FACULTIES OF THE
UNIVERSITY OF PRETORIA

HUMANITIES
NATURAL AND AGRICULTURAL SCIENCES
LAW
THEOLOGY
ECONOMIC AND MANAGEMENT SCIENCES
VETERINARY SCIENCE
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HEALTH SCIENCES
ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY

Address all correspondence to:

The Director: Academic Administration
University of Pretoria
PRETORIA
0002

Cheques and postal orders must be crossed and made payable to the *University of Pretoria*.

Telephone: 012 420 4111
Fax: 012 362 5168/362 5190
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FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY

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(separate publication)

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ACADEMIC PERSONNEL AS AT 30 SEPTEMBER 2008

DEAN
Prof. R.F. Sandenbergh, PrEng MEng DEng(Pretoria) FSAIMM MCorrISA

CHAIRMAN
Prof. M.J. Maritz, MSc(QS) PhD(Pretoria) Cert Arb PrQS PMAQS MRICS AAArb

Department of Architecture
Joubert, O., MScArch(Pennsylvania State) PhD(Natal) ..... Professor (Head)
Pr.Arch
Bakker, K.A., MArch PhD(Pretoria) Pr.Arch ..... Professor
Fisher, R.C., MArch PhD(Pretoria) Pr.Arch ..... Professor
Jekot, B.P., MArch(Silesia) PhD(Wroclaw) Pr.Arch ..... Associate Professor
Osman, A.O.S., BSc MSc(Arch)(Khartoum)..... Senior Lecturer
PhD(Pretoria)
Vosloo, P.T., BSc(Boukunde) BArch ML PhD(Pretoria)..... Senior Lecturer
Pr.LArch Pr.Arch Pr.CPM
Young, G.A., BLArch(Toronto) Pr.LArch ..... Senior Lecturer
Botes, N., BArch(Pretoria)..... Lecturer
Breed, C.A., BLArch(Pretoria) Mdes(Mex) ..... Lecturer
Clarke, N.J., BArch(Pretoria) MPhil(Cantab) Pr.Arch..... Lecturer
Hindes, C.N., BL ML(Pretoria)..... Lecturer
Karruseit, C., BHome Econ(Int)(Pretoria)..... Lecturer
Königk, R., BInt(Pretoria) .....Lecturer
Laubscher, J., BArch MTRP(Free State) ..... Lecturer
Müller, L., BLArch(Pretoria) BA(Anthropology) ..... Lecturer
Van Rensburg, R.J., BArch MArch(Pretoria)..... Lecturer
Viljoen, M., BArch MArch(Pretoria) .....Lecturer
White, G., BArch(Free State) MCPUD(Cape Town) ..... Lecturer

Department of Construction Economics
Maritz, M.J., MSc(QS) PhD(Pretoria) Cert Arb PrQS ..... Associate Professor (Head)
PMAQS MRICS AAArb
Cloete, C.E., MSc DSc(Pretoria) BA(Hons)(Pretoria) ..... Professor
BTh MBL(Unisa) MCIOB FRICS
Cruywagen, J.H.H., MSc(QS)(Pretoria) PrQS PMAQS..... Senior Lecturer
Hoffman, D.J., MSc(QS) MBA(Pretoria) PrQS ..... Senior Lecturer
PMAQS
Prinsloo, H.F., MSc(Real Estate)(Pretoria) PrCPM ..... Senior Lecturer
Jacobsz, H.J., BSc(Construction Management)(Pretoria)..... Lecturer
CIOB PAV
Jansen, J.J.A., BSc(Construction Management) ..... Lecturer
BComm(Pretoria) MIOB
Le Roux, F., MSc(Construction Management)(Pretoria) ..... Lecturer
BCom STR(Free State) BCompt(Hons) HED(Unisa)

Department of Town and Regional Planning

Oranje, M.C., BT&RP MT&RP PhD(Pretoria) ..... Associate Professor (Head)
Anyumba, G., BAHons(Nairobi) MA(Nottingham) ..... Senior Lecturer
Dip Urban Design(Oxon) PhD(Delft) MRTPI
Du Toit, J.L., BT&RP(Pretoria) MPhil(Stellenbosch) ..... Lecturer
Faling, W., BT&RP(Pretoria) MT&RP(Natal)..... 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
Selection takes place prior to admission to the following programmes in the School for the Built Environment:

(a) All undergraduate programmes
A restricted number of students are admitted to all undergraduate programmes.

(b) Postgraduate programmes
A restricted number of students are admitted to the following taught programmes: BArch(Hons), BInt(Hons), BLArch(Hons), BSc(Hons)(QuantitySurveying), BSc(Hons)(Construction Management), MArch(Prof), MInt(Prof), ML(Prof), MSc (Quantity Surveying), MSc(Construction Management), MSc(Project Management), MSc(Real Estate) and M(Town and Regional Planning). Applications close on 31 October for South African students.
Admission to the MSc and PhD programmes by research is subject to approval by the Head of Department and the Dean.

(c) International students
Applications close on 31 August for international students.
International students wanting to be considered for selection must have their qualifications audited and verified by the South African Qualifications Authority (SAQA). Those candidates wanting to register for professional postgraduate degree programmes for purposes of professional registration must further have their qualifications verified by the relevant registering council as to the equivalence of the registration category. All costs are for the direct account of the applicant. All documentation must accompany the application and be submitted before the closing date.
Note: Contact details for the various bodies are to be found on the relevant departmental web page.

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.

National Senior Certificate
All undergraduate candidates who enrol at the University of Pretoria for the first time, must show their original National Senior Certificate at the Student Administration of their faculty before the end of the first semester.

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 March 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 orientation week
Details of the welcoming day to which all parents are cordially invited, and the subsequent academic orientation 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 inform students regarding prescribed books 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.
Please note: The fees advertised and thus levied in respect of a module or study programme presentation represents a combination of the costs associated with the formal services rendered (for example lectures, practicals, access to laboratories, consumables used in laboratories, etc) as well as associated indirect overheads such as the provision of library and recreation facilities, security and cleaning services, electricity and water supply, etc. Therefore the fees in respect of a module or study programme presentation cannot simply be reconciled with the visible services that are rendered in respect of such module or programme.

GLOSSARY OF TERMS

academic year: The 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.
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.
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, 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** (for a module) **x 10)**
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.
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.

DEGREES CONFERRED 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 2009.

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) (1 year)
(v) Baccalaureus Honores in Interior Architecture – BInt(Hons) (1 year)
(vi) Baccalaureus Honores in Landscape Architecture – BL(Hons) (1 year)

(vii) Master of Architecture (Professional) – MArch(Prof) (1 year)
(viii) Master of Architecture (by research) – MArch (1 year)
(ix) Master of Interior Architecture (Professional) – MInt(Prof) (1 year)
(x) Master of Interior Architecture (by research) – MInt (1 year)
(xi) Master of Landscape Architecture (Professional) – ML(Prof) (1 year)
(xii) Master of Landscape Architecture (by research) – ML (1 year)
(xiii) Philosophiae Doctor – PhD (1 year)

DEPARTMENT OF CONSTRUCTION ECONOMICS

(i) Baccalaureus Scientiae (Quantity Surveying) – BSc(QS) (3 years)
(ii) Baccalaureus Scientiae (Construction Management) – BSc(Construction Management) (3 years)
(iii) Baccalaureus Scientiae Honores (Quantity Surveying) – BSc(Hons)(QS) (2 years)
(iv) Baccalaureus Scientiae Honores (Construction Management) – BSc(Hons) (Construction Management) (2 years)
(v) Magister Scientiae (Quantity Surveying) – MSc(QS) – By research (1 year); Coursework (2 years)
(vi) Magister Scientiae (Construction Management) – MSc(Construction Management) By research (1 year); Coursework (2 years)
(vii) Magister Scientiae (Real Estate) – MSc(Real Estate) – By research (1 year); Coursework (2 years)
(viii) Magister Scientiae (Project Management) – MSc(Project Management) By research (1 year); Coursework (2 years)
(ix) Philosophiae Doctor – PhD (1 year)

DEPARTMENT OF TOWN AND REGIONAL PLANNING

(i) Bachelor of Town and Regional Planning – BT&RP (4 years)
(ii) Master of Town and Regional Planning – MT&RP – By research (2 year); Coursework (2 year)
(iii) Philosophiae Doctor – PhD (2 years)

REGULATIONS FOR BACHELOR'S DEGREES

B.1 Admission to degree 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 bachelor's degree at the University, a candidate must, in addition to having a valid National Senior Certificate with admission for degree purposes, 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. Admission to the School for the Built Environment is based on the final matriculation examination results.

(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.

Abovementioned candidates are requested to contact the Student Administrtion at the Faculty for more information regarding admission requirements.

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 student administration concerned 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 Admission requirements for the Faculty of Engineering, Built Environment and Information Technology for candidates with a National Senior Certificate from 2009

To be able to gain access to the Faculty and specific programmes, prospective students must meet the requirements of the appropriate combinations of recognised NSC subjects as well as certain levels of achievement in the said subjects. In this regard the determination of an admission point score (APS) is explained and a summary of the faculty specific requirements, i.e. APS per programme and the specific subjects required per programme is provided.

Determination of an Admission Point Score (APS, previous M-Score)

The calculation is simple and based on a candidate's achievement in six 20-credit recognised subjects by using the NSC ratings, that is the "1 to 7 scale of achievement". Thus, the highest APS that can be achieved is 42.

Life Orientation is excluded from the calculation determining the APS required for admission.

Rating code	Rating	Marks %
7	Outstanding achievement	80-100%
6	Meritorious achievement	70-79%
5	Substantial achievement	60-69%
4	Adequate achievement	50-59%
3	Moderate achievement	40-49%
2	Elementary achievement	30-39%
1	Not achieved	0-29%

Preliminary admission is based on the results obtained in the final Grade 11 examination. Final admission is based on Grade 12 results. Please note: The final Grade 12 results will be the determining factor with regard to admission.

B.2.1 Specific admission requirements for the School for the Built Environment from 2009

a) A valid National Senior Certificate with admission for degree purposes.
b) The following minimum subject and level requirements:

School for the Built Environment – minimum requirements						
Degree	**APS**	**Group A**			**Group B**	
		Two Languages	**Mathematics**	**Life Orientation**	**Physical Science**	**2 Other subjects**
BSc (Architecture) (A limited number of students are selected. An interview takes place.)	27	Comply with NSC minimum requirements; ADDITIONALLY one of these languages must be Afrikaans OR English at level 5 (60-69%).	4 (50-59%)	4 (50-59%) (Excluded when calculating the APS)	4 (50-59%)	Any two subjects
BSc (Interior Architecture) (A limited number of students are selected. An interview takes place.)	27	Comply with NSC minimum requirements; ADDITIONALLY one of these languages must be Afrikaans OR English at level 5 (60-69%).	4 (50-59%)	4 (50-59%) (Excluded when calculating the APS)	4 (50-59%)	Any two subjects
BSc (Landscape Architecture) (A limited number of students are selected. An interview takes place.)	27	Comply with NSC minimum requirements; ADDITIONALLY one of these languages must be Afrikaans OR English at level 5 (60-69%).	4 (50-59%)	4 (50-59%) (Excluded when calculating the APS)	4 (50-59%)	Any two subjects
BSc (Quantity Surveying) (A limited number of students are selected.)	25	Comply with NSC minimum requirements; ADDITIONALLY one of these languages must be Afrikaans OR English at level 5 (60-69%).	4 (50-59%)	4 (50-59%) (Excluded when calculating the APS)	4 (50-59%) for any one of the following subjects: Physical Science and/ or Accounting	Any two subjects
BSc (Construc-tion Manage-ment) (A limited number of students are selected.)	25	Comply with NSC minimum requirements; ADDITIONALLY one of these languages must be Afrikaans OR English at level 5 (60-69%).	4 (50-59%)	4 (50-59%) (Excluded when calculating the APS)	4 (50-59%) for any one of the following subjects: Physical Science and/ or Accounting	Any two subjects

B Town and Regional Planning (A limited number of students are selected.)	24	Comply with NSC minimum requirements; ADDITIONALLY one of these languages must be Afrikaans OR English at level 4 (50-59%).	4 (50-59%)	4 (50-59%) (Excluded when calculating the APS)	Any three subjects

B.3 Modules from other faculties

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.4 Academic literacy

Academic literacy is presented as part of the specific study programme requirements. All first-year students who wish to register with the University are required to write an academic literacy test. On grounds of the results of this test, students who passed will be granted exemption from the EOT modules. Students who do not pass the test will be required to register for the EOT modules in order to obtain sufficient credits for degree purposes.

B.5 Computer and information literacy

Computer Literacy (CIL 111) and Information Literacy (CIL 121) are presented as compulsory modules, but exemption may be obtained for CIL 111 by writing an exemption test.

B.6 Registration for a specific year

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

B.7 Registration of modules

(a) Final cut-off dates are set for the change of modules (removing or adding) for each academic year. Please consult the calender of the University in this regard.

(b) Should a student register for second semester modules 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 done.

B.8 Module credits for unregistered students

There are students who attend lectures, write tests and examinations and in this manner earn marks, but have either not registered for modules or have not registered as students at all. 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.9 Examinations

9.1 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 10.3 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.

9.2 Examination admission

A minimum semester/year mark of 40% is required in order to be admitted to the final examination in a specific module, with the exception of first-semester 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.

9.3 Pass requirements

Refer to General Regulations 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 such as 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 set out in the study guide of each module. 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 containing 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) For 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 containing 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 subminimum requirements in subdivisions of certain modules. For such modules these specific requirements are given in the study guide of the module. Also, a schedule containing this information (for all such modules presented in each school) will be compiled, for approval by the Dean.

9.4 Ancillary examinations

Refer to General Regulation G.12.3.

9.4.1 No ancillary examinations are granted in any Design modules (all ONT modules) in the Department of Architecture.

9.5 Supplementary examinations

Refer to General Regulation G.12.4.

Except for first-semester modules in the first year where supplementary examinations are compulsory between 40% and 49%, a supplementary examination is only granted in instances where:

(i) a final mark of between 45% and 49% was obtained;

(ii) a final mark of between 40% and 44% was obtained and where the candidate also obtained either a semester mark or an examination mark of 50% or higher;

(iii) a pass mark has been obtained, but the required subminimum in the examination section of the module or divisions thereof has not been obtained.

Regulations (i) to (iii) do not apply to second and third-year modules of any of the programmes in the Department of Architecture. No supplementary examinations are granted in any year of study for the Design module (ONT modules).

9.6 Special examinations (including the aegrotat)

Refer to General Regulation G.12.5.

9.7 Other special examinations

Refer to General Regulation G.12.6.

(a) The Dean may, at the recommendation of the Head of Department concerned, grant a special examination in a module to a student who failed such a 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) In order to be considered 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. Before a student may

sit the examination, the Head of Department decides when the special examination will take place and may prescribe work which should be satisfactorily completed before the examination will take place.

(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.

9.8 Re-marking of examination scripts

Refer to General Regulation G.14.

B.10 Promotion requirements

(a) Students whose academic progress is not acceptable can be suspended from further studies. Refer to the following important regulations:
General Regulation G.3
and/or
Regulations B.12 (d); B17 (d) or B.22 (d), Department of Architecture
or
Regulations B.27 (c) and B.29 (c), Department of Construction Economics
or
Regulation B.38 (c), Department of Town and Regional Planning.

(b) A student who is excluded from further studies in terms of the stipulations of the abovementioned regulations, will be notified in writing by the Dean or Admissions Committee at the end of the relevant semester.

(c) A student who has been excluded from further studies may apply in writing to the Admissions Committee of the School for the Built Environment for readmission on or before 12 January.

(d) Should the student be readmitted by the Admissions Committee, strict conditions will be set which the student must comply with in order to proceed with studies.

(e) Should the student not be readmitted to further studies by the Admissions Committee, he/she will be informed in writing.

(f) Students who are not readmitted by the Admissions Committee have the right to appeal to the Senate Appeals Committee: Admissions.

(g) Any decision taken by the Senate Appeals Committee: Admissions is final.

DEGREES IN THE DEPARTMENT OF ARCHITECTURE

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, landscape architecture and urban design where their responsibilities would be the documentation of projects, project administration and site management.
Students are advised to work in the offices of an architect or a landscape architect to gain practical experience 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 is 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.11 BACCALAUREUS SCIENTIAE IN ARCHITECTURE [BSc(Arch)] (Code 12132002)

(a) Admission requirements

See General Information B.1, B.2 and B.3 in this publication.
Note: Students wishing to transfer to other programmes in the Department of Architecture must obtain written consent from the Admissions Committee.

(b) Duration

The minimum period of study is three years full-time. Candidates wishing to become professional architects must hereafter apply to register for the BArch(Hons) degree (one year full-time) and thereafter the MArch(Prof) degree (one year full-time).

(c) Curriculum

Total credits: 418

Unless the Dean, in consultation with the Head of the Department decides otherwise, the following applies:

Code	Module	Prerequisites	Credits
First year of study			
First semester			
AAL 110	Earth Studies 110	-	10
ARC 110	Elective module 110	-	6
CIL 111	Computer literacy 111	-	4
EOT 110*	Academic literacy 110	-	6
KON 111	Construction 111	-	8
OML 110	Environmental Studies 110	-	6
ONT 100	Design 100	-	30
	Total		70
Second semester			
CIL 121	Information literacy 121	-	4
EOT 120*	Academic literacy 120	-	6
KON 121	Construction 121	KON 111 GS	8
OKU 120	Design Communication 120	-	6
OML 120	Environmental Studies 120	-	6
ONT 100	Design 100	-	30
	Total		60

* Students who did not pass the Academic Literacy Test must register for EOT 110 and 120 offered by the Unit for Academic Literacy. (See Regulation B.5.).

Second year of study
First semester

AAL 210	Earth Studies 210	-	8
JCP 201	Community-based Project 201	-	4
KON 210	Construction 210	KON 111, 121	8
OML 210	Environmental Studies 210	-	6
ONT 200	Design 200	AAL 110 KON 111, 121 OML 110, 120 ONT 100	30
STU 211	Theory of Structures 211	-	8
	Total		64

Second semester

AAL 224	Earth Studies 224	-	4
GGY 265	Geomorphology of the Built Environment 265	-	12
JCP 201	Community-based Project 201	-	4
KON 220	Construction 220	KON 210 GS	8
OML 220	Environmental Studies 220	-	6
ONT 200	Design 200	AAL 110 KON 111, 121 OML 110, 120 ONT 100	30
STU 221	Theory of Structures 221	STU 211 GS	8
	Total		72

Third year of study
First semester

BER 310	Business Law 310	-	16
GGY 283*	Introductory GIS 283 (Capita selecta)	-	12
or			
OKU 313	Design Communication 313	-	6
KON 310	Construction 310	KON 210, 220	8
OMG 310	History of the Environment 310	-	6
OML 310	Environmental Studies 310	-	6
ONT 300	Design 300	KON 210, 220 ONT 200	30
STU 311	Theory of Structures 311	STU 211, 221	8
	Total		80

* If this module is chosen the total credits = 86

Second semester

AAL 320	Earth Studies 320	AAL 210	6
KON 320	Construction 320	KON 310 GS	8
OMG 320	History of the Environment 320	-	6
OML 320	Environmental Studies 320	OML 310 GS	6

ONT 300	Design 300	KON 210, 220 ONT 200	30
PRS 320	Practice Management 320	-	8
STU 321	Theory of Structures 321	STU 311 GS	8
	Total		72

The programme is set out below:

Year	Semester	PRS	STU	AAL	KON	ONT	OML	OMG	OKU
1	1	CIL 111	-	110	111	100	110	-	Elective module
	2	CIL 121	-	-	121	100	120	-	OKU 120
2	1	JCP 201	211	210	210	200	210	-	-
	2	JCP 201	221	GGY 265 AAL 224	220	200	220	-	-
3	1	BER 310	311	-	310	300	310	310	GGY 283 or OKU 313
	2	PRS 320	321	320	320	300	320	320	-

(d) Promotion requirements

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.

Note: Students not promoted to the next year of study must obtain the approval of the programme co-ordinator and the Head of Department to register for modules in the subsequent year of study. Students must re-apply for admission to the Department of Architecture in instances where:

(i) a student is not promoted to the second year of study;
(ii) a student after repeating any year of study, is not promoted to the following year of study.

(e) Concurrent presentation

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

(f) Awarding of degree

The degree is awarded to those students obtaining all the prescribed credits for the programme modules.

(g) Degree with distinction

The BSc(Arch) degree is conferred with distinction on a student who, at first registration, simultaneously passes both Design 300 and Construction 320 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 without any supplementary/special examinations.

B.12 BACCALAUREUS HONORES IN ARCHITECTURE [BArch(Hons)] (Code 12242003)

Refer to General Regulations G.16 to G.29 and G.62.

(a) Admission requirements

A candidate for the degree programme Baccalaureus Honores in Architecture:

(1) must be a graduate with a BSc(Arch) degree or an equivalent university degree;

or

(2) must have an appropriate recognised tertiary qualification.
Such a candidate may be required, at the discretion of the Head of Department to take:
(i) an academic literacy test;
(ii) a computer skills test;

or

(3) must have a qualification deemed adequate by the Head of Department in consultation with the Dean and obtain (where necessary) the approval of the Senate, and comply with any other prescribed requirements.

Candidates mentioned in (2) and (3) above may, at the discretion of the Head of Department, be required to be evaluated in prerequisite fields of knowledge and/or register for additional modules for non-degree purposes.
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 considered a record of their experience within the discipline;
(iv) are selected on merit.

Note: A limited number of candidates are admitted to this programme.

(b) Duration

The minimum period of study is one year full-time.

(c) Curriculum

Unless the Head of Department, after consultation with the Dean, decides otherwise, for those students wishing to hereafter continue with the MArch(Prof) degree, the following curriculum applies:

BArch(Hons)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Practice Component	CPD 710 Professional and employee ethics 6 credits	CPD 720 Legislative framework for the built environment 6 credits	CPD 730 Project and contract planning 6 credits POU 720 2 credits	CPD 740 Project and practice management 6 credits
Theory Component	RFS 710 6 credits	RFS 720 6 credits	RFS 730 6 credits	RFS 740 6 credits

Project Component	RFP 711 20 credits	RFP 721 20 credits	RFP 731 20 credits	RFP elective 20 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) Awarding of degree

The degree is awarded to those students who have obtained the prescribed credits. Those students admitted with conditions must comply with all of these before all the 700 series module credits and the degree are awarded.

(f) Degree with distinction

The degree is conferred with distinction if students registered for the degree for the first time, complete the degree within the minimum prescribed time and pass all modules with a weighted average of 75%.

B.12(a) BACCALAUREUS SCIENTIAE HONORES IN APPLIED SCIENCE [BSc(Hons)(Applied Science) (Code 12242000)]

Refer to General Regulations G.16 to G.29 and G.62.

Note: This degree is for those students intending hereafter to pursue a master's degree by research or coursework in applied science in the field of architecture or the built environment.

(a) Admission requirements

A candidate for the degree programme Baccalaureus Scientiae Honores in Applied Science :

(1) must be a graduate with a BSc degree or an equivalent university degree;
or

(2) must have an appropriate recognised tertiary qualification.
Such a candidate may be required, at the discretion of the Head of Department to take:
(i) an academic literacy test;
(ii) a computer skills test;
or

(3) must have a qualification deemed adequate by the Head of Department in consultation with the Dean and obtain (where necessary) the approval of the Senate, and comply with any other prescribed requirements.

Candidates mentioned in (2) and (3) above may, at the discretion of the Head of Department, be required to be evaluated in prerequisite fields of knowledge and/or register for additional modules for non-degree purposes.

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 journal which demonstrates the requisite level of proficiency and competency and is considered a record of their experience within the discipline;
(iv) are selected on merit.

Note: A limited number of candidates are admitted to this programme.

(b) Duration

The minimum period of study is one year full-time.

(c) Curriculum

A curriculum comprising a minimum of 50% of module credits from the programme below and a maximum of 50% of module credits from other honours programmes by coursework must be devised in consultation with the Postgraduate Programme Coordinator of the Department and approved by the Head of Department. Students who follow modules presented by other schools or faculties must first obtain permission for such registration(s) from those schools or faculties and must familiarise themselves with the admission requirements of the specific module(s), and the examination rules and regulations pertaining to such a module(s).

BSc(Hons) Applied Science	**1st Quarter**	**2nd Quarter**	**3rd Quarter**	**4th Quarter**
Practice Component	CPD 710 Professional and employee ethics 6 credits	CPD 720 Legislative framework for the built environment 6 credits	CPD 730 Project and contract planning 6 credits	CPD 740 Project and practice management 6 credits
Theory Component	RFS 710 6 credits	RFS 720 6 credits	RFS 730 6 credits	RFS 740 6 credits
Project Component				RFP elective 20 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) Awarding of degree

The degree is awarded to those students who have obtained the prescribed credits. Those students admitted with conditions must comply with all of these before all the 700 series module credits and the degree are awarded.

(f) Degree with distinction

The degree is conferred with distinction if students registered for the degree for the first time, complete the degree within the minimum prescribed time and pass all modules with a weighted average of 75%.

B.13 MASTER OF ARCHITECTURE (Professional) [MArch(Prof)] (Code 12252005)

Refer to General Regulations G.30 to G.44 and G.57 to G.62.

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 BArch(Hons) degree or an equivalent university degree;
or

(2) must have an appropriate recognised tertiary qualification at honours degree level;
or

(3) must have a qualification deemed adequate by the Head of Department in consultation with the Dean and obtain (where necessary) the approval of the Senate and comply with any other prescribed requirements.

Candidates mentioned in (2) and (3) above may, at the discretion of the Head of Department, be required to be evaluated in prerequisite fields of knowledge and/or register for additional modules for non-degree purposes.

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 considered a record of their experience within the discipline;
(iv) are selected on merit.

Note: A limited number of candidates are admitted to this programme.

(b) Duration

The minimum period of study is one year full-time.

(c) Curriculum

Unless the Head of Department, after consultation with the Dean, decides otherwise, the following curriculum applies:

MArch(Prof)	**1st Quarter**
Practice component	CPD 810 Project brief development 10 credits
	Year module
Theory component	DIT 801 Design Investigation Treatise 50 credits

Project component	DPD 801 Design Project and Discourse 60 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) Design topic

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

(f) Awarding of degree

The degree is awarded to those students who have obtained the prescribed credits. Those students admitted with conditions must comply with all of these before all the 700 series module credits and the degree are awarded.

(g) 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.

B.14 MASTER OF ARCHITECTURE (by research) [MArch (by research)] (Code 12252002)

Refer to General Regulations G.30 to G.44 and G.57 to G.62.

By virtue of a dissertation and examination.

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 obtained (where necessary) the approval of the Senate and complying with whatever additional requirements may be prescribed are admitted for the degree Master of 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 have an oral examination of 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.15 PHILOSOPHIAE DOCTOR [PhD] (Code 12262002)

Refer to General Regulations G.45 to G.62.

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 pass supplementary modules prior to commencing of 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 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.
Students are advised to work in the offices of an architect or an interior architect during the university recesses to gain practical experience.
It is recommended that those graduates wishing to practice as interior designers pursue further studies namely the one year, full-time Honours in Interior Architecture programme.
A graduate wishing to become a Professional Interior Architect is advised to register for the MInt(Prof) degree programme.

B.16 BACCALAUREUS SCIENTIAE IN INTERIOR ARCHITECTURE [BSc(Int)] (Code 12132008)

(a) Admission requirements

Refer to General Information B.1, B.2 and B.3 in this publication.
Note: Students wishing to transfer to other programmes in the Department of Architecture must obtain written consent from the Admissions Committee.

(b) Duration

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

(c) Curriculum

Total credits: 422

Unless the Dean, in consultation with the Head of Department, decides otherwise, the following cirruculum applies:

Code	Module	Prerequisite	Credits
First year of study			
First semester			
AAL 110	Earth Studies 110	-	10
ARC 110	Elective module	-	6
CIL 111	Computer literacy 111	-	4
EOT 110*	Academic literacy 110	-	6
KON 111	Construction 111	-	8
OML 110	Environmental Studies 110	-	6
ONT 100	Design 100	-	30
	Total		70
Second semester			
CIL 121	Information literacy 121	-	4
EOT 120*	Academic literacy 120	-	6
KON 121	Construction 121	KON 111 GS	8
OKU 120	Design Communication 120	-	6
OML 120	Environmental Studies 120	-	6
ONT 100	Design 100	-	30
	Total		60

*Students who did not pass the Academic Literacy Test must register for EOT 110 and 120 offered by the Unit for Academic Literacy. (See Regulation B.5.)

Second year of study			
First semester			
AAL 210	Earth Studies 210	-	8
JCP 201	Community-based Project 201	-	4
KON 210	Construction 210	KON 111, 121	8
OML 210	Environmental Studies 210	-	6

ONT 203	Design 203	AAL 110 KON 111, 121 OML 110, 120 ONT 100	30
TKS 212	Textiles 212	-	14
	Total		70

Second semester

AAL 223	Earth Studies 223	-	4
AAL 224	Earth Studies 224	-	4
JCP 201	Community-based Project 201	-	4
KON 220	Construction 220	KON 210 GS	8
OML 220	Environmental Studies 220	-	6
ONT 203	Design 203	AAL 110 KON 111, 121 OML 110, 120 ONT 100	30
TKS 222	Textiles 222	TKS 212 GS	14
	Total		70

Third year of study
First semester

BER 310	Business Law 310	-	16
KON 310	Construction 310	KON 210, 220	8
GGY 283*	Introductory GIS 283 (Capita selecta)	-	12
or			
OKU 313	Design Communication 313	-	6
OMG 310	History of the Environment 310	-	6
OML 310	Environmental Studies 310	-	6
ONT 303	Design 303	KON 210, 220 ONT 203	30
MST 313	Material Studies 313	TKS 212, 222	8
	Total		80

* If this module is chosen the total credits = 86

Second semester

AAL 320	Earth Studies 320	AAL 210	6
KON 320	Construction 320	KON 310 GS	8
OMG 320	History of the Environment 320	-	6
OML 320	Environmental Studies 320	OML 310 GS	6
ONT 303	Design 303	KON 210, 220 ONT 203	30
PRS 320	Practice Management 320	-	8
MST 323	Material Studies 323	MST 313	8
	Total		72

The programme is set out below:

Year	Semester	PRS	MST	AAL	KON	ONT	OML	OMG	OKU
1	1	CIL 111	-	110	111	100	110	-	Elective module
	2	CIL 121	-	-	121	100	120	-	OKU 120
2	1	JCP 201	TKS 212	210	210	203	210	-	-
	2	JCP 201	TKS 222	223 224	220	203	220	-	-
3	1	BER 310	313	-	310	303	310	310	OKU 313 or GGY 283
	2	PRS 320	323	320	320	303	320	320	-

(d) Promotion requirements

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.

Note: Students not promoted to the next year of study must obtain the approval of the programme coordinator and the Head of Department to register for modules in the subsequent year of study. Students must re-apply for admission to the Department of Architecture in instances where:

(i) a student is not promoted to the second year of study;

(ii) a student after repeating any year of study, is not promoted to the following year of study.

(e) Concurrent presentation

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

(f) Awarding of degree

The degree is awarded to those students who have obtained all the prescribed credits for the programme modules.

(g) Degree with distinction

The degree is conferred with distinction on a student who, at first registration, simultaneously passes both Design 303 and Construction 320 with distinction (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 without any supplementary/special examinations.

B.17 BACCALAUREUS HONORES IN INTERIOR ARCHITECTURE [BInt(Hons)] (Code 12242006)

Refer to General Regulations G.16 to G.29 and G.62.

(a) Admission requirements

A candidate for the degree programme Baccalaureus Honores in Interior

Architecture:

(1) must be a graduate with a BSc(Int) degree or an equivalent university degree;
or

(2) must have an appropriate recognised tertiary qualification.
Such a candidate may be required, at the discretion of the Head of Department to take:
(i) an academic literacy test;
(ii) a computer skills test;
or

(3) must have a qualification deemed adequate by the Head of Department in consultation with the Dean and obtain (where necessary) the approval of the Senate and comply with any other prescribed requirements.

Candidates mentioned in (2) and (3) above may, at the discretion of the Head of Department, be required to be evaluated in prerequisite fields of knowledge and/or register for additional modules for non-degree purposes.

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 considered 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 one year full-time.

(c) Curriculum

Unless the Head of Department, after consultation with the Dean, decides otherwise, for those students wishing hereafter to continue with the MInt(Prof) degree, the following curriculum applies:

BInt(Hons)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Practice component	CPD 710 Professional and employee ethics 6 credits	CPD 720 Legislative framework for the built environment 6 credits	CPD 730 Project and contract planning 6 credits POU 720 2 credits	CPD 740 Project and practice management 6 credits
Theory component	RFS 710 6 credits	RFS 720 6 credits	RFS 730 6 credits	RFS 740 6 credits
Project component	RFP 713 20 credits	RFP 723 20 credits	RFP 733 20 credits	RFP elective 20 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) Awarding of degree

The degree is awarded to those students who have obtained the prescribed credits. Those students admitted with conditions must comply with all of these before all the 700 series module credits and the degree are awarded.

(f) Degree with distinction

The degree is conferred with distinction if students registered for the degree for the first time, complete the degree within the minimum prescribed time and pass all modules with a weighted average of 75%.

B.17(a) BACCALAUREUS SCIENTIAE HONORES IN APPLIED SCIENCE [BSc(Hons)(Applied Science) (Code 12242000)]

Refer to General Regulations G.16 to G.29 and G.62.

Note: This degree is for those students intending hereafter to pursue a master's degree by research or coursework in applied science in the field of architecture or the built environment.

(a) Admission requirements

A candidate for the degree programme Baccalaureus Scientiae Honores in Applied Science :

(1) must be a graduate with a BSc degree or an equivalent university degree;
or

(2) must have an appropriate recognised tertiary qualification.
Such a candidate may be required, at the discretion of the Head of Department to take:
(i) an academic literacy test;
(ii) a computer skills test;
or

(3) must have a qualification deemed adequate by the Head of Department in consultation with the Dean and obtain (where necessary) the approval of the Senate, and comply with any other prescribed requirements.
Candidates mentioned in (2) and (3) above may, at the discretion of the Head of Department, be required to be evaluated in prerequisite fields of knowledge and/or register for additional modules for non-degree purposes.
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 journal which demonstrates the requisite level of proficiency and competency and is considered a record of their experience within the discipline;
(iv) are selected on merit.

Note: A limited number of candidates are admitted to this programme.

(b) Duration

The minimum period of study is one year full-time.

(c) Curriculum

A curriculum comprising a minimum of 50% of module credits from the programme below and a maximum of 50% of module credits from other honours programmes by coursework must be devised in consultation with the Postgraduate Programme Coordinator of the Department and approved by the Head of Department. Students who follow modules presented by other schools or faculties must first obtain permission for such registration(s) from those schools or faculties and must familiarise themselves with the admission requirements of the specific module(s), and the examination rules and regulations pertaining to such a module(s).

BSc(Hons) Applied Science	**1st Quarter**	**2nd Quarter**	**3rd Quarter**	**4th Quarter**
Practice Component	CPD 710 Professional and employee ethics 6 credits	CPD 720 Legislative framework for the built environment 6 credits	CPD 730 Project and contract planning 6 credits	CPD 740 Project and practice management 6 credits
Theory Component	RFS 710 6 credits	RFS 720 6 credits	RFS 730 6 credits	RFS 740 6 credits
Project Component				RFP elective 20 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) Awarding of degree

The degree is awarded to those students who have obtained the prescribed credits. Those students admitted with conditions must comply with all of these before all the 700 series module credits and the degree are awarded.

(f) Degree with distinction

The degree is conferred with distinction if students registered for the degree for the first time, complete the degree within the minimum prescribed time and pass all modules with a weighted average of 75%.

B.18 MASTER OF INTERIOR ARCHITECTURE (Professional) [MInt(Prof)] (Code 12252007)

Refer to General Regulations G.30 to G.44 and G.57 to G.62.

The Master of Interior Architecture (Professional) is done by coursework, 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 BInt(Hons) degree or an equivalent university degree;
or

(2) must have an appropriate recognised tertiary qualification at honours degree level;
or

(3) must have a qualification deemed adequate by the Head of Department in consultation with the Dean and obtain (where necessary) the approval of the Senate, and comply with any other prescribed requirements.

Candidates mentioned in (2) and (3) above may, at the discretion of the Head of Department, be required to be evaluated in prerequisite fields of knowledge and/or register for additional modules for non-degree purposes.

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 considered a record of their experience within the discipline;
(iv) are selected on merit.

Note: A limited number of candidates are admitted to this programme.

(b) Duration

The minimum period of study is one year full-time.

(c) Curriculum

Unless the Head of Department, after consultation with the Dean, decides otherwise, the following curriculum applies:

MInt(Prof)	**1st Quarter**
Practice component	CPD 810 Project brief development 10 credits
	Year module
Theory component	DIT 803 Design Investigation Treatise 50 credits
Project component	DPD 803 Design Project and Discourse 60 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) Design topic
The topic of the final design project (DIT 803 & DPD 803) must be approved by the Head of Department.

(f) Awarding of degree
The degree is awarded to those students having obtained the prescribed credits. Those students admitted with conditions must comply with all of these before all the 700 series module credits and the degree are awarded.

(g) 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 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.

B.19 MASTER OF INTERIOR ARCHITECTURE (by research) [MInt (by research)] (Code 12252004)

Refer to General Regulations G.30 to G.44 and G.58 to G.62.
By virtue of dissertation and examination.

Dissertation: INT 890

Total credits: 200

(a) Admission requirements
Candidates who wish to research a topic within the discipline of interior architecture and who

(i) are in possession of a BInt or equivalent degree of four years or more;
or
(ii) are in possession of an honours degree in Interior Architecture, BInt(Hons), or equivalent;
or
(iii) are 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) are deemed adequate by the Head of Department in consultation with the Dean and obtained (where necessary) the approval of the Senate and complying with whatever additional requirements may be prescribed are admitted 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 has 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.20 PHILOSOPHIAE DOCTOR [PhD] (Code 12262008)

Refer to General Regulations G.45 to G.62.

Thesis: INT 990

(a) Candidates who have obtained a Master's degree in Interior 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 pass supplementary modules prior to commencing of 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 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 people. Parks, game reserves, recreational areas and marinas are only a few of the environments which the landscape architect designs. They create 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 matters, sport, recreational and fishing areas, and nature conservation.
Students are advised to work in the offices of an architect or a landscape architect to gain practical experience 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 studies 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 the Act on the Landscape Architectural Profession (Act 45 of 2000).

B.20 BACCALAUREUS SCIENTIAE IN LANDSCAPE ARCHITECTURE [BSc(LArch)] (Code 12132004)

(a) Admission requirements

Refer to General Information B.1, B.2 and B.3 in this publication.
Note: Students wishing to transfer to other programmes in the Department of Architecture must obtain written consent from the Admissions Committee.

(b) Duration

The minimum period of study is three years full-time. Candidates wishing to become professional landscape architects must hereafter apply to register for the BL(Hons) degree (one year full-time), and thereafter the ML(Prof) degree (one year full-time).

(c) Curriculum

Total credits: 426

Unless the Dean, in consultation with the Head of Department, decides otherwise, the following curriculum applies:

Code	Module	Prerequisite	Credits
First year of study			
First semester			
AAL 110	Earth Studies 110	-	10
ARC 110	Elective module	-	6
CIL 111	Computer literacy 111	-	4
EOT 110*	Academic literacy 110	-	6
KON 111	Construction 111	-	8
OML 110	Environmental Studies 110	-	6
ONT 100	Design 100	-	30
	Total		70
Second semester			
CIL 121	Information literacy 121	-	4
EOT 120*	Academic literacy 120	-	6
KON 121	Construction 121	KON 111 GS	8
OKU 120	Design Communication 120	-	6
OML 120	Environmental Studies 120	-	6
ONT 100	Design 100	-	30
	Total		60

* Students who did not pass the Academic Literacy Test must register for EOT 110 and 120 offered by the Unit for Academic Literacy. (See Regulation B.5.).

Second year of study			
First semester			
AAL 210	Earth Studies 210	-	8
JCP 201	Community-based Project 201	-	4
KON 210	Construction 210	KON 111, 121	8
OML 210	Environmental Studies 210	-	6
ONT 202	Design 202	AAL 110 KON 111, 121	30

		OML 110, 120 ONT 100	
LAN 212	Landscape Architecture 212	-	8
	Total		64

Second semester

GGY 265	Geomorphology of the Built Environment 265	-	12
GKD 225	General Soil Science 225 *(Capita selecta)*	-	12
JCP 201	Community-based Project 201	-	4
KON 220	Construction 220	KON 210 GS	8
OML 220	Environmental Studies 220	-	6
ONT 202	Design 202	AAL 110 KON 111, 121 OML 110, 120 ONT 100	30
LAN 222	Landscape Architecture 222	LAN 212 GS	8
	Total		80

Third year of study
First semester

BER 310	Business Law 310	-	16
GGY 283*	Introductory GIS 283 (Capita selecta)	-	12
or			
OKU 313	Design Communication 313	-	6
KON 310	Construction 310	KON 210, 220	8
OMG 310	History of the Environment 310	-	6
OML 310	Environmental Studies 310	-	6
ONT 302	Design 302	KON 210, 220 ONT 202	30
PWT 312	Plant Science 312	LAN 212, 222	8
	Total		80

* If this module is chosen the total credits = 86

Second semester

AAL 320	Earth Studies 320	AAL 210	6
KON 320	Construction 320	KON 310 GS	8
OMG 320	History of the Environment 320	-	6
OML 320	Environmental Studies 320	OML 310 GS	6
ONT 302	Design 302	KON 210, 220 ONT 202	30
PRS 320	Practice Management 320	-	8
PWT 322	Plant Science 322	PWT 312 GS	8
	Total		72

The programme is set out below:

Year	Semester	PRS	LAN	AAL	KON	ONT	OML	OMG	OKU
1	1	CIL 111	-	110	111	100	110	-	Elective module
	2	CIL 121	-	-	121	100	120	-	OKU 120
2	1	JCP 201	212	210	210	202	210	-	-
	2	JCP 201	222	GGY 265 GKD 225	220	202	220	-	
3	1	BER 310	PWT 312	-	310	302	310	310	GGY 283 or OKU 313
	2	PRS 320	PWT 322	320	320	302	320	320	-

(d) Promotion requirements

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.
Note: Students not promoted to the next year of study must obtain the approval of the programme co-ordinator and the Head of Department to register for modules in the subsequent year of study. Students must re-apply for admission to the Department of Architecture in instances where:

(i) a student is not promoted to the second year of study;
(ii) a student after repeating any year of study, is not promoted to the following year of study.

(e) Concurrent presentation

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

(f) Awarding of degree

The degree is awarded to those students who have obtained all the prescribed credits for the programme modules.

(g) Degree with distinction

The BSc(LArch) degree is conferred with distinction on a student who, at first registration, simultaneously passes Design 302 and Construction 320 with distinction (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 without any supplementary/special examinations.

B.22 BACCALAUREUS HONORES IN LANDSCAPE ARCHITECTURE [BL(Hons)] (Code 12242004)

Refer to General Regulations G.16 to G.29 and G.62.

(a) Admission requirements

A candidate for the degree programme Baccalaureus Honores in Landscape Architecture:

(1) must be a graduate with a BSc(LArch) degree or an equivalent university degree;
or

(2) must have an appropriate recognised tertiary qualification. Such a candidate may be required, at the discretion of the Head of Department to take:
(i) an academic literacy test;
(ii) a computer skills test;
or

(3) must have a qualification deemed adequate by the Head of Department in consultation with the Dean and obtain (where necessary) the approval of the Senate, and comply with any other prescribed requirements.
Candidates mentioned in (2) and (3) above may, at the discretion of the Head of Department, be required to be evaluated in prerequisite fields of knowledge and/or register for additional modules for non-degree purposes.

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 considered a record of their experience within the discipline;
(iv) are selected on merit.

Note: A limited number of candidates are admitted to this programme.

(b) Duration

The minimum period of study is one year full-time.

(c) Curriculum

Unless the Head of Department, after consultation with the Dean, decides otherwise, for those students wishing to hereafter continue with the ML(Prof) degree, the following curriculum applies:

BL(Hons)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Practice component	CPD 710 Professional and employee ethics 6 credits	CPD 720 Legislative framework for the built environment 6 credits	CPD 730 Project and contract planning 6 credits POU 720 2 credits	CPD 740 Project and practice management 6 credits
Theory component	RFS 710 6 credits	RFS 720 6 credits	RFS 730 6 credits	RFS 740 6 credits

Project component	RFP 712 20 credits	RFP 722 20 credits	RFP 732 20 credits	RFP elective 20 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) Awarding of degree

The degree is awarded to those students who have obtained the prescribed credits. Students admitted with conditions must comply with all of these before all 700 series module credits and the degree are awarded.

(f) Degree with distinction

The degree is conferred with distinction if students registered for the degree for the first time, complete the degree within the minimum prescribed time and pass all modules with a weighted average of 75%.

B.22(a) BACCALAUREUS SCIENTIAE HONORES IN APPLIED SCIENCE [BSc(Hons)(Applied Science) (Code 12242000)]

Refer to General Regulations G.16 to G.29 and G.62.

Note: This degree is for those students intending hereafter to pursue a master's degree by research or coursework in applied science in the field of architecture or the built environment.

(a) Admission requirements

A candidate for the degree programme Baccalaureus Scientiae Honores in Applied Science :

(1) must be a graduate with a BSc degree or an equivalent university degree;
or

(2) must have an appropriate recognised tertiary qualification.
Such a candidate may be required, at the discretion of the Head of Department to take:
(i) an academic literacy test;
(ii) a computer skills test;
or

(3) must have a qualification deemed adequate by the Head of Department in consultation with the Dean and obtain (where necessary) the approval of the Senate, and comply with any other prescribed requirements.
Candidates mentioned in (2) and (3) above may, at the discretion of the Head of Department, be required to be evaluated in prerequisite fields of knowledge and/or register for additional modules for non-degree purposes.
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 journal which demonstrates the requisite level of proficiency and competency and is considered a record of their experience within the discipline;

(iv) are selected on merit.

Note: A limited number of candidates are admitted to this programme.

(b) Duration

The minimum period of study is one year full-time.

(c) Curriculum

A curriculum comprising a minimum of 50% of module credits from the programmes below and a maximum of 50% of module credits from other honours programme by coursework must be devised in consultation with the Postgraduate Coordinator of the Department and approved by the Head of Department. Students who follow modules presented by other schools or faculties must first obtain permission for such registration(s) from those schools or faculties and must familiarise themselves with the admission requirements of the specific module(s), and the examination rules and regulations pertaining to such a module(s).

BSc(Hons) Applied Science	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Practice Component	CPD 710 Professional and employee ethics 6 credits	CPD 720 Legislative framework for the built environment 6 credits	CPD 730 Project and contract planning 6 credits	CPD 740 Project and practice management 6 credits
Theory Component	RFS 710 6 credits	RFS 720 6 credits	RFS 730 6 credits	RFS 740 6 credits
Project Component				RFP elective 20 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) Awarding of degree

The degree is awarded to those students who have obtained the prescribed credits. Those students admitted with conditions must comply with all of these before all the 700 series module credits and the degree are awarded.

(f) Degree with distinction

The degree is conferred with distinction if students registered for the degree for the first time, complete the degree within the minimum prescribed time and pass all modules with a weighted average of 75%.

B.24 MASTER OF LANDSCAPE ARCHITECTURE (Professional) [ML (Prof)] (Code 12252008)

Refer to General Regulations G.30 to G.44 and G.57 to G.62.

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 Landscape Architecture (Professional):

(1) must be a graduate with a BL(Hons) degree or an equivalent university degree;

or

(2) must have an appropriate recognised tertiary qualification at honours degree level;

or

(3) must have a qualification deemed adequate by the Head of Department in consultation with the Dean and obtain (where necessary) the approval of the Senate and comply with any other prescribed requirements.

Candidates mentioned in (2) and (3) above may, at the discretion of the Head of Department, be required to be evaluated in prerequisite fields of knowledge and/or register for additional modules for non-degree purposes.

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 considered a record of their experience within the discipline;
(iv) are selected on merit.

Note: A limited number of candidates are admitted to this programme.

(b) Duration

The minimum period of study is one year full-time.

(c) Curriculum

Unless the Head of Department, after consultation with the Dean, decides otherwise, the following applies:

ML(Prof)	**1st Quarter**
Practice component	CPD 810 Project brief development 10 credits
	Year module
Theory component	DIT 802 Design Investigation Treatise 50 credits
Project component	DPD 802 Design Project and Discourse 60 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) Design topic

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

(f) Awarding of degree

The degree is awarded to those students who have obtained the prescribed credits.
Those students admitted with conditions must comply with all of these before all the 700 series module credits and the degree are awarded.

(g) 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.

B.24 MASTER OF LANDSCAPE ARCHITECTURE (by research) [ML (by research)] (Code 12252003)

Refer to General Regulations G.30 to G.44 and G.57 to G.62.

By virtue of dissertation and examination.

Dissertation: LAN 890

Total credits: 200

(a) Admission requirements

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

(1) are in possession of a BL or equivalent degree of four years;
or

(2) are in possession of an Honours degree in Landscape Architecture, BL(Hons), or equivalent;
or

(3) are 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) are deemed adequate by the Head of Department in consultation with the Dean and obtained (where necessary) the approval of the Senate and complying with whatever additional requirements may be prescribed are admitted to 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 takes an oral examination of the dissertation in the related field of study.

(c) Awarding of the degree
The Master of Landscape Architecture degree is conferred on a student who has obtained 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.

B.26 PHILIOSOPHIAE DOCTOR [PhD] (Code 12262003)

Refer to General Regulations G.45 to G.62.

Thesis: LAN 990

(a) Candidates who have obtained a Master's degree in Landscape 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 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.

DEGREES IN THE DEPARTMENT OF CONSTRUCTION ECONOMICS

DEGREES IN QUANTITY SURVEYING

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 subcontractors.
The student could enter the building or construction industry as a candidate quantity surveyor after he/she has completed the three-year degree. Such qualification, however, would not allow the person to register as a professional quantity surveyor. After completing the honours programme the opportunities become far wider, and application

can be made for registration as a professional quantity surveyor at the South African Council for the Quantity Surveying Profession, after further assessment and furnishing of evidence, in compliance with the prescribed competencies. Employment opportunities in the building and construction sector, government departments, in the property sector, banks and manufacturing industry exist for such qualified quantity surveyors. Most, however, work in the private sector where they find employment with quantity surveying practices, or open their own practices.
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), as well as by the Royal Institution of Chartered Surveyors.

B.26 BACCALAUREUS SCIENTIAE (QUANTITY SURVEYING) [BSc(QS)] (Code 12132013)

(a) Admission requirements
Refer to General Information B.1, B.2 and B.3 in this publication.

(b) Duration
The minimum duration of study is three years full-time.

(c) Promotion requirements

(i) **Promotion to the second semester of the first year and to the second year of study**

(a) A newly registered first-year student who failed all the prescribed modules for the programme at the end of the first semester shall not be readmitted to the School for the Built Environment in the second semester.

(b) A student who complies with all the requirements of the first year of study, or has at least obtained 110 credits, is promoted to the second year of study.

(c) A student who has not obtained at least 70% of the credits of the first year of study after the November examinations, must reapply for admission should he/she intend to continue with his/her studies. Written application must be submitted to the Student Administration of the School for the Built Environment no later than 12 January. Late applications will be accepted only in exceptional circumstances after approval by the Dean and conditions of readmission as determined by the Admissions Committee shall apply should first-year students be readmitted.

(d) Students who have not passed all the prescribed modules of the first year of study, as well as students who are readmitted in terms of (c) must register for the outstanding modules of the first year.

(e) A student who is repeating his/her first year, may, on recommendation of the relevant Head of the Department and with the approval of the Dean, be permitted to enrol for modules of the second year of study in addition to the first-year modules which he or she failed, providing that he or she complies with the prerequisites for the second-year modules and that no timetable clashes occur. The number of credits per semester for which a student registers may not exceed the prescribed number of credits per semester by more than 16 credits.

(ii) **Promotion to the third year of study**

(a) A student who complies with all the requirements of the second year of study, or has at least obtained 230 credits, is promoted to the third year of study.

(b) 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 those modules to the next or a later year provided that no timetable clashes occur.

(c) The number of credits per semester for which a student registers may not exceed the prescribed number of credits per semester by more than 16 credits.

(d) 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.

(e) The degree is awarded if all the prescribed modules have been passed.

(f) 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, excluding JCP 201, 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, excluding JCP 201, not being less than 65%:

(a) Quantities 300 (HVH 300)
(b) Quantity Surveying Practice 300 (BRK 300)
(c) Building Services 312 and 322 (GBD 312/322) (average 75%)
(d) Building Science 310 and 320 (BWT 310/320) (average 75%) .

(e) Curriculum

The curriculum is 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 that a combined (final) mark (semester/year mark plus examination mark) of 40% - 49% is required for admission to the module in the first column.

Total number of credits required: 403

Code	Module	Prerequisites	Credits
First year of study			
First semester			
BOU 111	Building Drawings 111	-	6
BWT 110	Building Science 110	-	9
CIL 111	Computer literacy 111	-	4
EOT 110*	Academic literacy 110	-	6
GBD 112	Building Services 112	-	6
HVH 101	Quantities 101	-	12

SKE 110	Introduction to Structures 110	-	9
STK 110	Statistics 110	Maths 4 (50-59%)	13
or			
STK 113**	Statistics 113	-	(11)**
WTW 133	Precalculus 133	-	8
	Total		73

Second semester

BDO 181	Industrial and Organisational Psychology 181	-	5
BGG 121	Building Organisation 121	-	6
BOU 121	Building Drawings 121	-	6
BWT 120	Building Science 120	BWT 110 GS	9
CIL 121	Information literacy 121	-	4
EOT 120*	Academic literacy 120	-	6
GBD 122	Building Services 122	-	6
HVH 101	Quantities 101	-	12
OMG 122	History of the Environment 122	-	6
SKE 120	Structures 120	SKE 110 GS	9
STK 161	Statistics 161	STK 110 GS	6
STK 123**	Statistics 123	STK 113 GS	(12)**
	Total		75

* Students who did not pass the Academic Literacy Test must register for EOT 110 and 120 offered by the Unit for Academic Literacy. (See Regulation B.5.).

** Students who did not pass the grade 12 examination in Mathematics with a rating of at least 4 (50 -59%), must register for STK 113 and STK 123 and may only register for STK 161 in the following year.

Second year of study
First semester

BWT 210	Building Science 210	BWT 110 GS BWT 120 GS	9
EKN 110	Economics 110	-	10
FRK 111	Financial Accounting 111	-	10
GBD 212	Building Services 212	-	6
HVH 200	Quantities 200	BWT 110 GS BWT 120 GS HVH 101	12
SKE 210	Reinforced Concrete Structures 210	SKE 120 GS	9
TRN 213	Site Surveying 213	-	12
	Total		68

Second semester

BWT 220	Building Science 220	-	9
EKN 120	Economics 120	EKN 110 GS	10
FRK 121	Financial Accounting 121	FRK 111 GS	12
GBD 222	Building Services 222	-	6
HVH 200	Quantities 200	BWT 110 GS BWT 120 GS HVH 101	12

INF 181*	Informatics 181	FRK 111 GS	3
OMG 224	History of the Environment 224	-	6
SKE 220	Civil Engineering Services 220	-	9
	Total		67

*A student who obtained at least 5 (60-69%) in Accounting in the Grade 12 examination, may register for INF 181 in the first semester.

Third year of study

First semester

BER 310	Business Law 310	-	16
BRK 300	Quantity Surveying Practice 300	HVH 200 GS	9
BWT 310	Building Science 310	-	9
GBD 312	Building Services 312	-	6
HVH 300	Quantities 300	BWT 210 GS BWT 220 GS GBD 112 GS GBD 122 GS HVH 200	12
JCP 201	Community-based Project 201	-	4
KIT 311	Construction Information Technology and Communication 311	-	12
	Total		68

Second semester

BHU 320	Housing 320	-	6
BRK 300	Quantity Surveying Practice 300	HVH 200 GS	9
BWT 320	Building Science 320	-	9
EOW 320	Introduction to Property Law 320	-	6
GBD 322	Building Services 322	GBD 312 GS	6
HVH 300	Quantities 300	BWT 210 GS BWT 220 GS GBD 112 GS GBD 122 GS HVH 200	12
JCP 201	Community-based Project 201	-	4
	Total		52

B.27 BACCALAUREUS SCIENTIAE HONORES (QUANTITY SURVEYING) [BSc(Hons)(QS)] (Code 12242014)

Refer to General Regulations G.16 to G.29 and G.62.

(a) Admission requirements

Subject to the stipulations of the General Regulations, a BSc(Quantity Surveying) degree or equivalent qualification as well as practical experience which is deemed adequate by the Head of 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. A student is required to attend lectures diligently, but in addition, to work for the remainder of the day in the offices of a registered quantity surveyor on tasks which meet the requirements for registration in terms of the Quantity Surveying Profession Act.

(c) Examination admission

A minimum semester/year mark of 40% is required in order to be admitted to the examination in a specific module. In addition, all other examination admission requirements, applicable to the relevant module, must have been met.

(d) Supplementary examinations

No supplementary examinations are granted at postgraduate level.

(e) Special examinations

No special examinations are granted at postgraduate level.

(f) Promotion and complying with degree requirements

(i) A student is promoted to the second year after acquiring a minimum of 70 credits for modules completed in the first year of study.
(ii) The degree is awarded when all prescribed modules have been passed.

(g) Degree with distinction

The degree is conferred with distinction when a student has obtained a combined average of at least 75% for all the prescribed modules, excluding POU 720, 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, excluding POU 720, not being less than 65%.

(a) Quantity Surveying Practice 700 (BRK 700)
(b) Construction Contract Law 730 and 740 (KKR 730/740) (average 75%)
(c) Building Cost Estimation 700 (BKR 700)
(d) Feasibility Studies 700 (EOW 700)
(e) Treatise 785 (BRK 785)

(h) Curriculum

The curriculum is extended over two 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.

Total number of credits required: 173

Code	Module	Prerequisites	Credits
First year of study			
First semester			
BKR 700	Building Cost Estimation 700	-	12
BRK 700	Quantity Surveying Practice 700	-	9
BTP 700	Management Practice 700	-	12

EOW 710	Property Financial Mathematics 710	-	6
HVH 700	Quantities 700	-	12
	Total		51

Second semester

BKR 700	Building Cost Estimation 700	-	12
BRK 700	Quantity Surveying Practice 700	-	9
BTP 700	Management Practice 700	-	12
HVH 700	Quantities 700	-	12
	Total		45

Second year of study
First semester

BRK 785	Treatise 785	-	12
EOW 700	Feasibility Studies 700	EOW 710 GS	9
KKR 730	Construction Contract Law 730	-	12
KPB 730	Construction Project Management 730	-	9
	Total		42

Second semester

BRK 785	Treatise 785	-	12
EOW 700	Feasibility Studies 700	EOW 710 GS	9
KKR 740	Construction Contract Law 740	KKR 730 GS	12
POU 720	Practical Development Feasibility 720	-	2
	Total		35

DEGREES IN CONSTRUCTION MANAGEMENT

Construction management is the field of study meant for the person who wishes to become part of the 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 subcontractors 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.

The examinations of the BSc(Hons) degree in Construction Management are recognised by the Minister as prescribed examinations in terms of the stipulations as described in the Project and Construction Management Professions Act (Act No 48/2000), as well as by the Chartered Institute of Building.

B.28 BACCALAUREUS SCIENTIAE (CONSTRUCTION MANAGEMENT) [BSc(Construction Management)] (Code 12132017)

(a) Admission requirements

Refer to General Information B.1, B.2 and B.3 in this publication.

(b) Duration

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

(c) Promotion requirements

(i) **Promotion to the second semester of the first year and to the second year of study**

(a) A newly registered first-year student who failed all the prescribed modules for the programme at the end of the first semester shall not be readmitted to the School for the Built Environment in the second semester.

(b) A student who complies with all the requirements of the first year of study, or has at least obtained 110 credits, is promoted to the second year of study.

(c) A student who has not obtained at least 70% of the credits of the first year of study after the November examinations, must reapply for admission should he/she intend to continue with his/her studies. Written application must be submitted to the Student Administration of the School for the Built Environment no later than 12 January. Late applications will be accepted only in exceptional circumstances after approval by the Dean and conditions of readmission as determined by the Admissions Committee shall apply should first-year students be readmitted.

(d) Students who have not passed all the prescribed modules of the first year of study, as well as students who are readmitted in terms of (c) must register for the outstanding modules of the first year.

(e) A student who is repeating his/her first year, may, on recommendation of the relevant Head of the Department and with the approval of the Dean, be permitted to enrol for modules of the second year of study in addition to the first-year modules which he or she failed, providing that he or she complies with the prerequisites for the second-year modules and that no timetable clashes occur. The number of credits per semester for which a student registers may not exceed the prescribed number of credits per semester by more than 16 credits.

(ii) **Promotion to the third year of study**

(a) A student who complies with all the requirements of the second year of study, or has at least obtained 230 credits, is promoted to the third year of study.

(b) 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 those modules to the next or a later year provided that no timetable clashes occur.

(c) The number of credits per semester for which a student registers may not exceed the prescribed number of credits per semester by

more than 16 credits.

(d) 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.

(e) The degree is awarded if all the prescribed modules have been passed.

(f) 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, excluding JCP 201, 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, excluding JCP 201, not being less than 65%:

(a) Construction Quantities 300 (KSH 300)
(b) Construction Management 310 and 320 (KBS 310/320) (average 75%)
(c) Building Science 310 en 320 (BWT 310/320) (average 75%)
(d) Building Services 312 en 322 (GBD 312/322) (average 75%)

(e) Curriculum

The curriculum is 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 that a combined (final) mark (semester/year mark plus examination mark) of 40%-49% is required for admission to the module in the first column.

Total number of credits required: 423

	Module	Prerequisites	Credits
First year of study			
First semester			
BOU 111	Building Drawings 111	-	6
BWT 110	Building Science 110	-	9
CIL 111	Computer literacy 111	-	4
EOT 110*	Academic literacy 110	-	6
GBD 112	Building Services 112	-	6
HVH 101	Quantities 101	-	12
SKE 110	Introduction to Structures 110	-	9
STK 110	Statistics 110	Maths 4 (50-59%)	13
or			
STK 113**	Statistics 113	-	(11)**
WTW 133	Precalculus 133	-	8
	Total		73
Second semester			
BDO 181	Industrial and Organisational Psychology 181	-	5

BGG 121	Building Organisation 121	-	6
BOU 121	Building Drawings 121	-	6
BWT 120	Building Science 120	BWT 110 GS	9
CIL 121	Information literacy 121	-	4
EOT 120*	Academic literacy 120	-	6
GBD 122	Building Services 122	-	6
HVH 101	Quantities 101	-	12
OMG 122	History of the Environment 122	-	6
SKE 120	Structures 120	SKE 110 GS	9
STK 161	Statistics 161	STK 110 GS	6
STK 123**	Statistics 123	STK 113 GS	(12)**
	Total		75

* Students who did not pass the Academic Literacy Test must register for EOT 110 and 120 offered by the Unit for Academic Literacy. (See Regulation B.5.).

** Students who did not pass the grade 12 examination in Mathematics with a rating of at least 4 (50-59%) must register for STK 113 and STK 123 and may only register for STK 161 in the following year.

Second year of study
First semester

ABR 311	Labour Law 311	-	20
BWT 210	Building Science 210	BWT 110 GS BWT 120 GS	9
EKN 110	Economics 110	-	10
FRK 111	Financial Accounting 111	-	10
GBD 212	Building Services 212	-	6
KSH 201	Construction Quantities 201	BWT 110 GS BWT 120 GS HVH 101	12
SKE 210	Reinforced Concrete Structures 210	SKE 120 GS	9
TRN 213	Site Surveying 213	-	12
	Total		88

Second semester

BWT 220	Building Science 220	-	9
EKN 120	Economics 120	EKN 110 GS	10
FRK 121	Financial Accounting 121	FRK 111 GS	12
GBD 222	Building Services 222	-	6
INF 181	Informatics 181	FRK 111 GS	3
KSH 201	Construction Quantities 201	BWT 110 GS BWT 120 GS HVH 101	12
OMG 224	History of the Environment 224	-	6
SKE 220	Civil Engineering Services 220	-	9
	Total		67

Third year of study
First semester

BER 310	Business Law 310	-	16
BWT 310	Building Science 310	-	9

GBD 312	Building Services 312	-	6
JCP 201	Community-based Project 201	-	4
KBS 310	Construction Management 310	-	9
KIT 311	Construction Information Technology and Communication 311		12
KSH 300	Construction Quantities 300	BWT 210 GS BWT 220 GS GBD 112 GS GBD 122 GS KSH 201	12
	Total		68

Second semester

BHU 320	Housing 320	-	6
BWT 320	Building Science 320	-	9
EOW 320	Introduction to Property Law 320	-	6
GBD 322	Building Services 322	GBD 312 GS	6
JCP 201	Community-based Project 201	-	4
KBS 320	Construction Management 320	-	9
KSH 300	Construction Quantities 300	BWT 210 GS BWT 220 GS GBD 112 GS GBD 122 GS KSH 201	12
	Total		52

B.29 BACCALAUREUS SCIENTIAE HONORES (CONSTRUCTION MANAGEMENT) [BSc(Hons)(Construction Management)] (Code 12242015)

Refer to General Regulations G.16 to G.29 and G.62.

(a) Admission requirements

Subject to the stipulations of the General Regulations, a BSc(Construction Management) degree or equivalent qualification as well as practical experience which is deemed adequate by the Head of 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.

A student is required to attend lectures diligently, but in addition, to work full-time for the remainder of the day for a suitable employer in the building/construction industry.

(c) Examination admission

A minimum semester/year mark of 40% is required in order to be admitted to the examination in a specific module. In addition, all other examination admission requirements, applicable to the relevant module, must have been met.

(d) Supplementary examinations

No supplementary examinations are granted at postgraduate level.

(e) Special examinations

No special examinations are granted at postgraduate level.

(f) Promotion and complying with degree requirements

(i) A student is promoted to the second year after acquiring a minimum of 70 credits for modules completed in the first year of study.

(ii) The degree is awarded when all prescribed modules have been passed.

(g) Degree with distinction

The degree is conferred with distinction on a student who has obtained a combined average of at least 75% for all the prescribed modules, excluding POU 720, 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, excluding POU 720, not being less than 65%.

(a) Financial Management 701 (FMT 701)
(b) Construction Contract Law 730 and 740 (KKR 730/740) (average 75%)
(c) Construction Project Management 730 (KPB 730) and Construction Entrepreneurship 740 (KEN 740) (average 75%)
(d) Feasibility Studies 700 (EOW 700)
(e) Treatise 785 (KBS 785)

(h) Curriculum

The curriculum is extended over two 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.

Total number of credits required: 182

Code	Module	Prerequisites	Credits
First year of study			
First semester			
EOW 710	Property Financial Mathematics 710	-	6
FMT 700	Financial Management 700	-	12
KBS 710	Construction Management 710	-	9
KSH 700	Construction Quantities 700	-	12
	Total		39
Second semester			
FMT 700	Financial Management 700	-	12
KBS 720	Construction Management 720	-	9
KEN 740	Construction Entrepreneurship 740	-	9
KSH 700	Construction Quantities 700	-	12
	Total		42
Second year of study			
First semester			
EOW 700	Feasibility Studies 700	EOW 710 GS	9
FMT 701	Financial Management 701	FMT 700 GS	12

KBS 785	Treatise 785	-	12
KKR 730	Construction Contract Law 730	-	12
KPB 730	Construction Project Management 730	-	9
	Total		54

Second semester

EOW 700	Feasibility Studies 700	EOW 710 GS	9
FMT 701	Financial Management 701	FMT 700 GS	12
KBS 785	Treatise 785	-	12
KKR 740	Construction Contract Law 740	KKR 730 GS	12
POU 720	Practical Development Feasibility 720	-	2
	Total		47

MASTER'S PROGRAMMES

Refer to General Regulations G.30 to G.44 and G.57 to G.62.

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 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**

(a) 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 Department.

(b) The minimum duration is one year during which the student works under supervision of the Head of Department.

(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**

(a) The degree can be obtained by successfully completing a curriculum with coursework and a treatise.

(b) The modules are presented in block weeks. The attendance of block weeks is compulsory. All examinations are conducted at the Department of Construction Economics, South Campus, University of Pretoria.

(c) The minimum period of study is two years part-time.

(d) The curriculum is compiled in consultation with the Head of Department.

(ii) **Pass requirements**

(a) A minimum of 40% is required in the examination, with a minimum final mark of 50% to pass.

(b) Examination requirements are set out in the departmental study manuals.
(c) The topic of the treatise must be approved by the Head of Department and a minimum of 50% is required to pass.
(d) 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 a weighted average of at least 65% in the remaining modules, constituting the required credits for the specific degree.

B.30 MAGISTER SCIENTIAE (QUANTITY SURVEYING)
MSc(QS) by means of a dissertation and examination (Code 12252010)
MSc(QS) by means of coursework and a treatise (Code 12252011)
MSc(Applied Science) (Code 12252018)

(a) Dissertation: BRK 890
(b) Treatise: BRK 895

B.31 MAGISTER SCIENTIAE (CONSTRUCTION MANAGEMENT)
MSc(Construction Management) by means of a dissertation and examination (Code 12252012)
MSc(Construction Management) by means of coursework and a treatise (Code 12252013)
MSc(Applied Science) (Code 12252019)

(a) Dissertation: KBS 891
(b) Treatise: KBS 892

B.32 MAGISTER SCIENTIAE (REAL ESTATE)
MSc(Real Estate) by means of a dissertation and examination (Code 12252020)
MSc(Real Estate) by means of coursework and a treatise (Code 12252015)
MSc(Applied Science) (Code 12252017)

(a) Dissertation: EMW 890
(b) Treatise: EMW 892`

B.33 MAGISTER SCIENTIAE (PROJECT MANAGEMENT)
MSc(Project Management) by means of a dissertation and examination (Code 12252021)
MSc(Project Management) by means of coursework and a treatise (Code 12252014)
MSc(Applied Science) (Code 12252016)

(a) Dissertation: PRB 890
(b) Treatise: PRB 892

NOTE:
NO NEW APPLICANTS FOR THE FIRST YEAR MSc (PROJECT MANAGEMENT) WILL BE CONSIDERED FOR 2009.

STUDENTS CURRENTLY ENROLLED AND REGISTERED FOR THE PROGRAMME WILL BE ACCOMMODATED TO COMPLETE THE REQUIRED CREDITS IN ACCORDANCE WITH THE CURRICULUM AND REQUIREMENTS OF THE EXISTING PROGRAMME, BUT REVISIONS TO MODULES MAY REQUIRE THEM TO DO ADDITIONAL WORK OR FOLLOW ADDITIONAL OR REVISED MODULES.

With reference to paragraph (b)(i)(d) above, the curricula for MSc degrees per coursework and treatise are compiled from the modules listed below.
Depending on the specific degree enrolled for, the inclusion of certain modules will be compulsory and others optional. Enrolment for certain modules may also be subject to having passed or performed satisfactorily in others.

In order to be considered for the degree to be awarded, a candidate should have obtained a minimum of 110 credits for MSc(Quantity Surveying), MSc(Construction Management) and MSc (Project Management) and 120 credits for MSc(Real Estate) and in addition, have submitted and passed an applicable treatise (60 credits), i.e. a total of 170 or 180 credits, respectively.

MSc(Real Estate)

Compulsory modules		**Credits**
EBS 801	Property Management 801	20
EDW 801	Property Valuation 801	20
EDW 802	Property Valuation 802	20
EMW 892	Treatise	60
EOW 801	Property Development 801	20
EOW 822	Property Development 822	10
FAM 822	Facilities Management 822	10
NMK 820	Research Methodology 820	10
PMN 820	Property Investment 820	10
		180

Supplementary modules
Depending on the qualifications of an applicant, the Head of the Department, may prescribe any or all of the following supplementary modules during the first year of study:

FBS 600 Financial Management Preparatory 600
BTP 600 Management Practice Preparatory 600
BWT 600 Building Science Preparatory 600
GBD 600 Building Services Preparatory 600

DOCTORAL PROGRAMMES

Refer to General Regulations G.45 to G.62.

(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.34 PHILOSOPHIAE DOCTOR [PhD] (Code 12262014)

Thesis: BRK 990

B.35 PHILOSOPHIAE DOCTOR [PhD] (Code 12262015)

Thesis: KBS 990

B.36 PHILOSOPHIAE DOCTOR [PhD] (Code 12262016)

Thesis: EMW 990

DEGREES IN THE DEPARTMENT OF TOWN AND REGIONAL PLANNING

Town and Regional Planning is primarily concerned with 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.37 BACCALAUREUS IN TOWN AND REGIONAL PLANNING [BT&RP] (Code 12132022)

(a) Admission requirements

Refer to General Information B.1, B.2 and B.3 in this publication.

(b) Duration

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

(c) Promotion requirements

(i) **Promotion to the second semester of the first year and to the second year of study**

(a) A new first-year student who fails all the prescribed modules for the programme at the end of the first semester shall not be readmitted to the School for the Built Environment in the second semester.

(b) A student is promoted to the second year provided the student (1) has obtained at least 100 credits; and (2) is not repeating more than one first-year Town and Regional Planning module per semester.

(c) A student who is not promoted to the second year of study in terms of (b) may not register for second-year Town and Regional Planning modules.

(d) Students who have not obtained at least 100 credits of the first year of study after the November examinations must apply for re-admission should they intend to proceed with their studies. Written application must be submitted to the Student Administration for the School for the Built Environment no later than 12 January. Late applications will only be accepted under exceptional circumstances and with approval by the Dean. If first year students are readmitted, conditions of readmission will be set by the Admissions Committee.

(e) Students who have not passed all the prescribed modules of the first year of study, as well as students who are readmitted in terms of (d) must register for the outstanding modules of the first year.

(ii) **Promotion to the third year of study**

(a) A student is promoted to the third year provided the student (1) has obtained at least 210 credits; (2) is not repeating more than one second-year Town and Regional Planning module per semester; and (3) is not repeating any first-year Town and Regional Planning module.

(b) A student who is not promoted to the third year of study in terms of (a) may not register for third-year Town and Regional Planning modules.

(iii) **Promotion to the fourth year of study**

(a) A student is promoted to the fourth year provided the student (1) has obtained at least 310 credits; (2) is not repeating more than one third-year Town and Regional Planning module per semester; and (3) is not repeating any second-year Town and Regional Planning module.

(b) A student who is not promoted to the fourth year of study in terms of (a) may not register for fourth-year Town and Regional Planning modules.

(c) 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.

(d) The degree is awarded if all the prescribed modules have been passed.

(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:

- The Future of Planning 400 (TRP 400)
- Planning Interventions: Metropolitan Areas (TPI 451)
- Planning Interventions: Urban Areas (TPI 452)
- Planning Interventions: Supranational, National and Regional Scale (TPI 453)
- Planning Interventions: Peri-Urban and Rural Areas (TPI 454)
- Essay (TPE 400)

(e) Curriculum

Total credits: 620

Code	Module	Prerequisites	Credits
First year			
First semester			
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	-	12
CIL 111	Computer literacy 111	-	4
EKN 110	Economics 110	-	10
EOT 110*	Academic literacy 110	-	6
GGY 132	Cartographic Skills 132	-	4
STK 110	Statistics 110	Maths 4 (50-59%)	13
or			
STK 113**	Statistics 113	-	(11)**
	Total		77
Second semester			
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	-	12
CIL 121	Information literacy 121	-	4
EKN 120	Economics 120	EKN 110 GS	10
EOT 120*	Academic literacy 120	-	6
GGY 162	Remote Sensing 162	-	4
STK 120	Statistics 120	STK 110 GS	13
STK 123**	Statistics 123	STK 113 GS	(12)**
	Total		77

*Students who did not pass the Academic Literacy Test must register for EOT 110 and 120 offered by the Unit for Academic Literacy. (See Regulation B.5.).
** Students who did not pass the grade 12 examination in Mathematics with a rating of at least 4 (50-59%) must register for STK 113 and STK 123 and may only register for STK 120 n the following year.

Second year			
First semester			
TPA 210	Plan and Policy Analysis and Assessment 210	-	12
TPD 210	Development Planning 210	-	12
TPS 210	Settlement Design Concepts 210	-	16
TPU 210	Land Use Management Theory 210	-	16
GGY 283	Introductory GIS 283	-	12
JCP 201	Community-based Project 201	-	4
PAD 210	Public Administration 210	-	16
	Total		88
Second semester			
TPD 220	Theory of Strategic and Integrated Development Planning 220	-	16
TPS 220	Settlement Establishment and Housing Delivery 220	-	16

TPU 261	Urban Land Development Economics 261	-	8
TPU 262	Land Use Management Practice 262	-	8
GGY 263	Urban Modelling 263	-	12
GGY 264	Urban Social Morphology 264	-	12
JCP 201	Community-based Project 201	-	4
RES 151	Introduction to Research 151	-	6
	Total		82

Third year
First semester

TPS 310	Spatial Concepts 310	-	16
TRP 310	Institutional and Legal Structures for Planning 310	-	20
TRP 300	Planning Futures 300	-	9
RES 261	Methods for Critical Thinking and Research 261	RES 151	10
SOC 210	Sociology 210	-	20
	Total		75

Second semester

TPD 320	Local Economic Development 320	-	12
TPD 321	Participatory Planning 321	-	12
TPS 320	Metropolitan, District and Local Spatial Planning 320	-	16
TRP 300	Planning Futures 300	-	9
BHU 320	Housing 320	-	6
EOW 320	Introduction to Property Law 320	-	6
MDS 321	Municipal Services Provision 321	-	6
SVB 321	Transport Planning 321	-	4
	Total		71

Fourth year
First semester

TPE 400	Essay 400	-	20
TPI 453	Planning Interventions: Metropolitan Areas 453	-	16
TPI 451	Planning Interventions: Urban Areas 451	-	16
TRP 400	The Future of Planning 400	-	10
PRF 412	Professional Practice 412	Final year only	8
	Total		70

Second semester

TPE 400	Essay 400	-	20
TPI 452	Planning Interventions: Peri-Urban and Rural Areas 452	-	16
TPI 454	Planning Interventions: Supranational, National and Regional Scale 454	-	16
TRP 400	The Future of Planning 400	-	10
POU 720	Practical Development Feasibility 720	Final year only	2
SEV 421	Environmental Geotechnology 421	-	16
	Total		80

Transitional arrangements
Students who have already been registered as a final-year student during 2007, and not yet completed BHU 320, EOW 320, GGY 363, SVC 324, SVB 321 or EOW 710 must register and pass these modules to comply with degree requirements.

B.38 MASTER OF TOWN AND REGIONAL PLANNING (MT&RP)

Refer to the General Regulations G.30 to G.44 and G.57 to G.62.

(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 pass mark 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.

(v) The successful completion of a relevant module in research methodology is a prerequisite for approval of the study proposal.

Dissertation: SSB 890 (180 credits)

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

Subject to the stipulations of General Regulations G.30, G.37 and G.38, a relevant four-year degree, or a relevant three-year degree plus honours degree, or a relevant three-year degree plus a minimum of five years relevant experience, 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.

(d) Curriculum

Total credits: 240

Code	Module
TPE 800	Essay 800 (100 credits)

The Head of Department must approve the topic of the treatise.
Research Methodology (NMK 810) is a prerequisite for students who have not yet passed a relevant module in research methodology on honours or master's level (NOTE: NMK 810 – not for credit purposes.)

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 811 Metropolitan and Urban Area-based interventions 811 (20 credits)
TPI 821 Regional Interventions 821 (20 credits)
TRP 800 An overview of planning theory and practice 800 (20 credits)
Remaining credits must be taken from the core modules above and/or the following level-8 modules in consultation with the Head of Department:

Modules can be taken from the master's degree programmes in:
- Civil and Transportation Engineering (School of Engineering);
- Environment and Society (School of Physical Sciences);
- Public Management (School of Public Management and Administration);
- Rural Development (School of Agricultural and Food Sciences);
- Economics (Faculty of Economic and Management Sciences);
- Other modules as approved by the Head of Department.

For the students without an equivalent module in Planning Law in a former under/ postgraduate qualification in Town and Regional Planning, the following module needs to be successfully completed as a prerequisite for obtaining the MT&RP degree in addition to the prescribed modules:

TRP 310 – Institutional and Legal Structures for Planning 310 (not for credit purposes).

B.39 PHILOSOPHIAE DOCTOR [PhD] (Code 12262022)

Refer to General Regulations G.45 to G.62.

(a) A candidate is admitted to doctoral studies only if he or she holds a master's degree. A student must have successfully completed a relevant module in research methodology in order for his/her study proposal to be approved.
(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.

Thesis: SSB 990 (360 credits)

SYLLABI FOR DEGREE PROGRAMMES IN THE SCHOOL FOR THE BUILT ENVIRONMENT

Note:
(i) Syllabi are arranged alphabetically by 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/week, 14 weeks, 10 credits)
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/week, 14 weeks, 8 credits)
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 (3 lectures/week, 7 weeks, 4 credits)
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 224) Earth Studies 224 (3 lectures/week, 7 weeks, 4 credits)
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.

(AAL 320) Earth Studies 320 (2 lectures/week, 14 weeks, 6 credits)
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. Application of principles of sustainable development and ecological design including energy demand and efficiency and energy dissipation.

(ABR 311) Labour Law 311 (3 lectures/week, 14 weeks, 20 credits)
(Offered by the Department of Mercantile Law)
Basic principles of the employment contract. Statutory conditions of employment. Collective Labour Law. Individual and collective labour disputes. Settlement procedures.

(BDO 181) Industrial and Organisational Psychology 181 (4 lectures/week, 7 weeks, 5 credits)
(Offered by the Department of Human Resources Management)
May only be taken in the 4th quarter by Construction Economics students.

This module is an introduction to the various schools of thought in psychology with particular emphasis on Industrial and Organisational Psychology and its fields of application. The basic principles of scientifically systematising industrial psychological knowledge will be discussed. The biological basis of behaviour will be addressed in order to lay the foundation for the application of ergonomical principles.

(BER 310) Business Law 310 (4 lectures/week, 14 weeks, 16 credits)
(Offered by the Department of Mercantile Law)
Introduction to law; general principles of contract law; specific contracts: purchase contracts, job contracting, representative law; general aspects of business law; dispute resolution – mediation and arbitration.

(BGG 121) Building Organisation 121 (2 lectures/week, 14 weeks, 6 credits)
The structure of the building industry and the role of building disciplines and related parties.

(BHU 320) Housing 320 (2 lectures/week, 14 weeks, 6 credits)
Concepts, principles, history, current trends in settlement, shelter and integrated living environments; role of housing in society; statutory policy and planning frameworks and paradigms; housing delivery options; housing development management; financing and property rights options; housing types and densities; housing product, norms and standards; management and maintenance of social housing stock; housing needs assessment and post-occupancy evaluation; consumer education and protection.

(BKR 700) Building Cost Estimation 700 (4 lectures/week, 28 weeks, 24 credits)
Estimation of building costs – principles and process; elements of a price; rough quantities and inclusive quantities (elemental and builders' quantities) for estimating; estimating methods; pricing of various trades and preliminaries; analysis of building cost; building cost escalation; design cost management, value management and life-cycle costing.

(BOU 111) Building Drawings 111 (1 lecture + 1 practical/week, 14 weeks, 6 credits)
Students are introduced to design aspects in the built environment by doing basic technical drawings of simple building structures with appropriate detail sketches. Assignments during the semester expose the students to building plan interpretation through the following topics: foundations; super-structure; roof structure; window and door types; plan and sectional drawings and local authority submission criteria.

(BOU 121) Building Drawings 121 (1 lecture + 1 practical/week, 14 weeks, 6 credits)
Broadens the vocabulary of the technical language from BOU 111. Students are introduced to other aspects of the building industry that include the following topics: topography; symbols; ergonomic design principles; orientation of buildings; perspective drawings; waterproofing and dampcourse applications.

(BRK 300) Quantity Surveying Practice 300 (2 lectures/week, 28 weeks, 18 credits)
Payment certificates; final accounts; contract price adjustments; value-added tax; specification and billing; lists of materials; application of computer-based measuring programmes.

(BRK 700) Quantity Surveying Practice 700 (3 lectures/week, 28 weeks, 18 credits)
Model preliminaries; different types of bills of quantities; bills of quantities compilation; standards for uniformity; contract administration; project administration; conditions of

appointment and fee accounts; consortiums; tendering for professional services; professional indemnity; Quantity Surveying Profession Act; Council for the Built Environment Act; CIDB Act.

(BRK 785) Treatise 785 (28 weeks, 24 credits)
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 (4 lectures/week, 28 weeks, 24 credits)
Budgets, cash-flow schedules and financial statements for the quantity surveying practice. Interpretation of financial statements and construction financial management.

(BWT 110) Building Science 110 (3 lectures/week, 14 weeks, 9 credits)
Principles, methods and materials used in best practice in the construction of simple single-storey buildings up to wall plate height.

(BWT 120) Building Science 120 (3 lectures/week, 14 weeks, 9 credits)
Principles, methods and materials used in best practice in the construction of simple single-storey buildings from wall plate height to completion including finishes and external work. Introduction to alternative practices and materials for sustainability.

(BWT 210) Building Science 210 (3 lectures/week, 14 weeks, 9 credits)
Erection and construction of multi-storey buildings: Including site management and temporary site work, building equipment and earthwork machinery, specialised foundations, cellars and advanced concrete construction. Material study of metals. Timber and steel structures. Types of, and construction methods, for retaining walls.

(BWT 220) Building Science 220 (3 lectures/week, 14 weeks, 9 credits)
Study and development of sensitivity for and the philosophy of industrial safety, accident prevention and total loss control safety risk management in construction. An approved certificate in first aid has to be submitted before this module will be awarded.

(BWT 310) Building Science 310 (3 lectures/week, 14 weeks, 9 credits)
Erection and construction of specialised building components and finishes. Acoustics. Material study of plastics, glues, rubber, mastics, bonding agents, fibre cement, bituminous products, sealers, epoxies and waterproofing.

(BWT 320) Building Science 320 (3 lectures/week, 14 weeks, 9 credits)
Thermal comfort of buildings (including insulation systems and materials). Critical review of current development and construction practice; alternative and sustainable resource utilisation; innovation in construction; statutory and voluntary programmes and instruments for the promotion of sustainable development; technical evaluation of innovative construction materials and methods; maintenance, repair, conservation, restoration, and redesign and reuse of buildings and services.

(CIL 111) Computer Literacy 111 (2 lectures/week, 14 weeks, 4 credits)
(Offered by the School of Information Technology)
Computer concepts, Windows 2003, Internet and the World Wide Web. What will word processing do for me? Gaining proficiency: editing and formatting; enhancing a document; the web and other resources. Advanced features: Outlines and Styles, Selections and Tables. Introduction to Power Point. Presentations made easy. Gaining proficiency: slide show tools. The web and slide masters. Introduction to MS Excel: What

is a spreadsheet? Gaining proficiency: the web and business applications. Spreadsheets in decision making: What if? Graphs and charts: Delivering a message. Introduction to MS Access: What is a database? Tables and Forms: designs, properties, views and wizards, information from the database: reports and queries.
An exemption examination may be written in the first week of semester 1.

(CIL 121) Information Literacy 121 (2 lectures/week, 14 weeks, 4 credits)
(Offered by the Shool of Information Technology))
Why computers matter to you? Networks. Information resources (including the Department of Library Services). Quality of information. Ethics, plagiarism and copyright. Searching the Internet. Information seeking strategies, location and access. Specific search environments (including all electronic databases and journals in the AIS applicable to the relevant faculties). Referencing techniques. Uses, synthesis and evaluation of information. New trends. Content specific to University of Pretoria.
No exemption examination.

(EKN 110) Economics 110 (3 lectures/week 14 weeks, 10 credits)
(Offered by the Department of Economics)
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 and policy, economic development and 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/week, 14 weeks, 10 credits)
(Offered by the Department of Economics)
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.

(EOT 110) Academic literacy 110 (2 lectures + 1 tutorial/week, 14 weeks, 6 credits)
(Offered by the Unit for Academic Literacy)
An introduction to academic literacy that considers various language learning styles and strategies, and provides an initial exploration of the characteristics of academic language. The module focuses initially on academic listening and speaking. Practice in collecting information for academic tasks, as well as in the processing of academic information. In addition, the module has a focus on the enhancement of academic vocabulary, and some initial and elementary academic writing is attempted.

(EOT 120) Academic literacy 120 (2 lectures + 1 tutorial/week, 14 weeks, 6 credits)
(Offered by the Unit for Academic Literacy)
While retaining an emphasis on the collection and processing of academic information, this module also provides sustained practice in academic reading. Similarly, we concentrate on building up an academic vocabulary specific to certain fields of study. The final part of the module brings together academic listening, reading and writing. The production of academic information in the form of argumentative writing is the focus here, i.e. producing academic discourse that is rational, coherent, clear and precise.

(EOW 320) Introduction to Property Law 320 (2 lectures/week, 14 weeks, 6 credits)
Moveable and immovable property. Rights over immovable property; private legal circumscription of ownership; relevant legislation pertaining to property; real securities; the registration of rights; zoning regulations.

(EOW 700) Feasibility Studies 700 (3 lectures/week, 28 weeks, 18 credits)
Overview of factors affecting the feasibility of proposed developments. Detailed financial viability studies of different types of property developments.

(EOW 710) Property Financial Mathematics 710 (2 lectures/week, 14 weeks, 6 credits)
Application of the principles of interest calculations on the building industry; introduction to financial return techniques, nett present values and internal rate of return.

(FMT 700) Financial Management 700 (4 lectures/week, 28 weeks, 24 credits)
Budget estimates, cash-flow schedules and financial statements as well as the handling of contract accounts as introduction to construction financial management.

(FMT 701) Financial Management 701 (4 lectures/week, 28 weeks, 24 credits)
The application of management principles such as: cost, budgets, cash-flow and financial statements, in construction financial management and construction project management.

(FRK 111) Financial Accounting 111 (4 lectures/week, 14 weeks, 10 credits) (Offered by the Department of Accounting)
The nature and function of accounting; the development of accounting; financial position; financial result; the recording process; processing of accounting data; accounting treatment of VAT; elementary income statement and balance sheet; flow of documents; accounting systems; introduction to internal control and internal control measures; bank reconciliations; control accounts; adjustments; financial statements of a sole proprietorship; the accounting framework.

(FRK 121) Financial Accounting 121 (4 lectures/week, 14 weeks, 12 credits) (Offered by the Department of Accounting)
Property, plant and equipment; intangible assets; inventories; liabilities; presentation of financial statements; enterprises withou profit motive; partnerships; companies; close corporations; cash flow statements; analysis and interpretation of financial statements.

(GBD 112) Building Services 112 (2 lectures/week 14 weeks, 6 credits)
Sanitary services; soil and waste drainage for simple, multi-storey and multi-purpose buildings; local sewage by-laws; construction of all types of sewage and sanitary fittings.

(GBD 122) Building Services 122 (2 lectures/week, 14 weeks, 6 credits)
Sanitary services; hot and cold-water supply to simple and multi-storey buildings; local by-laws; water reticulation to town development; different hot-water systems; water purification systems; water and energy saving.

(GBD 212) Building Services 212 (2 lectures/week, 14 weeks, 6 credits)
Climatic conditions, human comfort, characteristics of buildings, airconditioning, energy efficiency.

(GBD 222) Building Services 222 (2 lectures/week, 14 weeks, 6 credits)
Installation and operation of lifts and other mechanical services; cleaning and waste

disposal systems; industrial kitchens and cold rooms; fire detection and protection; building access control systems; building management systems.

(GBD 312) Building Services 312 (2 lectures/week, 14 weeks, 6 credits)
Theory of electricity; regulations of electricity-supply authorities; electrical installations; distribution of electricity.

(GBD 322) Building Services 322 (2 lectures/week, 14 weeks, 6 credits)
Principles of illumination; illumination installations; lightning security; security systems; communication systems. Multimedia installations.

(GGY 132) Cartographic Skills 132 (1 practical/week, 7 weeks, 4 credits)
(Offered by the Department of Geography)
Principles of cartography. Map reading, analysis and interpretation; introductory survey techniques.

(GGY 162) Remote Sensing 162 (1 practical/week, 7 weeks, 4 credits)
(Offered by the Department of Geography)
Use, interpretation and analysis of satellite imagery, aerial photography and other sources of remotely sensed data.

(GGY 263) Urban Modelling 263 (4 lectures + 2 practicals/week, 7 weeks, 12 credits)
(Offered by the Department of Geography)
The utility of existing models for urban planning for cities in developing countries, and the challenges presented by urban realities will be examined using empirical case studies of cities and planning in Africa. Themes discussed include urban agriculture, peri-urban settlement, tenure insecurity, and the importance of the informal economy. In light of the realities of the aforementioned factors, the development of new, more appropriate urban models will be considered.

(GGY 264) Urban Social Morphology 264 (4 lectures + 2 practicals/week, 7 weeks, 12 credits)
(Offered by the Department of Geography)
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 265) Geomorphology of the Built Environment 265 (4 lectures/week, 7 weeks, 12 credits)
(Offered by the Department of Geography)
The theory component covers geomorphological aspects of the built environment including landscape identification; weathering or deterioration of natural stone and application to design and preservation of buildings and monuments; slope hydrology and stability conditions; soil erosion processes and construction impacts; drainage modification in urban areas; wetland identification, human impacts and rehabilitation; recreational impacts and management. In addition to the theory a field-based project is undertaken. *This module is for Architecture and Landscape Architecture students only.*

(GGY 283) Introductory GIS 283 (4 lectures + 2 practicals/week, 14 weeks, 12 credits)
(Offered by the Department of Geography)
Introduction to Geographic Information Systems (GIS), theoretical concepts and implications of GIS. The focus will be on the GIS process and data input, data analysis, data output and associated technologies.
Note: This is a closed module, only available to students studying [BT&RP] (12132022), [BSc(Arch)] (12132002), [BSc(LArch)] (12132004), BSc Meteorology (02133312), BSc Geoinformatics (02133383), BSc Environmental Science (02133361), BSc Earth Sciences (02133012), BSc Geography (02133385) or as approved by the Head of Department. The content of this module is the same as GIS 221 and students are not allowed to earn credits for both GGY 283 and GIS 221.

(GKD 225) General Soil Science 225 (3 lectures + 1 practical/week, 7 weeks, 12 credits) *(Capita selecta)*
(Offered by the Department of Plant Production and Soil Science)
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 101) Quantities 101 (4 lectures/week, 28 weeks, 24 credits)
Introduction to quantity surveying, mensuration; interpretation of drawings, methodology of measuring, working up processes, general instructions, measuring of simple building elements.

(HVH 200) Quantities 200 (4 lectures/week, 28 weeks, 24 credits)
Measuring of single-storey buildings and simple building elements, and adjustment of foundations on sloping sites. Abstracting and billing.

(HVH 300) Quantities 300 (4 lectures/week, 28 weeks, 24 credits)
Measuring of simple concrete structures, joinery, structural steelwork, sundry metalwork, plumbing and drainage, simple electrical work and external works. Theory of monetary allowances in bills of quantities. Abstracting and billing.

(HVH 700) Quantities 700 (4 lectures/week, 28 weeks, 24 credits)
Measuring of demolitions, alterations, geotechnical engineering works, civil engineering works, mass earthworks, advanced earthworks and concrete work, different concrete slab constructions, precast concrete, advanced brickwork, rubble walling, stone masonry, advanced electrical work and mechanical services. Abstracting and billing.

(INF 181) Informatics 181 (2 lectures/week, 14 weeks, 3 credits)
(Offered by the Department of Information Technology)
Computer processing of accounting information.
(Offered in first and second semester.)

(JCP 201) Community-based Project 201 (8 credits)
This project-orientated module is a form of applied learning which is directed at specific community needs and is integrated into all undergraduate academic programmes offered by the Faculty of Engineering, Built Environment and Information Technology. The main

objectives with the module are as follows: (1) The execution of a community related project aimed at achieving a beneficial impact on a chosen section of society, preferably but not exclusively, by engagement with a section of society which is different from the student's own social background. (2) The development of an awareness of personal, social and cultural values, an attitude to be of service, and an understanding of social issues, for the purpose of being a responsible professional. (3) The development of important multidisciplinary and life skills, such as communication, interpersonal and leadership skills. Assessment in the module will include all or most of the following components: evaluation and approval of the project proposal, assessment of oral and/or written progress reports, peer assessment in the event of team projects, written report-back by those at whom the project was aimed, and final assessment on grounds of the submission of a portfolio and a written report.

(KBS 310) Construction Management 310 (3 lectures/week, 14 weeks, 9 credits)
General functions and techniques of management. Office administration.

(KBS 320) Construction Management 320 (3 lectures/week, 14 weeks, 9 credits)
Site establishment. Purchasing and handling of building materials. Introduction to communication.

(KBS 710) Construction Management 710 (3 lectures/week, 14 weeks, 9 credits)
Operational management techniques, productivity and work study. Construction programming techniques.

(KBS 720) Construction Management 720 (3 lectures/week, 14 weeks, 9 credits)
Human resource management.

(KBS 785) Treatise 785 (28 weeks, 24 credits)
An essay on a subject approved by the Head of Department has to be completed during the final year of study.

(KEN 740) Construction Entrepreneurship 740 (3 lectures/week, 14 weeks, 9 credits)
Entrepreneurship, strategic management and marketing. Business ethics.

(KIT 311) Construction Information Technology and Communication 311 (4 lectures/ week, 14 weeks, 12 credits)
Orientation in the use of electronic technologies and aids in the construction industry. Confident group communication. Effective communication in organisations: the process of communication, formal meetings, the interview, planning and organising messages, intercultural communication.

(KKR 730) Construction Contract Law 730 (4 lectures/week, 14 weeks, 12 credits)
Law of contract – an overview; history of building contracts in South Africa; JBCC principal building agreement: definitions, objective, preparation, execution, completion, payment, termination, settlement of disputes; JBCC minor works agreement; case studies.

(KKR 740) Construction Contract Law 740 (4 lectures/week, 14 weeks, 12 credits)
Subcontracting: consultants; main contractor; direct contractor and subcontractor; JBCC nominated/selected subcontract agreement: definitions, objective, preparation, execution, completion, payment, termination, settlement of disputes; non-nominated subcontract

agreement. Other standard agreements (GCC, NEC and FIDIC); case studies. Dispute resolution: mediation, adjudication and arbitration; alternative dispute resolution; litigation: legislation and rules; law of delict; negligence and damage to property.

(KON 111) Construction 111 (3 lectures/week, 14 weeks, 8 credits)
Drawing conventions.
Typical city site: city block, shape, title, services.
Single-storeyed buildings: preparation for building work. Setting out, foundations, foundation walls, filling. Dampproofing. Surface beds, steps, level differences, stoeps. Superstructure walls, stability, hearths, chimneys, and gable walls. Building in of windows, doors, services. Thresholds, window sills, lintels. Timber roof structures and finishes: profiled sheetmetal, concrete tiles and thatch. Plaster and screeds. Ceilings. Windows, doors, ironmongery. Fasteners.

(KON 121) Construction 121 (3 lectures/week, 14 weeks, 8 credits)
Surveying, map projections, distance measurement with tape, levelling instrument, practical contour plan and site sections. Site and structure data collection and interpretation. Contours, cut-and-fill. Storm water. Introduction to materials: properties, movement, binding, thermal properties, water resistance, durability, appearance, production, economy. Concrete, clay bricks, mortar, bond. Concrete blocks, modular coordination. Building stone. Timber. Steel. Fasteners.

(KON 210) Construction 210 (3 lectures/week, 14 weeks, 8 credits)
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 220) Construction 220 (3 lectures/week, 14 weeks, 8 credits)
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.

(KON 310) Construction 310 (3 lectures/week, 14 weeks, 8 credits)
Roads: design and construction, materials and finishes, kerbing. Water features: design and construction. Street furniture. Construction equipment. Site and building services: water lines, sanitary plumbing and pipe systems above ground and indoors, underground sewer systems, electricity and gas. Electrical lighting: light, lamp types, luminaires; lighting requirements. Product design: design of a luminaire (in DESIGN): the preparation of technical documentation and a prototype.

(KON 320) Construction 320 (2 lectures/week, 14 weeks, 8 credits)
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, glass. Human transportation systems: types, applications. Design of a small commercial building/landscape/interior space (in DESIGN) and the preparation of its construction drawings.

(KPB 730) Construction Project Management 730 (3 lectures/week, 14 weeks, 9 credits)
Introduction to project management in the building and property industry. Key processes,

knowledge areas and techniques are covered.

(KSH 201) Construction Quantities 201 (4 lectures/week, 28 weeks, 24 credits)
Measuring of single-storey buildings and simple building elements, and adjustment of foundations on sloping sites, sundry metalwork and joinery.

(KSH 300) Construction Quantities 300 (4 lectures/week, 28 weeks, 24 credits)
Measuring of simple concrete structures, structural steelwork, plumbing and drainage, and alterations. Quantities of materials, analysis of building costs, certificates, contract price adjustments (CPA) and final accounts.

(KSH 700) Construction Quantities 700 (4 lectures/week, 28 weeks, 24 credits)
Preliminaries and pricing thereof, different types of bills of quantities, builder's quantities, civil engineering works, tender documentation, analysis of building costs, economical designs, building cost estimates, practical contractor's administration and cost management – internal and external.

(LAN 212) Landscape Architecture 212 (3 lectures/week, 14 weeks, 8 credits)
Introductory botany and plant diversity; plant design philosophy; criteria and process for plant material selection and preparing plant material lists; plant classification; identification of genera and species.

(LAN 222) Landscape Architecture 222 (3 lectures/week, 14 weeks, 8 credits)
The role of plant geography in plant selection and the identification of plant species specific to their natural environment; practical considerations in plant selection.

(MDS 321) Municipal Services Provision 321 (2 lectures/week, 14 weeks, 6 credits)
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/week, 14 weeks, 8 credits)
(Offered by the Department of Materials Science and Metallurgical Engineering)
Unconventional construction materials: properties, applications.

(MST 323) Material Studies 323 (3 lectures/week, 14 weeks, 8 credits)
Application of materials in artificial environments:
- Development of modern materials and processes in product design
- Joint theory
- New applications in technical textiles, polymers and other artificial materials
- Material selection and technical development in conjunction with projects in design (ONT 303) and construction (KON 320).

(OKU 120) Design Communication 120 (2 lectures/week, 14 weeks, 6 credits)
Introduction to orthographic projection. Projection techniques in communicating the geometry of lines and planes. The construction of successive auxiliary views in spatial analysis. Construction of shades, shadows and perspectives. A basic interlocution into basic two dimensional computer-aided drafting.

(OKU 313) Design Communication 313 (2 lectures + 1 studio session/week, 14 weeks, 6 credits)
Advanced graphic and presentation techniques.

(OMG 122) History of the Environment 122 (2 lectures/week, 14 weeks, 6 credits) (Offered by the Department of Architecture)
Introduction to the study and application of the history of the environment. Insight in the process of endemic building, settlement and urbanisation in various periods and environments. Concise history of the environments of the Antique, Bronze Era, Classical, Christian, Judaic, and Muslim cultures of the Mediterranean and European civilizations up until the Renaissance. Bhuddism and Shintoism in the East.

(OMG 224) History of the Environment 224 (2 lectures/week, 14 weeks, 6 credits) (Offered by the Department of Architecture)
Concise history of the environment of the West, from the circumnavigation of the southern Cape Point in 1488 AD until the present, with specific reference to contemporaneous environments in Southern Africa.

(OMG 310) History of the Environment 310 (2 lectures/week, 14 weeks, 6 credits)
History of the environment of African societies between the tropics within global context until the present.

(OMG 320) History of the Environment 320 (2 lectures/week, 14 weeks, 6 credits)
History of the environment of Southern African societies from the old Stone Age until the present.

(OML 110) Environmental Studies 110 (2 lectures/week, 14 weeks, 6 credits)
Introduction to contemporary thought with emphasis on perception and interpretation as functions of culture. Building types as artefacts of material culture. Focus: twentieth-century artefacts. Approaches and guidelines to the study of history of the environment. Understanding of the process of endemic construction and its monumentalisation, settlement and urbanisation of various ages and environments. An interdisciplinary investigation of living spaces as shapers of social interaction. The history of the environment of the Mediterranean Antique, Bronze Age, Classical and Biblical societies
.

(OML 120) Environmental Studies 120 (2 lectures/week, 14 weeks, 6 credits)
The history of the environment of and the link between North Europe and the Mediterranean area, the Arabic peninsula and the Indies, from the fall of Jerusalem up until the fall of Constantinople in 1453 AD.

(OML 210) Environmental Studies 210 (2 lectures/week, 14 weeks, 6 credits)
The history of the environment and the link between North Europe and a newly discovered world from the time of the circumnavigation of the southernmost Cape Point of Africa until the Industrial Revolution.

(OML 220) Environmental Studies 220 (2 lectures/week, 14 weeks, 6 credits)
History of the environment of Western societies and their dominions from the Industrial Revolution up to the intellectual questioning of Modernism. Southern African housing typologies and Western artefacts as manifestation of socio-political realities since 1488 AD.

(OML 310) Environmental Studies 310 (2 lectures/week, 14 weeks, 6 credits)
Normative positions: Normative positions that guide design thinking. Surface features, broad inclinations and differentiating features. Problems of substantiation. Theory and practise.
Theory of design disciplines: A hermeneutic appraisal of contemporary philosophical

directions defining the current intellectual context in which the design disciplines are practised and appraised. Contextualising culture, philosophy and science as the eco-system of the designer.
Housing studies: Contemporary theory, approaches and projects in housing. Developing a personal approach.

(OML 320) Environmental Studies 320 (2 lectures/week, 14 weeks, 6 credits)
Rethinking relationships of form and function in the 21st century and the advent of hybrid typologies and cross programming as formal determinants.
The relationship between global intellectual movements and the local debate. Appraising the state of current design production and the establishment of identity through design. Universalism versus regionalism and the global design context.

(ONT 100) Design 100 (5½ studio sessions + 2 lectures/week, 28 weeks, 60 credits)
Introduction to design. 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. Basic design principles through spatial studies, composition, colour and texture. Light and shadows. Proportions and scale. Design based on the principles of optimum space use, ergonomics and universal design. Relation of internal to external space. Development of a vocabulary to describe and illustrate the discipline of design.
Theory
Design methodology, procedural design theory with the aim of developing personal strategies. Design aids and tools for a variety of design situations. Design principles including composition, colour, proportion and scale, developed as a visual language. Anthropometry and ergonomics. Visual literacy: visual media, analysis, interpretation and criticism. The designer as visual thinker: perception; ideograms.
Introduction to recent philosophical traditions defining the current intellectual climate as a context for design production and appraisal.

(ONT 200) Design 200 (5½ studio sessions + 2 lectures/week, 28 weeks, 60 credits)
Semester 1
This module is initially generically presented to continue emphasising the correspondence between the three design disciplines. Programme specific content is applied from the second semester, although it is introduced in the first semester.
The first quarter focuses on the stimulation of creativity and innovation. Students are systematically exposed to various design determinants. The objectives are to demystify the process of design, to enable students to develop a personal design methodology and to expand their design vocabulary.
This is reinforced in the second quarter where spatial design is investigated and developed in response to tectonic and contextual influences. Specific reference is made to the contents of supporting modules with the purpose to strengthen the integrity of design decisions.
Theory is presented as an introduction to current philosophical attitudes informing the production of space and the reading of place as central concerns within the design disciplines.
Semester 2
The process of design through the integration of supporting modules. The design of simple public spaces and buildings other than domestic with the emphasis on planning, plan-making, structure and economy. Skills: programming, site analysis, time

management, advanced graphic techniques, reprographic techniques.
Normative stances as function of a theoretical frame of reference. Time and space as structuring elements. The contemporary theory pertaining to space and place as central principles of the environmental design disciplines.
Analysis of various housing scenarios, alternative delivery models, design principles in housing and applications.

(ONT 202) Design 202 (5½ studio sessions + 2 lectures/week, 28 weeks, 60 credits)
Semester 1
This module is initially generically presented to continue emphasising the correspondence between the three design disciplines. Programme specific content is applied from the second semester, although it is introduced in the first semester.
The first quarter focuses on the stimulation of creativity and innovation. Students are systematically exposed to various design determinants. The objectives are to demystify the process of design, to enable students to develop a personal design methodology and to expand their design vocabulary.
This is reinforced in the second quarter where spatial design is investigated and developed in response to tectonic and contextual influences. The contents of supporting modules are referred to with the purpose of strengthening the integrity of design decisions.
Theory is presented as an introduction to current philosophical attitudes informing the production of space and the reading of place as central concerns within the design disciplines.
Semester 2
The process of design through the integration of supporting modules. Exploration of meaning and integrity in landscape design. Skills: programming, site analysis, creative design, time management, advanced graphic techniques, reprographic techniques.
Normative stances as function of a theoretical frame of reference. Time and space as structuring elements. The contemporary theory pertaining to space and place as central principles of the environmental design disciplines.
The programme specific theory forms an introduction to landscape architecture design theory of the 20th c. with reference to the most influential landscape architectural design projects and designers of the century.

(ONT 203) Design 203 (5½ studio sessions + 2 lectures/week, 28 weeks, 60 credits)
Semester 1
This module is initially generically presented to continue emphasising the correspondence between the three design disciplines. Programme specific content is applied from the second semester, although it is introduced in the first semester.
The first quarter focuses on the stimulation of creativity and innovation. Students are systematically exposed to various design determinants. The objectives are to demystify the process of design, to enable students to develop a personal design methodology and to expand their design vocabulary.
This is reinforced in the second quarter where spatial design is investigated and developed in response to tectonic and contextual influences. Specific reference is made to the contents of supporting modules with the purpose to strengthen the integrity of design decisions.
Theory is presented as an introduction to current philosophical attitudes informing the production of space and the reading of place as central concerns within the design disciplines.
Semester 2
The process of design through the integration of supporting modules. Scenographic

design, product design and prototypes. Skills: programming, architectural space analysis, advanced graphic and reprographic techniques.
Normative stances as function of a theoretical frame of reference. Time and space as structuring elements. The contemporary theory pertaining to space and place as central principles of the environmental design disciplines.
Analysis of various housing scenarios, alternative delivery models, design principles in housing and applications.
Design of inclusive environments, re-use of architectural space, planning and form-giving processes, identity design, exhibition and installation design.

(ONT 300) Design 300 (5½ studio sessions + 2 lectures/week, 28 weeks, 60 credits)
Semester 1
The process of design through the integration of supporting modules. The design of spaces and buildings with the emphasis on lateral thinking, restoration and adaptive re-use. Interior and industrial design. Skills: technology-backed reprographic techniques, competitions and exhibitions, decision making and time planning.
Semester 2
The product of design through the integration of supporting modules. The design of a mixed-use project in an urban context with a complex program up to a full set of design and detail drawings for construction drawings and specifications in KON 320. Statutory requirements, feasibility and payability studies.

(ONT 302) Design 302 (5½ studio sessions + 2 lectures/week, 28 weeks, 60 credits)
Semester 1
The process of design through the integration of supporting modules. Understanding and investigating urban form, urban ecology and site ecology. Site planning: exploration of complexities at neighbourhood and regional scale including ecological, economic and social planning aspects. Design: framework and master planning at regional context. Skills: technology-backed reprographic techniques, competitions and exhibitions, decision making and time planning.
Semester 2
The product of design through the integration of supporting modules. Exploration of detail urban ecology, economic and social aspects, and historic and cultural environments. Site planning: Interdisciplinary problem solving with emphasis on site design and sustainable and appropriate technologies. Design: complex detail design and sketch plans with technical documentation. Full coordination with KON 320.

(ONT 303) Design 303 (5½ studio sessions + 2 lectures/week, 28 weeks, 60 credits)
Semester 1
The process of design through the integration of supporting modules. The design of spaces with the emphasis on lateral thinking and ritual, restoration and adaptive reuse; luminaires as product design and the manufacture of a prototype. Skills: technology-backed reprographic techniques, competitions and exhibitions, decision making and time management.
Semester 2
The product of design through the integration of supporting modules. The design of a commercial project in an existing architectural envelope in an urban context with a complex program up to a full set of design and detail drawings for construction and specification in KON 320. Corporate identity, statutory requirements, feasibility and payability studies, tenant mix.

(PAD 210) Public Administration 210 (3 lectures/week, 14 weeks, 16 credits)
(Offered by the School of Public Management and Administration)
Public organisational dynamics and policy studies
Organisation and management concepts. Bureaucratisation. Organisational culture. Departmentalisation in the various governmental spheres. Delegation, communication, organisational change and development. Organisational behaviour. Organisational conflict. Political and organisational analysis. Group dynamics. Structural design of organisations. Organisation development. 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. Quantative tools for policy making. Policy analysis. Analytical policy studies. Tools of policy analysis.

(POU 720) Practical Development Feasibility 720 (Seminar conducted over three days, 2 credits)
(Offered by the Department of Construction Economics)
The feasibility of a project is investigated by groups comprising students of the various fields of study in the built environment.
The projects are presented to a panel of judges comprising practitioners.

(PRF 412) Professional Practice 412 (2 lectures/week, 14 weeks, 8 credits)
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/week, 14 weeks, 8 credits)
(Offered by the Department of Construction Economics)
The structure of the built environment in South Africa; basic principles and techniques of project management and financial management; methodology of measuring; building cost estimates; feasibility studies; economic design; contract administration; valuation of buildings.

(PWT 312) Plant Science 312 (3 lectures/week, 14 weeks, 8 credits)
Plant community studies and conservation within the context of urban open space; implications and management of weeds and invaders, red-data lists and rare and endangered species.
Technical aspects regarding the establishment of plants and the maintenance thereof. Approaches to the establishment of planting in complex urban environments.

(PWT 322) Plant Science 322 (3 lectures/week, 14 weeks, 8 credits)
Ecological principles for planting in reclamation and resettlement. Environmental legislation with reference to environmental management and monitoring.

(RES 151) Introduction to Research 151 (2 lectures/week, 7 weeks, 6 credits)
(Offered by the Department of Anthropology and Archaeology)
This module is only presented during quarter 3.
Introduction to basic research in the social sciences and humanities. Various approaches to research. Research methods: problem statement, formulation of hypotheses, design of variables, interpretation and graphic presentation of data, and report writing. Ethics in research.

(RES 261) Methods of Critical Thinking and Inquiry 261 (2 lectures/week, 7 weeks, 10 credits)
(Offered by the Department of Phsychology)
** 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.

(SEV 421) Environmental Geotechnology 421 (4 lectures, 1 practical, 1 discussion/week, 14 weeks, 16 credits)
(Offered by the Department of Civil Engineering)
Regulatory framework, site investigation, site restoration and waste disposal. Site characterisation methods. Waste types and properties. Subsurface contaminant transport. Multiphase fluid flow. Design of waste containment and waste disposal systems. Review of remedial alternatives with emphasis on in situ technologies. Case histories. Integrated environmental management processes. Environmental legislation in SA. Environmental impact, environmental auditing and risk analysis. ISO 140000: what it entails and how it is applied. Community participation.

(SKE 110) Introduction to Structures 110 (2 lectures/week, 14 weeks, 9 credits)
(Offered by the Department of Civil Engineering)
Design; basics (forces, moments, equilibrium, reactions, stress, strain); materials; loads; pin-jointed trusses; tension members.

(SKE 120) Structures 120 (2 lectures/week 14 weeks, 9 credits)
(Offered by the Department of Civil Engineering)
Beams (shear force and bending moment, bending and shear stresses, design of standard beams in steel, concrete and timber, section properties, lateral restraint); compression members; combined axial and bending; deflection.

(SKE 210) Reinforced Concrete Structures 210 (2 lectures/week, 14 weeks, 9 credits)
(Offered by the Department of Civil Engineering)
Properties of reinforced concrete; construction methods; slabs; beams; columns; foundations; retaining walls; placement of reinforcement in the various structural members; basic concepts of prestressed concrete.

(SKE 220) Civil Engineering Services 220 (3 lectures/week, 14 weeks, 9 credits)
(Offered by the Department of Civil Engineering)
Water reticulation; sewerage reticulation; stormwater reticulation; roads.

(SOC 210) Sociology 210 (3 lectures/week, 1 tutorial, 14 weeks, 20 credits)
(Offered by the Department of Sociology)
Section 1: Societal change, development and globalisation: The study of societal change and development is fundamental to sociological analysis. Moreover the contemporary

process of globalisation at a world level impacts on the process of change. This section will review some classical and contemporary debates on issues such as progress, modernisation, development and underdevelopment, dependency, post-development and globalisation.
Section 2: Households, family and gender: This section focuses on theories and issues relevant to the understanding of gender, households and family life at a general level but with a particular emphasis on the Southern African context. The section will address issues such as poverty, survival strategies of rural and urban households, domestic violence and its effects on family life.

(STK 110) Statistics 110 (3 lectures + 1 hour practical/week, 14 weeks, 13 credits)
(Offered by the Department of Statistics)
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 113) Statistics 113 (3 lectures/week, 14 weeks + 1 hour practical/week last 7 weeks, 11 credits)
(Offered by the Department of Statistics)
Data operations and transformations
Introductory concepts: The role of statistics, various types of data and the number system. Concepts underlying linear, quadratic, exponential, hyperbolic, logarithmic transformations of quantitative data: Graphical representations, solving of equations, 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, double) and absolute values.
Descriptive statistics – Univariate
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) Statistics 120 (3 lectures + 1 hour practical/week, 14 weeks, 13 credits)
(Offered by the Department of Statistics)
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, 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' and consumers' surplus, distribution functions, probability distributions, probability density functions. Identification, use, evaluation, interpretation of statistical computer packages and statistical techniques.

(STK 123) Statistics 123 (3 lectures/week, 14 weeks + 1 hour practical/week, last 7 weeks, 12 credits)
(Offered by Department of Statistics)
Optimisation techniques with economic applications
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, optimisation techniques, the area under a curve and applications of definite integrals.
Probability theory 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 161) Statistics 161 (3 lectures + 1 hour practical/week, 7 weeks, 6 credits)
(Third quarter)
(Offered by the Department of Statistics)
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 211) Theory of Structures 211 (3 lectures/week, 14 weeks, 8 credits)
(Offered by the Department of Civil Engineering)
Introduction to structural engineering concepts like design, analysis , sizing and planning of structures. Introduction to Newton's laws, equilibrium, free body diagrams. The application of equilibrium in solving reactions of statically determinate structures. The principles of determinacy and stability of structures. The application of Newton's laws in determining the internal forces in common structural systems like cable structures, trusses, frames and beams. The fundamental principles of weight and forces and how forces are transmitted through structural members and load tracing.

(STU 221) Theory of Structures 221 (3 lectures/week, 14 weeks, 8 credits)
(Offered by the Department of Civil Engineering)
Introduction to material science in structural engineering. Concepts like stress, strain, elasticity, stress-strain diagrams, elasticity modules, strength and deformation as applied in structural engineering. Cross-sectional properties of structural elements. Types of stresses, and their transmission in structural elements. Introduction to the relationship between stress and strain (deflection) in beams by Coulomb's theory. Introduction to the analysis of compressive structural elements by means of Euler's theory.

(STU 311) Theory of Structures 311 (3 lectures/week, 14 weeks, 8 credits)
(Offered by the Department of Civil Engineering)
Concrete structures.
Loads on concrete structures, limit-states design principles.
Bending, shear and punching: Design of beams, slabs and footings.
Compression members: Design of columns.
Load-bearing brickwork.
Limit-states design principles. Effective length and width of compression members.

(STU 321) Theory of Structures 321 (3 lectures/week, 14 weeks, 8 credits)
(Offered by the Department of Civil Engineering)
Timber structures.
Loads on typical timber structures, limit-states design principles.
Bending, shear and deflection: Design of flexural members without and with axial loads.
Tension members: Tension members in roof trusses.
Compression members: Design of compression members in trusses and as support members for trusses.
Bracing systems.
Steel structures.
Loads on typical steel structures, Limit-states design principles.
Bending, shear and deflection: Design of flexural members without and with axial loads.
Tension members: Tension members in roof trusses.
Compression members: Design of compression members in trusses and as support members for trusses.
Bracing systems.

(SVB 321) Transportation Planning 321 (3 lectures/week, 7 weeks, 4 credits)
(Presented by the Department of Civil Engineering)
(1) Road engineering: Introduction to traffic engineering; road functions and hierarchy; operational characteristics of traffic, capacity, traffic control, geometric design of streets, level junction and interchanges, parking and traffic studies. (2) Transport planning: Environmental, economic and social impacts of transport; transport planning process; introduction to transport studies; evaluation; public transport.

(TKS 212) Textiles 212 (3 lectures + 1 practical/week, 14 weeks, 14 credits)
(Offered by the Department of Consumer Science)
Utility aspects
Basic components of textiles, consumer decision making, utility aspects that include durability, comfort, maintenance, health/safety/protection and aesthetic aspects.
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 222) Textiles 222 (3 lectures + 1 practical/week, 14 weeks, 14 credits)
(Offered by the Department of Consumer Science)
Fabric structures
Introduction to fabric structures. Woven fabrics, knits, non-woven fabrics and compound fabrics.
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.

(TPA 110) Site Analysis and Assessment 110 (2 lectures + 1x3 hours practical/ week, 14 weeks, 16 credits)
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 + 1x3 hours practical/week, 14 weeks, 16 credits)
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/week, 14 weeks, 12 credits)
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/week, 14 weeks, 12 credits)
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 and Integrated Development Planning 220 (3 lectures/week, 14 weeks, 16 credits)
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 320) Local Economic Development 320 (3 lectures/week, 14 weeks, 12 credits)
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 technology for local areas within the global economy. Government programmes and initiatives that can influence and promote local economic development.

(TPD 321) Participatory Planning 321 (3 lectures/week, 14 weeks, 12 credits)
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 820) Integrated Development Planning 820 (2 blocks, 14 weeks, 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 400) Essay 400 (1 contact session/week, 28 weeks, 40 credits)
Identification and description of research problem; literature study, research programme and methods; research proposal in the prescribed format for approval by the Head of Department; execute research in line with the approved research proposal; collection, synthesis and interpretation of data; writing up and presentation of research findings.

(TPE 800) Treatise 800 (4 blocks, 28 weeks, 100 credits)
Identification and discussion of a research problem; preparation of a research proposal in the prescribed format for approval by the Head of Department; literature study; design, plan and execution of research in line with approved research proposal; writing up and presentation of research findings; academic article for publication.

(TPI 451) Planning Interventions: Urban Areas 451 (2 lectures + 1x3 hours practical/week, 7 weeks, 16 credits) ([second quarter)
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 of current practice; simulated planning exercise.

(TPI 452) Planning Interventions: Peri-Urban and Rural Areas 452 (2 lectures + 1x3 hours practical/week, 7 weeks, 16 credits) (third quarter)
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 + 1x3 hours practical/week, 7 weeks, 16 credits) (first quarter)
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 + 1x3 hours practical/week, 7 weeks, 16 credits) (fourth quarter)
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 811) Metropolitan and Urban Area-based Interventions 811 (2 blocks, 14 weeks, 20 credits)
Scope, nature and rationale of metropolitan and urban area-based interventions; unique problems in metropolitan areas, for example inner city decay, fringe development, housing, services backlog, the dysfunctional apartheid cityscape and dependency on private transport; types of intervention (inter alia institutional, spatial, economic and social) in order to accomplish restructuring and development in metropolitan areas in South Africa in a relevant, social and environmentally accountable way; policy and

legislation regarding urban restructuring and development in South Africa; international and local case studies; impact of globalisation on South African metropolitan areas and major cities; simulated metropolitan and urban area-based intervention exercise.

(TPI 821) Regional Interventions 821 (2 blocks, 14 weeks, 20 credits)
Scope, nature and rationale of regional interventions on both a supranational and sub-national scale; approaches to planning and development on continental, macro-regional, provincial and district scales; types of intervention (inter alia institutional, spatial, economic and social) in order to accomplish restructuring and development in regions in a relevant, social and environmentally accountable way, past and present examples of planning on each of these scales; planners' roles in planning exercises at these scales; critiques and improvements on current practice; rural urban linkages and their significance for regional interventions; debates around the way in which problems facing rural settlements (such as the absence of an economic base and necessary infrastructure, lack of access to land and conflicting demands on natural resources) in regions can be addressed; international and local case studies; simulated regional intervention exercise.

(TPS 120) Principles of Settlement Design 120 (2 lectures + 1x3 hours practical/ week, 14 weeks, 12 credits)
Introduction to the goals and principles of settlement design. Characteristics and measures as well as 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 + 1x3 hours practical/week, 14 weeks, 16 credits)
The skills and techniques to design a layout of a new settlement 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 + 1x3 hours practical/week, 14 weeks, 16 credits)
Institutional and legal frameworks in which settlement 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 + 1x3 hours practical/week, 14 weeks (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 320 (2 lectures + 1x3 hours practical/week, 14 weeks, 16 credits)
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 (2 blocks, 14 weeks, 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 (2 blocks, 14 weeks, 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/week, 14 weeks, 16 credits)
A brief history of land use management in South Africa; critique of land use management; rationale 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 Urban Land Development 261 (3 lectures/week, 7 weeks, 8 credits)
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/week, 7 weeks, 8 credits)
Generic components of land use applications and land development related applications and application procedures; practical exercises in the preparation, submission, 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 (2 blocks, 14 weeks, 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/week, 14 weeks, 12 credits) (Offered by the Department of Geography)
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) Introduction to Planning 110 (3 lectures/week, 14 weeks, 12 credits)
Definitions of planning; rationale for planning; focus areas of planning; planning processes; planners' roles and work places; the institutional framework for planning; planning legislation; values and ethics of planners; the future of planning.

(TRP 111) Planning and Settlement Histories before the Industrial Revolution 111 (3 lectures/week, 14 weeks, 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 121) Planning and Settlement Histories since the Industrial Revolution 121 (3 lectures/week, 14 weeks, 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 situation. 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 300) Planning Futures 300 (2 lectures/week, 28 weeks, 18 credits)
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 310) Institutional and Legal Structures for Planning 310 (3 lectures/week, 14 weeks, 20 credits)
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 400) The Future of Planning 400 (2 lectures/week, 28 weeks, 20 credits)
Planning in the future: definitions, rationale, focus areas, processes and systems. Future planners' roles and work places, values and ethics.

(TRP 800) An overview of planning theory and practice 800 (4 blocks, 28 weeks, 20 credits)
Definitions of planning; rationale for planning; focus areas of planning; planning processes; planners' roles and work places; the institutional framework for planning; the role, impact and evolution of planning legislation; values and ethics of planners; the future of planning. The future as a concept: the importance of thinking about, and planning for the future. Techniques/methods of predicting and/or shaping in the future. Overview of past and present planning theories.

(WTW 133) Precalculus 133 (5 lectures + 2 hour group discussion + 1 hour practical/week, 14 weeks, 8 credits)
(**Offered by the Department of Mathematics and Applied Mathematics**)
Real numbers, elementary set notation, exponents and radicals. Algebraic expressions, fractional expressions, linear and quadratic equations, inequalities. Coordinate geometry: lines, circles. Functions: definition, notation, piecewise defined functions, absolute value, domain and range, graphs, transformations of functions, symmetry, even and odd functions, combining functions, one-to-one functions and inverses, polynomial functions and zeros. Sequences, summation notation, arithmetic, geometric sequences, infinite geometric series, annuities and instalments. Degrees and radians, unit circle, trigonometric functions, fundamental identities, trigonometric graphs, trigonometric identities, double-angle, half-angle formulae, inverse trigonometric functions, trigonometric equations, applications.

MEDALS AND PRIZES IN THE SCHOOL FOR THE BUILT ENVIRONMENT

Not limited to the Faculty of Engineering, Built Environment and Information Technology		
Name	**Donor**	**Award**
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 S A Society for the Promotion of Science (S_2 A_3)
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.

Department of Architecture **Undergraduate Programmes**		
Name	**Donor**	**Award**
Archneer Prize	Archneer CC	Best design student in first year in all three programmes
KWP Prize	KWP Architects and Landscape Architects	First-year student with the best average in all modules in all three programmes
Louis Mook Award	Family Mook and Depart-ment of Architecture	Best progress to a distinction in first-year Design
DLV Prize	DLV	Best design student in second year in all three programmes
Uys & White Prize	Uys & White Landscape Architects	Second-year student with the best average in all modules in all three programmes
PIA Prize	Pretoria Institute of Architecture	Best design student in third year in architecture
ILASA Prize	Institute of Landscape Architects of South Africa	Best design student in third year in landscape architecture
Sheila Kirtley McIntosh Prize	Sheila Kirtley McIntosh Trust	Third-year student with the best average in all modules in the architecture programme
Cave Klapwijk Prize	Cave Klapwijk Landscape Architects	Third-year student with the best average in all modules in the landscape architecture programme
Honours programmes		
PIA Prize	Pretoria Institute for Architecture	Best design student in honours year in architecture
ILASA Prize	Institute of Landscape Architects of South Africa	Best design student in honours year in landscape architecture

Name	Donor	Award
Holm Jordaan Prize	Holm Jordaan Architects	Best average in all modules in hounours year in architecture
GreenInc Prize	GreenInc Landscape Architects	Best average in all modules in honours year in landscape architecture
Professional programmes		
PIA Prize	Pretoria Institute for Architecture	Best design student in MArch(Prof) programme
ILASA Prize	Institute of Landscape Architects of South Africa	Best design student in ML(Prof) programme
Corobrik Prize	Corobrik	Best design project in MArch(Prof) programme
Cowan, Glennie & Jury Prize	Cowan, Glennie & Jury Architects	Best documentation of a pro-ject for M(Prof) programmes
Steel Institute Prize	Steel Institute of South Africa	Best use of steel in design in the M(Prof) programmes
Concrete Association Prize	Concrete Association of South Africa	Best use of concrete in design in the M(Prof) programmes
Corobrik Brick Prize	Corobrik	Best use of brick in design in the M(Prof) programmes
David Haddon Award	South African Institute of Architects	Student in the School for the Built Environment with the highest average in the practice modules of the professional postgraduate programmes: In the Depart-ment of Architecture 800 series modules; in the Depart-ment of Construction Economics in the 700 series modules in Construction Contract Law
SAIA Prize	South African Insitute of Architects	Student in the MArch(Prof) programme with the highest average in all 700 and 800 modules
Dr Erica van den Berg Prize	Dr Erica van den Berg	Student in the ML(Prof) programme with highest average in all 700 and 800 modules
Johanna Muller Trophy	Johanna Muller	Student in the MInt(Prof) programme with highest average in all 700 and 800 modules
Research degrees		
Neill Powell Neill Award	Neill Powell Neill	Best completed postgraduate study by research
Robert Gustav Schmikl Award	Robert Gustav Schmikl Family	Best progress in postgraduate study by research
General		
SAHRA Prize	SAHRA	For the most heritage concious design in all programmes

Name	Donor	Award
Department of Construction Economics: Quantity Surveying		
Gold medal of the Association of South African Quantity Surveyors	The Association of South African Quantity Surveyors	Best final-year student in the Republic of South Africa whose academic achieve-ments in all the years of study are of outstanding merit and whose personal qualities promise to positively contribute to the profession
DJ Laing Scholarship	The Association of South African Quantity Surveyors	Student nationally in any year of study with excep-tional academic achieve-ment, character and who participated in student affairs
Davis Langdon Treatise Prize	Davis Langdon Quantity Surveyors	Student nationally who has obtained his or her degree with exceptional meritorious results in Construction Contract Law in all the years of study
Bell-John Prize	The Association of South African Quantity Surveyors	Student with the best academic achievement in any year of study
Royal Institution of Chartered Surveyors Prize	Royal Institution of Chartered Surveyors	Student with outstanding merits in any year of study
The Association of South African Quantity Surveyors Prize	The Association of South African Quantity Surveyors	Best undergraduate student in each study year
The Association of South African Quantity Surveyors Prize	The Association of South African Quantity Surveyors	Best honours student in each study year
Davis Langdon Trearise Prize	Davis Langdon Quantity Surveyors	Best treatise
Old Mutual Prize	Old Mutual	Best student in Feasibility Studies 700
Gauteng Chapter of The Association of SA Quantity Surveyors Prize	Gauteng Chapter of The Association of South African Quantity Surveyors	Best student in Quantities 300
POU Prize	Everite Building Products	Best group project at the yearly project school
Construction Project Management Prize	Gert Basson	Best student in Construction Project Management 730
Building Services 222 Prize	Roelf Coertze	Best three students in Building Services 222 in Quantity Surveying and Construction Management
Department of Construction Economics: Construction Management		
President's Medal of Gauteng Master Builders Association	Gauteng Master Builders Association	Student with the best academic achievement over five years in any year of study

Name	Donor	Award
Chartered Institute of Building Prize	Chartered Institute of Building	Best treatise
Chartered Institute of Building Prize	Chartered Institute of Building	Best overall honours student
STOCKS Africa Prize	STOCKS Africa	Best overall undergraduate student
Liebherr Trophy	Liebherr	Best honours student with outstanding merit in participation in student affairs
Sable Homes Trophy	Sable Homes	Best student in Feasibility Studies 700
Protea Book Prize	Protea Bookshop	Best undergraduate student in each study year
Protea Book Prize	Protea Bookshop	Best honours student in each study year
POU Prize	Everite Building Products	Best group project at the yearly project school
Construction Project Management Prize	Gert Basson	Best student in Construction Project Management 730
Construction Entrepreneurship Prize	Josua Pienaar	Best student in Construction Entrepreneurship 740
Building Services 222 Prize	Roelf Coertze	Best three students in Building Services 222 in Construction Management and Quantity Surveying
Department of Construction Management: MSc Real Estate		
Property Develop-ment Prize	Chris Cloete	Best student in Property Development in any year of study
Chatered Institute of Building Prize	Chartered Institute of Building	Best student in Project Management in any year of study
FMSA Prize	FMSA	Best student in Facility Management 822
Other available departmental prizes are determined annually. Enquiries about this can be directed to the Department		
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 Prize	PLAN	Final-year student with the best essay (TPE 420) for the BT&RP degree