Passing of an exemption examination or | | | |
| EOT 151 | Language Proficiency | | 3 |
| EOT 152 | Language Proficiency | | 3 |
| EOT 153 | Language Proficiency | | 3 |
| EOT 154 | Language Proficiency | | 3 |

Core modules (minimum 79 credits)

| Code | Module | Prerequisites | Credits |
|---------|---------------------------------|--|---------|
| COS 151 | Computers and Algorithms: Intro | | 8 |
| COS 160 | Bridging Module | | 8 |
| INF 153 | Informatics | Mathematics HG (D), SG (C) or Mathematics HG (E), SG (D) & Computer Studies HG (C), SG (B) or LP | 5 |
| INF 163 | Informatics | INF 153 GS | 5 |
| INL 111 | Information Science | - | 6 |
| INL 112 | Information Science | - | 6 |
| KOB 181 | Communication Management | - | 5 |
| OBS 110 | Business Management | - | 10 |
| OBS 120 | Business Management | OBS 110 GS | 10 |

| Code | Module | Prerequisites | Credits |
|--------------------------|-------------|-------------------------------|---------|
| WTW 101 or WTW 114 | Mathematics | Mathematics HG (E), SG (D) | 16 |
| | Calculus | Mathematics HG (D) | 16 |

POSTGRADUATE PROGRAMMES IN INFORMATION TECHNOLOGY

IT.15 **MASTER OF INFORMATION TECHNOLOGY (Coursework)** (Code 02250082)

This degree programme is only offered in English.

(a) Admission

- (i) Subject to the stipulations of Gen. Reg. G.1.3, G.30 and G.62, an appropriate bachelor's degree or an equivalent qualification is a requirement for admission.
- (ii) A pass mark in Mathematics at grade 12 (matriculation) level or another qualification in Mathematics, Statistics or Mathematical Statistics, which the Chairperson of the School considers to be sufficient.
- (iii) Sufficient appropriate practical experience in the opinion of the Chairperson of the School.
- (iv) The Chairperson of the School may impose additional requirements for admission. In particular, this will apply to candidates with insufficient academic background in Information Technology.
- (v) Selection of candidates will take place.

(b) Duration

A minimum of two years part-time study.

(c) Conferment of the degree

The Master's degree in Information Technology is conferred on a student who successfully completes 240 credits.

| | |
|----------------------------------|-------------|
| Mini-dissertation | 60 credits |
| Core modules | 80 credits |
| Fundamental and elective modules | 100 credits |

(d) Pass requirements

At least 50% has to be obtained in the mini-dissertation as well as in the prescribed course work.

(e) Degree with distinction

The degree is conferred with distinction on students who has a weighted average final mark of at least 75%.

(f) Curriculum

The curriculum is determined in consultation with the programme coordinator.

| |
|---|
| IT.16 DOCTOR OF PHILOSOPHY IN INFORMATION TECHNOLOGY (Code 02260593) |
|---|

Also consult General Regulations G.45 to G.62.

- (a)** Subject to the stipulations of Regulations G.45 and G.62, no candidate is admitted to doctoral studies unless he/she holds an appropriate Master's degree.
- (b)** Unless the Dean, on the recommendation of the Chairperson of the School, decides otherwise, the PhD degree is conferred on the basis of a thesis and an examination on the thesis.
- (c)** Unless the Dean, on the recommendation of the Chairperson of the School, decides otherwise, a student shall submit at least one draft article to a recognised journal for publication, before or concurrent with the submission of the thesis. The draft article must be based on the research undertaken for the thesis and must be acceptable to the supervisor.
- (d)** The student must provide proof by means of his or her work, thesis and examination of advanced original research and/or creative work which makes a real and substantial contribution to the relevant field of research.

| |
|---|
| IT.17 CURRICULUM FOR BCOM WITH SPECIALIZATION IN INFORMATICS (Code 07130172) |
|---|

The Faculty of Economic and Management Sciences confer this degree.

Programme manager:

Prof C de Villiers, Education and Law Building, Room 5-78, Tel: (012) 420 3085, e-mail: cdevill@hakuna.up.ac.za

This programme is defined as the application of modern information systems in organisations, both private and public. The student will have a graduate-level knowledge of the analysis, design and implementation of information systems, databases, operating systems, networks and information management. In addition, the student will have the competence to develop a complete information system to support organisational functions. The holder of this qualification has the skills to advise organisations in empowering and enhancing the quality of work life of the individual workers through the application of information technology.

Total credits required : 461

| | Year Level 1 | | Year Level 2 | | Year Level 3 | |
|---------------------|--------------|------------|--------------|------------|--------------|------------|
| | Number | Credits | Number | Credits | Number | Credits |
| Fundamental modules | 8 | 24 | 1 | 10 | 0 | 0 |
| Core modules | 20 | 100 | 16 | 88 | 10 | 75 |
| Elective modules | 4 | 20 | 8 | 64 | 8 | 80 |
| Total | 32 | 144 | 25 | 162 | 18 | 155 |

NB: To calculate the total number of prescribed modules, a weight of one (1) is allocated to a 7-week module, two (2) to a 14-week module and four (4) to a 28-week module.

Curriculum

| YEAR LEVEL | | 1 | 2 | 3 |
|---|-------------------------------------|---|-------------------------|--------------------------|
| Fundamental modules (Compulsory) | | | | |
| CIL | Computer and Information Literacy * | 171, 173, 172, 174 | | |
| EOT | Language Proficiency § | 151, 153, 152, 154 | | |
| BPE | Business Ethics | | 251 | |
| Core modules (Compulsory) | | | | |
| INF | Informatics ^{(1); (2)} | 112, 163, 153, 164, 154 | 214, 261, 262, 271, 272 | 314, 324, 370, 354 |
| FRK | Financial Accounting ⁽³⁾ | 151 *, 121, 152, 181 ⁽⁴⁾ , or 100 ⁽⁵⁾ , or 101 ⁽⁵⁾ | | |
| EKN | Economics | 110, 120 | | |
| BER | Business Law | | 210, 220 | |
| STK | Statistics | 110, 120 | | |
| KOB | Communication Management | 184 | | |
| Elective modules | | | | |
| OBS | Business Management | 110, 120 | 210, 220 | 310 ⁽⁷⁾ , 320 |
| EKN | Economics | | 251, 220, 252 | 310, 320 |
| FRK | Financial Accounting ⁽⁶⁾ | 200 | 300 | |
| STK | Statistics | | 210, 220 | 310, 320 |
| ODT | Auditing ⁽⁶⁾ | | | 200, 301 |
| BEL | Taxation ⁽⁶⁾ | | | 300 |

| YEAR LEVEL | | 1 | 2 | 3 |
|------------|--|-----------------------|--|--|
| KOB | Communication Management | | 251, 261, 252, 262 | 351, 361, 352, 362 |
| FBS | Financial Management ⁽⁶⁾ | | | 200, 300 |
| BEM | Marketing Management | 110, 161, 162 | 251, 261, 252, 262 | 351, 361, 352, 362 |
| BDO | Industrial and Organizational Psychology | 110, 120 | 219, 229, 271, 272 | 319 ⁽⁷⁾ , 329 ⁽⁷⁾ , 371, 372 |
| PAD | Public Administration | 151, 161, 152, 162 | 251, 261, 252, 262 | 351, 361, 352, 362 |
| OBS | Entrepreneurship | 113, 123 | 213, 223 | 313, 323 |
| COS | Computer Science | | 212 ⁽⁸⁾ , 213 ⁽⁸⁾ , 283 ⁽⁸⁾ , 284 ⁽⁸⁾ | 314, 333, 341, 343 |
| INL | Information Science | | 211, 221, 212 and at least one of INY 221, 222, 223 | 311 and at least one of INY 311, 312, INL 321 and at least one of INY 322, 323, 324 |

Elective modules can only be taken if they can be accommodated in the class, test and examination timetables.

Note:See Regulation C.2 for prerequisites of all modules.

- ★ Exemption will be awarded if an exemption test is passed.
- § Exemption from the four Language Skills modules EOT 151, 152, 153 and 154 will be awarded if the compulsory assessment test is passed.
- (1) Only candidates who meet the entrance requirements for the compulsory modules Informatics 153, 154, 163, 164, and 271, 272 i.e. a minimum of 50% in Mathematics (higher grade) or 60% in Mathematics (standard grade) in Grade 12 will be admitted to the BCom degree with specialization in Informatics. Admission to the BCom degree with specialization in Informatics can also be obtained by complying with the requirements as set out in Reg 1.2(m) of the section **Requirements for specific modules**, in which case the Dean, on recommendation of the head of department, may allow a student to register simultaneously for Informatics 153, 154, 163, 164 and 271, 272.
- (2) In addition to the provisions of the footnote ⁽¹⁾ above, candidates who have passed Grade 12 Mathematics with at least 40% (higher grade) or 50% (standard grade) and have passed Informatics 151 and 152, may, if their academic performance merits it, be allowed by the Dean, on recommendation of the head of the department, to register for the BCom degree programme with specialization in Informatics, and to register simultaneously for Informatics 153, 154, 163, 164, 271, 272.

- (3) See Reg 1.2 (d).
- (4) FRK 181 is a 14-week module that is offered in the first as well as the second semester. Credit for any of FRK 151, 152 and 121 will only be awarded if FRK 181 has been passed.
- (5) See Reg 1.2 (e).
- (6) Can only be taken if FRK 100 or 101 has been passed.
- (7) OBS 310 and BDO 319, 329 may not be included in the same curriculum.
- (8) Students must take COS 110 as an extra module in their first year to be able to take this elective. Students must also comply with the regulations and prerequisites for Computer Science as stipulated in the yearbook of the Faculty of Engineering, Built Environment and Information technology.

Specialization modules: INF 314, 324, 370 and 354.

I. HONOURS, MASTER’S AND PHD DEGREES IN BCOM (INFORMATICS)

Please contact the Faculty of Economic and Management Sciences.

DEGREE PROGRAMMES IN INFORMATION SCIENCE (BIS)

Programme manager:

Prof TJD Bothma, HSB 17-15, Tel: (012) 420 2293, e-mail: tbothma@postino.up.ac.za

Degree with distinction

The BIS degrees are conferred with distinction on a student who obtains an average of at least 75% in all the core and elective final-year modules.

**IT.18.1 BIS with specialization in LIBRARY SCIENCE
(Code 12131003)**

The increasing amount of information available and growing information needs have necessitated trained information intermediaries to facilitate the bringing together of users and their required information. Students are trained as information intermediaries to gather, organise and make information available for use in various environments.

Admission requirements

A grade 12-certificate with university exemption; **and**

- at least 50% at higher grade in Afrikaans or English or an African language; **and**
- an M-score of 12.

Package organiser:

Prof I Fourie, HSB 17-25, Tel: (012) 420 5216, e-mail: fouriei@postino.up.ac.za

| Minimum credits required: 443 | Yr-level 1 | Yr-level 2 | Yr-level 3 | Total |
|--------------------------------------|-------------------|-------------------|-------------------|--------------|
| Fundamental modules | 36 | 0 | 0 | 36 |
| Core modules | 68 | 112 | 135 | 315 |
| Elective modules | 20* | 32* | 40* | 92* |
| Total | 124 | 144 | 175 | 443* |

- at least 50% in Mathematics at higher grade; **or** 60% in Mathematics at standard grade; **or** an average of 60% in Statistics 110 and 120 **or** STK 113, STK 123 and STK 120 (two first-year modules).

Package organiser:

Mrs M Holmner, HSB 17-24, Tel: (012) 420 5215, e-mail: mholmner@postino.up.ac.za

| Minimum credits required: 390 | Yr-level 1 | Yr-level 2 | Yr-level 3 | Total |
|-------------------------------|------------|------------|------------|-------|
| Fundamental modules | 36 | 0 | 0 | 36 |
| Core modules | 74 | 128 | 60 | 262 |
| Elective modules | 20* | 32* | 40* | 92* |
| Total | 130 | 160 | 100 | 390* |

Note:

- * Because credits are not calculated in the same way in all faculties, students should take note that the total amount of credits required for this package must be at least 390. Total credits may be more depending on the choice of elective modules.

| Curriculum | Module codes |
|-----------------------------------|---|
| Fundamental modules | |
| Computer and Information Literacy | CIL 171,172,173,174 |
| Academic Skills | EAG 151 |
| Language Proficiency | EOT 151,152,153,154 |
| Research | RES 151 |
| Core modules | |
| Information Science | INL 111,112,121, 122 211,212,221 311,321 Select one module on year-level 2, and one module on year-level 3: |
| Information Science | INY 221,223,224 311,312,318 Select another module on year-level 3 |
| Information Science | INY 323,324,329 |
| Informatics ¹ | INF 112,153,154 163,164 214,261,262, 271,272 Select any one of the following subjects up to year-level 2: |
| Economics ¹ | EKN 110,120 251,252,220 |
| or | or |
| Business Management ¹ | OBS 110,120 210,220 |
| or | or |
| Entrepreneurship ¹ | OBS 113,123 213,223 |

| Curriculum | Module codes |
|------------------------------------|---|
| Elective modules** | Select 12 modules from the following choosing at least four modules on year -level 3 in consultation with the package organiser:** |
| Economics ¹ ^ | EKN 310,320~ |
| Business Management ¹ ^ | OBS 310,320~ |
| or | or |
| Entrepreneurship ¹ ^ | OBS 313,323~ |
| Informatics ¹ | INF 314,324,354, 370 |
| Computer Science ² | COS Select modules in consultation with specific dept.** |
| Public Administration ¹ | PAD Select modules in consultation with specific dept.** |
| Geography | GGY Select modules in consultation with specific dept.** |
| International Relations | IPL Select modules in consultation with specific dept.** |
| Psychology | SLK Select modules in consultation with specific dept.** |
| Sociology | SOC Select modules in consultation with specific dept.** |
| Political Science | STL Select modules in consultation with specific dept.** |

Note:

¹ See *Regulations and Syllabi: Faculty of Economic and Management Sciences* for credits, prerequisites and presentation of these modules.

² Credits, prerequisites and presentation of these COS modules – see *Syllabi* for modules.

^ Selecting Economics, Business Management or Entrepreneurship on 3rd year-level is subject to the choice made on year-level 1 and 2.

~ A semester module = 14 weeks

**Elective modules should preferably be selected as follows:

- > At least four modules per subject on year-level 1;
- > At least four modules per subject on year-level 2 (continuing with the subject taken on year-level 1);
- > At least four modules per subject on year-level 3 (continuing with the subject taken on year-level 2);
- > In consultation with the specific department and in accordance with their requirements.

**IT.18.3 BIS with specialization in MULTIMEDIA
(Code 12131005)**

Modern information technology offers the possibility of information products being designed and created comprising various types of media over and above the traditional text medium. Information technology is thus converging various previously separate traditional media. There is not a single discipline that handles the combination of information products. The Multimedia qualification in the Department of Information Science addresses this shortcoming. Any type of institution in all economic spheres, including government, may profit from a multimedia approach to information design, organization and retrieval.

Multimedia documents include text, graphics, sound, video and animation. The purpose of this qualification is to enable students to understand the necessary concepts to build multimedia products and maintain the products. This programme is therefore a combination of theory and practice.

The explosion of the Web, as well as the exponential growth and power of information technology requires the introduction of this degree following international trends. The qualification is a new field of study not offered at other local universities.

Admission requirements

A grade 12-certificate with university exemption; **and**

- at least 50% at higher grade in Afrikaans or English or an African language; and
- an M-score of 14; **and**
- at least 50% in Mathematics at higher grade **and**
- at least 50% in Computer Studies at higher grade; or at least 50% in COS 160 (a first-year module).

Package organiser:

Prof TJD Bothma, HSB 17-14, Tel: (012) 420 2961, e-mail: tbothma@postino.up.ac.za

| Minimum credits required: 541 | Yr-level 1 | Yr-level 2 | Yr-level 3 | Total |
|-------------------------------|------------|------------|------------|-------|
| Fundamental modules | 12 | 0 | 0 | 12 |
| Core modules | 152 | 148 | 93 | 393 |
| Elective modules | 24 | 40 | 72 | 136 |
| Total | 188 | 188 | 165 | 541* |

Note:

* Because credits are not calculated in the same way in all faculties, students should take note that the total amount of credits required for this package must be at least 541.

| Curriculum | Module codes |
|------------------------------------|---|
| Fundamental modules | |
| Computer and Information Literacy+ | CIL+ 171,172,173,174 |
| Academic Skills | EAG 151 |
| Language Proficiency+ | EOT+ 151,152,153,154 |
| Research | RES 151 |
| Core modules | |
| Computer Science ^d | COS 110,151,283 212,213,222, 284 223 301 |
| Information Science | INL 111,112,121, 122 |
| Information Science | INY 171,172 215,216,225, 226,271,272 300,316,315, 325,326 |
| Visual Design | VIO 102* 202* |
| Visual Communication | VKK 153,155,156, 157 |

| Curriculum | Module codes |
|---|---|
| Business Management ² or Entrepreneurship ² | OBS 110,120 or OBS 113,123 |
| Elective modules Afrikaans, English, German, French, African Languages Also see the alphabetical list at the back of yearbook of the <i>Faculty of Humanities</i> when selecting the language modules. Computer Science ¹ | <p>➤ Select four modules on year-level 1 from one of the language groups 2-12. ∇</p> <p>➤ Select four modules on year-level 2 from the same language group selected on year-level 1 or two of the abovementioned language modules and two Document Design modules LCC 251 and LCC 351.∇#</p> <p>Select 4 modules from the following: COS 314,332,333, 341,343,344, 389</p> |

Note:

+ It is expected of all admitted BIS Multimedia students to perform satisfactorily in the University's Computer Literacy and Language Proficiency tests and thus obtaining exemption from the Computer Literacy and Language Proficiency modules. However, if a student does not perform satisfactorily in the test, the student must take the proposed CIL and EOT modules, but no extra credits are obtained.

¹ Credits, prerequisites and presentation appear in the list of COS modules – see list in Syllabi for Modules.

² See *Regulations and Syllabi: Faculty of Economic and Management Sciences* for credits, prerequisites and presentation of these modules.

∇ Language groups for each year-level appear in the yearbook of the *Faculty of Humanities*.

These four modules can be selected as follows:

- four language modules from the same language group selected on year-level 1; or
- two language modules from the same language group selected on year-level 1 and the two Document Design modules LCC 251 and LCC 351.

| |
|--|
| IT.18.4 BIS with specialization in PUBLISHING (Code 12131006) |
|--|

This package contextualises the South African publishing industry, with specific application to book publishing and corporate publishing. The objectives are to equip students with background knowledge on the industry, role-players and trends as well as with specific skills linked to the publishing value-chain. These skills include: the commissioning of manuscripts aimed at specific markets; the management of the design, reproduction and printing phase; copy-editing and proofreading; financial and marketing management. Students are enabled to act as responsible information intermediaries who can add value to publications during the various phases of the publishing process.

Admission requirements

A grade 12-certificate with university exemption; **and**

- at least 60% at higher grade in Afrikaans or English or an African language; **and**
- an M-score of 12.

Package organiser:

Prof TJD Bothma, HSB 17-15, Tel: (012) 420 2293, e-mail: tbothma@postino.up.ac.za

| Minimum credits required: 441 | Yr-level 1 | Yr-level 2 | Yr-level 3 | Total |
|--------------------------------------|-------------------|-------------------|-------------------|--------------|
| Fundamental modules | 30 | 0 | 0 | 30 |
| Core modules | 80 | 117 | 90 | 287 |
| Elective modules | 24 | 40 | 60 | 124 |
| Total | 134 | 157 | 150 | 441* |

Note:

* Because credits are not calculated in the same way in all faculties, students should take note that the total amount of credits required for this package must be at least 441.

| Curriculum | Module codes | | | |
|---------------------------------------|---------------------|-------------------------|---------------------|-----------------|
| Fundamental modules | | | | |
| Computer and Information Literacy | CIL | 171,172,173,174 | | |
| Academic Skills | EAG | 151 | | |
| Research | RES | 151 | | |
| English | ENG | 158 | | |
| Language Proficiency+ | EOT+ | 151,152,153,154 | | |
| Core modules | | | | |
| Library Science | BIB | 111,121 | | |
| Information Science | INL | 111,112,121, | 211,221 | 311,321 |
| Information Science (Publishing) | INY | 122 | 213,222,214 | 322,319, 320 |
| Document Design | LCC | | 251 | 351 |
| Communication Management ¹ | KOB | | 251,252,261, 262 | |
| Visual Communication | VKK | 153,155,156, 157,158 | 255,256,257, 258 | |
| Marketing ¹ | BEM | 110,161,162 | | |
| or | or | | | |
| Business Management ¹ | OBS | 110,120 | | |
| or | or | | | |
| Entrepreneurship ¹ | OBS | 113,123 | | |

| | |
|---|--|
| <p>Elective modules</p> <p>Language groups: Afrikaans, English, German, French, African languages# *</p> | <ul style="list-style-type: none"> ➤ Select four modules on year-level 1 from one of the following language module groups: 2-12. ➤ Select four modules on year-level 2 from the language module group selected on year-level 1. ➤ Select four modules on year-level 3 from the language module group selected on year-level 1 |
| <p>Note the selection of modules if English# is selected as language</p> | <p>Year-level 1 ENG 151,152,153,154 Year-level 2 ENG 251,252,253,254 Year-level 3 Select at least four of the following year-level 3 modules:</p> <ul style="list-style-type: none"> ➤ Any four year-level 3 ENG modules (ENG 358 and ENG 359 are strongly recommended ^) <p>OR</p> <ul style="list-style-type: none"> ➤ Any two year-level 3 ENG modules (ENG 358 and ENG 359 are strongly recommended ^), and select another two of the following year-level 3 modules: JRN 351<, JRN 352<, TRL 351 or TRL 352. |
| <p>Note the following if you select Afrikaans#:</p> | <p>Year-level 1 Any four AFR or LCC modules on year-level 1 (See alphabetical list at the back of Yearbook) Year-level 2 Any four AFR or LCC modules on year-level 2 (See alphabetical list at the back of Yearbook) Year-level 3 AFR 358 is compulsory. Select any other three modules of the following: AFR, LCC, JRN or TRL.</p> |
| <p>Note the following if you select an African language#</p> | <p>AFT 361 is compulsory on year-level 3.</p> |

Note:

+ It is expected of all admitted BIS Publishing students to perform satisfactorily in the University's Language Proficiency test and thus obtaining exemption from the Language Proficiency modules. However, if a student does not perform satisfactorily in the test, the student must take the proposed EOT modules, but no extra credits are obtained.

- # 1 See also the alphabetical list at the back of the yearbook of the *Faculty of Humanities* for the selection of the Language modules.
- 2 Students who wish to continue with their Language Studies at postgraduate level, should consult the specific department for the selection of their modules and should possibly select additional modules.
- 3 If you are interested in Translation TRL 151, TRL 251, TRL 351 and TRL 352 can be taken additionally. Consult the package organiser in this regard. Take note that TRL 351 and TRL 352 require TRL 251; and TRL 251 requires TRL 151.

- ^ ENG 358 and ENG 359 require an average of 65% for year-level 2 language modules or a entry test which can be taken at the end of November. These two modules are strongly recommended.
- < JRN 351 requires a minimum of 64 credits in AFR, ENG or LCC year-level 2 modules; and JRN 352 requires JRN 351.

| |
|--|
| IT.18.5 BIS with specialization in INFORMATION AND KNOWLEDGE MANAGEMENT (Code 12131007) |
|--|

The information and knowledge-based economy has brought about radical changes in the job market. The purpose of this degree is to enable students to develop knowledge and skills in the management of one of the most important resources of enterprises, namely information and knowledge. Graduates will have knowledge and skills in the effective management of information and knowledge, will realise the importance of the integration of information content and information technology (IT), and will be able to implement in a professional way, information and knowledge management strategies in enterprises.

Applicable domains are government, community, business, education and SMME's. Graduates will be trained as information and knowledge managers, information consultants, information-system developers, systems analysts, e-commerce-specialists, information technologists and information specialists.

The degree has been developed in consultation with experts in industry and is based on three core subject fields, namely Information Science, Informatics and Entrepreneurship/Business management.

Admission requirements

A grade 12-certificate with university exemption; **and**

- at least 50% at higher grade in Afrikaans or English or an African language; **and**
- an M-score of 12; **and**
- at least 50% in Mathematics at higher grade; **or** 60% in Mathematics at standard grade; **or** an average of 60% in Statistics 110 and 120 **or** STK 113, STK 123 and STK 120 (two first-year modules).

Package organiser:

Prof MMM Snyman, HSB 17-12, Tel: (012) 420 2294, e-mail: msnyman@postino.up.ac.za

| Minimum credits required: 480 | Yr-level 1 | Yr-level 2 | Yr-level 3 | Total |
|-------------------------------|------------|------------|------------|-------|
| Fundamental modules | 36 | 0 | 0 | 36 |
| Core modules | 99 | 180 | 145 | 424 |
| Elective modules | 20* | 0 | 0 | 20* |
| Total | 155 | 180 | 145 | 480 |

Note:

- * Because credits are not calculated in the same way in all faculties, students should take note that the total amount of credits required for this package must be at least 480. Total credits may be more depending on the choice of elective modules.

| Curriculum | Module codes |
|--|---|
| Fundamental modules | |
| Computer literacy | CIL 171,172,173,174 |
| Academic skills | EAG 151 |
| Language Proficiency | EOT 151,152,153,154 |
| Research | RES 151 |
| Core modules | |
| Information Science | INL 111,112,121 211,212,221 311,321 |
| Information Science | INY 123 218,224,227 318,327,328 |
| Informatics ¹ | INF 112,153,154, 163,164 214,261,262, 271,272 324 |
| Business Management ¹ or Entrepreneurship ¹ | OBS 110,120 210,220 310,320 or OBS 113,123 213,223 313,323 |
| Communication Management ¹ | KOB 251,252,261, 262 |
| Financial accounting ¹ | FRK 151,152,121, 181 |
| Elective modules | Select any four modules from one subject on year-level 1* |

Note:

¹ See *Regulations and Syllabi: Faculty of Economic and Management Sciences* for credits, prerequisites and presentation of these modules.

* Elective modules must be selected in consultation with the package organiser. See also the alphabetical list at the back of the yearbook of the *Faculty of Humanities* for elective modules.

POSTGRADUATE PROGRAMMES IN INFORMATION SCIENCE

**IT.19 BACCALAUREUS INFORMATIONIS SCIENTIAE (HONORES),
BACCALAUREUS ARTIUM (HONORES) [BIS(Hons), BA(Hons)]**

Programme manager:

Prof TJD Bothma, HSB 17-14, Tel: (012) 420 2293, e-mail: tbothma@postino.up.ac.za

Admission requirements:

1. BIS specializing in Information Science, Library Science, Multimedia, or Publishing
2. Any equivalent first degree.

**IT.19.1 BIS(HONS) with specialization in LIBRARY SCIENCE
[BIS(Hons) Library Science] (Code 12240002)**

Package organiser:

Prof MMM Snyman, HSB 17-27, Tel: (012) 420 2294, e-mail: msnyman@postino.up.ac.za

Admission requirements:

BIS specializing in Library Science or equivalent first degree.

| | | | | | | | |
|--------------------------------------|----|----------|---|--------------------|----|------------------|---|
| Minimum credits required: 160 | | | | NQF Level 7 | | | |
| Fundamental modules | 96 | Research | 0 | Core modules | 64 | Elective modules | 0 |

| Curriculum | Modules | Credits |
|---------------------|--|---------|
| Fundamental modules | INY 771 Research Methodology | 32 |
| | BIY 776 Information services and users | 32 |
| | BIY 777 Management of information services | 32 |
| Core modules | Select any 2 of the following modules: | |
| | INY 772 Information management | 32 |
| | INY 773 Organisation and retrieval of information | 32 |
| | INY 775 Information philosophy, information ethics and information law | 32 |
| | INY 780 Informetrics | 32 |
| | INY 784 Introduction to information for development | 32 |

**IT.19.2 BIS(Hons) with specialization in INFORMATION SCIENCE
[BIS(Hons) Information Science] (Code 12240003)**

Package organiser:

Prof MMM Snyman, HSB 17-27, Tel: (012) 420 2294, e-mail: msnyman@postino.up.ac.za

Admission requirements:

BIS (Information Science) or equivalent degree.

| | | | | | | | |
|--------------------------------------|----|----------|---|--------------------|----|------------------|---|
| Minimum credits required: 160 | | | | NQF Level 7 | | | |
| Fundamental modules | 64 | Research | 0 | Core modules | 96 | Elective modules | 0 |

| Curriculum | Modules | Credits |
|---|---|---------|
| Fundamental modules | INY 771 Research Methodology | 32 |
| | INY 772 Information management | 32 |
| Core modules | Select any 3 of the following modules: | |
| | INY 773 Organisation and retrieval of Information | 32 |
| | INY 774 Multimedia | 32 |
| | INY 775 Information philosophy, information, ethics and information law | 32 |
| | INY 780 Informetrics | 32 |
| | INY 781 Competitive intelligence | 32 |
| | INY 782 Decision-making theory | 32 |
| | INY 783 Management of information centres | 32 |
| INY 784 Introduction to Information for development | 32 | |

| |
|---|
| IT.19.3 BIS(Hons) with specialization in MULTIMEDIA [BIS(Hons) Multimedia] (Code 12240004) |
|---|

Package organiser:

Prof TJD Bothma, HSB 17-14, Tel: (012) 420 2293, e-mail: tbothma@postino.up.ac.za

Admission requirements

BIS (Multimedia)

| Minimum credits required: 172 | | | | NQF Level 7 | | | |
|-------------------------------|----|----------|---|--------------|-----|------------------|---|
| Fundamental modules | 72 | Research | 0 | Core modules | 100 | Elective modules | 0 |

| Curriculum | Modules | Credits |
|---------------------|---|---------|
| Fundamental modules | INY 771 Research Methodology | 32 |
| | INY 761 Applied Multimedia | 40 |
| Core modules | IMY 751 Multimedia Trends | 25 |
| | Select any 3 of the following modules: | |
| | IMY 752 Hypermedia and Mark-up Languages | 25 |
| | IMY 753 Multimedia technology | 25 |
| | IMY 754 Virtual environments | 25 |
| | IMY 756 Multimedia training and education systems | 25 |
| | IMY 757 Animation theory and practice | 25 |
| | IMY 758 Music and sound technology | 25 |
| | IMY 759 Human-computer interaction | 25 |

**IT.19.4 BIS(Hons) with specialization in PUBLISHING
[BIS(Hons) Publishing] (Code 12240005)**

Package organiser:

Dr F Galloway, HSB 18-1, Tel: (012) 420 2426, e-mail: fgallow@postino.up.ac.za

Admission requirements

BIS (Publishing) with a minimum average of 65% on language year level 3, or any related package or equivalent degree.

| | | | | | | | |
|--------------------------------------|----|----------|---|--------------------|-----|------------------|---|
| Minimum credits required: 164 | | | | NQF Level 7 | | | |
| Fundamental modules | 32 | Research | 0 | Core modules | 132 | Elective modules | 0 |

| Curriculum | Modules | Credits | |
|--------------------|--|---------|--|
| Fundamental module | INY 771 Research Methodology | 32 | |
| Core modules | PUB 703 Design and production | 16 | |
| | PUB 704 Publishing management | 32 | |
| | PUB 709 Corporate publishing | 16 | |
| | PUB 713 The publishing environment | 32 | |
| | PUB 714 E-publishing | 16 | |
| | Select any one of the following modules* | | |
| | PUB 712 Electronic publishing (Advanced) | 20 | |
| | PUB 715 Advanced design and production | 20 | |
| | AFT 758 Advanced copy -editing African languages | 20 | |
| | AFR 767 Advanced copy -editing Afrikaans | 20 | |
| | ENG 777 Advanced copy -editing English | 20 | |
| | TRL 751 Literary translation | 20 | |
| | TRL 851 Translation theory and practice | 20 | |

Note: * Select in consultation with the package organiser.

**IT.20 BA(HONS) with specialization in INFORMATION SCIENCE FOR DEVELOPMENT
[BA(Hons) Information Science for Development] (Code 01240016) ***
*Registration for this degree programme is done on Level 6 of the Human Sciences Building.

Package organiser:

Prof MMM Snyman, HSB 17-12, Tel: (012) 420 2294, e-mail: msnyman@postino.up.ac.za

Admission requirements

BA degree with Information Science on third-year level.

| | | | | | | | |
|--------------------------------------|-----|----------|---|--------------------|----|------------------|---|
| Minimum credits required: 159 | | | | NQF Level 7 | | | |
| Fundamental modules | 127 | Research | 0 | Core modules | 32 | Elective modules | 0 |

| Curriculum | Modules | Credits |
|---------------------|--|---------|
| Fundamental modules | INY 771 Research Methodology | 32 |
| | INY 785 Information practice for development | 40 |
| | INY 786 ICT (Information and communication technology) for development | 40 |
| | GSO 751 Development theories | 15 |
| Core modules | Choose any 1 of the following modules: | |
| | INY 772 Information management | 32 |
| | INY 775 Information philosophy, information ethics and information law | 32 |
| | INY 776 Information services and users | 32 |
| | INY 783 Management of information centres | 32 |

| | |
|---------------|---|
| IT. 21 | MAGISTER INFORMATIONIS SCIENTIAE [MIS] MAGISTER ARTIUM [MA] (RESEARCH) |
|---------------|---|

Programme manager:

Prof TJD Bothma, HSB 17-14, Tel: (012) 420 2293, e-mail: tbothma@postino.up.ac.za

Admission requirements

For IT.21.1 – IT.21.4

BIS and BIS(Hons) specializing in any of the specific packages for:

1. Library Science
2. Information Science
3. Multimedia
4. Publishing
5. **or** any equivalent honours degree

For IT.21.5

An appropriate BA(Hons) or an appropriate B degree plus at least two years' work experience. In specific cases it may be required of candidates to complete additional preparatory work in order to achieve the required level of competence in the specific discipline.

**IT.21.1 MIS with specialization in LIBRARY SCIENCE (Research)
[M IS (Library Science)] (Code: 12254001)**

BIB 890 Dissertation: Library Science

IT.21.2 MIS with specialization in INFORMATION SCIENCE (Research)

[M IS (Information Science)] (Code 12254003)

INL 890 Dissertation: Information Science

IT.21.3 MIS with specialization in IN MULTIMEDIA (Research)

[M IS (Multimedia)] (Code 12254005)

IMY 890 Dissertation: Multimedia

IT.21.4 MIS with specialization in PUBLISHING (Research)

[M IS (Publishing)] (Code 12254007)

PUB 890 Dissertation: Publishing

IT.21.5 MA with specialization in DEVELOPMENT COMMUNICATION (Research)

[MA (Development Communication)] (Code 01252044)*

OKT 890 Dissertation: Development Communication

*Registration for this degree is done on Level 6 of the Human Sciences Building.

IT.22 MAGISTER INFORMATIONIS SCIENTIAE, MAGISTER ARTIUM [MIS, MA] (COURSEWORK)

Programme manager:

Prof TJD Bothma, HSB 17-14, Tel: (012) 420 2293, e-mail: tbothma@postino.up.ac.za

Admission requirements

- For IT.22.1 – IT.22.4 (see above, same as for Research IT.21.1 – IT.21.4);
- For IT.22.5 an appropriate BA(Hons) or an appropriate B degree plus at least two years' work experience. In specific cases it may be required of candidates to complete additional preparatory work in order to achieve the required level of competence in the specific discipline.

IT.22.1 MIS with specialization in LIBRARY SCIENCE (Coursework)

[MIS (Library Science)] (Code 12254002)

IT.22.2 MIS with specialization in INFORMATION SCIENCE (Coursework)

[MIS (Information Science)] (Code 12254004)

IT.22.3 MIS with specialization in MULTIMEDIA (Coursework)

[MIS (Multimedia)] (Code 12254006)

IT.22.4 MIS with s pecialization in PUBLISHING (Coursework)

[MIS (Publishing)] (Code 12254008)

IT.22.5 MA with s pecialization in DEVELOPMENT COMMUNICATION (Coursework)

[MA (Development Communication)] (Code 01252045)*

*Registration for this degree is done on Level 6 of the Human Sciences Building.

| Minimum credits required: 240 | | | | NQF Level 7 | | | |
|-------------------------------|---|----------|-----|--------------|-----|------------------|---|
| Fundamental modules | 0 | Research | 120 | Core modules | 120 | Elective modules | 0 |

The coursework for the curriculum is identified and compiled in consultation with industry, individual students and according to the student's research interest.

| Curriculum | Modules | Credits |
|---|---|---------|
| Select as applicable for your field of study | | |
| | Library Science | |
| Research | BIB 895 Mini-dissertation: Library Science | 120 |
| | Compulsory | |
| Core modules | BIB 804 Management of information services | 50 |
| | BIB 805 User studies | 30 |
| | And select any two modules from the following (20 credits each): | |
| | BIB 802 Knowledge management | 20 |
| | BIB 803 Information retrieval | 20 |
| | INL 803 Information ethics and information law | 20 |
| | INL 804 Information for development | 20 |
| | INL 806 Information society | 20 |
| | INL 809 Informetrics | 20 |
| | Information Science | |
| Research | INL 895 Mini-dissertation: Information Science | 120 |
| | Compulsory | |
| Core modules | INL 802 Information and knowledge management | 50 |
| | INL 812 Organisation and retrieval of information | 30 |
| | And select any two modules from the following (20 credits each): | |
| | INL 803 Information ethics and information law | 20 |
| | INL 804 Information for development | 20 |
| | INL 806 Information society | 20 |
| | INL 809 Informetrics | 20 |
| | INL 810 Competitive intelligence | 20 |
| | INL 811 Advanced decision-making theory | 20 |
| | INL 813 Management of information centres | 20 |
| | Multimedia | |
| Research | IMY 895 Mini-dissertation: Multimedia | 120 |
| Core modules | IMY 801 Multimedia (coursework): Course component | 120 |

| Curriculum | Modules | Credits |
|--------------------------|---|---------|
| Research Core modules | Publishing PUB 895 Mini-dissertation: Publishing | 120 |
| | PUB 801 Publishing (coursework): Course component | 120 |
| Research Core modules | Development Communication OKT 895 Mini-dissertation: Development Communication | 120 |
| | Compulsory OKT 880 Theory of Development Communication | 30 |
| | OKT 881 Management of Development Communication | 30 |
| | OKT 882 Practice of Development Communication | 30 |
| | OKT 883 Information centres and Development Communication | 30 |
| | | |

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|--|
| IT.23 DOCTOR PHILOSOPHIAE, PHILOSOPHIAE DOCTOR [D Phil, PhD] (RESEARCH) |
|--|

Programme manager:

Prof TJD Bothma, HSB 17-14, Tel: (012) 420 2293, e-mail: tbothma@postino.up.ac.za

Admission requirements

1. MIS (Library Science)
2. MIS (Information Science)
3. MIS (Multimedia)
4. MIS (Publishing)
5. MIS (Development Communication)
6. **or** an equivalent Master's degree

IT.23.1 DPHIL with specialization in LIBRARY SCIENCE**[DPhil Library Science] (Code 12264001)**

- BIB 990 Thesis: Library Science
BIB 900 Examination/justification of thesis

IT.23.2 DPHIL with specialization in INFORMATION SCIENCE**[DPhil Information Science] (Code 12264002)**

- INL 990 Thesis: Information Science
INL 900 Examination/justification of thesis

IT.23.3 PhD with specialization in PUBLISHING**[PhD: Publishing] (Code 12264001)**

- PUB 990 Thesis: Publishing
PUB 900 Examination/justification of thesis

DEPARTMENT OF COMPUTER SCIENCE

Admission requirements for the degree *Baccalaureus Scientiae (Computer Science)* (Code 12134000)

To obtain admission to this degree programme, a candidate should have obtained the following:

- a) at least 60% in Mathematics at higher grade in the final Grade 12 examinations; and
- b) a minimum M score of 18 in the final Grade 12 examinations; and
- c) at least 60% in Computer Studies at Higher Grade in the final Grade 12 examinations;

or

EPE111/COS130 (either in a previous year at the University or after attending the module presented during the Summer School).

or

Candidates who do not comply with the above requirements, but who have passed COS151 *and* COS160 in a prior year of study, will be considered for admission into the BSc(CS) programme. Such potential BSc(CS) candidates should therefore initially register for any other programme for which they qualify and ensure that they include the above two modules in their curriculum as well as any other BSc(CS) modules for which they qualify.

Degree with distinction

The BSc(CS) degree is conferred with distinction on a student who obtains a weighted average of at least 75% in third-year level modules required for the degree, provided that a subminimum of 65% is obtained in each of these modules and provided that the degree is completed in the prescribed minimum period of three years.

CURRICULA OF PROGRAMMES IN COMPUTER SCIENCE

IT.24 BACCALAUREUS SCIENTIAE [BSc(CS)](Code 12134000)

Curriculum

The curriculum of the BSc(CS) degree programme is outlined below. It comprises fundamental, core and elective modules in each year of study. The degree is awarded after a minimum of 443 credits has been obtained successfully. The following credit requirements apply to the different study-year levels:

Year-level 1:

| | |
|--------------------------|--|
| University requirements: | at least 12 credits |
| Fundamental modules: | 80 credits |
| Core modules: | at least 24 credits |
| Total: | at least 125 credits and at most 155 credits |

Year-level 2:

| | |
|----------------------|----------------------|
| Fundamental modules: | 74 credits |
| Core modules: | at least 40 credits |
| Total: | at least 114 credits |

Year-level 3:

| | |
|----------------------------|----------------------|
| Fundamental modules: | 90 credits |
| Core modules: | at least 24 credits |
| Elective modules | at least 30 credits |
| Total: | at least 144 credits |
| Enrichment modules: | 8 to 16 credits |

Notes:

- 1) In addition to complying with all the requirements specified at the different year-levels below, one or more *enrichment modules* to the value of between 8 and 16 credits must be taken at some stage during the degree programme. These modules may be chosen freely and constitute the enrichment credits. Such modules may, however, not be taken if presented by any department offering the modules mentioned below. Neither may such modules be presented by any other department in the Faculty of Engineering, Built Environment and Information Technology, nor by any other department in the Faculty of Economic and Management Sciences.
- 2) *Core modules* at each year-level are classified into coherent groups. In order to obtain credits for specified modules in a selected group, *all* modules in the group have to be passed. (For example, OBS110 and OBS120 should both be passed if their total of 20 credits is to contribute towards the 24-credit requirement for core modules at year – level 1.)
- 3) Any single core module may serve as an *elective* module. Therefore elective modules thus do not have to be passed as a group. (For example, OBS 110 may be passed on its own and contribute 10 credits towards the requirements for *elective* modules at year –level 1)
- 4) The code in the “Period” column in the tables below indicates when the module is *normally* presented. “Q” indicates Quarter, and “S” indicates Semester. In certain years, these times may change in certain departments.

First year of study (at least 128 credits and maximum of 155)**University requirements (at least 12 credits)**

| Code | Module | Prerequisite | Credits | Period |
|---------|-----------------------------------|--------------|---------|--------|
| CIL 171 | Computer and Information Literacy | | 3 | Q1 |
| CIL 172 | Computer and Information Literacy | | 3 | Q2 |
| CIL 173 | Computer and Information Literacy | | 3 | Q3 |
| CIL 174 | Computer and Information Literacy | | 3 | Q4 |

Credits for each of these respective modules may be obtained by passing the associated exemption test.

| Code | Module | Prerequisite | Credits | Period |
|---------|----------------------|--------------|---------|--------|
| EOT 151 | Language Proficiency | | 3 | Q1 |
| EOT 152 | Language Proficiency | | 3 | Q2 |
| EOT 153 | Language Proficiency | | 3 | Q3 |
| EOT 154 | Language Proficiency | | 3 | Q4 |

Only students who fail the entry examination in Language Proficiency may obtain credit for these modules.

Fundamental modules for year -level 1 (80 credits):

| Code | Module | Prerequisites | Credits | Period |
|---------|---------------------------------|---------------|---------|--------|
| COS 110 | Program Design: Introduction | | 16 | S1 |
| COS 151 | Computers and Algorithms: Intro | | 8 | S1 |
| COS 283 | Netcentric Computing | COS 110 or LP | 12 | S2 |
| COS 284 | Computer Architecture | COS 110 or LP | 12 | S2 |
| WTW 114 | Calculus | | 16 | S1 |
| WTW 115 | Discrete Structures | | 8 | S1 |
| WTW 126 | Linear Algebra | | 8 | S2 |

Core modules for year -level 1 (minimum of 24 credits):

A minimum of 24 credits from the following module groups should be selected:

| Code | Module | Prerequisite | Credits | Period |
|--------------------------|--|-------------------------------|----------------|------------------|
| FRK 100 or FRK 101 | Financial Accounting or Financial Accounting | D (HG) Grade 12 Accounting | 24 or 24 | Year Year |
| OBS 110 | Business Management | - | 10 | S1 |
| OBS 120 | Business Management | OBS 110 GS | 10 | S2 |
| OBS 113 OBS 123 | Entrepreneurship Entrepreneurship | - OBS 110, 113 GS or LP | 10 10 | S1 S2 |
| KOB 181 | Communications Management | - | 5 | Q1, 2 or 4 |
| INL 111 | Information Science | - | 6 | Q1 |
| INL 112 | Information Science | - | 6 | Q2 |
| WST 110 | Mathematical Statistics | | 16 | S1 |
| WST 120 | Mathematical Statistics | | 16 | S2 |
| WTW 123 | Numerical Analysis | | 8 | S2 |
| WTW 128 | Calculus | | 8 | S2 |
| WTW 152 | Mathematical Modelling | Par IT.3 | 8 | S1 |

Elective modules for year -level 1:

Credits from the following module groups may be taken at any year-level

| |
|---|
| 16 credits for COS 130, for candidates who are eligible to take this module |
| 16 credits for COS 160, for candidates who are eligible to take this module |
| Any modules at year -level 1 from Chemistry |
| Any modules at year -level 1 from Mathematics |
| Any modules at year -level 1 from Physics |

| Code | Module | Prerequisites | Credits | Period |
|---------|-----------------------------|---------------|---------|--------|
| FIL 153 | Critical thinking and logic | - | 6 | Q3 |
| FIL 155 | Science and world views | - | 6 | S1 |
| INF 153 | Informatics | Par IT.3 | 5 | S1 |
| INF 163 | Informatics | INF 153 GS | 5 | S2 |

Second year of study (at least 114 credits)**Fundamental modules for year-level 2 (74 credits):**

| Code | Module | Prerequisites | Credits | Period |
|---------|--------------------------------|--------------------------|---------|--------|
| COS 212 | Data Structures and Algorithms | COS 110 or LP | 12 | S1 |
| COS 213 | Advanced Programming | COS 212 | 12 | S2 |
| COS 222 | Operating Systems | COS 110 or LP | 12 | S1 |
| COS 223 | Concurrent Systems | COS 110 or LP | 12 | S2 |
| INF 214 | Informatics | CIL 171, 172 173, 174 | 14 | S1 |
| WTW 285 | Discrete Structures | WTW 115 | 12 | S2 |

Core modules for year -level 2 (minimum of 40 credits):

A minimum of 40 credits from the following module groups should be selected:

| Code | Module | Prerequisites | Credits | Period |
|---------------------------------|---|---|-----------------------|------------------|
| COS 289 | Introduction to Digital Systems | COS 110 and WTW 115 | 12 | S2 |
| INL 221 | Information Science | - | 10 | Q3 |
| INY 224 | Applied Information Ethics | - | 10 | Q4 |
| WTW 218 | Calculus | WTW 114 and WTW 128 | 12 | S1 |
| WTW 220 | Analysis | WTW 114 and WTW 128 | 12 | S2 |
| WTW 211 | Linear Algebra | WTW 126 or WTW 102 | 12 | S1 |
| WTW 221 | Linear Algebra | WTW 211 | 12 | S2 |
| FBS 200 or FRK 200 | Financial Management or Financial Accounting | FRK 100 or FRK 101 or FRK 100 or FRK 101 | 32 or 35 | Year Year |
| GGY 283 | Introductory GIS | - | 12 | Q1 |
| GIS 220 | Geographic data analysis | - | 12 | S2 |
| INF 271 | Informatics | CIL 171 to 174, INF 163 | 14 | Year |

Elective modules for year -level 2:**Choose from the following module groups according to credits required:**

| |
|--|
| Any modules at year-level 2 from Mathematics |
| Any modules at year-level 2 from Mathematical Statistics |
| Any modules at year-level 2 from Physics |

| Code | Module | Prerequisites | Credits | Period |
|---------|--------------------------------|------------------------|---------|--------|
| FIL 253 | Cognitive philosophy | - | 10 | Q3 |
| FIL 254 | Science and world views | - | 10 | Q4 |
| INL 211 | Information Science | CIL 174 | 10 | Q1 |
| INL 212 | Information Science | CIL 174 | 10 | Q2 |
| INY 271 | Advanced Mark-up Languages (1) | Departmental selection | 10 | S1 |
| INY 272 | Advanced Mark-up Languages (2) | Departmental selection | 10 | S2 |
| KOB 251 | Communication Management | - | 8 | Q1 |
| KOB 252 | Communication Management | - | 8 | Q2 |
| KOB 253 | Communication Management | - | 8 | Q3 |
| KOB 254 | Communication Management | - | 8 | Q4 |

Third year of study (minimum 144 credits)**Fundamental modules for year -level 3 (90 credits):**

| Code | Module | Prerequisites | Credits | Period |
|---|-------------------------|---|---------|--------|
| COS 301 | Software Engineering | COS 213 or LP | 18 | Year |
| At least four of the following semester modules: | | | | |
| Note: The semester in which these modules are offered may vary from year to year | | | | |
| COS 314 | Artificial Intelligence | COS 213 and WTW 128 or LP | 18 | S1 |
| COS 332 | Computer Networks | COS 213 or LP | 18 | S1 |
| COS 333 | Programming Languages | COS 110 or LP | 18 | S1 |
| COS 341 | Compiler Construction | COS 212 or LP | 18 | S1 |
| COS 343 | Trends in IT | COS 110 or LP | 18 | S2 |
| COS 344 | Computer Graphics | COS 213 and WTW 126 or LP | 18 | S2 |
| COS 389 | Microprocessor Systems | COS 289 or LP | 18 | S2 |
| COS 326 | Database Systems | INF 214 or LP | 18 | S2 |

Core modules for year-level 3 (minimum of 24 credits):

Modules for a minimum of 24 credits should be selected from the following module groups:

| Any two Computer Science modules not selected under the list of fundamental modules for year-level 3. | | | | |
|--|--------------------------------|---------------|---------|--------|
| Any module group of at least 36 credits at year-level 3 from Mathematics that includes WTW 385. | | | | |
| Code | Module | Prerequisites | Credits | Period |
| GIS 310 | Geographic Information Systems | GGY 283 | 24 | S1 |
| GIS 320 | Spatial Analysis | GIS 310 | 24 | S2 |
| Any three of the following modules: (Note : * Admission to these modules requires departmental selection.) | | | | |
| INY 315 | Advanced Multimedia | * | 15 | Q1 |
| INY 316 | Human-computer Interaction | * | 15 | Q2 |
| INY 325 | Interface Design | INY 316 | 15 | Q3 |
| INY 326 | Mark-up Languages | * | 15 | Q4 |

Elective modules for year-level 3:

Select modules for the remainder of credits from the following:

| Any additional modules at year-level 3 in Computer Science | | | | |
|---|---|---------------------------------|-----------------------|------------------|
| Any additional modules at year-level 3 in Mathematics | | | | |
| Any additional modules at year-level 3 Mathematical Statistics | | | | |
| Code | Module | Prerequisites | Credits | Period |
| INF 324 | Informatics | INF 271, 272, or LP | 15 | S2 |
| FRK 300 or FBS 300 | Financial Accounting or Financial Management | FRK 200 or FBS 200 | 42 or 40 | Year Year |
| At most three INL 3** / INY 3** modules selected from the INY 3** core modules and from the list below, provided that the INY3** modules have not been selected as specified modules. | | | | |
| INL311 | Information Science | - | 15 | Q1 |
| INL321 | Information Science | - | 15 | Q3 |
| INY311 | Multimedia | - | 15 | Q2 |
| INY312 | Information for Development | - | 15 | Q2 |
| INY323 | Information: Social-political Context | - | 15 | Q4 |

Requirements for promotion to the following year of study:

- i) A student is promoted to the next year of study after complying with the credit requirements mentioned below:
 - to the second year after obtaining half of the minimum number of credits required in the first year; and
 - to the third year after obtaining half of the minimum number of credits required in the second year.
- ii) The degree is awarded once a student complies with all credit requirements.

POSTGRADUATE PROGRAMMES IN COMPUTER SCIENCE

Details for postgraduate studies are available from the Head of the Department as well as in the School of Information Technology's information pamphlet, or consult the home page www.cs.up.ac.za.

IT.25 BACCALAUREUS SCIENTIAE HONORES IN COMPUTER SCIENCE [BSc(Hons)Computer Science] (Code12244000)

This degree programme is offered in English.

Also consult General Regulations G.16 to G.29

(a) Admission

Subject to the stipulations of General Regulations G.1.3, G.16 and G.62, an appropriate bachelor's degree, with at least half the credits being Computer Science module credits at 300 level, is required for admission. The Head of the Department may prescribe additional conditions for admission.

(b) Minimum duration of study period

A student is required to complete his/her studies within one year (full-time) or within two years (part-time). However, the Dean, on the recommendation of the Head of the Department, may approve a stipulated limited extension of this period.

(c) Pass requirements

In calculating marks, General Regulation G.12.2 is applicable. However, a student is required to obtain at least 50% in an examination in a module where no semester or year mark is required.

(d) Examinations

The Dean may, on the recommendation of the Admissions Committee, cancel the studies of a student who fails more than a module in one academic year. A module may only be repeated once. No supplementary examinations are granted at postgraduate level.

(e) Degree with distinction

The BSc(Hons) degree is awarded with distinction to a candidate who obtains a weighted average of at least 75% in all the prescribed modules and not less than 65% in any one of the prescribed modules.

(f) Conferment of degree

The degree is conferred on a student who successfully completes at least 160 credits of coursework in Computer Science at honours level.

| | |
|----------------------------------|---------------|
| Core modules | : 80 credits |
| Fundamental and elective modules | : 80 credits |
| Total | : 160 credits |

(g) Curriculum

The curriculum is determined in consultation with the Head of Department.

**IT.26 MAGISTER SCIENTIAE IN COMPUTER SCIENCE
[MSc(Computer Science)] (Research) (Code 12255000)**

Also consult General Regulations G.30 to G.62

(a) Admission

Subject to the stipulations of General Regulations G.1.3, G.30 and G.62, an appropriate BSc (Hons) or equivalent degree is required for admission. In addition, to be considered for admission, an average of 65% should have been obtained for the modules passed for the honours degree. The Dean, on the recommendation of the supervisor and the Head of the Department, may approve additional requirements and conditions.

(b) Conferment of degree

The MSc degree is conferred on grounds of a dissertation and such additional postgraduate coursework as may be prescribed. A student works under the guidance of a supervisor and is expected to identify and complete a research project. The research results are to be fully reported in an MSc dissertation.

(c) Degree with distinction

The MSc degree is conferred with distinction on candidates who obtain a final average mark of at least 75%. A minimum mark of 75% for the dissertation is required from each of the members of the examination panel. Should a member of the examination panel award a mark of less than 75% for the dissertation, that member should give a written indication of whether support for the conferment of the degree with distinction could be contemplated.

(d) Progress requirements

If the supervisor affirms that a candidate has progressed satisfactorily, registration may be renewed for the second year (full-time) or for the second to fourth year (part time). Re-registration thereafter will only take place if a written motivation from the candidate, supported by the Head of the Department is submitted to the Faculty Administration Offices.

(e) Duration

Consult General Regulation G32.4 regarding the maximum period of registration allowable.

(c) Curriculum

A student is required to demonstrate, by means of a dissertation, the ability to plan, institute and execute a scientific investigation. Unless decided otherwise by the Dean, on the recommendation of the Head of Department, a student shall submit at least one draft article, based on the research undertaken and approved by the supervisor, to a refereed journal or conference for publication, before or concurrent with the submission of the dissertation.

| | |
|--------------|--|
| IT.27 | PHILOSOPHIAE DOCTOR IN COMPUTER SCIENCE PhD(Computer Science) (Code 12266000) |
|--------------|--|

Also consult General Regulations G.45 to G.62

(a) Admission

Subject to the stipulations of General Regulations G1.3, G.45 and G.62, admission to doctoral studies requires that the candidate should have obtained at least 75% for a Master's degree in Computer Science.

(b) Curriculum

The Department offers a research-based PhD degree. The student works under guidance of a supervisor and is expected to identify and complete a research project. The research results are to be fully reported in a PhD thesis.

(c) Conferment of degree

Unless otherwise decided by the Dean, on the recommendation of the supervisor, the PhD(Computer Science) degree is awarded on the basis of a thesis and an examination on the thesis.

(d) Draft article

Unless decided otherwise by the Dean, on the recommendation of the Head of Department, a student shall submit at least one draft article, based on the research undertaken and approved by the supervisor, to a refereed journal or conference for publication, before or concurrent with the submission of the thesis.

(e) Pass requirements

The thesis and examination thereof should prove that the candidate has carried out advanced original research and/or creative work, which make a real and substantial contribution to the discipline of Computer Science.

IT. SYLLABI FOR THE SCHOOL OF INFORMATION TECHNOLOGY

This section comprises an alphabetical list of all the modules offered by the School of Information Technology as well as alphabetical lists of the modules offered by other faculties. The alphabetical lists are set out as follows:

- Column 1:** the module code, which consists of an alpha code (a combination of three capitals which indicate the discipline of the study field) and a numerical code (which indicates the year level and the position of the module in the series).
 - Column 2:** the department or discipline under which the module falls.
 - Column 3:** the credits that apply to the specific module.
 - Column 4:** the language of presentation (A = Afrikaans; E = English) and the number of **periods in the daytime timetable (07:30 to 17:20)** per week during which lectures and/or practicals for the specific module are presented.
 - Column 5:** the language of presentation (A = Afrikaans; E = English) and whether the module is presented within a flexilearn mode. **Note that not all modules are presented as flexilearning.** Flexilearn modules can be presented, for example, by means of contact tuition (lectures/practicals as arranged by the department), or as distance education via WebCT, or as paper-based distance education, or a combination of presentation modes. The flexilearn student has to consult with the department offering the specific flexilearn module before registration to make sure of the mode of presentation.
 - Column 6:** the term (first, second, third or fourth) in which the module is offered (in some cases a semester or a year module is indicated). **Note:** The quarter in which a module is offered is not indicated in the alpha code.
 - Column across:** the name and a short description of the content of the module.
- Abbreviations:** **lpw** = lectures per week
ppw = practicals per week
dpw = discussion classes per week
upw = hours per week
hpr = hours practical

IT. THE MODULES LISTED BELOW FALL UNDER THE SCHOOL FOR INFORMATION TECHNOLOGY

| Module - code | De partment | Credits | Fulltime | WebCT | Quarter Semester Year |
|--|---------------------|---------|-------------------|-------|-----------------------|
| BIB 111 | Information Science | 6 | A&E 3 lpw + 1 ppw | WebCT | Quarter 1 |
| Library Science 111 <i>Introduction to information service provision:</i> Development of information services, information provision and information services in Southern Africa, information infrastructure, national information policy, cooperation and resource sharing. | | | | | |

| | | | | | |
|---|----------------------------|-----------|------------------------------|--------------|------------------|
| BIB 112 | Information Science | 6 | E 3 lpw + 1 ppw | WebCT | Quarter 2 |
| Library Science 112 <i>Introduction to user studies:</i> Background to user studies, reading as a form of communication, people as users of information, a general frame of reference for the usage of media, reading and media usage in an electronic era, user needs, motives and interests and the promotion of reading and literacy. There is also a practical component. | | | | | |
| BIB 121 | Information Science | 6 | A&E 3 lpw + 1 ppw | WebCT | Quarter 3 |
| Library Science 121 <i>Introduction to the use of information sources:</i> Introduction to sources of information, format of information sources, creation of information sources, types of information sources, use of selected printed and electronic reference sources. | | | | | |
| BIB 122 | Information Science | 6 | E 3 lpw + 1 ppw | WebCT | Quarter 4 |
| Library Science 122 <i>Information services:</i> Community organisation services, MPCCs, telecentres, public libraries, school libraries, national libraries, provincial libraries, academic libraries, special libraries, hybrid libraries, virtual information services. | | | | | |
| BIB 211 | Information Science | 10 | E 3 lpw + 3 ppw | WebCT | Quarter 1 |
| Library Science 211 <i>User studies:</i> Information service provision, instructing and educating library users, advice to users (including guidance and extension services), bibliotherapy. There is also a practical component. | | | | | |
| BIB 212 | Information Science | 10 | E 3 lpw + 3 ppw | WebCT | Quarter 2 |
| Library Science 212 <i>Information and the law:</i> Passing of laws, Legal Deposit Act, Copyright Act, Films and Publications Act, Promotion of Access to Information Act. | | | | | |
| BIB 214 | Information Science | 10 | E 3 lpw + 3 ppw | WebCT | Quarter 3 |
| Library Science 214 (was partly BIB 311) <i>Cataloguing:</i> Bibliographic control, bibliographic standards, catalogues, creation of bibliographic records, use of Anglo American Cataloguing Rules. There is also a practical component. | | | | | |
| BIB 222 | Information Science | 10 | E 3 lpw + 3 ppw | WebCT | Quarter 4 |
| Library Science 222 <i>Information and reference services:</i> Nature and development of reference services, specialized information sources, current awareness services, user education. | | | | | |
| BIB 312 | Information Science | 15 | E 3 lpw + 3 ppw | WebCT | Quarter 2 |
| Library Science 312 <i>Advanced cataloguing:</i> The online catalogue, exchange of bibliographic data, bibliographic formats, MARC21, UNIMARC, Dublin Core, Z39.50, cataloguing of videos, CD-ROMs, serial publications, electronic sources, coding of bibliographic data with MARC21. | | | | | |
| BIB 316 | Information Science | 15 | E 3 lpw + 3 ppw | WebCT | Quarter 1 |
| Library Science 316 (was partly BIB 221) <i>Subject cataloguing (macro graphic and micrographic):</i> Classification, principles of Dewey Decimal Classification Scheme, assigning subject headings by means of Library of Congress Subject Headings, principles of indexing. | | | | | |

| | | | | | |
|---|----------------------------|------------|------------------------|--------------|------------------|
| BIB 321 | Information Science | 15 | E 3 lpw + 3 ppw | WebCT | Quarter 3 |
| Library Science 321 | | | | | |
| <i>Information in a digital environment:</i> Significant aspects on the nature, organisation, storage, distribution, availability, accessibility, use and preservation of records of human knowledge and information in a digital environment. | | | | | |
| BIB 322 | Information Science | 15 | E 3 lpw + 3 ppw | WebCT | Quarter 4 |
| Library Science 322 | | | | | |
| <i>Management of a digital information service:</i> The economics of management of digital information services. The management of various advanced information technologies such as high-performance computers and networks, multimedia/hypermedia, artificial intelligence, shared cataloguing, portals, co-operative document delivery, best practices, et cetera. | | | | | |
| BIB 324 | Information Science | 15 | | | Quarter 4 |
| Library Science 324 | | | | | |
| Practical work under supervision at approved institutions. | | | | | |
| BIB 802 | Information Science | 20 | | | |
| Knowledge Management 802 | | | | | |
| The module focuses in depth on the introduction of new tendencies and complex concepts in the field of Knowledge Management. | | | | | |
| BIB 803 | Information Science | 20 | | | |
| Information retrieval 803 | | | | | |
| The central problem of this module may be defined as the facilitating of effective communication of desired information between the generators and the users of information. Information organisation and retrieval tries to deal with this challenge by addressing the problems relating to the effective access and searching of desired information as required by individuals. | | | | | |
| BIB 804 | Information Science | 50 | | | |
| Management of information services 804 | | | | | |
| The module covers strategic and general management principles in depth, as well as effective management of human and other resources, marketing innovation, transformation and re-engineering, industrial relations and laws and regulations affecting information services. | | | | | |
| BIB 805 | Information Science | 30 | | | |
| User studies 805 | | | | | |
| This module aims at drawing attention to interrelationships between a wide spectrum of concepts used in user studies – from information needs, information seeking, and information behaviour, to readership studies. The module will serve as a springboard for the development of an understanding of information users and create the opportunity for research based on a holistic view of information users in the context of their work and social life. | | | | | |
| BIB 890 | Information Science | | | | |
| Library Science: Dissertation 890 | | | | | |
| BIB 895 | Information Science | 120 | | | |
| Library Science (coursework): Mini-dissertation 895 | | | | | |

| | | | | | |
|--|----------------------------|-----------|----------------------|--|------------------|
| BIB 900 | Information Science | | | | |
| Library Science: Examination 900 | | | | | |
| BIB 990 | Information Science | | | | |
| Library Science: Thesis 990 | | | | | |
| BIY 776 | Information Science | 32 | | | |
| Information services and users 776 | | | | | |
| The information activities of users of systems and services, the factors that impact on this, as well as the provision of information and services within the context of a variety of situations, are some of the major concerns of the information professional. This module attempts to address these concerns by: looking at the need to identify, analyse and model the information needs of those who seek information and the tasks they work on; examining the information-seeking practices of various communities and within various environments; discussing access to information, repackaging of information and value-added information provision, and provision of services in various communities ranging from the corporate environment to developing communities. | | | | | |
| BIY 781 | Information Science | 32 | | | |
| Management of information services 781 | | | | | |
| Most people working with information and information products operate within the structure of an information service organisation. This includes the acquisition, organisation and retrieval of information, as well as services to users by means of either print or electronic sources, including virtual/digital information services, using information systems, technology and the Internet. The module deals with strategic and general management principles; the effective management of human and other resources; marketing and service management; innovation and survival in a corporate environment; transformation and re-engineering; human resources management (including competency-based management systems) and financial management. It also considers industrial relations and the laws and regulations governing information service organisations. | | | | | |
| CIL 171 | SIT | 3 | A&E 2 lpw | | Quarter 1 |
| Computer and Information Literacy 171 | | | | | |
| Keyboard and mouse skills, email, basic Internet and Web skills, basic theoretical introduction to hardware and software. Microsoft Windows as operational system. | | | | | |
| CIL 172 | SIT | 3 | A&E 2 lpw | | Quarter 2 |
| Computer and Information Literacy 172 | | | | | |
| Word-processing programmes: creation, editing and formatting of documents, outline editing, automatic numbering and footnotes, tables and columns, insertion of multimedia, data exchanges etc. Presentation programs: creation of presentations, together with figures, text animation and the insertion of multimedia. | | | | | |
| CIL 173 | SIT | 3 | A&E 2 lpw | | Quarter 3 |
| Computer and Information Literacy 173 | | | | | |
| Spreadsheet programmes: basic spreadsheet skills including formulas and diagrams. Database programmes: Basic database skills including searches, compilation of reports, etc. | | | | | |
| CIL 174 | SIT | 3 | A&E 2 lpw | | Quarter 4 |
| Computer and Information Literacy 174 | | | | | |
| Search strategy formulation: the use of Boolean operators, natural language and controlled language. Searches on CD-ROM and the Internet; the evaluation of Internet | | | | | |

| | | | | |
|--|-------------------------|-----------|------------------------------|--------------|
| search engines. The analysis, organization and synthesizing of information. Resources study. | | | | |
| COS 110 | Computer Science | 16 | A&E 4 lpw + 1 ppw | Sem 1 |
| Program Design: Introduction 110 | | | | |
| Object oriented programming, graphical user interfaces and event handling. Teaches sound program design, leading to well structured, robust and documented programs. Appreciation of the limitations of computers. Prerequisite: [IT.2, p 92 and 93] | | | | |
| COS 130 | Computer Science | 16 | A&E 4 lpw + 1 ppw | Sem 1 |
| Introduction to Programming 130 | | | | |
| Introduction to programming covering fundamental concepts to ensure that well structured and effective programs can be written. Topics include sequencing of statements, selection, iteration, arrays, search and sort methods, modularity, parameter transfer, basic data structures, pointers and elementary file handling. Prerequisite: [IT.2, p 92] | | | | |
| COS 151 | Computer Science | 8 | A&E 2 lpw + 1 ppw | Sem 1 |
| Computer Science 151 | | | | |
| This module introduces concepts and terminology related to the hardware of computers, system software and communication systems. It also provides an understanding of basic algorithmic concepts, number systems and binary logic. | | | | |
| COS 160 | Computer Science | 16 | A&E 4 lpw + 1 ppw | Sem 2 |
| Bridging Course 160 | | | | |
| Introductory programming in an appropriate high-level language as preparation for COS110. This includes statement sequences, selection, iteration, arrays, sorting and searching, modularity (functions and procedures), parameter transfer and elementary file handling. Prerequisite: [IT.2, p 92], students who passed Computer Studies HG in grade 12 will be exempted | | | | |
| COS 212 | Computer Science | 12 | A&E 2 lpw + 1 ppw | Sem 1 |
| Data Structures & Algorithms 212 | | | | |
| Data abstraction for producing correct and reusable software. Designing abstract data types for the classic data structures, i.e. stacks, queues, lists, trees and graphs. Variations that can be made to the implementation of the structures without changing their interfaces. Choosing the appropriate data structure for efficiency. Classic algorithms for sorting, searching and traversing, and their efficiency. Recursive implementation of some of the algorithms. The meaning of algorithmic complexity. Prerequisite: COS 110 or LP | | | | |
| COS 213 | Computer Science | 12 | A&E 2 lpw + 1 ppw | Sem 2 |
| Advanced Programming 213 | | | | |
| The module teaches students advanced programming skills using an object oriented programming language that is widely used in industry. The module focuses on design pattern programming as approach to facilitate modular, maintainable and re-usable code. Principles of formal methods are used for program design and specification. Prerequisite: COS 212 or LP | | | | |
| COS 221 | Computer Science | 12 | A&E 2 lpw + 1 ppw | Sem 2 |
| Databases 221 | | | | |
| This module is an introduction to databases, data base management systems and the design of a database. The design of databases is done according to the "Entity-Relationship" model. The focus is on relational database systems. Distributed databases, object databases and logic databases are also introduced. Prerequisite: COS 110 or LP | | | | |

| | | | | | |
|---|-------------------------|-----------|------------------------------|--|--------------|
| COS 222 | Computer Science | 12 | A&E 2 lpw + 1 ppw | | Sem 1 |
| Operating Systems 222 | | | | | |
| Design issues for each of the following functional areas of operating systems are studied: process management, memory management, file systems, input/output management and deadlock. A number of case studies of operating systems are analysed as examples of operating system design. Prerequisite: COS 110 or LP | | | | | |
| COS 223 | Computer Science | 18 | A&E 2 lpw + 1 ppw | | Sem 2 |
| Concurrent and Distributed Systems 223 | | | | | |
| Approaches to modelling, specification and coding of safe and live concurrent systems are studied. Refer to COS 324. Prerequisite: COS 110 or LP | | | | | |
| COS 283 | Computer Science | 12 | A&E 2 lpw + 1 ppw | | Sem 2 |
| Netcentric Computing 283 | | | | | |
| An introduction to coding standards. Networking principles focusing on the use of Java for WWW and network programming, including HTML, scripting (both client-side and server-side), applets, ports and sockets. Remote Method Invocation (RMI) in Java applications. Database connectivity using JDBC and servlets. Students who pass this module may not enrol for INY 324. Prerequisite: COS 110 or LP | | | | | |
| COS 284 | Computer Science | 12 | A&E 2 lpw + 1 ppw | | Sem 1 |
| Computer Architecture 284 | | | | | |
| The aim of this module is to gain a deeper understanding of computers by studying their underlying components. The CPU is studied in great detail, covering design decisions such as CISC/RISC architectures, paging and pipelining. Cache, memory and bus architectures will also be scrutinized. IO architectures will be covered (i.e. polling vs. interrupt driven or DMA). Topics such as parallel processing (SIMD) are also touched. A brief review of number systems, combinatorial circuits, and sequential circuits (latches, counters, etc.). To illustrate many of the concepts in practice, the practicals will cover an assembly language. This will cover topics like interrupts, IO and video memory. Prerequisite: COS 110 or LP | | | | | |
| COS 289 | Computer Science | 12 | A&E 2 lpw + 1 ppw | | Sem 2 |
| Introduction to Digital Systems 289 | | | | | |
| Introduction to digital circuit design, digital representation of numbers, representation and simplification of logic functions, analysis and design of combinatorial circuits, components of sequential circuits, programmable components for combinatorial and sequential logic, microprocessor fundamentals. Prerequisites: COS 110 and WTW 115 | | | | | |
| COS 301 | Computer Science | 18 | E 1 lpw + 1 ppw | | Year |
| Software Engineering 301 | | | | | |
| The module exposes students to problems associated with software development on an industrial scale. Overall goals of the module are: To understand the software engineering process and to appreciate its complexity. To be exposed to a variety of methodologies for tackling different stages of the software lifecycle. To become familiar with the latest trends in software engineering. To experience the advantages and problems of working in a group. To take responsibility for a variety of roles within a group, and to understand the different requirements for these. To complete the development of a fairly large OO-based software product. The focus of the module is on a project that lasts the whole year. The project is tackled in groups of approximately 4 students. Prerequisite: COS 213 or LP. | | | | | |

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| COS 314 | Computer Science | 18 | E 2 lpw + 1 ppw | | Sem 1 |
| Artificial Intelligence 314 | | | | | |
| In this module, classical themes in AI are studied such as planning, searching, image recognition, machine learning, etc. A particular focus is placed on the modern AI term of computational intelligence, with reference to neural networks, intelligent agents, genetic and evolutionary algorithms, etc. Concepts are consolidated through homework and practical assignments. Prerequisite: COS 213 and WTW 128 or LP | | | | | |
| COS 324 | Computer Science | 18 | E 2 lpw + 1 ppw | | Sem 1 |
| Concurrent and Distributed Systems 324 | | | | | |
| The module exposes features in a contemporary programming language for controlling and synchronizing concurrent processes. It treats classical topics such as mutual exclusion, semaphores, monitors, deadlock and liveness in terms of contemporary programming features. It emphasizes the use of high-level textual and graphical notations to model and design concurrent systems before implementation. Prerequisite: COS 110 or LP | | | | | |
| COS 326 | Computer Science | 18 | E 2 lpw + 1 ppw | | |
| Database Systems 326 (NB: This module will be offered for the first time in 2005.) This course builds on a prior introductory module on database technology and provides more advanced theoretical and practical study material. Prerequisites: INF 214 or LP | | | | | |
| COS 332 | Computer Science | 18 | E 2 lpw + 1 ppw | | Sem 2 |
| Computer Networks 332 | | | | | |
| The objective of this module is to acquaint the student with the terminology of communication systems and to establish a thorough understanding of exactly how data is transferred in such communication networks, as well as applications that can be found in such environments. The study material includes: concepts and terminology, the hierarchy of protocols according to the OSI and TCP/IP models, protocols on the data level, physical level and network level as well as higher level protocols. The practical component of the module involves programming TCP/IP sockets using a high level language. Prerequisite: COS 213 or LP | | | | | |
| COS 333 | Computer Science | 18 | E 2 lpw + 1 ppw | | Sem 2 |
| Programming Languages 333 | | | | | |
| The overall goal of the module is to survey characteristics of the most important kinds of programming languages. Three paradigms are studied: imperative, functional and logic. The syntax, semantics and implementation of various languages within these paradigms are studied, critiqued and cross-compared. Students are given practical exercises in each of these programming language paradigms, as well as in scripting languages. Prerequisite: COS 110 or LP | | | | | |
| COS 341 | Computer Science | 18 | E 2 lpw + 1 ppw | | Sem 1 |
| Compiler Construction 341 | | | | | |
| The module illustrates how to build a complete compiler for a mini-language based on Java using a compiler generator. It covers LL and LR parsing, abstract syntax trees, semantic analysis, error recovery and code generation. Emphasis is placed on back-end analysis including intermediate codes, basic blocks, register allocation, liveness analysis and garbage collection. Prerequisite: COS 212 or LP | | | | | |

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| COS 343 | Computer Science | 18 | E 2 lpw + 1 ppw | | Sem 2 |
| Trends in Information Technology 343 | | | | | |
| The content of this module is specifically intended to keep students abreast of new and important trends in IT. The module focuses on relevant topics that vary from year to year at the discretion of the department. | | | | | |
| Prerequisite: COS 110 or LP | | | | | |
| COS 344 | Computer Science | 18 | E 2 lpw + 1 ppw | | Sem 2 |
| Computer Graphics 344 | | | | | |
| The aim of this course is to acquire a sound knowledge of the basic theory of interactive computer graphics and basic computer graphics programming techniques. The theory will cover graphics systems and models, graphics programming, input and interaction, geometric objects and transformations, viewing in 3D, shading, rendering techniques, and introduce advanced concepts, such as object oriented computer graphics and discrete techniques. The module includes a practical component that enables students to apply and test their knowledge in computer graphics. The OpenGL graphics library and the C programming language will be used for this purpose. | | | | | |
| Prerequisites: COS 213 and WTW 126 or LP | | | | | |
| COS 389 | Computer Science | 18 | E 2 lpw + 1 ppw | | Sem 2 |
| Microprocessor Systems 389 | | | | | |
| Covers the following areas of the 80x86 IBM PC and compatible computers: microprocessors and supporting chips, memory and memory interfacing, input/output and interfacing, timer and music, interrupts, device drivers, buses, programming in C and assembly language. | | | | | |
| Prerequisite: COS 289 or LP | | | | | |
| IMY 751 | Information Science | 25 | | | |
| Multimedia Trends 751 | | | | | |
| History of multimedia ideas and technology; current trends in multimedia, latest technologies and future trends of multimedia. | | | | | |
| IMY 752 | Information Science | 25 | | | |
| Hypermedia and Mark-up languages 752 | | | | | |
| A study of hypermedia systems, data modelling, storage and retrieval, database queries, structures and streaming, and metadata. A study of different mark-up languages and their role in multimedia products with the emphasis on data structuring, hyper linking theories and models. | | | | | |
| IMY 753 | Information Science | 25 | | | |
| Multimedia technology 753 | | | | | |
| The theory and practice of multimedia technology, such as compression techniques; image processing; delivery systems such as CD-ROM, DVD, digital TV, immersive systems, interaction with virtual worlds and other relevant technologies. An overview of important multimedia standards. | | | | | |
| IMY 754 | Information Science | 25 | | | |
| Virtual environments 754 | | | | | |
| Theory and components of virtual environments (VE); human interaction in VE; VE technologies; lighting techniques, props, landscapes and other related concepts. | | | | | |
| IMY 756 | Information Science | 25 | | | |
| Multimedia training and education systems 756 | | | | | |
| Theory and practice of multimedia systems aimed at training and education. An overview of learning theory. | | | | | |

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| IMY 757 | Information Science | 25 | | | |
| Animation theory and practice 757 History of animation theory and techniques; 2-D and 3-D animation; capturing, kinematic behaviours (e.g. movement, expressions), human artefacts (e.g. clothing, hairdressing) and other related themes. | | | | | |
| IMY 758 | Information Science | 25 | | | |
| Music and sound technology 758 A theoretical and practical study of the role of sound in multimedia products, compression techniques, and standards such as MIDI, MP3, MPEG. | | | | | |
| IMY 759 | Information Science | 25 | | | |
| Human-computer interaction 759 (Closed – Requires departmental selection) A theoretical and practical study of human-computer interaction, interface design and usability testing. | | | | | |
| IMY 761 | Information Science | 40 | | | |
| Applied Multimedia 761 Development and production of a multimedia product; product life-cycle management and documentation; the student submits a proposal which is evaluated and if approved, produces a working multimedia product. | | | | | |
| IMY 801 | Information Science | 120 | | | |
| Multimedia (coursework): Course component 801 | | | | | |
| IMY 890 | Information Science | | | | |
| Multimedia: Dissertation 890 | | | | | |
| IMY 895 | Information Science | 120 | | | |
| Multimedia (coursework): Mini-dissertation 895 | | | | | |
| INF 112 | Informatics | 10 | A&E 3 lpw | | Sem 1 |
| Informatics 112 Introduction to information systems, information systems in organizations, hardware: input, processing, output, software: systems and application software, organization 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. Prerequisite: [IT.2, p] | | | | | |
| INF 153 | Informatics | 5 | A&E 2 lpw | | Sem 1 |
| Informatics 153 General systems theory, creative problem solving, soft systems methodology. Prerequisite: [IT.2, p 92] | | | | | |
| INF 154 | Informatics | 5 | A&E 1 lpw + 2 ppw | | Sem 1 |
| Informatics 154 Introduction to programming. Prerequisite: [IT.2, p 92] | | | | | |
| INF 163 | Informatics | 5 | A&E 2 lpw | | Sem 2 |
| Informatics 163 The systems analyst, systems development building blocks, systems development, systems analysis methods, process modelling. Prerequisite: INF 153 GS | | | | | |

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| INF 164 | Informatics | 5 | A&E 1 lpw + 2 ppw | | Sem 2 |
| Informatics 164 Advanced programming, use of a computer-aided software engineering tool. Prerequisite: INF 154 GS | | | | | |
| INF 214 | Informatics | 14 | A&E 3 lpw + 1 ppw | | Sem 1 |
| Informatics 214 Database design: the relational model, structured query language (SQL), entity relationship modelling, normalization, data base development life cycle; practical introduction to database design. Databases: advanced entity relationship modelling and normalization, object-oriented databases, data base development life cycle, advanced practical data base design. Prerequisites: CIL 171, 172, 173 and 174 | | | | | |
| INF 261 | Informatics | 7 | A&E 3 lpw + 2 ppw | | Quarter 3 |
| Informatics 261 Database management; transaction management, concurrent processes, recovery, database administration; new developments: distributed databases, client-server databases; practical implementation of databases. Prerequisite: INF 214GS | | | | | |
| INF 262 | Informatics | 7 | A&E 3 lpw + 2 ppw | | Quarter 4 |
| Informatics 262 Operating systems: memory management, processor management, device management, file management, system management, concurrent processes and practical application in commercial operating systems. | | | | | |
| INF 271 | Informatics | 14 | A&E 2 lpw | | Year |
| Informatics 271 (was INF 253) Systems analysis. Systems design: construction, application architecture, input design, output design, interface design; Systems design: internal controls, program design, object design; project management, system implementation, use of computer-aided development tools. Prerequisites: CIL 171 and CIL 172 and CIL 173 and CIL 174 and INF 163 and INF 164 and [IT.2 p 92] | | | | | |
| INF 272 | Informatics | 14 | A&E 2 ppw + exercise class | | Year |
| Informatics 272 (was INF 263) Use of computer-aided development tools, advanced database programming with Visual Basic.Net. Prerequisites: CIL 171 and CIL 172 and CIL 173 and CIL 174 and INF 164 and [IT.2 p 92] IT.2 p 92 | | | | | |
| INF 314 | Informatics | | 3 lpw + 2 ppw | | Sem 1 |
| Informatics 314 Data communications and networks: fundamentals of business information communication, wide-area and local-area networks. Data communications and networks: applications and management issues. | | | | | |
| INF 324 | Informatics | | 3 lpw + 2 ppw | | Sem 2 |
| Informatics 324 Information systems in organisations, social and ethical responsibilities, the role of the Informatician. IT end-user relationships, IT management. | | | | | |

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| INF 354 | Informatics | | 2 lpw + 2 ppw | | Sem 1 |
| Informatics 354 Advanced programming | | | | | |
| INF 370 | Informatics | | 2 lpw + 2 ppw | | Year |
| Informatics 370 Application of systems analysis and design in a practical project, programming, use of computer-aided development tools. | | | | | |
| INL 111 | Information Science | 6 | A&E 3 lpw + ½ ppw | WebCT | Quarter 1 |
| Information Science 111 <i>An introduction to Information Science:</i> Information and the information community as concepts, information in a development context, the meaning of the information community for and the influence thereof on enterprises and individuals as well as the socio-ethical implications. The lifecycle of information: processes, products and role players, description of the information mediator, introduction to value adding. Practical: Practical: An introduction to web-based tutoring with WebCT. | | | | | |
| INL 112 | Information Science | 6 | A&E 3 lpw + ½ ppw | WebCT | Quarter 2 |
| Information Science 112 Representation and organization of information: Information objects, document-surrogates, databases, multimedia, metadata. The use of Dublin Core as metadata standard. Practical: Basic HTML and the design of a web page with metadata. | | | | | |
| INL 121 | Information Science | 6 | A&E 3 lpw + 1 ppw | WebCT | Quarter 3 |
| Information Science 121 <i>Information technology:</i> An overview of computer hardware and software, telecommunication technology, LAN, WAN and Intranet, the information highway, the Internet and WWW, and computer ethics. Practical: Multimedia and the web, and style sheets. | | | | | |
| INL 122 | Information Science | 6 | A&E 3 lpw + 1 ppw | WebCT | Quarter 4 |
| Information Science 122 <i>Communication media:</i> The process of human communication; analyses of the communication process; levels of communication; settings of communication; verbal and non-verbal communication, mass communication: the elements and functions of mass media of various forms of mass media. | | | | | |
| INL 211 | Information Science | 10 | A&E 3 lpw + 3 ppw | WebCT | Quarter 1 |
| Information Science 211 <i>*Requires CIL 174</i> <i>Information retrieval:</i> The theoretical component deals with various aspects of the online industry and facets of online searching such as search strategies, search techniques, vocabulary problems, database and search engine selection, database structures, the evaluation of search results and information overload. The practical component deals with sophisticated information retrieval. | | | | | |
| INL 212 | Information Science | 10 | A&E 3 lpw + 3 ppw | WebCT | Quarter 2 |
| Information seeking 212 <i>*Requires INL 211</i> Introduction to information retrieval research and the major research paradigms, namely the traditional or systems based approach, user-centered, cognitive and socio-cognitive approaches. Relevance is covered as a key issue. Entity representation, database design and information seeking behaviour are covered in the practical sessions. | | | | | |

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| INL 221 | Information Science | 10 | A&E 3 lpw + 3 ppw | WebCT | Quarter 3 |
| Information Science 221 | | | | | |
| <i>Infopreneurship and information ethics:</i> The various ethical problems applicable to the profession of the information professional, codes of conduct and ethical norms. Infopreneurship: the economic characteristics of information, basic guidelines on how to start an own information business, the business plan, the marketing and pricing of information products and services, the various legal and ethical aspects with regard to the infopreneur. | | | | | |
| INL 311 | Information Science | 15 | A&E 3 lpw + 3 ppw | WebCT | Quarter 1 |
| Information Science 311 | | | | | |
| <i>Publication formats in the digital environment:</i> The module studies the terrain of multimedia, hypermedia and hypertext fiction with reference to the theories of e.g. Landow, Nielsen, Aarseth and Hall. The method in which the Internet and WWW influence the publication and handling of digital information is studied, with special reference to the difference between paper based and digital text, as well as the role that portals and intranets play. | | | | | |
| INL 321 | Information Science | 15 | A&E 3 lpw + 3 ppw | WebCT | Quarter 3 |
| Information Science 321 | | | | | |
| <i>Information management:</i> Tools and techniques of information management, strategy for information management in organisations, quality management, value-adding, formulation and implementation of an information policy, information audit, information consultation, data warehousing and data mining. | | | | | |
| INL 802 | Information Science | 50 | | | |
| Information and Knowledge Management 802 | | | | | |
| The module focuses on an in-depth study of new tendencies and complex concepts in the field of Information and Knowledge Management. | | | | | |
| INL 803 | Information Science | 20 | | | |
| Information ethics and information law 803 | | | | | |
| This module focuses on the relationship between poverty and information and the effect that it has on the lives of people in South Africa; the Promotion of Access to Information Act; and the philosophical background of Intellectual Property Rights (Hegel, Marx and Lock) and how this Western concept has influenced the digital divide between the information rich and information poor. | | | | | |
| INL 804 | Information Science | 20 | | | |
| Information for development 804 | | | | | |
| This module focuses on human development and the importance of disseminating information effectively to developing communities. It includes aspects of participatory communication, the role of communication within the strategic management processes of the development project, elements of participatory message design as well as the role of Information Resource Centres in disseminating information. | | | | | |
| INL 806 | Information Science | 20 | | | |
| Information society 806 | | | | | |
| In this module the technological, social and globalisation aspects of the development of information in societies is investigated on three levels: Societies as a whole, organisations that produce information products; render information services; and the individual citizens. | | | | | |

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| INL 809 | Information Science | 20 | | | |
| Informetrics 809 <i>(Requires: Knowledge of Statistics – Consult the department in this regard)</i> Informetrics investigates the quantitative aspects of information (communication) processes, particularly those using text. It incorporates the old field of Bibliometrics, and the new areas of Cybermetrics and Webometrics. Topics covered are: citation indexing, citation networks and citation matrices, bibliographic coupling, co-citation graphs, science policy applications, informetric laws and approximations. | | | | | |
| INL 810 | Information Science | 20 | | | |
| Competitive intelligence 810 <i>“The next best thing to knowing all about your own business is to know all about the other fellow’s business” – John D Rockefeller</i> Establishing an effective competitive intelligence program is an integral part of every enterprise that wants to survive in the new millennium. This module focuses on the competitive intelligence strategy, intelligence management, intelligence processes, the intelligence resources, competitive technology intelligence and security. | | | | | |
| INL 811 | Information Science | 20 | | | |
| Advanced decision-making theory 811 Advanced decision-making theory within information and knowledge management is studied in depth. Processes and systems that are used for the management of information and knowledge are analysed concerning decision-making theory. Organisational sense making and scenario building are also addressed. | | | | | |
| INL 812 | Information Science | 20 | | | |
| Organisation and retrieval of information 812 Theoretical approaches for the organisation and retrieval of information are studied including metadata, ontologies and taxonomies. Organisation of information as well as storage, access and searching of desired information as required by individuals. | | | | | |
| INL 813 | Information Science | 20 | | | |
| Management of information centres 813 This module covers a study of information centres as business organisations. The focus, therefore, is on the survival of information centres in the business environment, e.g. change management, business processes, re-engineering, strategic human resource management, the impact of technological innovations and modern business practices, focussing on information centres. | | | | | |
| INL 890 | Information Science | | | | |
| Information Science: Dissertation 890 | | | | | |
| INL 895 | Information Science | 120 | | | |
| Information Science: Mini-dissertation 895 | | | | | |
| INL 900 | Information Science | | | | |
| Information Science: Examination 900 | | | | | |
| INL 990 | Information Science | | | | |
| Information Science: Thesis 990 | | | | | |

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| IN Y 122 | Information Science | 6 | A&E 3 lpw + 1 ppw | Quarter 4 |
| Publishing 122 <i>*Closed – requires departmental selection</i> <i>An introduction to publishing studies:</i> This module provides a basic introduction to the publishing industry. The following aspects are highlighted: the concept “publishing”; the publishing value-chain; processes, tasks and people involved; the role of the publisher in society; the different sectors of the book publishing industry; current trends and issues. | | | | |
| IN Y 123 | Information Science | 6 | E 3 lpw + 1 ppw | WebCT Quarter 4 |
| Information and Knowledge Management (1) 123 Nature and essence of information and knowledge management, impact of socio-economic trends, current problems and constraints in information management, information management in various milieus, responsibilities of the information manager. | | | | |
| IN Y 171 | Information Science | 6 | E 2 lpw + 2 ppw | Sem 1 |
| Mark-up languages 171 <i>*Closed – requires departmental selection.</i> The role of mark-up languages in the information environment, the difference between the logical structure and appearance of documents; the study of HTML, CSS; and XHTML, the building of web sites. | | | | |
| IN Y 172 | Information Science | 6 | E 2 lpw + 2 ppw | Sem 2 |
| Multimedia for the Web 172 <i>* Closed – requires departmental selection.</i> The role of multimedia in information products; the use of graphic and animation programmes; introduction to basic scripts (for example, JavaScript) and an introduction to scripting development environments (for example, Microsoft Visual Studio .NET). | | | | |
| IN Y 213 | Information Science | 10 | E 3 lpw + 2 ppw | Quarter 2 |
| Publishing 213 (was partly IN Y 313) <i>*Closed – requires departmental selection.</i> <i>The visual and production dimensions of publishing:</i> A theoretical positioning of graphic design, reproduction and printing within the publishing process. The following themes are addressed: an introduction to graphic design practice; the historical development of the relationship between reproduction and printing innovations and graphic design styles; the use of visual elements in order to add value to the editorial handling of publications; the management role of the (commissioning-) editor regarding this phase in the publishing process. | | | | |
| IN Y 214 | Information Science | 15 | E 2 ppw | Sem 2 |
| Publishing 214 <i>*Closed – requires departmental selection.</i> <i>Practical:</i> During the first seven weeks students are introduced to selected applications of DTP software and the practical aspects of the production process. During the following seven weeks students are equipped with practical skills in copy-editing, including editing on screen and technical exercises. | | | | |
| IN Y 215 | Information Science | 10 | E 3 lpw + 3 ppw | Quarter 1 |
| System development 215 <i>*Closed – requires departmental selection.</i> Database construction, project planning and management, determination of consumer needs, systems specifications., an introduction to interface development. | | | | |
| IN Y 216 | Information Science | 10 | E 3 lpw + 3 ppw | Quarter 2 |
| Multimedia 216 <i>*Closed – requires departmental selection</i> | | | | |

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| An introduction to the theory of multimedia, hypermedia and hypertext fiction, which includes the evaluation of hypermedia databases. The influence of digital (hyper) media on the information landscape is also studied, e.g. in terms of e-texts, intranets and portals. | | | | | |
| INY 217 | Information Science | 10 | E 3 lpw + 1 ppw | WebCT | Quarter 2 |
| Information for development 217 | | | | | |
| Development theories, information and communication as central factors in sustainable development, information needs in a development context, and cross cultural communication and sensitivity. | | | | | |
| INY 218 | Information Science | 10 | E 3 lpw + 1 ppw | WebCT | Quarter 2 |
| Information and the law 218 | | | | | |
| Passing of laws, Legal Deposit Act, Copyright Act, Films and Publications Act, Promotion of Access to Information Act. | | | | | |
| INY 221 | Information Science | 10 | E 3 lpw + 3 ppw | WebCT | Quarter 4 |
| System development 221 | | | | | |
| Project planning and management, user needs assessment, system specifications, interface development. | | | | | |
| INY 222 | Information Science | 10 | E 3 lpw + 1 ppw | | Quarter 4 |
| Publishing 222 | | | | | |
| <i>*Closed – requires departmental selection.</i> | | | | | |
| <i>Editing:</i> A theoretical introduction to the personality profile of the copy-editor; the three levels of copy -editing; the responsibilities of the copy-editor towards the manuscript, the author and the financial success of the publishing house; the responsibilities and skills of the proof-reader; editing and proof-reading symbols and the mark-up of texts; legal and ethical aspects. | | | | | |
| INY 223 | Information Science | 10 | E 3 lpw + 1 ppw | WebCT | Quarter 4 |
| Communication media 223 | | | | | |
| An encompassing module on the use of mass media as communication medium; including communication processes, technology, research and effect studies. The use of mass media in Africa and the role of mass media in development. | | | | | |
| INY 224 | Information Science | 10 | E 3 lpw + 1 ppw | WebCT | Quarter 4 |
| Applied information ethics 224 | | | | | |
| Cyber ethics: the right to privacy, the right of access to information, moral responsibility of Internet service providers, information poverty, cyber porn. | | | | | |
| INY 225 | Information Science | 10 | E 3 lpw + 3 ppw | | Quarter 3 |
| Multimedia 225 | | | | | |
| <i>*Closed – requires departmental selection.</i> | | | | | |
| A detailed study of multimedia and hypermedia with the emphasis on applications, hardware and software, the architecture of hypermedia systems, the principles involved in the construction of such databases and the practical creation of a multimedia and hypermedia databases. | | | | | |
| INY 226 | Information Science | 10 | E 3 lpw + 3 ppw | | Quarter 4 |
| Editorial handling of information products 226 | | | | | |
| <i>*Closed – requires departmental selection.</i> | | | | | |
| Introduction to copy -editing and mark-up of information products, aspects of the handling of visual materials and text (including principles of typography and page lay-out) with the emphasis on accessibility of information to the end user. | | | | | |

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| INY 227 | Information Science | 10 | E 3 lpw + 1 ppw | WebCT | Quarter 3 |
| Information representation 227 Organization, storage and retrieval of information are important challenges for the modern information society. The basic structure of information representation in social and scientific applications is the topic of this module. | | | | | |
| INY 271 | Information Science | 10 | E 2 lpw + 2 ppw | | Sem 1 |
| Advanced mark-up language (1) 271 <i>* Closed – requires departmental selection.</i> Study of new generation markup-languages (XML); building multimedia products with the XML family. | | | | | |
| INY 272 | Information Science | 10 | E 2 lpw + 2 ppw | | Sem 2 |
| Advanced mark-up language (2) 272 <i>*Closed – requires departmental selection.</i> The building of a complex multimedia product with the XML family and related technologies. | | | | | |
| INY 300 | Information Science | 15 | E 1 ppw | | Year |
| Multimedia project 300 <i>*Closed – Requires departmental selection.</i> The module exposes students to problems associated with software development on an industrial scale. The goal of the module is develop and complete a fairly large multimedia project. The focus of the module is on a project that lasts the whole year. The project is tackled in groups of two to three students. | | | | | |
| INY 311 | Information Science | 15 | E 3 lpw + 3 ppw | WebCT | Quarter 2 |
| Multimedia 311 Detailed study of multimedia and hypermedia, the application thereof, software and hardware, architecture of hypermedia systems, principles of constructing these databases, the creation of a multimedia and hypermedia database. | | | | | |
| INY 312 | Information Science | 15 | E 3 lpw + 1 ppw | WebCT | Quarter 2 |
| Information for development 312 Literacy and information literacy, ICT and development, media for the provision of information to developing communities with specific reference to the participatory approach. | | | | | |
| INY 315 | Information Science | 15 | E 3 lpw + 3 ppw | | Quarter 1 |
| Advanced multimedia 315 <i>*Closed – requires departmental selection.</i> Technical aspects of multimedia hardware and software, version management, practical multimedia project. | | | | | |
| INY 316 | Information Science | 15 | E 3 lpw + 3 ppw | | Quarter 2 |
| Human-computer interaction 316 <i>*Closed – requires departmental selection.</i> A study of human-computer interaction and human-information interaction, humans as computer and information users, ethical aspects relating to the creation of multimedia information products. | | | | | |

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| INY 318 | Information Science | 15 | E 3 lpw + 1 ppw | WebCT | Quarter 2 |
| Information economics 318 Economic characteristics of information, information as a national asset, contribution of the information sector to the economy of a country, methods for measuring the size of the information sector in a country, interaction between the information sector and the rest of the economy in a country, the marketing and pricing of information products and services, business intelligence, electronic commerce. | | | | | |
| INY 319 | Information Science | 15 | E 3 lpw + 1 ppw | | Quarter 4 |
| Publishing 319 (was partly INY 212) <i>*Closed – requires departmental selection.</i> <i>An introduction to publishing management:</i> This module contextualizes the changing role of the publisher as information intermediary within the context of the Information and Knowledge Era and the New Economy. It provides an introduction to the different facets of management in the publishing environment, including editorial organisation and management; financial management and marketing management. | | | | | |
| INY 320 | Information Science | 15 | E 2 ppw | | Sem 2 |
| Publishing 320 <i>*Closed – requires departmental selection.</i> <i>Practical:</i> During the first seven weeks students will develop individual manuscript proposals. During the following seven weeks students will be equipped with practical skills needed for the management of a publishing list; basic costing; budgeting; and scheduling. | | | | | |
| INY 322 | Information Science | 15 | E 3 lpw + 1 ppw | | Quarter 2 |
| Publishing 322 <i>*Closed – requires departmental selection.</i> <i>Manuscript commissioning/acquisition:</i> A theoretical introduction to the processes involved in market research and manuscript commissioning; list building; the management of the manuscript developing phase; editorial project management; scheduling; the costing of individual publications; and the development of marketing and promotion strategies. | | | | | |
| INY 323 | Information Science | 15 | E 3 lpw + 1 ppw | WebCT | Quarter 4 |
| Information: socio-political context 323 Theories about the information society, globalisation and localization and information poverty and information wealth. | | | | | |
| INY 324 | Information Science | 15 | E 3 lpw + 3 ppw | WebCT | Quarter 4 |
| Multimedia 324 <i>*Closed to COS 283 students.</i> A detailed study of multimedia in the WWW environment and mark-up languages such as HTML and XML. An introduction to SGML, other document formats and electronic style specifications. | | | | | |
| INY 325 | Information Science | 15 | E 3 lpw + 3 ppw | | Quarter 3 |
| Interface design 325 <i>*Closed – requires departmental selection.</i> A detailed study of the role, composition and functioning of an interface, underlying principles in the design and evaluation of interfaces. | | | | | |

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| INY 326 | Information Science | 15 | E 3 lpw + 3 ppw | | Quarter 4 |
| Mark-up languages 326 | | | | | |
| <i>*Closed – requires departmental selection.</i> | | | | | |
| A detailed study of HTML and XML, an introduction to SGML, other electronic and document formats and electronic style specifications. | | | | | |
| INY 327 | Information Science | 15 | E 3 lpw + 1 ppw | WebCT | Quarter 4 |
| Information and knowledge management 327 | | | | | |
| Creating a knowledge-based organisation, relationship between knowledge and organisational learning, roles and responsibilities of the knowledge manager, knowledge management strategies and policies, critical success factors for knowledge management, tools and techniques for knowledge management. Competitive intelligence. | | | | | |
| INY 328 | Information Science | 15 | E 1 lpw + 2 ppw | WebCT | Sem 2 |
| Information and knowledge management in practice 328 (from 2003) | | | | | |
| Project and experiential training in co-operation with industry. | | | | | |
| INY 329 | Information Science | 15 | E 3 lpw + 3 ppw | | Quarter 4 |
| Advanced information retrieval 329 | | | | | |
| <i>*Requires: INL 211 and INL 212</i> | | | | | |
| Information is growing exponentially, diversifying into many forms. Information retrieval covers issues regarding the effective storage, access and searching of information in all media. This module builds on the principles of retrieval covered in INL 211 and INL 212 and covers certain aspects of the systems approach to Information retrieval in more detail. | | | | | |
| INY 771 | Information Science | 32 | | | |
| Research methodology 771 | | | | | |
| Research methodology and the application thereof to resolve research problems and to create new knowledge, is a valued advantage to any student. The module is compiled with the following objectives in mind: to instruct the student in the basic principles of research and to avail them the opportunity to execute research projects in a professional manner. | | | | | |
| Students are guided from the selection of a problem to the presentation of a complete research report with practical suggestions based on a solid theoretical framework. | | | | | |
| INY 772 | Information Science | 32 | | | |
| Information management 772 | | | | | |
| The management of information and its supporting infrastructure is regarded as crucial for the effective functioning of an organisation. This course offers the student the opportunity to become conversant with the various techniques of information management. The latest developments in the field of information management are also covered, inter alia the paradigm shift in information management to knowledge management. | | | | | |
| INY 773 | Information Science | 32 | | | |
| Organisation and retrieval of information 773 | | | | | |
| <i>"Information retrieval covers the problems relating to the effective storage, access, and searching of information required by individuals. Currently, information is continuing to grow exponentially, diversifying into many forms and media. In this complex labyrinth there is a definite need for increased effort aimed at tailoring IR performance to user demands" (Ingwersen, 1992).</i> This module will introduce students to the theory and operative requirements of information organisation and retrieval and the evaluation of information retrieval systems. Students will also study the organisation of information in | | | | | |

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| specific environments, for example digital libraries, the Internet, and document management systems. | | | | | |
| INY 774 | Information Science | 32 | | | |
| Multimedia 774 | | | | | |
| This module focuses on both the evaluation and the development of multimedia products. Topics that are addressed include aspects of human-computer interaction and interface design, principles and practice of usability engineering and usability testing, multimedia / hypermedia project management and multimedia / hypermedia authoring principles, including open hypermedia systems and the impact of multi- and hypermedia on the occurrence, nature and use of digital libraries. Including aspects such as technology, the role of metadata, the influence of projects and standards such as the Open Archive Initiative, and the nature and use of e-journals. The module includes the hands-on development of a multimedia / hypermedia project. | | | | | |
| INY 775 | Information Science | 32 | | | |
| Information philosophy, information ethics and information law 775 | | | | | |
| The information era, with the accompanying use of technology confronts us with new ethical and legal questions regarding data security, our right to privacy, the right of access to information, and the dilemma of right to intellectual property versus intellectual freedom. This module focuses on the main ethical and legal issues, and includes aspects such as the information society as philosophical concept, privacy and pan-optic technologies, the ethical issues regarding the use of e-mail, Internet law (including legal aspects pertaining to the design of web sites), and practical guidelines in the formulation of ethical codes of conduct. | | | | | |
| INY 780 | Information Science | 32 | | | |
| Informetrics 780 | | | | | |
| <i>(Requires: Knowledge of Statistics – Consult the department in this regard.)</i> | | | | | |
| Informetrics is concerned with the application of information science principles and technology in science research and productivity. It investigates the quantitative and qualitative aspects of information processes. It covers citation indexing, informetric approximations, citation networks and citation analysis of scientific journals. | | | | | |
| INY 781 | Information Science | 32 | | | |
| Competitive intelligence 781 | | | | | |
| Establishing an effective competitive intelligence programme is an integral part of every enterprise that wants to survive in the new millennium. This module focuses on the competitive nature of the business environment, the aim of competitive intelligence, Porter's Competitive Forces Model, the distinction between competitive intelligence and industrial espionage, the intelligence process as well as the tools and techniques for the development and implementation of a competitive intelligence programme. | | | | | |
| INY 782 | Information Science | 32 | | | |
| Decision-making theory 782 | | | | | |
| Aspects such as the following will be studied: theory of decision making, decision-making support systems, processing of decision making, organisational sense making and decision-making theory with regard to information and knowledge management. | | | | | |
| INY 783 | Information Science | 32 | | | |
| Management of information centres 783 | | | | | |
| Information centres are now regarded as similar to any other type of business organisation. It is therefore, important for them to be managed in the same way that other businesses are managed. This module focuses on the management of information | | | | | |

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| centres within the greater business environment and highlights areas of management that can lead to the success of the information centres. These include change management, business processes, re-engineering, strategic human resources management and the impact of technological innovation in the IT environment. | | | | |
| INY 784 | Information Science | 32 | | |
| Introduction to information for development 784 | | | | |
| This module provides an overview of essential issues in the delivering of information to developing communities. It focuses on general development theories, the relationship between information and development and the role of the community in determining information needs, selecting applicable media and providing relevant content. | | | | |
| INY 785 | Information Science | 40 | | |
| Information practice for development 785 | | | | |
| Informed by the participatory approach to development, this module reflects in depth on methods to involve the community in determining information needs. Students will learn how to create a community profile by which appropriate media and content for the dissemination of information to developing communities can take place. The role of traditional and modern media for development purposes will be addressed as well as using the participatory method to create and disseminate relevant content according to the requirements of selected media in a developing context. | | | | |
| INY 786 | Information Science | 40 | | |
| ICT (Information and communication technology) for development 786 | | | | |
| In this module modern ICTs that are used in a developing context will be defined. The various literacies needed in such a context, namely basic literacy, information literacy and technological literacy will be studied. The focus will fall on the current use of ICT in the developing world with specific references to the South African situation including the telecentre approach. | | | | |
| The module will include a study of the diverse views on this issue as well as future possibilities with regard to ICT for development. | | | | |
| OKT 880 | Information Science | 30 | | |
| Theory of Development Communication 880 | | | | |
| This module will focus on human development and the principle of participatory communication. It will examine communication theory and processes especially with regard to communication and change. The student should be able to work effectively with others in establishing participative development communication principles, collect, analyse and critically evaluate existing literature on development communication, and demonstrate that communication forms an integral part of community development practices. | | | | |
| OKT 881 | Information Science | 30 | | |
| Management of development communication 881 | | | | |
| This module will be offered from a management perspective and will examine the role of development within the strategic management processes of an organisation. It will include the evaluation of development projects to suit the strategic objectives of the organisation and how to manage communication within a development project. | | | | |
| OKT 882 | Information Science | 30 | | |
| The practice of Development Communication 882 | | | | |
| The focus of this module is the practical side of development communication. It includes: methods to research the target audience, action programmes for communication campaigns in communities and the different channels that can be used for the dissemination of development messages. It also contains a component in which a | | | | |

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| development message must be designed by taking into account target group, appropriate channel and distribution. | | | | |
| OKT 883 | Information Science | 30 | | |
| Information centres and Development Communication 883 | | | | |
| This module will focus on the role of information centres in disseminating development information. Centres that will be studied as possible distribution points will include community libraries, telecentres and multi-purpose community centres. | | | | |
| OKT 890 | Information Science | | | |
| Development Communication: Dissertation 890 | | | | |
| A comprehensive report (100-150 pages) on an approved research project. | | | | |
| OKT 895 | Information Science | 120 | | |
| Development Communication (coursework): Mini-dissertation 895 | | | | |
| A report (80-100 pages) on an approved research project. | | | | |
| OKT 900 | Information Science | | | |
| Examination: Development Communication 900 | | | | |
| OKT 990 | Information Science | | | |
| Thesis: Development Communication 990 | | | | |
| PUB 703 | Information Science | 16 | | |
| Design and production 703 | | | | |
| A basic module that introduces the key disciplines, terminologies and professional contexts necessary for the planning and management of the visual design, production and technological processes that a project will pass through during its development from concept to final product. Fundamental principles, elements and functions underlying the effective application and integration of typography, illustration, photography, visual design and technology are examined. | | | | |
| PUB 704 | Information Science | 32 | | |
| Publishing management 704 | | | | |
| The objective of this module is to teach the student how to manage a publishing house. The main issues addressed are the various models of management; the vision and mission statements of a company and the role these play in determining the publishing lists of a house; the role of the manager in society; and how to manage each of the divisions in a publishing house effectively and efficiently. The financial management of publishing is emphasized so that the student is empowered to price products to the required profit margins; is able to draw up a profit-and-loss account, a balance sheet and an income statement, and is able to read from these and other accounts the narrative of where the company is either succeeding or failing. Research assignments are given on issues such as contractual rights; personnel management (recruitment; retrenchment; and dismissals, as well as the consequences of each action); labour law; international comparative studies, and futuristic themes in publishing. | | | | |
| PUB 709 | Information Science | 16 | | |
| Publishing 709 | | | | |
| This module offers an introduction to the corporate publishing environment. Themes that are addressed include the following: Contextualising the corporate publishing environment (marketing and advertising; communication; identity; branding; forms of publications; process; team; contemporary key issues) Writing for a corporate environment (persuasive writing; reporting; feature articles; interviewing; style and editing; ethics) | | | | |

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| Liaising with the media (roles; strategy; types of media releases) Planning and designing a corporate publication programme. | | | | |
| PUB 712 | Information Science | 20 | | |
| Electronic publishing (Advanced) 712 The aim of this module is to teach and enable the student to build and mark up a document in XML (eXtensible Mark-up Language) or SGML (Standard Generalized Mark-up Language) for electronic publication. | | | | |
| PUB 713 | Information Science | 32 | | |
| The publishing environment 713 (was PUB 700) This module is research orientated. Research-based themes focus on the critical analyses of role-players, trends and issues in the contemporary book publishing industry in South Africa, Africa and internationally. | | | | |
| PUB 714 | Information Science | 16 | | |
| E-publishing 714 (was PUB 701) This course focuses on characteristics, advantages and pitfalls of e-publications and e-publishing – both on the WWW, via the internet, or on other delivery platforms. Students are introduced to specific topics such as the role and function of a publisher in the e-environment; hypertext fiction; e-dictionaries; publishing and marketing e-journals; new publishing and delivery models because of e-technology; and technical aspects of e-publications. | | | | |
| PUB 715 | Information Science | 20 | | |
| Advanced design and production 715 (was PUB 706) An advanced module that explores the creation and preparation of integrated design solutions for paper and screen-based publications, taking account of specific functions, subject matter, composition and production processes, target audiences and budgeting constraints. Critical evaluation of visual manifestations and the communication and interpersonal skills needed to transmit creative ideas to other people are emphasized. | | | | |
| PUB 801) | Information Science | 120 | | |
| Publishing (coursework): Course component 801 | | | | |
| PUB 890 | Information Science | | | |
| Dissertation: Publishing 890 A comprehensive report on an aspect of Publishing. | | | | |
| PUB 895 | Information Science | | | |
| Mini-dissertation: Publishing 895 | | | | |
| PUB 900 | Information Science | | | |
| Examination Publishing 900 Justification of thesis/examination on thesis. | | | | |
| PUB 990 | Information Science | | | |
| Thesis: Publishing 990 A comprehensive and advanced report on an approved project. Expert, highly specialised and interdisciplinary research within Publishing. | | | | |

IT. THE FOLLOWING MODULES FALL UNDER THE FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

| Module - code | Department | Credits | Fulltime | WebCT | Quarter Semester Year |
|---|-----------------------------|-----------|----------------------|-------|-----------------------|
| BEM 110 | Marketing Management | 10 | A&E 3 lpw | | Sem 1 |
| Marketing Management 110 <i>Fundamentals of marketing management.</i> General overview of marketing management including the marketing concept, the process of marketing management, evolution of marketing and the marketing environment. Consumer entity, market segmentation, positioning and marketing information. Perspective of various marketing instruments in the marketing mix, for example, product decisions, distribution decisions, marketing communication decisions and pricing decisions. | | | | | |
| BEM 161 | Marketing Management | 5 | A&E 3 lpw | | Quarter 3 |
| Marketing Management 161 <i>Sales decisions.</i> The selling process, selling techniques, management of selling corps and the management of sales promotions. A professional approach to selling techniques and the selling process, the position of personal sales in the execution of the marketing task; integration of various sales management tasks - recruitment, selection, training, remuneration and evaluation of the sales process and ethics of sales practices. | | | | | |
| BEM 162 | Marketing Management | 5 | A&E 3 lpw | | Quarter 4 |
| Marketing Management 162 <i>Introduction to the marketing of professional services.</i> Acquiring basic marketing skills will enhance the capabilities of professionals in inter alia the accounting profession. This module provides an overview of the seven marketing instruments of a professional services marketing mix. The focus will fall on the practical implications of the characteristics of intangible products and the pricing, promotion, placement, physical evidence, process and people dimensions of professional services. | | | | | |
| EKN 110 | Economics | 10 | A&E 3 lpw | | Sem 1 |
| Economics 110 (3 lectures) The economic environment and problem: working and course of the South African economy; functioning and interrelationships of the different economic sectors. Macro-economic theory and analysis. Analyse and interpret economic performance criteria: economic growth, inflation, job creation, balance of payments and exchange rate stability, income distribution. Calculate and interpret core economic indicators. Basic micro-economic principles: demand analysis (consumer theory); supply analysis (producer theory). Market analysis: market equilibrium; price determination; market forms; market failure; calculate and interpret price, income and cross elasticities. | | | | | |
| EKN 120 | Economics | 10 | A&E 3 lpw | | Sem 2 |
| Economics 120 Conceptualise the interrelationships of the different sectors in South African economy. The functioning of international trade, government economics and policy, the labour market, monetary economics, economic development, environmental economics with | | | | | |

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| specific reference to the South African context. The impact of national and international decisions and events on the South African economy. | | | | |
| Prerequisite: [EKN110 GS] | | | | |
| EKN 171 | Economics | 5 | A&E 1 lpw | Year |
| Economics 171 | | | | |
| A practical module that integrate mathematical and statistical techniques with economic theory. Collect, analyse and interpret South African and international economic data. | | | | |
| EKN 220 | Economics | 16 | A&E 3 lpw | Sem 2 |
| Economics 220 | | | | |
| International economic insight is provided into; international economic relations and history, theory of international trade, international capital movements, international trade politics, economic and customs unions and other forms of regional co-operation and integration, international monetary relations, foreign exchange markets, exchange rate issues and the balance of payments, as well as open economy macroeconomic issues. | | | | |
| EKN 251 | Economics | 8 | A&E 3 lpw | Quarter 1 |
| Economics 251 | | | | |
| From Wall and Bay Street to Diagonal Street, a thorough understanding of the mechanisms and theories explaining the workings of the economy is essential. Macro-economic insight is provided on; the real market, the money market, two market equilibrium, monetarism, growth theory, conjuncture analysis, inflation, Keynesian general equilibrium analysis and fiscal and monetary policy issues. | | | | |
| EKN 252 | Economics | 8 | A&E 3 lpw | Quarter 2 |
| Economics 252 | | | | |
| Micro-economic insight is provided into; consumer and producer theory, general micro-economic equilibrium, Pareto-optimality and optimality of the price mechanism, welfare economics, market forms and the production structure of South Africa. | | | | |
| EKN 271 | Economics | 8 | A&E 1 lpw | Year |
| Economics 271 | | | | |
| A practical module designed to bring together the knowledge gained in Economics 251, 252 and 220 and combine it with statistics, basic mathematics and research knowledge in order to gain analytical experience needed in the job market. This module will make use of computers and information technology in order to build practical skills required of every economist and econometrician. | | | | |
| EKN 310 | Economics | 20 | A&E 3 lpw | Sem 1 |
| Economics 310 | | | | |
| Welfare economics (optimality of the market mechanism, general equilibrium, market failure and the role of the government); general macro-economic policy: public finance theory and fiscal policy, monetary policy, public debt management policy; international trade and balance of payments adjustment policies; modern macro-economic policy considerations and development. Macro-economic policy – implementation in South Africa: monetary policy, fiscal policy, competition policy, labour policy, South African development issues/policies. | | | | |
| EKN 320 | Economics | 20 | A&E 3 lpw | Sem 2 |
| Economics 320 | | | | |
| The identification, collection and interpretation process of relevant economic data; the national accounts (i.e. income and production accounts, the national financial account, the balance of payments and input-output tables); economic growth; inflation; employment, unemployment, wages, productivity and income distribution; business cycles; financial indicators; fiscal indicators; social indicators; international comparisons; | | | | |

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| relationships between economic time series - regression analysis; long-term future studies and scenario analysis; overall assessment of the South African economy over the period from 1960 onwards. | | | | | |
| EKN 363 | Economics | 20 | A&E 3 lpw | | Sem 2 |
| Economics 363 | | | | | |
| Economic systems: types, origin and historical development, history of economic thought, underdeveloped countries, types of underdeveloped countries, influence of population pressure and international relations on development; underdeveloped regions in developed countries, development co-operation and development policy, the history of western and other economic systems. | | | | | |
| FBS 200 | Financial Management | 32 | 3 lpw | | Year |
| Financial Management 200 | | | | | |
| The purpose and functioning of management accounting, cost classification. The determination of product costs including raw material costs, labour costs, overheads and the allocation thereof according to traditional and activity-based costing methods, inventory management, the accumulation of costs according to job and process costing systems, the treatment of joint and by-products and the determination of costs according to a direct and absorption costing approach. Decision-making with reference to cost volume-profit ratios, relevant costs, risk and uncertainty, decision trees, linear programming and capital investment budgets. Planning and control through the application of quantitative techniques, budgets and standard costing. | | | | | |
| FBS 300 | Financial Management | 40 | 3 lpw | | Year |
| Financial Management 300 | | | | | |
| The purpose and functioning of management accounting, cost classification. The determination of product costs including raw material costs, labour costs, overheads and the allocation thereof according to traditional and activity-based costing methods, the accumulation of costs according to job and process costing systems, the treatment of joint and by-products and the determination of costs according to a direct and absorption costing approach. Decision-making with reference to cost volume-profit ratios, relevant costs, risk and uncertainty, decision trees, linear programming and capital investment budgets, principles of project management. Planning and control through the application of quantitative techniques, budgets and standard costing. Performance measurement by means of the principles of responsibility accounting and the determination of transfer prices. Financial Management by taking cognisance of the purpose of Financial Management, working capital management, financing decisions, cost of capital, dividend policy, capital structure decisions, share valuation. The student should be capable of applying the underlying theory to advance case studies. | | | | | |
| FRK 100 | Financial Accounting | 24 | 4 lpw | | Year |
| Financial Accounting 100 | | | | | |
| Interest calculations, insurance claims, accounting treatment of transactions, enterprises without profit motive, departmental accounts and annual financial statements of sole proprietorships. Joint ventures, partnerships, close corporations, companies, analysis and interpretation of financial statements using cashflow statement, manufacturing enterprises, tracing and correction of errors, incomplete records, branch accounting and an introduction to theory of accounting. The technical ability to apply the aforementioned theory to complex problems is essential. | | | | | |

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| FRK 101 | Financial Accounting | 24 | 6 lpw | | Year |
| Financial Accounting 101 | | | | | |
| Basic accounting equation, accounting procedures from source documents via subsidiary books, general ledgers, trial balance and adjustments to the financial statements of a sole proprietorship. Control accounts, departmental accounts, bank reconciliation statements, realisation of property, plant and equipment, depreciation. Interest calculations, insurance claims, treatment of accounting transactions, enterprises without profit motive, departmental accounts and branch accounting. Joint ventures, partnerships, close corporations, companies, analysis and interpretation of financial statements using cash-flow statement, manufacturing enterprises, tracing and correction of errors, incomplete records, introduction to the theory of accounting. | | | | | |
| FRK 121 | Financial Accounting | 12 | A&E 4 lpw | | Sem 2 |
| Financial Accounting 121 | | | | | |
| Elements of financial statements in detail. The conceptual framework. Income statement, balance sheet, cash flow statement and analysis and interpretation of financial statements of clubs, partnerships close corporations. Introduction to companies. Prerequisites: [FRK151 GS] and [FRK152 GS] | | | | | |
| FRK 151 | Financial Accounting | 5 | A&E 4 lpw | | Quarter 1 |
| Financial Accounting 151 | | | | | |
| Computer-assisted training. The nature and function of accounting. The development of accounting, Financial position, financial result. The recording process. Processing of accounting data. Elementary income statement and balance sheet. Prerequisite: [IT.2] | | | | | |
| FRK 152 | Financial Accounting | 5 | A&E 4 lpw | | Quarter 2 |
| Financial Accounting 152 | | | | | |
| Flow of documents. Accounting systems. Introduction to internal control and internal control measures. Bank reconciliations. Control accounts. Adjustments. Financial statements of a sole proprietor. Prerequisites: [FRK151 GS] and [IT.2] | | | | | |
| FRK 181 | SIT | 3 | A&E 2 lpw | | Sem 2 |
| Financial Accounting 181 | | | | | |
| (Offered in the first and second semester. See [IT.2]) Computer processing of accounting information. Prerequisites: [FRK151 GS] and [IT.2] | | | | | |
| FRK 200 | Financial Accounting | 38 | A&E 5½ lpw | | Year |
| Financial Accounting 200 | | | | | |
| Accounting for investment transactions, debentures and instalment sale agreements. Consolidation techniques and preparation of group financial statements. Preparation and presentation of company annual financial statements in compliance with the requirements of the Companies Act and certain statements of generally accepted accounting practice. Contents of interim reports and provisional financial statements in compliance with Companies Act requirements. Introduction to changes/conversion of entity forms. Introduction to income tax in respect of companies and individuals, and VAT. | | | | | |
| FRK 300 | Financial Accounting | 42 | A&E 4½ lpw | | Year |
| Financial Accounting 300 | | | | | |
| Revision of accounting requirements of the Companies Act with advanced problems, introduction to company tax. Viewpoints regarding generally accepted accounting practice. Introduction to group statements (consolidated accounts), with minority shareholders as well as horizontal, vertical and mixed groups. Analysis and interpretation of financial statements (including cash-flow statement) with reporting for the various purposes which such reports are used for. The technical ability to apply the forementioned theory to complex problems, is essential. | | | | | |

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| KOB 181-184 | Marketing and Communication Management | 5 | A&E 3 lpw | | See below |
| <p>Communication Management 181-184 <i>Module content will be adapted in accordance with the appropriate degree programme. KOB 181 – Quarter 1, KOB 182 – Quarter 2, KOB 183 – Quarter 3, KOB 184 – Quarter 4</i> Applied business communication skills. Acquiring basic business communication skills will enhance the capabilities of employees and managers in the business environment. This module provides an overview of communication skills on the intrapersonal, interpersonal, group (team), organisational, public and mass communication levels. The practical part of the module concentrates on the performance dimensions of these skills as applied to particular professions.</p> | | | | | |
| KOB 251 | Marketing and Communication Management | 8 | A&E3 lpw | | Quarter 1 |
| <p>Communication Management 251 <i>Organisational communication</i> The development of organisational communication against the background of management theories. The management of interpersonal communication in terms of listening skills, obstacles in effective communication, nonverbal communication. Knowledge of the organisational communication process: formal channels and obstacles, informal communication networks and the grapevine. The function of a communication audit.</p> | | | | | |
| KOB 252 | Marketing and Communication Management | 8 | A&E 3 lpw | | Quarter 2 |
| <p>Communication Management 252 <i>Team communication</i> The management of communication among groups and in teams; the creation of teamwork and shared leadership; task and transactional processes; communication problems in the team; team participation and the planning of team events, meetings, presentations and written reports.</p> | | | | | |
| KOB 261 | Marketing and Communication Management | 8 | A&E 3 lpw | | Quarter 3 |
| <p>Communication Management 261 <i>Intercultural business communication</i> The management of communication within an international and intercultural context by being aware of the elements that may contribute to or become obstacles to effective communication. The analysis of cultural aspects which emphasise cultural differences like language, technology, social organisation, contextualisation, power and leadership, nonverbal communication and the concept of time.</p> | | | | | |
| KOB 262 | Marketing and Communication Management | 8 | A&E 3 lpw | | Quarter 4 |
| <p>Communication Management 262 <i>Management communication</i> The integration of communication with management; the movement from task-oriented management to people-oriented management; employee communication. The differentiation between the communication behaviour of management and leadership</p> | | | | | |

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| within the context of motivation, problem-solving, decision-making and change management. | | | | | |
| OBS 110 | Business Management | 10 | A&E 3 lpw | | Sem 1 |
| Business Management 110 Introduction to Business Management as a science, the environment in which the enterprise operates, the field of business, the mission and goals of an enterprise, management and entrepreneurship. The choice of a form of enterprise, the choice of products and/or services, profit and cost planning for different sizes of operating units, the choice of location, the nature of production processes and the layout of the plant or operating unit. | | | | | |
| OBS 113 | Entrepreneurship | 10 | A&E 3 lpw | | Sem 1 |
| Entrepreneurship 113 Introduction to the South African entrepreneurship environment. Entrepreneurship the construct including the culture of entrepreneurship. Characteristics of South African entrepreneurs, entrepreneurship in the informal sector. | | | | | |
| OBS 120 | Business Management | 10 | A&E 3 lpw | | Sem 2 |
| Business Management 120 Introduction to and overview of general management, especially regarding the five management tasks, strategic management, contemporary developments and management issues, financial management, marketing, public relations. (Note: For marketing students, marketing is replaced by financial management, and public relations by small business management.) Introduction to and overview of the value chain model, management of the inputs, management of the purchasing function, management of the transformation process with specific reference to production and operations management, human resources management, and information management. (Note: For information management students, information management is replaced by small business management.) | | | | | |
| OBS 123 | Entrepreneurship | 10 | A&E 3 lpw | | Sem 2 |
| Entrepreneurship 123 Feasibility of new opportunities, the business plan and its subsections: Marketing plan, operational plans, financial plan, purchasing plan and administrative plan. Importance of entrepreneurship in South Africa, case studies of successful entrepreneurs, female entrepreneurs. | | | | | |
| OBS 210 | Business Management | 16 | A&E 3 lpw | | Sem 1 |
| Business Management 210 <i>Logistics management.</i> 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. | | | | | |

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| OBS 213 | Entrepreneurship | 16 | A&E 3 lpw | | Sem 1 |
| Entrepreneurship 213 | | | | | |
| Creativity, innovation and identification of opportunities: synopsis of creativity, techniques to facilitate creativity, barriers to creativity, creative versus critical thinking. Creative problem-solving and identification of opportunities: identification of opportunities; development of ideas, evaluation and prioritizing of ideas. Reinforcement of personal attributes: personal attributes and actions to facilitate creativity, enhancement of intuitive abilities. | | | | | |
| OBS 220 | Business Management | 16 | A&E 3 lpw | | Sem 2 |
| Business Management 220 | | | | | |
| <i>Project management – introductory.</i> Project management concepts, needs identification, the project, the project manager and the project team, types of project organizations, project communication and documentation. planning and control: Planning, scheduling and schedule control of projects, resource considerations and allocations, cost planning and performance evaluation | | | | | |
| OBS 223 | Entrepreneurship | 16 | A&E 3 lpw | | Sem 2 |
| Entrepreneurship 223 | | | | | |
| Nature of small business management, management of entrepreneurial opportunities, management of business the plan, small business marketing, purchasing, operational and financial management. Social and legal small business environment in South Africa: all legal requirements entrepreneurial businesses have to comply with. | | | | | |
| OBS 310 | Business Management | 20 | A&E 4 lpw | | Sem 1 |
| Business Management 310 | | | | | |
| Human resource management and development: The environment in which human resource management takes place, job analysis, strategic human resource planning, equal employment opportunities, planning and management of training, development and careers, functioning in a global environment. 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. | | | | | |
| OBS 313 | Entrepreneurship | 20 | A&E 3 lpw | | Sem 1 |
| Entrepreneurship 313 | | | | | |
| Entrepreneurial process, new ideas, identification of opportunities, the entrepreneurial mind in action, the entrepreneurial manager, new business plans. Ethics and the entrepreneur, management of growth, entrepreneurs in unsuccessful businesses, closure of the entrepreneurial process (harvesting). | | | | | |
| OBS 320 | Business Management | 20 | A&E 4 lpw | | Sem 2 |
| Business Management 320 | | | | | |
| <i>Strategic management analysis and formulation</i> | | | | | |
| Basic concepts, formulation of mission, policy and objectives, external evaluation of the business environment, internal evaluation of the enterprise, including intellectual assets; the formulation and development of a strategic plan. | | | | | |
| <i>Strategic management implementation</i> | | | | | |
| The role of management in strategy implementation; budgets as instrument in the implementation process; leading processes of change within enterprises; supporting policies, procedures and information systems for strategic implementation; implementation in the various functional areas; evaluation and control of implementation. | | | | | |

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| OBS 323 | Entrepreneurship | 20 | A&E 3 lpw | | Sem 2 |
| Entrepreneurship 323 Development of performance motivation, development of positive motives, role models, level of performance motivation, reinforcement of performance motivation, strategies and action plans. Franchising, small business consultation, business acquisitions, mentorship, female entrepreneurs, family business, home industries and management of growth. | | | | | |
| OBS 355 | Entrepreneurship | 10 | A&E 3 lpw | | Quarter 1 |
| Entrepreneurship 355 Characteristics and description of entrepreneurship, the entrepreneurial process, identification of opportunities, new business opportunities, the entrepreneurial manager, the entrepreneurial team. | | | | | |
| OBS 356 | Entrepreneurship | 10 | A&E 3 lpw | | Quarter 2 |
| Entrepreneurship 356 The small business enabling environment, management of growth and development of a small business; the compilation of a business plan. | | | | | |
| OBS 365 | Entrepreneurship | 10 | A&E 3 lpw | | Quarter 3 |
| Entrepreneurship 365 Performance motivation: development of positive motives, role models, determining of the level of achievement motivation, reinforcement of the need for performance motivation, strategies and action plans. | | | | | |
| OBS 366 | Entrepreneurship | 10 | A&E 3 lpw | | Quarter 4 |
| Entrepreneurship 366 Creativity, innovation, need for achievement, entrepreneurial role models, and the development of risk propensity. | | | | | |
| PAD 151 | School: Public Management | 5 | 3 lpw | | Quarter 1 |
| Public Administration 151 <i>Constitutional framework for public administration</i> South African system of government. Dynamic nature of government. Public and judicial institutions. Human Rights Commission. Commission on Gender Equality. Bill of Rights. | | | | | |
| PAD 152 | School: Public Management | 5 | 3 lpw | | Quarter 2 |
| Public Administration 152 <i>Theoretical foundations of public administration</i> The phenomenon of public administration. Locus-focus of public administration. Politics, government and administration. Origin, development and contents of the discipline. Approaches in public administration. Relationships between public administration and other academic disciplines. Administrative process. | | | | | |
| PAD 161 | School: Public Management | 5 | 3 lpw | | Quarter 4 |
| Public Administration 161 <i>Role of the state</i> Service motive. Public Administration: its services and clients. Relations between legislative, executive and judicial institutions. Problems and possibilities of development. | | | | | |

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| PAD 162 | School: Public Management | 5 | 3 lpw | | Quarter 3 |
| Public Administration 162 <i>Standards in public administration</i> | | | | | |
| The constitutional state's protective role. Normative guidelines and ethical conduct. Practices of public administration. Rights and obligations of the state. Authority of the State. | | | | | |
| PAD 251 | School: Public Management | 10 | 3 lpw | | Quarter 1 |
| Public Administration 251 <i>Organisational dynamics</i> | | | | | |
| Organisation and management concepts. Theories and bureaucratisation. Organisational culture. Organisation and the external environment. Departmentalisation in the various governmental spheres. Delegation. Communication. Public service and infrastructure. Organisational change and development. Organisational behaviour. Organisational conflict. Political and organisational analysis. Group dynamics. Structural design of organisations. Organisation development. | | | | | |
| PAD 252 | School: Public Management | 10 | 3 lpw | | Quarter 2 |
| Public Administration 252 <i>Public policy studies</i> | | | | | |
| Role players in public policy. Policy and programme formulation. Decision-making and problem-solving. Legislation and public policy. Policy-making process. Public opinion. Policy implementation. Policy effectiveness and evaluation. Policy alternatives. The press and public policy. Decision analysis in the public sector. Policy making and governance. Quantitative tools for policy making. Policy analysis. Analytical policy studies. Tools of policy analysis. | | | | | |
| PAD 262 | School: Public Management | 10 | 3 lpw | | Quarter 3 |
| Public Administration 262 <i>Public human resources management</i> | | | | | |
| Management of a changing work force. Utilisation of personnel. Personnel training and career development. Conditions of service. Labour relations. Negotiations. Women in public administration. Professionalism. Job analysis. Job evaluation. Wage and salary management. Performance appraisal systems. Compensation systems. Pension systems and other issues of retirement. | | | | | |
| PAD 352 | School: Public Management | 10 | 3 lpw | | Quarter 4 |
| Public Administration 352 <i>Theoretical foundations</i> | | | | | |
| Accountability and democracy. Democratic public accountability. Democratic public responsibility. Accounting officers. Ombudsman systems. Role of the public protector. Costs benefit analysis. Cost effectiveness analysis. Validity requirements in public institutions. | | | | | |
| PAD 361 | School: Public Management | 15 | 3 lpw | | Quarter 3 |
| Public Administration 361 The state, the individual, ethics and service rendering. | | | | | |

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| PAD 362 | School: Public Management | 10 | 3 lpw 7 weeks | | Quarter 4 |
| Public Administration 362 <i>Information management</i> Computer literacy. Strategic planning. Electronic governance. Data collection and analysis. Analytical skills and methods. Communication policy and practices. Technological communication. Electronic communication and management. Privacy and security of communication. Freedom of information. Data warehousing. Media relations. Media and citizen groups. | | | | | |
| STK 110 | | 13 | A&E 3 lpw + 1 ppw | | Sem 1 |
| Statistics 110 <i>Descriptive Statistics</i> Sampling and the collection of data, frequency distributions and graphical representations. Descriptive measures of location and dispersion. <i>Probability and inference</i> Introductory probability theory and theoretical distributions. Sampling distributions. Estimation theory and hypothesis testing of sampling averages and proportions (one- and two-sample cases). Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques. Prerequisite : [IT.2] | | | | | |
| STK 113 | | 11½ | A&E 3 lpw + 1 ppw | | Sem 1 |
| Statistics 113 <i>Data operations and transformations</i> Introductory concepts: the role of Statistics, various types of data and the number system. Concepts underlying linear, quadratic, exponential, hyperbolic and logarithmic transformations of quantitative data: graphical representations, solving of equations and interpretations. Determining linear equations in practical situations. Characteristics of logarithmic functions. The relationship between the exponential and logarithmic functions in economic and related problems. Systems of equations in equilibrium. Additional concepts relating to data-processing: functions and inverse functions, sigma notation, factorial notation, sequences and series, inequalities (strong, weak, absolute, conditional and double) and absolute values. <i>Descriptive Statistics – Univariate</i> Sampling and the collection of data, frequency distributions and graphical representations. Descriptive measures of location and dispersion. Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques. | | | | | |
| STK 120 | | 13 | A&E 3 lpw + 1 ppw | | Sem 2 |
| Statistics 120 <i>Multivariate statistics:</i> Analysis of variance, categorical data analysis, distribution-free methods, curve fitting, regression and correlation, the analysis of time series and indices. Statistical and economical applications of quantitative techniques: Systems of linear equations: drafting, matrices, solving and application. Optimisation: linear functions (two and more independent variables), non-linear functions (one and two independent variables). Marginal and total functions. Stochastic and deterministic variables in statistical and economical context: producers' surplus, consumers' surplus, distribution functions, probability distributions and probability density functions. Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques. Prerequisite: [STK110 GS] | | | | | |

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| STK 123 | | 11½ | A&E 3 lpw + 1 ppw | | Sem 2 |
| <p><i>Optimization techniques with economic applications</i> Data transformations and relationships with economic applications: operations and rules, linear, quadratic, exponential, hyperbolic and logarithmic functions, systems of equations in equilibrium, system of linear inequalities, solving of linear programming problems by means of the graphical and extreme point methods. Applications of differentiation and integration in statistic and economic related problems: the limit of a function, continuity, rate of change, the derivative of a function, differentiation rules, higher order derivatives, optimization techniques, the area under a curve and applications of definite integrals.</p> <p><i>Probability and inference</i> Introductory probability theory and theoretical distributions. Sampling distributions. Estimation theory and hypothesis testing of sampling averages and proportions (one- and two-sample cases). Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques.</p> | | | | | |

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| IT. THE FOLLOWING MODULES FALL UNDER THE FACULTY OF HUMANITIES |
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| Module - code | Department | Credits | Full-Time | WebCT | Quarter Semester Year |
|--|-------------------|----------------|------------------|--------------|------------------------------|
| AFR 159 | Afrikaans | 6 | A 2 lpw | WebCT | Quarter 1 |
| <p>Taal- en teksvaardigheid (1) 159 Voorbereiding vir die skryfproses (met inagneming van teksdoelwitte, lesersdoelwitte, organisasiedoelwitte, oriëntering t.o.v. die teks, die leser en die inhoud); soorte boodskappe in die teks; die opstel van 'n raamwerk; vaste teksstrukture; die aanbring van uiterlike struktuur (inhoudsopgawes, inleidings, brugparagrafe, slot, inhoudsopskrifte); literatuurverwysings en bronnelyste; tegniese afwerking.</p> | | | | | |
| AFR 160 | Afrikaans | 6 | A 2 lpw | WebCT | Quarter 2 |
| <p>Taal- en teksvaardigheid (2) 160 Onderskeid tussen tekstipes en tekssoorte; styl en register; belangrikste stilistiese eise waaraan tekste moet voldoen, verskillende tekssoorte, w.o. formele korrespondensie, sakebriewe; tekste rondom betrekkings en vergaderingskommunikasie; die verslag en kommunikasie via die Internet.</p> | | | | | |
| AFR 162 | Afrikaans | 6 | A 2 lpw | WebCT | Quarter 3 |
| <p>Inleiding tot teksstudie (1) 162 Inleiding tot literatuursoorte en verhaalteorie met toespitsing op Afrikaanse verhalende tekste.</p> | | | | | |
| AFR 163 | Afrikaans | 6 | A 2 lpw | WebCT | Quarter 4 |
| <p>Inleiding tot teksstudie (2) 163 Inleiding tot literatuursoorte en poësie teorie met toespitsing op Afrikaanse poësie tekste.</p> | | | | | |
| AFR 164 | Afrikaans | 6 | A 2 lpw | WebCT | Quarter 1 |
| <p>Afrikaans vir sprekers van ander tale (1) 164 Geïntegreerde praat-, luister-, lees- en skryfvaardighede.</p> | | | | | |

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| AFR 165 | Afrikaans | 6 | A 2 lpw | WebCT | Quarter 2 |
| Afrikaans vir sprekers van ander tale (2) 165 Geïntegreerde praat-, luister-, lees- en skryfvaardighede. | | | | | |
| AFR 166 | Afrikaans | 6 | A 2 lpw | WebCT | Quarter 3 |
| Afrikaans vir sprekers van ander tale (3) 166 Geïntegreerde praat-, luister-, lees- en skryfvaardighede. | | | | | |
| AFR 167 | Afrikaans | 6 | A 2 lpw | WebCT | Quarter 4 |
| Afrikaans vir sprekers van ander tale (4) 167 Geïntegreerde praat-, luister-, lees- en skryfvaardighede. | | | | | |
| AFR 265 | Afrikaans | 10 | A 2 lpw | WebCT | Quarter 4 |
| Leer Nederlands 265 Die verwerking van Nederlands as 'n tweede- en 'n vreemdetaal binne goed omynde algemene beginsels, met die klem op spreekvaardighede. | | | | | |
| AFR 266 | Afrikaans | 10 | A 2 lpw | WebCT | Quarter 1 |
| Afrikaanse letterkunde (1) 266 'n Onderzoek na teoretiese, literêr-historiese en tematiese aspekte van die Afrikaanse verhaaltradisie. | | | | | |
| AFR 267 | Afrikaans | 10 | A 2 lpw | WebCT | Quarter 2 |
| Afrikaanse letterkunde (2) 267 'n Onderzoek na teoretiese, literêr-historiese en tematiese aspekte van die Afrikaanse poësiëtradisie. | | | | | |
| AFR 268 | Afrikaans | 10 | A 2 lpw | WebCT | Quarter 1 |
| Nederlandse letterkunde (1) 268 'n Keuse uit eietydse Nederlandstalige literatuur; analitiese teksondersoeke met aandag aan agtergrond- en resepsieaangeleenthede. | | | | | |
| AFR 269 | Afrikaans | 10 | A 2 lpw | WebCT | Quarter 3 |
| Afrikaans vir die onderwys 269 Studie van uitkomsgebaseerde onderwys; literêre vaardigheid; funksies van taal- en literatuuronderwys; insigte uit die moderne taal- en literatuurwetenskap; Afrikaanse tekste. | | | | | |
| AFR 358 | Eenheid vir die Ontwikkeling van Taalvaardigheid | 15 | A 2 lpw | WebCT | Quarter 1 |
| Redigering 358 Versorging van Afrikaanse tekste met betrekking tot korrekte taal- en leestekengebruik, feitelike korrektheid, bibliografiese versorging, teksstruktuur, en skryf vir verskillende teikengroepe. | | | | | |
| AFR 362 | Afrikaans | 15 | A 2 lpw | WebCT | Quarter 3 |
| Afrikaanse letterkunde (3) 362 'n Gevorderde ondersoek na teoretiese, literêr-historiese en tematiese aspekte van die Afrikaanse verhaaltradisie. | | | | | |
| AFR 363 | Afrikaans | 15 | A 2 lpw | WebCT | Quarter 4 |
| Afrikaanse letterkunde (4) 363 'n Gevorderde ondersoek na teoretiese, literêr-historiese en tematiese aspekte van die Afrikaanse poësiëtradisie. | | | | | |

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| AFR 364 | Afrikaans | 15 | A 2 lpw | WebCT | Quarter 4 |
| Nederlandse letterkunde (2) 364 'n Gevorderde studie van eietydse Nederlandstalige literatuur. | | | | | |
| AFR 365 | Afrikaans | 15 | A 2 lpw | WebCT | Quarter 4 |
| Afrikaanse taalkunde 365 <i>Capita selecta</i> uit die Afrikaanse taalkunde: Afrikaanse fonetiek, morfologie, sintaksis, leksikologie en leksikografie; Afrikaanse diversiteit; Afrikaanse pragmatiek en die diachronie van Afrikaans. | | | | | |
| EAG 151 | Academic | 6 | A&E 2 lpw | A&E 2 lpw | Quarter 1 |
| Academic skills 151 Develop academic skills to be able to set goals, manage time, take notes, study effectively and solve problems through analytical and critical thinking. | | | | | |
| ENG 151 | English | 6 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 1 |
| Introduction to English poetry 151 In this module, students are introduced to the critical study of poetry in English. After an initial outline of analytical methods and poetic techniques, students will study poems written in different periods of English literature from the Middle Ages to contemporary South Africa. | | | | | |
| ENG 152 | English | 6 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 2 |
| Critical language skills 152 Introduction to critical reading, writing and language skills is a module intended to improve student proficiency in English. Students will learn the rules of English grammar, to extract arguments from passages of prose and to provide a synopsis of a single argument as well as a synthesis of a number of such arguments. | | | | | |
| ENG 153 | English | 6 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 3 |
| Introduction to prose 153 This module introduces the study of the novel and embraces both metropolitan and African texts. By the end of this module, students should be proficient in the skills of reading a novel perceptively and of writing critically on the novel. | | | | | |
| ENG 154 | English | 6 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 4 |
| Introduction to drama 154 This module introduces the study of drama by examining a number of plays representing different genres, periods and contexts, including both African and metropolitan texts. By the end of the module, students should be proficient in the skills of reading a play perceptively and of writing critically on drama. | | | | | |
| ENG 155 | English | 6 | E 3 lpw | | Quarter 1 |
| Academic reading skills 155 <i>* Cannot continue with English on 2nd level.</i> Academic reading skills in English including summarizing, speed-reading, vocabulary building and critical reading are covered in this module. | | | | | |
| ENG 156 | English | 6 | E 3 lpw | | Quarter 2 |
| Academic writing skills 156 <i>* Cannot continue with English on 2nd level.</i> Academic writing skills including synthesis, structuring and sustaining arguments and basic English grammatical and editing skills are covered in this module. | | | | | |

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| ENG 157 | English | 6 | 3 lpw | | Quarter 3 |
| English for specific purposes (1)157 <i>* Cannot continue with English on 2nd level.</i> This module concentrates on legal English and students taking it can expect to increase their legal vocabulary, improve their reading, speaking and listening skills and learn how to simplify complex legal texts. | | | | | |
| ENG 158 | English | 6 | E 2 lpw + 1 dpw | | Quarter 2 |
| Eng for specific purposes (2) 158 <i>* Cannot continue with English on 2nd level.</i> This module is intended to equip students with a thorough knowledge of English grammar, and is particularly useful for those interested in a career in teaching, editing, document design or other forms of language practice. | | | | | |
| ENG 251 | English | 10 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 4 |
| Poetry after 1798 251 <i>* Requires ENG 151</i> In this module, students will study the work of poets ranging from the Romantic period to the Modern. The general characteristics and techniques of specific poets will be discussed in relation to developments in aesthetic theory and socio-historical changes. | | | | | |
| ENG 252 | English | 10 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 2 |
| Language studies 252 In this module, students will be introduced to basic linguistic and socio-linguistic disciplines including the study of English phonetics and syntax. The history and development of the English language will be outlined and various areas of applied linguistics highlighted. | | | | | |
| ENG 253 | English | 10 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 3 |
| The modern novel 253 <i>* Requires ENG 153</i> In this module, students will read a representative selection of late 19th century and 20th century English novels. They will also be introduced to the key principles of the modernist movement, elementary narratology and other relevant theoretical and critical concepts. | | | | | |
| ENG 254 | English | 10 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 4 |
| Twentieth-century drama 254 <i>* Requires ENG 154</i> In this module, an overview of significant trends in British and American drama, exemplified in key texts, is given. At the end of this module, students should have an understanding of the development of Anglo-American drama within the period. | | | | | |
| ENG 351 | English | 15 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 2 |
| Poetry before 1798 351 <i>* Requires ENG 151</i> In this module, students will study the works of representative poets from Chaucer to Pope. The general characteristics and techniques of specific poets will be discussed in relation to developments in aesthetic theory and socio-historical change. | | | | | |
| ENG 353 | English | 15 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 3 |
| The rise of the novel 353 <i>* Requires ENG 153 or ENG 101</i> In this module, students will read a representative selection of 18th and 19th century novels in English. Various literary theories will inform the reading of these texts. By the | | | | | |

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| end of this module, students should be able to read, discuss and analyse novels written during this period with enhanced understanding and sophistication. | | | | | |
| ENG 354 | English | 15 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 1 |
| Shakespeare 354 <i>* Requires ENG 154</i> This module will examine several of Shakespeare's plays in the genres of comedy, tragedy, history and romance. By the end of the module, students should have an understanding of Shakespeare's dramatic oeuvre, be able to discuss characteristic features of his work and write informed analyses of scenes taken from his plays. | | | | | |
| ENG 355 | English | 15 | E 2 lpw + 1 dpw | E 2 dpw | Quarter 4 |
| African literature 355 This module will examine a variety of African and South African texts in English, including poetry, drama and prose. Texts will be placed in their socio-historical contexts, and characteristic features of and developments in African literature as well as theoretical debates in this field will be highlighted. | | | | | |
| ENG 358 | English | 15 | E 2 lpw | | Quarter 1 |
| Editing principles and practice 358 <i>* Requires a minimum of 64 credits in ENG modules, with a minimum average of 65% in the second year ENG modules OR a pass mark in a departmental entrance test.</i> <i>* Requires ENG 158.</i> This module develops language-editing skills on a variety of texts from different fields and of varying levels of complexity for a specific target audience. Students are required to edit work, to produce grammatical, idiomatic and logical English texts, taking into account peculiarities of South African English and local needs. They will learn to adjust work to meet the needs of a specified target audience. | | | | | |
| ENG 359 | English | 15 | E 2 lpw | | Quarter 2 |
| Editing principles and practice 359 <i>* Requires ENG 358</i> This module practices advanced language-editing skills on a variety of texts from different fields and of varying levels of complexity for a specific target audience. The principles of plain language editing are applied, in addition to strategies for overcoming textual complexity for given audiences, ranging from academics to neo-literate. A specialist focus is the editing of translations. | | | | | |
| EOT 151 | Unit for Language Skills Development Proficiency | 3 | A&E 2 lpw | A&E 2 lpw | Quarter 1 |
| Language Proficiency 151 Knowledge of basic grammar and basic vocabulary is revised, using documentary texts that are thematically subject related. In terms of skills the focus is placed on the development of the receptive skills (listening and reading) on text level, while the development of the productive skills (speaking and writing) will also receive attention, but only on paragraph level. | | | | | |
| EOT 152 | Unit for Language Skills Development Proficiency | 3 | A&E 2 lpw | A&E 2 lpw | Quarter 2 |
| Language Proficiency 152 Knowledge of general academic vocabulary is developed by means of general academic texts, which are thematically subject related. A foundation is laid in the knowledge of text | | | | | |

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| grammar and argumentation forms. All four the linguistic skills (listening, reading, speaking and writing) are practised on text level. | | | | | |
| EOT 153 | Unit for Language Skills Development Proficiency | 3 | A&E 2 lpw | A&E 2 lpw | Quarter 3 |
| Language Proficiency 153 Knowledge of subject-specific vocabulary is developed, using subject-specific academic and scientific texts. Basic knowledge of text grammar and argumentation forms is broadened. Specific attention is given to the application of the two receptive skills (listening and reading) for academic purposes. | | | | | |
| EOT 154 | Unit for Language Skills Development Proficiency | 3 | A&E 2 lpw | A&E 2 lpw | Quarter 4 |
| Language Proficiency 154 The focus is on developing and applying the four linguistic skills on text level for academic purposes. The two productive skills (speaking and writing) will receive special attention. | | | | | |
| FIL 151 | Philosophy | 6 | A&E 2 lpw | E 2 lpw | Quarter 1 |
| Humankind, World and Philosophy 151 Characteristics and nature of philosophy. What is it to be human (philosophical anthropology)? Brain and consciousness. What is truth (epistemology)? Characteristics of ethics with euthanasia as special problem. Eastern philosophy. Philosophy of the universe (cosmology). Environmental philosophy. Worldviews: materialism, idealism and pragmatism. | | | | | |
| FIL 152 | Philosophy | 6 | A&E 2 lpw | E 2 lpw (dept arrange) | Quarter 2 |
| Western thinking 152 A concise history of Western thinking, from the ancient Greeks to the end of the Middle Ages. The aim is to give a coherent account of the evolution of the Western mind and its changing conception of reality. The following themes are dealt with: The Greek world view, the transformation of the classical era (Hellenism and the emergence of Christianity), the Christian world view of the Middle Ages, the transformation of the Middle Ages in Scholasticism and late Scholasticism, and the rise of secularism. | | | | | |
| FIL 153 | Philosophy | 6 | A&E 2 lpw | E 2 lpw | Quarter 3 |
| Critical Thinking and Logic 153 Conditions for correct argumentation. Considering alternative arguments. Basic laws of thought. Deductive and inductive arguments. Dilemmas and analogical arguments. Uncritical prejudices and fallacies. Critical thinking and contexts. Mythical and critical thinking. | | | | | |
| FIL 154 | Philosophy | 6 | A&E 2 lpw | | Quarter 4 |
| African philosophy 154 Problems concerning the concept of an African philosophy: Is there such a thing as an "African philosophy", and how can one distinguish it from other philosophies? The African world view is studied and attention is given to themes in African philosophy, such as epistemology, ethics and political philosophy. | | | | | |

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| FIL 155 | Philosophy | 6 | A&E 1 lpw | | Sem 1 |
| Science and world views 155 | | | | | |
| Role played by mathematics and observation (experiment). Induction and falsification. Causality and determinism. Scientific revolutions: theory of relativity, quantum and evolution theory. Brain and consciousness. How is ethics possible? Euthanasia and abortion. | | | | | |
| FIL 251 | Philosophy | 10 | A&E 2 lpw | | Quarter 1 |
| Western Intellectual History 251 | | | | | |
| A concise history of Western thinking from the Renaissance to the late modern (post-modern) era. The following themes are dealt with: the Renaissance, Reformation, Scientific Revolution (Copernicus, Kepler, Galileo, Newton, Bacon, Descartes), foundations of the modern world view, triumph of secularism, paradox of modernity and the changing image of man (from Copernicus through Freud), self-critique of the modern mind (Locke, Hume, Kant, Hegel), conflicting streams of culture (temperaments): Enlightenment vs Romanticism, the significance of Nietzsche, Existentialism and Nihilism, the postmodern mind and its challenges to the contemporary intellectual and cultural milieu. | | | | | |
| FIL 252 | Philosophy | 10 | A&E 2 lpw | | Quarter 2 |
| History and society 252 | | | | | |
| This module takes as its point of departure F Fukuyama's controversial statement that the "end of history" has arrived with the global triumph of liberal democracy which is currently taking place. The idea of a Universal History emerged within the Western philosophical tradition, reaching its peak in Hegel's non-materialist, dialectical view of history, based on the struggle for recognition. This tradition, and its appropriation by Fukuyama in the present context, is examined in conjunction with the critiques of Tocqueville, Nietzsche and some of the "postmodern" thinkers. The Hegelian account of liberal democracy is critically opposed to the so-called "classical" representatives such as Hobbes and Locke. Particular attention is also given to the relationship between political and economical liberalism, as well as the tension between liberal democracy and cultural factors such as religion, nationalism and ethnicity. | | | | | |
| FIL 253 | Philosophy | 10 | A&E 2 lpw | E 2 lpw | Quarter 3 |
| Cognitive philosophy 253 | | | | | |
| Drawing on various primary and secondary literature, this module aims to acquaint the student with some of the major themes in cognitive philosophy today. The mind-body problem is introduced by exploring the work of various dualist and monist theorists. The question of consciousness is explored in detail, with special focus on the ideas of Daniel Dennett and Thomas Nagel. | | | | | |
| FIL 254 | Philosophy | 10 | A&E 2 lpw | E 2 lpw | Quarter 4 |
| Philosophy of Science 254 | | | | | |
| Cause and effect in science. Determinism. Induction and falsification. Positivism. The human sciences. Revolutionary changes: theory of relativity, quantum theory, theory of evolution and chaos/complexity theory. Artificial intelligence. Cosmology: origin of the universe and extra terrestrial life. | | | | | |
| JRN 151 | English | 6 | A/E 2 lpw | | Quarter 1 |
| Introduction to journalism 151 | | | | | |
| This module provides an introduction to the print media, concentrating on newspaper reportage and on advertising. It covers persuasive techniques, the analysis of both advertisements and media articles, reportage and comment, newsworthiness, article | | | | | |

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| format and the effect of layout. Students are encouraged to read critically and analytically. | | | | | |
| JRN 351 | English | 15 | E 2 lpw | | Quarter 1 |
| Writing for the print media (1) 351 | | | | | |
| * Requires a minimum of 64 credits in AFR, ENG or LCC modules | | | | | |
| The first of two complementary modules, this module focuses on news reportage and includes news values, audience awareness, interviewing skills, sources and their evaluation, the news writing process (selection of material, structure, language, style and tone), the principle of fairness, and editing skills. | | | | | |
| JRN 352 | English | 15 | E 2 lpw | | Quarter 2 |
| Writing for the print media (2) 352 | | | | | |
| * Requires JRN 351 | | | | | |
| This module focuses on feature writing, and includes various kinds of features, the generation, selection and organization of material, style, tone, principles of effective writing, and journalistic ethics, as well as the transition to web journalism. Students will be expected to write a feature article, a review and a column. | | | | | |
| LCC 151 | Afrikaans | 6 | A&E 2 lpw | WebCT | Quarter 3 |
| Introduction to the study of language 151 | | | | | |
| The nature of linguistic knowledge; the study of grammar and language use; introduction to the theory of grammar: phonetics and phonology, morphology, syntax, lexicology, semantics. | | | | | |
| LCC 152 | Afrikaans | 6 | A&E 2 lpw | WebCT | Quarter 4 |
| Introduction to language, culture and industry 152 | | | | | |
| An introduction to the role of language in culture and industry. | | | | | |
| LCC 153 | Afrikaans | 6 | A&E 2 lpw | WebCT | Quarter 2 |
| Introduction to media literacy 153 | | | | | |
| An introductory study of contemporary print and electronic media (newspapers, magazines, radio, TV, film and internet). | | | | | |
| LCC 154 | Afrikaans | 6 | A&E 2 lpw | WebCT | Quarter 1 |
| Introduction to cross-cultural communication 154 | | | | | |
| The nature and dynamics of the process of linguistic communication; important factors in this process; communicative intentions; text interpretation and text creation; negotiating meaning; the role of socio-cultural practices (discourse conventions; interpersonal relationships and relationships of power); cross-cultural miscommunication (conflicting interpretative schemas, stereotypes and discrimination). | | | | | |
| LCC 251 | Afrikaans | 10 | A&E 2 lpw | WebCT | Quarter 1 |
| Principles of document design 151 | | | | | |
| The design and use of heuristics for evaluating and writing informative, instructional and persuasive documents (paper and online), with special reference to content, structure and style. | | | | | |
| LCC 252 | Afrikaans | 10 | A&E 2 lpw | WebCT | Quarter 4 |
| Politics of language 252 | | | | | |
| The relationship between language and politics (broadly spoken); the main functions of the politics of language; construction of language and identity; language and bonding; language and separation; language and power; language elaboration, maintenance and death/decline; language shift; language and the public domain; language contact and language conflict. | | | | | |

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| LCC 253 | Afrikaans | 10 | A&E 2 lpw | WebCT | Quarter 3 |
| Contemporary text studies 253 A study of contemporary texts, with reference to <i>inter alia</i> gender, ecological and political issues. | | | | | |
| LCC 254 | Afrikaans | 10 | A&E 2 lpw | WebCT | Quarter 4 |
| Media texts 254 A genre-based analysis of media texts with reference to newspapers, magazines, film, television and radio. | | | | | |
| LCC 255 | Afrikaans | 10 | A&E 2 lpw | WebCT | Quarter 2 |
| Approaches in and to the media 255 Critical approaches to the discourse of the media. | | | | | |
| LCC 351 | Afrikaans | 15 | A&E 2 lpw | WebCT | Quarter 2 |
| Document design 351 <i>Persuasive documents:</i> The process of persuasion – a cognitive perspective: classifying, evaluating and designing persuasive texts. <i>Instructional documents:</i> Mental processes playing a role in following and remembering verbal and visual instructions; the structure, style and layout of selected instructional text types: e.g. manuals, forms, examination papers and patient information leaflets. | | | | | |
| LCC 352 | Afrikaans | 15 | A&E 2 lpw | WebCT | Quarter 1 |
| Language planning 352 The nature of language planning; language stipulations of the SA Constitution; the national language policy and its implementation; the sociolinguistic character of SA; language attitudes; language promotion; corpus, status and acquisition planning; language management (PANSALB), provincial and national language committees. | | | | | |
| LCC 353 | Afrikaans | 15 | A&E 2 lpw | WebCT | Quarter 3 |
| Critical discourse analysis 353 Critical discourse analysis as a socially relevant theory of language in context; the role of language in the construction of social relationships and social identities (subject positions, types of self, etc.); the construction of knowledge systems and social relationships between individuals; the elements of discourse: text, discursive event (production, interpretation, distribution) and social practice (e.g. political, cultural); ideology and power in discourse. | | | | | |
| LCC 354 | Afrikaans | 15 | A&E 2 lpw | WebCT | Quarter 1 |
| Comparative literary studies 354 A comparative study of texts from post-colonial literature, e.g. from Africa, the Americas, Asia, Australia and Europe. | | | | | |
| LCC 355 | Afrikaans | 5 | A&E 2 lpw | WebCT | Quarter 2 |
| Comparative cultural and media studies 355 A comparative study of cultural and media phenomena in the world today. | | | | | |
| LCC 356 | Afrikaans | 15 | A&E 2 lpw | WebCT | Quarter 1 |
| Writing for the new media 356 (offered from 2004) Strategies for creating effective texts for film, television and the internet. | | | | | |
| LCC 357 | Afrikaans | 15 | A&E 2 lpw | WebCT | Quarter 1 |
| Language and development (2) 357 The concepts language and development and the interaction between these; | | | | | |

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| multilingualism and development; an overview of the role of language and multilingualism in the following spheres of development: education, the economy, politics and state administration. | | | | | |
| LCC 358 | Afrikaans | 15 | A&E 2 lpw | WebCT | Quarter 3 |
| Independent research (1) 358 | | | | | |
| An independent research project: students make a choice from the departmental focal areas in consultation with the head of the department. | | | | | |
| LCC 359 | Afrikaans | 15 | A&E 2 lpw | WebCT | Quarter 4 |
| Independent research (2) 359 | | | | | |
| An independent research project: students make a choice from the departmental focal areas in consultation with the head of the department. | | | | | |
| RES 151 | Academic | 6 | A&E 2 lpw | A&E 2 lpw | Quarter 3 |
| Introduction to research 151 | | | | | |
| <i>* This module is only presented during quarter 3.</i> | | | | | |
| The module introduces the student to basic research in the social sciences and humanities. Various approaches to research, problem-solving strategies, interpretation of results, critical reading and thinking skills, and report writing are included. The focus is on practical application, gathering, analysing and synthesizing of research literature, and for representation of scholarly efforts. | | | | | |
| SLK 151 | Psychology | 6 | A&E 2 lpw + 1 bpw | E 2 lpw | Quarter 1 |
| Psychological perspectives 151 | | | | | |
| 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. | | | | | |
| SLK 152 | Psychology | 6 | A&E 2 lpw + 1 bpw | E 2 lpw | Quarter 2 |
| Cognitive Processes 152 | | | | | |
| 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. Compulsory introduction module. | | | | | |
| SLK 154 | Psychology | 6 | A&E 2 lpw + 1 bpw | E 2 lpw | Quarter 3 |
| Health Psychology 154 | | | | | |
| This module is an introduction to psychological aspects related to illness and health. Themes such as the following are explored: the patient-helper relationship, stress and stress-related illnesses, lifestyle and illness/health, psychological aspects of physical illnesses, coping with emotional distress associated with illness, and psychological processes related to loss and death. | | | | | |
| SLK 155 | Psychology | 6 | A&E 2 lpw + 1 bpw | | Quarter 3 |
| Environmental Psychology 155 | | | | | |
| This module deals with the reciprocal relationship between people and the natural and built environment. Environment-behaviour theories are explored and evaluated, as well as environmental stressors (e.g. noise), environmental disturbances (e.g. natural disasters and air pollution), and territoriality and personal space related to crowding and high density. The urban environment is discussed, with particular emphasis on its effects on the city dweller. Attention is given to the use of design principles to create more liveable spaces. Finally, strategies that encourage environmentally responsible behaviour are outlined. | | | | | |

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| SLK 156 | Psychology | 6 | A&E 2 lpw + 1 bpw | E 2 lpw | Quarter 4 |
| Developmental Systems Theory 156 | | | | | |
| In this module, the entire lifespan development of the individual is investigated according to an ecosystemic model and a psychosocial approach. Explanations of the actions, roles and relationships of the person within various contexts of development. Understanding of and a sensitivity for the complexity of human development is acquired. | | | | | |
| SLK 251 | Psychology | 10 | A&E 2 lpw | E 2 lpw | Quarter 1 |
| Personology 251 | | | | | |
| In the module on Personology, various theories of personality are studied, including the psychoanalytical and social learning theories, the person-oriented approaches, and the ecosystemic approach. An African perspective is also discussed. These approaches are compared and critically evaluated with regard to their basic assumptions, view of the person, and philosophy of science, as well as their contribution towards understanding and explaining human behaviour within contemporary contexts. Requires SLK 151 and 152. Prerequisites: [SLK151] and [SLK152] | | | | | |
| SLK 253 | Psychology | 10 | A&E 2 lpw | E 2 lpw | Quarter 2 |
| Development Psychology 253 | | | | | |
| In this module, the areas and determinants of early, middle and late adulthood development are studied. Incorporated are the developmental changes related to cognitive, physical, emotional and social functioning of the individual and the context of work. Traditional and contemporary theories of human development explaining and describing these stages are studied in order to address the key issues related to adulthood. | | | | | |
| SLK 254 | Psychology | 10 | A&E 2 lpw | E 2 lpw | Quarter 3 |
| Social Psychology 254 | | | | | |
| This module is a social-psychological perspective on interpersonal and group processes. Themes that are covered include communication, pro-social behaviour, social influence and persuasion, political transformation, violence, and group behaviour. | | | | | |
| SLK 256 | Psychology | 10 | A&E 2 lpw | E 2 lpw | Quarter 4 |
| Psychological Assessment 256 | | | | | |
| This module deals with the nature and role of psychological measurement and assessment. It includes an overview of different perspectives on psychological assessment, the classification, nature and scope of various categories of tests and techniques, the role of ethics in psychometry, and the areas of application of psychological assessment and evaluation. | | | | | |
| SLK 257 | Psychology | 10 | A&E 2 lpw | | Quarter 2 |
| Child Psychopathology 257 | | | | | |
| Identification of abnormal behaviour in children based on knowledge of normal childhood development; introduction to the study of various models pertaining to abnormal behaviour; understanding and application of basic concepts in child psychopathology. Prerequisites: [SLK 156 or OPV251] and [SLK251] | | | | | |
| SLK 351 | Psychology | 15 | A&E 2 lpw | E 2 lpw | Quarter 1 |
| Community Psychology 351 | | | | | |
| This module deals with a community psychological perspective on human behaviour and psychological interventions. The module focuses on themes such as definitions of key concepts, principles and aims of community psychology, and the role of the community psychologist. The application of these principles within the South African society, social change and psychological problems are investigated from a cross-cultural perspective. | | | | | |

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| SLK 352 | Psychology | 15 | A&E 2 lpw | E 2 lpw | Quarter 2 |
| Abnormal Behaviour 352 | | | | | |
| This module provides an introduction to psychopathology and symptomatology of adult abnormal behaviour. Terminology, definitions of abnormal behaviour, problems in diagnosis, labelling, and myths regarding abnormal behaviour are discussed. Neurosis as a specific mental disorder is studied critically from a multi-dimensional perspective, including intrapsychic, interpersonal and social-cultural explanations. | | | | | |
| Prerequisites: [SLK251] and [SLK253], [OPV 251] | | | | | |
| SLK 353 | Psychology | 15 | A&E 2 lpw | E 2 lpw | Quarter 4 |
| Critical Perspectives 353 | | | | | |
| This is a module that critically explores the contribution of various perspectives in Psychology. The impact of earlier thought frameworks on contemporary perspectives, and the implications of these ideas for practical initiatives focussed on mental health in communities, are discussed. | | | | | |
| Prerequisites: [SLK 151], [SLK 152], [SLK 251], [SLK 253], [SLK 254], [SLK 351], [SLK 352] | | | | | |
| SLK 354 | Psychology | 15 | A&E 2 ppw | Special arrangement | Sem 1 Sem 2 |
| Community Psychology in Practice 354 | | | | | |
| Practical module: Training to apply principles of community psychology to various fields of study. As a practical module it involves workshops, action research, and facilitation, empowerment, and evaluation of students while doing practical work within different communities. | | | | | |
| Prerequisites: [OPV251 or SLK 156] and [SLK251] and [SLK253] and [SLK 351] | | | | | |
| SLK 355 | Psychology | 15 | A&E 2 lpw | E 2 lpw | Quarter 3 |
| Psychological Assistance 355 | | | | | |
| This is a practical module which offers opportunities for practising basic communication and interpersonal skills, reflection and the utilisation of available resources during psychological assistance. | | | | | |
| Prerequisites: [SLK251] and [SLK352] and [Closed: needs departmental permission] | | | | | |
| TRL 151 | Translation | 6 | A/E 2 lpw | A/E 2 lpw ** | Quarter 3 |
| Introduction to translation 151 | | | | | |
| <i>*Translation in any two languages offered by the School of Languages, provided that the particular language combination can be accommodated during any given year.</i> | | | | | |
| <i>** Flexilearning: Mode of presentation will be determined by student numbers.</i> | | | | | |
| Translation and basic translation skills such as source text analysis, translation methods and translation aids. Translation in South Africa. Practical translations of a variety of texts of limited scope. | | | | | |
| TRL 251 | Translation | 10 | A/E 2 lpw | A/E 2 lpw ** | Quarter 2 |
| Equivalence in translation 251 | | | | | |
| <i>*Requires TRL 151.</i> | | | | | |
| <i>*Translation in any two languages offered by the School of Languages, provided that the particular language combination can be accommodated during any given year.</i> | | | | | |
| <i>** Flexilearning: Mode of presentation will be determined by student numbers.</i> | | | | | |
| Equivalence at word level and above word level. Equivalence at text level. Problems of equivalence in a variety of texts. Practical translations. | | | | | |

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| TRL 351 | Translation | 15 | A/E 2 lpw | A/E 2 lpw ** | Quarter 4 |
| Intercultural translation 351 <i>*Requires TRL 251.</i> <i>*Translation in any two languages offered by the School of Languages, provided that the particular language combination can be accommodated during any given year.</i> <i>** Flexilearning: Mode of presentation will be determined by student numbers.</i> Translation and language varieties such as dialects, code-switching, sociolects, etc. Translation of culture-bound texts. Translation in a multilingual speech community such as South Africa. Practical translations of a variety of different text types. | | | | | |
| TRL 352 | Translation | 15 | A/E 2 lpw | A/E 2 lpw ** | Quarter 1 |
| Literary translation 352 <i>*Requires TRL 251.</i> <i>*Translation in any two languages offered by the School of Languages, provided that the particular language combination can be accommodated during any given year.</i> <i>** Flexilearning: Mode of presentation will be determined by student numbers.</i> Theories of and strategies for literary translation; study of translated texts; practical translation (prose and poetry). The source and target languages are chosen by the student from any of the languages offered by the School of Languages, provided that the particular language combination can be accommodated during any given year. | | | | | |
| VIO 102 | Visual Arts | 24 | 1 lpw + 1 design + 1 ppw | | Year |
| Visual design (1) 102 <i>* Requires: Mathematics HG 50%; Computer Studies HG 60%</i> <i>* Only for students who specialize in B IS Multimedia.</i> Introduction to elements and principles of design, typography and layout. Application of visual principles and techniques. Media characteristics. The design process. | | | | | |
| VIO 202 | Visual Arts | 40 | 1 lpw + 1 design + 1 ppw | | Year |
| Visual design (2) 202 <i>* Requires: Mathematics HG 50%; Computer Studies HG 50%</i> <i>* Only for students who specialize in BIS Multimedia.</i> Visual analysis and interpretation. Design function and specific applications in the electronic environment. Aesthetic, functional and communicative evaluation of design. | | | | | |
| VKK 153 | Visual Arts | 6 | A/E 3 lpw | | Quarter 3 |
| Cultural myths and icons 153 Definitions of popular culture. The relationship between popular culture and the mass-media. Interpretation of diverse manifestations of icons in relation to cultural codes, stereotypes and myths. Reference to figures such as, for example, Barbie, Madonna, Diana, the Marlboro man, Mandela, Nkosi Johnson. Virtual personifications. Soap opera stereotypes and the South African soap opera. | | | | | |
| VKK 155 | Visual Arts | 6 | A/E 3 lpw | | Quarter 1 |
| Foundations of visual language 155 Study of the form, content and aims of static and moving images in diverse media (for example, fine arts and design). Introduction to the scientific and systematic analysis and interpretation of visual images and visual media. Formalistic analysis. Introduction to visual language and the visual communication process. Visual communication and visual literacy in relation to cultural conventions, codes, visual metaphors, icons, symbols, myths and ideology. | | | | | |

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| VKK 156 | Visual Arts | 6 | A/E 3 lpw | | Quarter 2 |
| Visual language in popular culture 156 | | | | | |
| Introduction to popular culture. Introduction to methods of analysis of visual culture. Application of modes of analysis to various aspects of visual culture. Visual language and cultural codes as encapsulated in, for example, shopping malls, photography and comics. | | | | | |
| VKK 157 | Visual Arts | 6 | A/E 3 lpw | | Quarter 4 |
| Visual semiotics 157 | | | | | |
| Explanation and application of semiotics as a strategy for the interpretation and evaluation of the moving image. Origins, principles, aims and terminology of semiotics. Introduction to genre theory in the interpretation of the moving image; application to, for example, music video and film. | | | | | |
| VKK 255 | Visual Arts | 10 | A/E 2 lpw | | Quarter 1 |
| Gender ideology in visual culture 255 | | | | | |
| Introduction to gender as an ideological system. Terminology and history of feminism and masculinism. Interpretation of images from the mass-media and art in terms of themes and issues in gender theory. | | | | | |
| VKK 256 | Visual Arts | 10 | A/E 2 lpw | | Quarter 2 |
| History of film 256 | | | | | |
| Contextual approach to history of film. Aspects of history of film up to present. Reciprocal influence between art movements, art styles and films of the 20 th century. | | | | | |
| VKK 257 | Visual Arts | 10 | A/E 2 lpw | | Quarter 3 |
| Style and Anti-Style 1940-Pres 257 | | | | | |
| Changes in the appearance of visual culture from 1940 to the present. Contextualisation of popular visual culture and consumer culture. Influence of youth- and sub-cultures such as Beatniks, Hippies, Punks, and Grunge on contemporary design styles. Influence of cultural codes and conventions on design styles. Description and contextualisation of design styles with reference to South Africa. | | | | | |
| VKK 258 | Visual Arts | 10 | A/E 2 lpw | | Quarter 4 |
| Visual Identity and Branding 258 | | | | | |
| The aims and functions of visual communication in the marketing context. Visual communication as foundation for the creation of corporate, product and brand identity, as well as advertising and promotion. Methods of analysis and evaluation of advertisements and visual identity. Influence of target audience and media characteristics on visual communication. | | | | | |
| VKK 352 | Visual Arts | 15 | A/E 2 lpw | | Quarter 1 |
| Visual image and ideology 352 | | | | | |
| Investigation on more advanced level of theoretical frameworks that can be used in the interpretation, analysis and evaluation of visual culture. Influence of methods of analysis such as, for example, Post-structuralism, Marxism, and Feminism is explained in terms of the interpretation of contemporary visual culture. Ideologies as embodied in cultural expressions. Application to advertisements and television texts; kitsch and the ideology of taste. | | | | | |
| VKK 353 | Visual Arts | 15 | A/E 2 lpw | | Quarter 2 |
| Decoding visual culture 353 | | | | | |
| Critical decoding of culturally encoded ideas and ideologies as embodied in visual culture. The emphasis is placed on the semiotic decoding of aspects of visual culture. | | | | | |

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| Application to clothing and South African identity; entertainment landscapes and theme parks in South Africa, and the 'myth of Africa'. The necessity of a critical attitude towards visual messages. | | | | | |
| VKK 355 | Visual Arts | 15 | A/E 2 lpw | | Quarter 3 |
| Authorship in moving image 355 | | | | | |
| Investigation of aspects of authorship in the creation of the moving image. Barthes and the 'death of the author'. Concepts such as ownership, creativity and signature in the creation of the moving image are discussed; application to, for example, music video, television and film. | | | | | |
| VKK 356 | Visual Arts | 15 | A/E 2 lpw | | Quarter 4 |
| Virtual culture 356 | | | | | |
| The influence of technology on new visual paradigms. History and development of virtual reality. Virtual communities. Cyberpunk and William Gibson. The cyborg. The visual culture of virtual reality; examples from various fields of visual culture, for example computer games, advertisements, film and television. Images of technology. | | | | | |

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| IT. | THE FOLLOWING MODULES FALL UNDER THE FACULTY OF NATURAL AND AGRICULTURAL SCIENCES |
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| Module - code | Department | Credits | Full-Time | WebCT | Quarter Semester Year |
|--|-------------------|----------------|----------------------|--------------|------------------------------|
| GGY 132 | Geography | 4 | A&E 1 ppw | | Sem 1 |
| Cartographic Skills 132 | | | | | |
| Principles of cartography. Map reading, analysis and interpretation; introductory survey techniques. Prerequisite: [IT.2] | | | | | |
| GGY 153 | Geography | 6 | A&E 4 lpw | | Quarter 1 |
| Geography of Cities 153 | | | | | |
| An introduction to the forms and functions of cities from ancient times to the 17th Century as a basis for understanding early South African towns. The essence of the segregated and apartheid forms of the modern South African city. Prerequisite: [IT.2] | | | | | |
| GGY 154 | Geography | 6 | A&E 4 lpw | | Quarter 2 |
| Geography of Tourism 154 | | | | | |
| Geography of tourism: conceptualisation; basic elements; classification; international and South African context; ecotourism: resources; urban tourism. Prerequisite: [IT.2] | | | | | |
| GGY 155 | Geography | 6 | E 4 lpw | | Quarter 2 |
| Human Geography of SADC 155 | | | | | |
| Foundations for understanding contemporary human geographic processes in Southern Africa. The module will trace the major changes in the economic, political and population geography of Southern Africa including those associated with the formation of SADC. | | | | | |
| GGY 162 | Geography | 4 | A&E 1 ppw | | Sem 2 |
| Remote Sensing 162 | | | | | |
| Use, interpretation and analysis of satellite imagery, aerial photography and other remotely sensed data. Prerequisite: [IT.2] | | | | | |

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| GGY 163 | Geography | 6 | A&E 4 lpw | | Quarter 3 |
| Biogeography of SA 163 | | | | | |
| Introduction to the biogeography of South Africa; the environment as ecological system; ecological laws and processes; natural regions and biomes; humans as ecological elements; resource utilisation, management and mismanagement in South Africa. Prerequisite: [IT.2] | | | | | |
| GGY 164 | Geography | 6 | A&E 4 lpw | | Quarter 4 |
| Physical Geography of SA 164 | | | | | |
| Introduction to the physical geography of South Africa including climate and weather patterns, landscape evolution and topographical distribution. Landscaping processes within arid, semi-arid and coastal environments; fluvial systems and processes; mountain environments. | | | | | |
| GGY 252 | Geography | 12 | E 4 lpw + 2 ppw | | Quarter 2 |
| Process Geomorphology 252 | | | | | |
| Physical processes that influence the earth's surface and management. Specific processes and their interaction in themes such as weathering; soil erosion; slope, mass movement and fluvial processes | | | | | |
| GGY 263 | Geography | 12 | E 4 lpw + 2 ppw | | Quarter 3 |
| Urban Modelling 263 | | | | | |
| Theoretical constructs for the single and multi-nodal forms of the western city. Modelling the inter-urban settlement system, and intra-urban tertiary activity. Presentation skills; geographic communication; analysis and statistical interpretation of spatial data. | | | | | |
| GGY 264 | Geography | 12 | E 4 lpw + 2 ppw | | Quarter 4 |
| Urban Social Morphology 264 | | | | | |
| The structure and spatial distribution of class, income, ethnicity, age and other demographic variables in urban environments in South Africa and other parts of the world. Qualitative and quantitative analyses of social change and transformation in cities, including segregation, desegregation and gentrification. Other themes include urban perception, urban living, social area analysis, and spatial strategies for social integration. | | | | | |
| GGY 283 | Geography | 12 | E 4 lpw + 2 ppw | | Quarter 1 |
| Introductory GIS 283 | | | | | |
| Introduction to Geographic Information Systems (GIS), types of GIS, data input, data analysis and associated technology. GIS applications and data analysis techniques in practicals comprise concepts presented in lectures. The practical application of GIS is emphasised rather than mastering software. | | | | | |
| GGY 353 | Geography | 18 | E 4 lpw + 2 ppw | | Quarter 2 |
| Urban Development Studies 353 | | | | | |
| Relationships between land values and land uses under changing conditions affected by corporations, super corporations, powerful individuals, and local authorities with selected examples from London, Paris, and Johannesburg. | | | | | |
| GGY 354 | Geography | 18 | E 4 lpw + 2 ppw | | Quarter 1 |
| Development Geography 354 | | | | | |
| Principles of development, perspectives on development. Aspects of development strategy such as population growth, urbanisation, rural development. Development in Third World cities. Frameworks for development in South Africa. | | | | | |

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| GGY 361 | Geography | 18 | E 4 lpw + 2 ppw | | Quarter 3 |
| Environmental Geomorphology 361 | | | | | |
| Interactions of geomorphic processes within the physical and built environments; themes such as geomorphology and environmental change, slope processes and the environment, geomorphic risks and hazards, soil erosion and conservation, geomorphology in environmental management, weathering in urban environments, preservation of buildings, and deterioration and preservation of indigenous rock art. Practicals involve fieldwork and subsequent laboratory analysis. | | | | | |
| GGY 362 | Geography | 18 | E 4 lpw + 2 ppw | | Quarter 4 |
| Natural Resource Management 362 | | | | | |
| The biosphere as an environmental system; environmental degradation due to mismanagement; principles and approaches to sustainable resource management; ecosystem management in South Africa; solutions to environmental degradation; terrain potential and impact assessment. Special emphasis is placed on tourism as a land-use. | | | | | |
| GGY 363 | Geography | 12 | E 4 lpw + 2 ppw | | Quarter 3 |
| Applied Geomorphology 363 | | | | | |
| Interactions of geomorphic processes within the physical and built environments. Geomorphology in environmental management, weathering in urban environments, conservation and preservation of buildings. (Module for Landscape Architecture and Architecture students) | | | | | |
| GIS 220 | Geography | 12 | E 3 lpw + 1 ppw | | Sem 2 |
| Geographic Data Analysis 220 | | | | | |
| Collection, management, analysis and representation of geographic data; Data sampling, and preparation; geographic referencing; interpolation; data integration; presentation. | | | | | |
| GIS 310 | Geography | 24 | E 3 lpw + 1 ppw | | Sem 1 |
| Geographic Information Systems 310 | | | | | |
| Advanced theory and practice of Geographic Information Systems; GIS applications; design and implementation of GIS applications. | | | | | |
| Prerequisite: [GGY283] or [TDH] | | | | | |
| GIS 320 | Geography | 24 | E 3 lpw + 1 ppw | | Sem 2 |
| Spatial Analysis 320 | | | | | |
| Introduction to spatial analysis techniques classification, interpolation, extrapolation, geo-referencing, kriging, topology, visualisation, networks, spatial interaction, spatial statistics and general spatial systems analysis. | | | | | |
| Prerequisite: [GIS 310] or [TDH] | | | | | |
| WST 110 | Mathematics and Applied Maths | 16 | A&E 4 lpw + 1 ppw | | Sem 1 |
| Mathematical Statistics 110 | | | | | |
| Sampling methods. Exploratory data analysis. Classification of data, graphical representations, elementary descriptive measures. More advanced descriptive methods. Probability calculation. Introductory distribution theory and statistical inference: Point and interval estimation. Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques. | | | | | |
| Prerequisite: [IT.2] | | | | | |

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| WST 120 | Mathematics and Applied Maths | 16 | A&E 4 lpw + 1 ppw | | Sem 2 |
| Mathematical Statistics 120 Statistical inference: Hypothesis testing with applications in one and two-sample cases. Analysis of variance. Distribution-free methods. Correlation and regression. Introductory categorical data analysis. Indices. Curve fitting. Time series analysis. Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques. Report writing. Prerequisite: [WST 110 GS] | | | | | |
| WTW 101 | Mathematics and Applied Maths | 16 | A&E 4 lpw + 1 ppw + 1 dpw | | Year |
| Mathematics 101 This module includes the syllabus of Calculus 114, as well as enrichment. Enrichment includes computer-based study units. Real numbers and the coordinate plane. Functions and their zero's. Polynomials. Exponential and logarithmic functions. Vector algebra. Functions, limits and continuity. Differential calculus of single variable functions, rate of change, graph sketching, optimisation and applications. The mean value theorem, the rule of L'Hospital. Definite and indefinite integrals, the fundamental theorem of Calculus, the mean value theorem for integrals, integration techniques. Prerequisite: [IT.2] | | | | | |
| WTW 102 | Mathematics and Applied Maths | 16 | A&E 4 lpw + 1 ppw + 1 dpw | | Year |
| Mathematics 102 This module includes the syllabi of Calculus 128 and Linear algebra 126, as well as enrichment. Enrichment includes computer-based study units. This module follows WTW 101. Integration techniques, improper integrals. Applications of integration, elementary differential equations. Elementary power series and Taylor's theorem. Conic sections. Vector functions, space curves and arc lengths. Quadric surfaces and multivariable functions. Matrices and their algebra, systems of linear equations, subspaces of \mathbb{R}^n , bases, determinants. Mathematical induction. Complex numbers and factorisation of polynomials. Prerequisite: [WTW 114 GS or WTW 101 GS] | | | | | |
| WTW 114 | Mathematics and Applied Maths | 16 | A&E 4 lpw + 1 tutorial of 3 hrs | | Sem 1 |
| Calculus 114 Vector algebra with applications to geometry. Functions, limits and continuity. Differential calculus of single variable functions, rate of change, graph sketching, applications. The mean value theorem, the rule of L'Hospital. Definite and indefinite integrals, the fundamental theorem of Calculus, the mean value theorem for integrals, integration techniques. This module serves as preparation for students majoring in Mathematics (including all students who intend to enrol for WTW 218 and WTW 220). Students will not be credited for more than one of the following modules for their degree: WTW 114, WTW 158 and WTW 134. This module also includes a formal technique-mastering programme. Prerequisite: [IT.2] | | | | | |
| WTW 115 | Mathematics and Applied Maths | 8 | 2 lpw + 1 tutorial of 1½ hrs | | Sem 1 |
| Discrete Structures 115 Propositional logic: truth tables, logical equivalence, implication, arguments. Mathematical induction and well-ordering principle. Counting techniques: elementary probability, multiplication and addition rules, permutations and combinations, binomial theorem, inclusion-exclusion rule. Prerequisite: [IT.2] | | | | | |

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| WTW 123 | Mathematics and Applied Maths | 8 | A&E 2 lpw + 1 tutorial of 1½ hrs | | Sem 2 |
| Numerical Analysis 123 | | | | | |
| Non-linear equations, numerical integration, initial value problems for differential equations, systems of linear equations. Algorithms for elementary numerical techniques are derived and implemented in computer programs. Error estimates and convergence results are treated. Prerequisite: [WTW 114 GS or WTW 101 GS] | | | | | |
| WTW 126 | Mathematics and Applied Maths | 8 | A&E 2 lpw + 1 tutorial of 1½ hrs | | Sem 2 |
| Linear Algebra 126 | | | | | |
| Vector algebra with applications, matrix algebra, systems of linear equations, the vector space \mathbb{R}^n , bases, and determinants. Mathematical induction. Complex numbers and factorisation of polynomials. Conic sections. This module serves as preparation for students majoring in Mathematics (including all students who intend to enrol for WTW 211). Students will not be credited for more than one of the following modules for their degree: WTW 126, WTW 161. This module also includes a formal technique-mastering programme. Prerequisite: [T.2] | | | | | |
| WTW 128 | Mathematics and Applied Maths | 8 | A&E 2 lpw + 1 tutorial of 1½ hrs | | Sem 2 |
| Calculus 128 | | | | | |
| Integration techniques, improper integrals. Applications of integration, introduction to differential equations. Elementary power series and Taylor's theorem. Vector functions, space curves and arc lengths. Quadric surfaces and multivariable functions. This module serves as preparation for students majoring in Mathematics (including all students who intend to enrol for WTW 218 and WTW 220). Students will not be credited for more than one of the following modules for their degree: WTW 128, WTW 168. This module also includes a formal technique-mastering programme. Prerequisite: [WTW 114 GS or WTW 101 GS] | | | | | |
| WTW 152 | Mathematics and Applied Maths | 8 | A&E 2 lpw and 1 tutorial of 1½ hrs | | Sem 1 |
| Mathematical Modelling 152 | | | | | |
| Introduction to the modelling of dynamic processes using difference equations. Continuous dynamic systems. Applications to real-life situations in, among others, finance, economics and ecology. WTW 152 can also be taken in the second semester. Prerequisite: [T.2] | | | | | |
| WTW 211 | Mathematics and Applied Maths | 12 | A&E 2 lpw and 1 tutorial of 1½ hrs | | Sem 1 |
| Linear Algebra 211 | | | | | |
| Matrices and linear equations, linear independence, real vector spaces and subspaces, eigenvalues, eigenvectors, diagonalisation of matrices, applications of eigenvalue problems, linear transformations. Prerequisite: [WTW 126 or WTW 102] | | | | | |
| WTW 218 | Mathematics and Applied Maths | 12 | A&E 2 lpw + 1 tutorial of 1½ hrs | | Sem 1 |
| Calculus 218 | | | | | |
| Calculus of multivariable functions, directional derivatives. Extrema and Lagrange multipliers. Multiple integrals, polar, cylindrical and spherical coordinates. Line integrals and the theorem of Green. Surface integrals and the theorems of Gauss and Stokes. Prerequisites: [WTW 114 or WTW 101] and [WTW 128 or WTW 102] | | | | | |

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| WTW 220 | Mathematics and Applied Maths | 12 | A&E 2 lpw + 1 tutorial of 1½ hrs | | Sem 2 |
| Analysis 220 Properties of real numbers. Analysis of sequences and series of real numbers. Power series and theorems of convergence. The Bolzano-Weierstrass theorem and the intermediate value theorem. Analysis of real-valued functions on an interval. Prerequisites: [WTW 114 or WTW 101] and [WTW 128 or WTW 102] | | | | | |
| WTW 221 | Mathematics and Applied Maths | 12 | A&E 2 lpw + 1 tutorial of 1½ hrs | | Sem 2 |
| Linear Algebra 221 Change of basis, diagonalisability of linear transformations, orthogonal vectors, unitary and orthogonal transformations, canonical forms, applications. Prerequisite: [WTW 211] | | | | | |
| WTW 285 | Mathematics and Applied Maths | 12 | A&E 2 lpw + 1 tutorial of 1½ hrs | | Sem 2 |
| Discrete Structures 285 Counting techniques: combinations with repetition, functions. Pigeon-hole principle. Countability and computability. Setting up and solving recurrence relations. Graphs: paths, cycles, trees, isomorphism. Graph algorithms: Kruskal, Prim, Fleury, loop invariants. Prerequisite: [WTW 115] | | | | | |

IT. THE FOLLOWING MODULE FALLS UNDER THE FACULTY OF LAW

| Module code | Department | Credits | Full-time | WebCT | Quarter |
|--|-----------------------|----------------|------------------|--------------|----------------|
| BER 410 | Mercantile Law | | 4 lpw | | |
| Introduction to law; general principles of contract law; specific contracts: purchase contracts, employment contracts, job contracting, representative law; general aspects of business law; dispute resolution – mediation and arbitration. | | | | | |

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| IT. MEDALS AND PRIZES IN THE SCHOOL OF INFORMATION TECHNOLOGY |
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| Name | Donor | Award |
|---|---------------------------|--|
| Department of Computer Science | | |
| The Roelf van den Heever / EPIUSE prize | EPIUSE | For the best student in Computer Science at honours level |
| The ISIS Software-Engineering Prize | ISIS | For the best BSc(IT) group project in Software Engineering |
| The Microsoft Third-Year Computer Science Prize | Microsoft | For the best female student in Computer Science at 300 level. |
| The Microsoft Second-Year Operating Systems Prize | Microsoft | For the best student in the module Operating Systems at 200 level. |
| The Microsoft First-Year Computer Science Prize | Microsoft | For the best student in Computer Science at 100 level. |
| Department of Informatics | | |
| AST Prize | AST | Best achievement in Informatics on 100 level. |
| AST Prize | AST | Best achievement in Informatics on 200 level. |
| AST Prize | AST | Best achievement in Informatics on 300 level. |
| Inbekon Prize | Inbekon Pty Ltd | For the best project in Informatics 370 |
| ABSA Prize | ABSA | Best achievement in Informatics over all 3 years |
| Future Enterprize Prize | Gerrie Lewies | For the best honours student in Informatics |
| Informatics Prize | Department of Informatics | For the best honours project in Informatics |