



2016 HANDBOOK CONSTRUCTION MANAGEMENT & QUANTITY SURVEYING



HANDBOOK FOR 2016

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

**DEPARTMENT of
CONSTRUCTION MANAGEMENT
and
QUANTITY SURVEYING**

DEPARTMENTAL MISSION

Mission

To undertake internationally relevant teaching, study, research and consultancy that supports the advancement of our students and the Construction and Quantity Surveying Professions.

The department will provide a coherent, quality driven academic course of study which is relevant to the needs of employers in these disciplines and to society at large.

What is a University of Technology?

A university of technology is characterised by being research informed rather than research driven where the focus is on strategic and applied research that can be translated into professional practice. Furthermore, research output is commercialized thus providing a source of income for the institution. Learning programmes, in which the emphasis on technological capability is as important as cognitive skills, are developed around graduate profiles as defined by industry and the professions.

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IMPORTANT NOTICE

The departmental rules in this handbook must be read in conjunction with the Durban University of Technology's General Rules.

NOTE TO ALL REGISTERED STUDENTS

Your registration is in accordance with all current rules of the Institution. If, for whatever reason, you do not register consecutively for every year/semester of your programme, your existing registration contract with the Institution will cease. Your re-registration anytime thereafter will be at the discretion of the Institution and, if permitted, will be in accordance with the rules applicable at that time.

I. CONTACT DETAILS

All departmental queries to:

Secretary: Mrs Anisha Pirthiraj
Tel No: 031-373 2143
Fax No: 031-373 2610
Email: anishap@dut.ac.za
Location of Department: Steve Biko Campus, S3, Level 2, Room 201

All Faculty queries to:

Faculty officer: Mrs N Singh
Tel No: 031-373 2718
Fax No: 031-373 2724
Location of Faculty office: Steve Biko Campus, S4, Level 3

Executive Dean: Prof T N Andrew
Tel No: 031-373 2140
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Location of Executive Dean's office: Steve Biko Campus, S Block, S6, Level 4

2. STAFFING	Name and Qualification
Head of Department	Mr D Moodley, NHD (Build); NTTD (MLST); B.Com (UNISA), M.Tech (Entrep) (DIT)
Associate Director	Mr G Reddy, Pr QS; FCIQB, MSc URP (Natal); B.Com, NHD (Q.S); ICM (Lund)
Senior Lecturers	Mr K Ramphal, Pr. Valuer NHD (Build Sur); NHD (Const.Sup); M.Tech (QS) (MLST); B.Com (UNISA) Mr A K Mahomed, NHD (Build); NTTD (MLST); M.Ed (UDW) Dr O A Aiyetan (PhD) (NMMU)
Lecturers	Mrs H T Zungu, B Tech: (Const. Mngt) (TN) Mr E F La Vita, B.Tech: (Quantity Surveying) (CUT) Mr J Victor, NHD: Architecture, B Tech: (Quantity Surveying) (DUT) Mrs E H Hefer, BSc (QS) (UFS), Pr QS, PMAQS
Technician	Mr R Deeplall, ND: (Civil Eng); NHD (PSE); B.Tech (Const. Mngt) (MLST)
Secretary	Mrs A Pirithiraj, ND (Business Computing) (MLST), B.Tech (Commercial Admin) (DIT)
Part-time Lecturers	Dr P Utting, BE(Hons) (Civil), ME (Civil) (Canterbury), PhD (NSW), RE (NZ) Dr S H P Chikafalimani, PhD (Real Estate) (UP)

3. PROGRAMMES OFFERED BY THE DEPARTMENT

Programmes are offered in this Department which, upon successful completion, lead to the award of the following qualifications:

Qualification	SAQA NLRD Number
ND: (Building)	72214
B TECH (Quantity Surveying)	72158
B TECH (Construction Management)	72121
MBE (Quantity Surveying)	72199
MBE (Construction Management)	72172

4. PROGRAMME INFORMATION AND RULES

On the basis of a variety of placement assessments, successful applicants for study towards a National Diploma will be accepted into a three-year minimum programme of study.

MINIMUM ADMISSION REQUIREMENTS

NATIONAL DIPLOMA: BUILDING (NDBLD2)

In addition to the requirements of the General Rules pertaining to entrance requirements (G7), a candidate for the above qualifications shall have passed at Senior Certificate level or equivalent NSC with Engl HL 4/FAL 5 and Maths 4 and two 20 credit subjects (not more than one language) 3 OR Senior Cert with Maths 'E' HG/'C' SG OR N3 with Maths 'C' or 60 % or N4 50 %.

As places on the course are limited a selection process is implemented, based on the following:

- NSC results;
- Performance in the Standardised Assessment tests for Access and Placement;
- Level of achievement in English, Mathematics and Physical Science;
- Interest in/aptitude for a career in the Construction or allied industries professions;
- Employment Status or relevant experience (if any).

The department may require applicants to undergo an interview to establish aptitude and interest. The number of students accepted each year will depend on the growth policy of the Institution and that of the department. Meeting the admissions level does not guarantee admission.

B TECH: CONSTRUCTION MANAGEMENT (BTCSM1)

A National Diploma: Building, or equivalent qualification.

As places on the course are limited, a selection process is implemented with appropriate work experience and level of achievement at diploma level being considered. In addition, where a diplomate wishes to continue to the next

(fourth level) of study in the year following completion of the diploma, a minimum average mark of 60 % is required in the N. Dip: Building as well as a minimum of 60 % in the subject Construction Management 3. A minimum of one year of appropriate experience in the Construction Management field is required if a student fails satisfy the 60 % average requirement.

B TECH: QUANTITY SURVEYING (BTQTSI)

A National Diploma: Building, or equivalent qualification.

As places on the course are limited, a selection process is implemented with appropriate work experience and level of achievement at diploma level being considered. In addition, where a diplomate wishes to continue to the next (fourth level) of study in the year following completion of the diploma, a minimum average mark of 60 % is required in the N. Dip: Building as well as a minimum of 60 % in the subject Quantity Surveying 3. A minimum of one year of appropriate experience in the Quantity Surveying field is required if a student fails satisfy the 60 % average requirement.

MBE: CONSTRUCTION MANAGEMENT (MBCSMI)

Every candidate for this qualification shall have:

1. completed the requirements for the Baccalaureus Technologiae: Construction Management or
2. have been granted a conferment of status for the pre-requisite qualification.

The Master's Degree can only be taken by means of a full research option. The DRC (Department Research Committee) to be satisfied that the candidate is capable of undertaking and succeeding in this advanced course of study.

Where a student has not already completed a Research Methodology course then the student will be required to complete it concurrently with his/her research.

MBE: QUANTITY SURVEYING (MBQTSI)

Every candidate for this qualification shall have:

1. completed the requirements for the Baccalaureus Technologiae: Quantity Surveying or
2. have been granted a conferment of status for the pre-requisite qualification.

The Master's Degree can only be taken by means of a full research option.

The DRC (Department Research Committee) to be satisfied that the candidate is capable of undertaking and succeeding in this advanced course of study.

Where a student has not already completed a Research Methodology course then the student will be required to complete it concurrently with his/her research.

GENERAL INFORMATION PERTAINING TO THE QUALIFICATION/PROFESSION

The National Diploma: Building instructional programme is aimed at providing a higher level, general education in construction management and quantity surveying.

After completion of this instructional programme the diplomate should be able to co-ordinate all the production activities on site or function adequately as a Trainee Quantity Surveyor under the control of a qualified Quantity Surveyor.

The B. Tech: Construction Management:

The graduate will co-ordinate and control sub-contractors, the labour force and all other resources on a contract, such as plant, materials and finances, work in close conjunction with the professional team and share the responsibility of remaining within the contract budget and completing the project on time.

After gaining sufficient practical experience, the graduate should be in a position to carry full responsibility for the overall management of a project. This is a key position and he/she must understand both the problems of management and the problems of construction. The smooth co-ordination of planning, administration and execution depend on the Construction Manager. This qualification provides a route to registration as a construction/construction project manager.

The B. Tech: Quantity Surveying:

After gaining experience in practice, the graduates will be able to take full responsibility for the financial side of contracts and finalisation of final accounts. They will be able to prepare estimates and work out tender prices. The Quantity Surveyor is a key figure in the construction industry. This qualification provides a route to registration as a professional Quantity Surveyor.

The Quantity Surveying graduate prepares full monthly payment certificates, payments for sub-contractors' work, reports and provides guidance to junior surveyors.

CONDUCT OF STUDENTS DURING PRACTICALS AND SITE VISITS

Rules of conduct pertaining to practicals and site visits, as instituted by the head of department, shall apply to all students.

5. PROGRAMME STRUCTURE

NATIONAL DIPLOMA:							
Code	Subjects:	*C/O	Semester/ Year	Assessment Method	NQF Level	Pre- requisite	Co- req .
ABLS101	Applied Building Science 1	C	Year	Refer to Par 8 subject content	6		
CMMN101	Communication 1	C	Semester	Refer to Par 8 subject content	6		
CAPP103	Computer Applications 1	C	Semester	Refer to Par 8 subject content	6		
CMNT101	Construction Mngment 1	C	Year	Refer to Par 8 subject content	6		
CTEC102	Construction Technology 1	C	Year	Refer to Par 8 subject content	6		
QSUR102	Quantity Surveying 1	C	Year	Refer to Par 8 subject content	6		
EXBD101	Work Integrated Learning/ Interpretation of Doc.	C	Semester	Refer to Par 8 subject content	6		
EXBD201	Experiential Learning #	C	Semester	Refer to Par 8 subject content	6		
CMNT201	(Industry Placement)	C	Year	Refer to Par 8 subject content	6	CMNT101	
CTEC202	Construction Mngment 2	C	Year	Refer to Par 8 subject content	6	CTEC102	
QSUR202	Construction Technology 2	C	Year	Refer to Par 8 subject content	6	QSUR102	
CACG302	Construction Accounting 3	C	Year	Refer to Par 8 subject content	6		
CMNT301	Construction Mngment 3	C	Year	Refer to Par 8 subject content	6	CMNT201	
CTEC302	Construction Technology 3	C	Year	Refer to Par 8 subject content	6	CTEC202	
PAES302	Price Analysis and Estimating 3	C	Year	Refer to Par 8 subject content	6		
QSUR302	Quantity Surveying 3	C	Year	Refer to Par 8 subject content	6	QSU202	
SCON301	Structures and Concrete 3	C	Year	Refer to Par 8 subject content	6	ABLS101	
B TECH: CONSTRUCTION MANAGEMENT							
ACNS401	Appropriate Construction 4	O		Refer to Par 8 subject content	7		
BLDE401	Bldg Entrepreneurship 4	C		Refer to Par 8 subject content	7		
CNEC401	Construction Economics 4	C		Refer to Par 8 subject content	7		
CLWP402	Construction Law and Procedures 4	C		Refer to Par 8 subject content	7		
CMNT402	Construction Mngment 4	C		Refer to Par 8 subject content	7	CMNT301	
DEVM403	Development Mngment 4	C		Refer to Par 8 subject content	7		
MTMN401	Maintenance Mngment 4	C		Refer to Par 8 subject content	7		
RMCM101	Research Methodology	O		Refer to Par 8 subject content	7		
B TECH: QUANTITY SURVEYING							
BLDE401	Building Entrepreneurship 4	C		Refer to Par 8 subject content	7		
CNEC401	Construction Economics 4	C		Refer to Par 8 subject content	7		
CLWP402	Construction Law and Procedures 4	C		Refer to Par 8 subject content	7		
DEVM403	Development Mngment 4	C		Refer to Par 8 subject content	7		
MVAL402	Market Valuations 4	C		Refer to Par 8 subject content	7		
QSUR402	Quantity Surveying 4	C		Refer to Par 8 subject content	7	QSUR302	
REMT401	Real Estate Mngment 4	O		Refer to Par 8 subject content	7		
RMCM10	Research Methodology	O		Refer to Par 8 subject content	7		

Offered on demand only and subject to viable student numbers.

* C + Compulsory; O = Optional

6. ASSESSMENT PLAN

6.1 PROMOTION TO HIGHER LEVEL

In addition to Rule G16, the following shall apply:

For promotion to second year, a maximum of **two** subjects at first year may be outstanding unless otherwise determined by the Head of Department. The subjects Computer Applications 1 (CAPPI03) and Communication 1 (CMMN103) are considered half subjects. All the rest are full subjects.

Students will only be promoted to third year provided that they have passed all first and second level subjects unless otherwise determined by the Head of Department.

7. RE-REGISTRATION RULES

7.1 A student who has not successfully completed any subject after two periods of registration shall only be permitted to re-register for that subject at the discretion of the Head of Department. (A subject for which a student de-registers after the last day of the first semester shall count as a period of registration.)

7.2 A student who has been refused permission to register for a subject in terms of Rule 9.1, and thereby will be unable to complete the qualification, will not be permitted to register for any other subject in that qualification.

7.3 A student who has not completed the diploma within six years of first registering, or the B.Tech within four years of first registration, may, at the discretion of the Head of Department, be refused permission to re-register, or may be accepted subject to special conditions.

7.4 A student wishing to appeal to the Faculty Board of Engineering against the application of this rule must submit to the Faculty Officer a statement in which the student explains the reasons for the appeal.

This appeal must be submitted to the Faculty Officer within ten (10) working days of being officially notified in writing that the student has not been permitted to re-register. No appeals will be considered after this.

8. SPECIAL TESTS

8.1 A special test may be granted by the Head of Department to a student who has been prevented from taking a test:

by illness on the day of the test or immediately before it, provided that the student submits a medical certificate on the prescribed form on which a medical practitioner, registered by the Health Professions Council of SA, homoeopath or chiropractor, registered with the Allied Health Professions Council of South Africa, specifies the nature and duration of the illness and that for health reasons, it was impossible or undesirable for the student to sit for the test, and that the student submits such certificate to the Head of Department on the day as determined by the practitioner that the student should return to lectures immediately following such illness, or on one of the two following working days;

8.2 or by circumstances which, in the opinion of the Head of Department, were beyond the student's control at the time of the test provided that satisfactory evidence of such circumstances is provided. Such circumstances shall not include:

- any misinterpretation by the student of the date, time or venue of the test;
- transportation difficulties, where the student's residential term time address is within the area serviced by a scheduled bus or commuter train service to the central Durban area, and provided otherwise that the student informs the Head of Department of such difficulty prior to the time of commencement of the test;
- failure by the student to bring to the test venue any equipment normally required for that subject as specified in the study guide for the particular subject.

8.3 For the purpose of this rule "test" shall mean any written, oral, or practical test, set for the purpose of determining or contributing towards a course mark for a subject, and shall include tests set for subjects which are evaluated by continuous evaluation.

8.4 Any student who misses a test and who does not qualify for a special test, and any student who qualifies for a special test, but fails to write it, shall be awarded a zero mark for the missed test.

9. EXPERIENTIAL LEARNING

This programme requires the student/candidate to undergo a period of experiential learning (6 months) as part of the course. All prescribed compulsory and elective subjects (instructional offerings) and the prescribed experiential component must be passed in order to obtain sufficient credits to qualify for the qualification.

Although the Institution undertakes to assist the student/candidate in obtaining suitable experiential learning placement, the onus is on the student/candidate to find an employer. The employer must be accredited by the Durban University of Technology for the purposes of experiential learning. An experiential learning agreement creates a separate contract between the employer and the student/candidate.

10. RULE CHANGE

Important information for current and prospective students (effective as of January 2016):

The current National Diploma: Building will be phased out starting in 2016 to allow for the introduction of the new Bachelor of the Built Environment in Construction Studies.

The last cohort of first-time entering students admitted to this National Diploma qualification will be in January 2016.

Notwithstanding all the current rules (both General rules and Departmental Rules) that regulate this diploma, the last year in which any student may register for each of the subjects is listed as follows:

Subject Name	Last Possible Year of Registration
Applied Building Science I	2017
Communication I	2017
Computer Applications I	2017
Construction Management I	2017
Construction Technology I	2017
Quantity Surveying I	2017
Site Surveying I	2017
Construction Management II	2018
Construction Technology II	2018
Quantity Surveying II	2018
Construction Accounting III	2020
Construction Management III	2020
Construction Technology III	2020
Price Analysis and Estimating III	2020
Quantity Surveying III	2020
Structures and Concrete III	2020

New Rule

Old Rule	New Rule	Motivation
	Students are to complete their theory subjects prior to completing experiential learning. Experiential learning must be completed latest by 2022	As per the Diploma phase out plan above, as of 2016 ALL students must complete ALL subjects before commencing Experiential Learning

II. SUBJECT CONTENT

NATIONAL DIPLOMA: BUILDING

APPLIED BUILDING SCIENCE I (ABLSI01)

CONTACT TIME: Theory - 6 periods per week

COURSE MARK: Four tests - each 10%

EXAMINATION: One three hour paper - 60%

SYLLABUS

1. Basic building science principles
2. Application of basic building science principles in construction

CONSTRUCTION MANAGEMENT I (CMNTI01)

CONTACT TIME: Theory - 6 periods per week

COURSE MARK: Four tests - each 10%

EXAMINATION: One three hour paper - 60%

SYLLABUS

1. Construction Industry and Company Organisations
2. Introduction to site administration
3. Management of Resources and Sub-Contractors
4. Introduction to Construction Human Resource Management
5. Project Planning and Cost Control

CONSTRUCTION TECHNOLOGY I (CTECI02)

CONTACT TIME: Theory - 6 periods per week

COURSE MARK: Three tests - each 10%

One assignment - 10 %

EXAMINATION: One four hour paper - 60%

SYLLABUS

Technology and methodology of the construction process as related to housing

1. Preconstruction phase
2. Foundations, substructure and superstructure
3. Services and finishes

QUANTITY SURVEYING I (QSURI02)

CONTACT TIME: Theory - 6 periods per week

COURSE MARK: Four tests - 10% each

EXAMINATION: One four hour paper - 60%

SYLLABUS

1. An understanding of the role of the professional Quantity Surveyor and his contribution to the construction process
2. Bills of Quantities production
3. The measurement of the main elements of single storey buildings

COMMUNICATION I (CMMNI01) (Half course)

CONTACT TIME: Theory - 2 periods per week

COURSE MARK: Minimum of 3 tests and 2 assignments

EXAMINATION: NO EXAMINATION - CONTINUOUS ASSESSMENT

SYLLABUS

1. Introduction to course methods and objectives
2. Communication theory
3. Oral presentation
4. Group communication skills and meeting procedure
5. Leadership skills
6. Technical writing and correspondence
7. Practical communication applications

COMPUTER APPLICATIONS I (CAPPI03) (Half course)

CONTACT TIME: Theory - 2 periods per week

Practical - 2 periods per week

COURSE MARK: Three practical tests - 20% each

Control test - 40%

(Sub minimum of 20% - i.e. 50% of 40%)

EXAMINATION: NO EXAMINATION - CONTINUOUS ASSESSMENT

SYLLABUS

1. Introduction to computers
2. Operating system basics
3. Application programmes

SITE SURVEYING I (SSUR101)

CONTACT TIME: Theory - 2 periods per week

Practical - 4 periods per week

COURSE MARK: Two tests - 10% each

Two practical assignments - 10% each

EXAMINATION: One three hour paper - 60%

SYLLABUS

1. Linear surveying
 2. Setting out
 3. Levelling
 4. Elementary tacheometry
 5. Contouring
 6. Surveys of existing buildings
- Note: Tuition time to include a minimum of 36 hours field work.

EXPERIENTIAL LEARNING I (EXBD101)

Completion of the following modules:

1. Work Integrated Learning
2. Interpretation of Documentation

EXPERIENTIAL LEARNING 2 (EXBD201)

Six months industry based on experiential training

CONSTRUCTION MANAGEMENT II (CMNT201)

EXAMINATION: CONTINUOUS ASSESSMENT (100 %)

SYLLABUS

Projects based on reinforcing and expanding the Construction Management I syllabus. Aimed at encouraging students to problem solve and foster a spirit of self-study and research. Student to draw on site and office experiences to produce project solutions.

CONSTRUCTION TECHNOLOGY II (CTEC202)

EXAMINATION: CONTINUOUS ASSESSMENT (100 %)

SYLLABUS

Projects based on reinforcing and expanding the Construction Technology I syllabus. Aimed at encouraging students to problem solve and foster a spirit of self-study and research. Students draw on site experiences to produce project solutions.

QUANTITY SURVEYING II (QSUR202)

EXAMINATION: CONTINUOUS ASSESSMENT (100 %)

SYLLABUS

Projects based on reinforcing and expanding Quantity Surveying I syllabus. Aimed at encouraging students to problem solve and foster a spirit of self-study and research. Students draw on site and office experiences to produce project solutions.

CONSTRUCTION ACCOUNTING III (CACG302)

CONTACT TIME: Theory - 6 periods per week

COURSE MARK: Best three of four tests - 13,33% each

EXAMINATION: One three hour paper - 60%

1. The purpose of accounting
2. Records and first entries
3. Business transactions
4. Bank transactions
5. Transactions up to trial balance
6. Closing entries up to balance sheet
7. Contract accounts
8. Sole owners and partnership accounts
9. Limited companies and close corporation accounts
10. Application of a construction accounting computer programme

CONSTRUCTION MANAGEMENT III (CMNT301)

CONTACT TIME: Theory - 6 periods per week

COURSE MARK: Four tests - 10% each

EXAMINATION: One three hour paper - 60%

SYLLABUS

1. Human resources management as it relates to the construction industry
2. Construction process management

CONSTRUCTION TECHNOLOGY III (CTEC302)

CONTACT TIME: Theory - 6 periods per week

COURSE MARK: Three tests - 10% each

One assignment - 10%

EXAMINATION: One four hour paper - 60%

SYLLABUS

Technology and methodology of the construction process as related to multi-storey buildings.

1. Preconstruction phase
2. Foundations, substructure and superstructure
3. Services and finishes

PRICE ANALYSIS & ESTIMATING III (PAES302)

CONTACT TIME: Theory - 6 periods per week

COURSE MARK: Four tests - 10% each

EXAMINATION: One three hour paper - 60%

SYLLABUS

1. Analysis of unit rates of items of each major trade in the Bills of Quantities, including the Preliminaries Bill
2. Methods of estimating and costing and the use of prime cost items and provisional sums
3. Valuations and progress payments

QUANTITY SURVEYING III (QSUR302)

CONTACT TIME: Theory - 6 periods per week

COURSE MARK: Four tests - 10% each

EXAMINATION: One four hour paper - 60%

SYLLABUS

1. The measurement and billing of the various elements of load bearing brick, structural steel and framed reinforced concrete structures, together with the associated site works and drainage
2. Builders quantities

STRUCTURES AND CONCRETE III (SCON301)

CONTACT TIME: Theory - 6 periods per week

COURSE MARK: Six tests - 6,67% each

EXAMINATION: One three hour paper - 60%

SYLLABUS

1. Theory of Structures
2. Concrete Technology
3. Formwork

**B TECH: QUANTITY SURVEYING (BTQTSI) AND
B TECH: CONSTRUCTION MANAGEMENT (BTCSMI)**

APPROPRIATE CONSTRUCTION IV (ACNS401)

CONTACT TIME: Theory - 4 periods per week

COURSE MARK: Minimum of 3 tests and 1 assignment

EXAMINATION: One three-hour paper

SYLLABUS

1. Alternative construction technologies and methods
2. Appropriate construction technologies for low income housing in developing countries
3. Latest development in construction methods and materials internationally
4. Structures for quality control in construction (Standard Building system, Local Authority regulations, Agreement Board)
5. Mass housing
6. Timber construction
7. High rise and fast track construction
8. Computer applications

BUILDING ENTREPRENEURSHIP IV (BLDE401)

CONTACT TIME: Theory - 4 periods per week

COURSE MARK: Two tests - 10% each

One Business Plan - 10%

One Case Study - 10%

EXAMINATION: One three hour paper - 60%

SYLLABUS

1. Building Entrepreneurship
2. Building Business Management
3. Building Financial Management

CONSTRUCTION ECONOMICS IV (CNEC401)

CONTACT TIME: Theory - 4 periods per week

COURSE MARK: Three tests - 10% each

One assignment - 10%

EXAMINATION: One three hour paper - 60%

SYLLABUS

1. Land utilisation
2. Property economics
3. Property development and feasibility reports

CONSTRUCTION LAW AND PROCEDURES IV (CLWP402)

CONTACT TIME: Theory - 4 periods per week

COURSE MARK: Four tests - 10% each

EXAMINATION: One three hour paper - 60%

SYLLABUS

1. LAW

Basic principles of South African law, Law of Contracts, Construction Law, Standard Conditions of Building and Civil Engineering Contracts, Labour Law and Building Law, Introduction to insurance of buildings

2. CONTRACT ADMINISTRATION PROCEDURES

Tenders, valuations and final accounts.

CONSTRUCTION MANAGEMENT IV (CMNT402)

CONTACT TIME: Theory - 4 periods per week

COURSE MARK: Four tests - 8% each

One assignment - 8%

EXAMINATION: One three hour paper - 60 %

SYLLABUS

1. Advanced human resources as it relates to the construction industry
2. Advanced construction process management

DEVELOPMENT MANAGEMENT IV (DEVM403)

CONTACT TIME: Theory - 4 periods per week

COURSE MARK: Three tests - 7,33% each
One project - 18%

EXAMINATION: One three hour paper - 60%

SYLLABUS

1. Project Management for Community Low Income Housing Developments
2. Project Management for Commercial Developments

MAINTENANCE MANAGEMENT IV (MTMN401)

CONTACT TIME: Theory - 4 periods per week

COURSE MARK: One test - 10%
One group assignment - 10%
Two research projects - 10%

EXAMINATION: One three hour paper - 60%

SYLLABUS

1. The management of facilities and the technologies utilised
2. Facilities maintenance management and processes

MARKET VALUATION IV (MVAL402)

CONTACT TIME: Theory - 4 periods per week

COURSE MARK: Three tests - 8% each
Two assignments - 8% each

EXAMINATION: One three hour paper - 60% each

SYLLABUS

1. Introduction to investment in property
2. Decision to build or buy, renovate, remodel or refurbish
3. Market research
4. Feasibility analysis
5. Executive feasibility reports
6. Investment analysis and finance
7. Risk analysis and existing buildings
8. Computer applications

QUANTITY SURVEYING IV (QSUR402)

CONTACT TIME: Theory - 4 periods per week

COURSE MARK: Three tests - 10% each
One assignment - 10%

EXAMINATION: Two four hour papers - 30% each

SYLLABUS

1. Comprehensive study of the measurement of more specialised elements of builders work
2. Measurement of civil engineering work
3. Measurement of electrical & mechanical installations

REAL ESTATE MANAGEMENT IV (REMT401)

CONTACT TIME: Theory - 4 periods per week

COURSE MARK: Minimum of 3 tests and 1 assignment

EXAMINATION: One three hour paper

SYLLABUS

1. The estate agency business
2. Valuations and expropriation of property
3. Introduction to Marketing and Administration of property
4. Computer applications

RESEARCH METHODOLOGY IV (RMCM101)

EXAMINATION: NO EXAMINATION - CONTINUOUS ASSESSMENT: 100 %

SYLLABUS

1. Research planning and design
2. Communication
3. Data collection and statistical analysis
4. Research proposal
5. Technical research report related to building industry
6. Preparation of article for publication

NB: Students to read this section in conjunction with the relevant learner guides.