NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF THE BUILT ENVIRONMENT

Name of Programme	**BACHELOR OF SCIENCE HONOURS IN QUANTITY SURVEYING DEGREE**
Duration	4 years
Minimum Credit Load	480
Maximum Credit Load	
ZNQF Level	

Entry Requirements	Tick
Normal Entry	√
Special Entry (National Diploma exemption from core modules with a total of 52 credits, Higher National Diploma year one exemption = 124 credits)	√
Mature Entry	√
Other (indicate)	

LEARNING OUTCOMES
1. Understand construction and engineering services technologies and the impact of these designs on the costs and timing of construction activities.
2. Measure buildings in accordance with the standard methods of measurement documents.
3. Prepare estimates of work from first principles and including interpreting historical cost data, including Quantity Surveying computer applications
4. Financially manage projects throughout the design and construction phases of the projects.
6. Manage workloads and meet deadlines.
7. Understand the principles of law relating to the construction industry.
8. Apply taught theoretical aspects in real life projects through industrial attachment

Programme Assessment (Describe and indicate percentage [%])	
Coursework	60%, 50%, 100%
By thesis	
Written Examinations	40%, 50%

Other	

Basis of Allocating Credits		
Activity	**Time in Hours**	**Credits**
Contact Time/Time on task		
Lectures	1620	162
Tutorials	448	44.8
Field Visits		
Laboratory Work		
Workshops		
Work Integrated Learning (WIL)/Industrial Attachment/Clinical Practice/Teaching Practice etc.	1200	120
Scheduled Assessment Time		
Final written examinations	87	8.7
In-class tests	86	8.6
Online Testing and Examinations		
Seminar Presentations	107	10.7
Independent Study Time		
Preparation for scheduled sessions	268	26.8
Reading	501	50.1
Written assignments	557	55.7
Revision Work	162	16.2
Maximum Credits for the 80% Courses /Modules Threshold	**503.6**	

BACHELOR OF SCIENCE HONOURS IN QUANTITY SURVEYING DEGREE (4 YEARS)

(583 Hour Credits)		
YEAR I (140 Hour Credits)		
Semester 1 and 2		
BQS1001	Measurement I	22
Semester I		**Hour Credits**
BCM1101	Construction materials	10
BCM1102	Construction technology I	10
BCS1102	Principles of economics	10
BCS1101	Construction drawing	12
ILI 1105	Communication skills	10
BQS2101	Theory & practice of Quantity Surveying I	12
Semester II		
BCS1202	Principles of construction law	10
BCS1201	Statistics	10
CBU2115	Entrepreneurship and innovation	10
BLP1206	Principles of town planning	12
BQS2201	Theory and practice of Quantity surveying II	12
YEAR II (155 CREDITS)		
Semester 1 and 2		
BCS2001	Measurement II	25
BQS2003	Construction estimates, pricing and computer applications	22
Semester I		
BCM2101	Construction Technology II	10
BQS2110	Engineering Surveying	10
BCM2102	Building services and systems I	10
BCS2102	Aspects of structural design	10
BCS2103	Construction law	12
Semester II		
BCM2202	Building services and systems II	10
BQS2208	Construction economics aspects	12
BCM2203	Construction Technology III	12
BQS2202	Research skills	10
SHE3102	Safety, health and environment	12
	YEAR III (110 Hour Credits)	
Semester 1 and 2		
BQS3001	Industrial attachment (1 academic Year)	110
	YEAR IV (178 Hour Credits)	

Semester 1 and 2		
BQS4001	Quantity surveying research project	30
Semester I		
BQS4102	Contracts administration I	14
BQS4103	Construction site management	14
BQS4106	Construction accounting	14
BQS4107	Measurement III, civil and structural	15
BQS4108	Construction equipment and methods	16
Semester II		
BQS4202	Contracts administration II	14
BQS4203	Construction project finance	14
BQS4208	Property studies	16
BQS4201	Professional practice and procedure	16
BQS4204	Measurement IV	15

MODULE SYNOPSIS

MODULE	**SYNOPSIS**
BQS1001 Measurement I	This is an introduction to Mensuration and Measurement in accordance with the System of Measurement of simple structures e.g. foundations, brickwork, surface beds, carpentry, joinery and ironmongery, glazing, doors, windows, floors and paving. Lectures shall also focus on measurement of simple structures e.g. internal and external finishes, and roof work. The module shall be examined at the end of Semester 2. The module is a prerequisite to BQS2001 Measurement II.
BCM1101 Construction Materials	An introduction review of the materials used in construction, of their physical properties and characteristics, and the processes they undergo to convert them to building materials.
BCM1102 Construction Technology I	The module examines the construction process and the materials used in construction of simple structures through lectures, case studies and project assignments. Students shall be required to study a building under construction and create a portfolio for documenting the project.
BCS1102 Principles of Economics	The course offers students an understanding of how the general economy operates. It introduces students to microeconomic issues like the theory of demand, theory of supply and cost. Students are also taught on the behaviour of economic agents especially consumer behaviour and firm behaviour (under cost and production theory). The course introduces macroeconomic aspects that include, national output determination under a closed economy and open economy assumptions, money and banking sector, macroeconomic problems of inflation and unemployment, growth, external sector and exchange rate regimes.

BCS1101 Construction Drawing	This module introduces the purpose of architectural drawings and the process of communication through presentation and working drawings, types of two-dimensional drawings and their uses. Architectural lettering, relationship between scale and degree of detail, the use of hatching, the layout of architectural drawing sheets, dimensions- are some of the topics also covered in this module. Construction professionals deal with working drawings and architectural presentation drawings. The main aim and objectives of this module is to make students able to interpret the architectural presentation and working drawings in detail. The course is 100% continuous assessment
ILI 1105 Communication Skills	Lectures will equip students with skills to enable them to plan and present oral and written reports and prepare and write business and technical reports
BQS2101 Theory and practice of Quantity Surveying	The module covers the theory of quantity surveying. It gives an overview of the building design and construction process, the scope of the activities of construction and the responsibilities of the quantity surveyor. Aspects to be covered include procurement methods, tendering, interim valuations, final accounts, cost control, etc.
BCS1202 Principles of Construction Law	Lectures covering Law of Contract, Law of Delict as it arises in Roman Dutch Law, Law for Surveyors, including a detailed study of relevant statutes such as on Town Planning, Sale and Lease of Property, Safety, Health and Environment.
BCS1201 Statistics	The module focuses on mathematical and statistical concepts, tools, skills and techniques in analysis interpretation and application of numerical information and testing of theoretical fundamentals. It encompasses basic concepts of marketing statistics, representation of statistical results, measures of central tendency and dispersion including probability concepts, confidence intervals, hypothesis testing, index numbers, time series analysis, regression and correlation analysis and financial calculations (Simple and compound interest, annuities, sinking funds and amortisation schedules).At the end, students must be able to demonstrate knowledge of the basics of inferential statistics by making valid generalisations from sample data and have the ability to interpret statistical outputs to inform business-oriented decisions.
CBU2115 Entrepreneurship and innovation	The aim of this module is to develop entrepreneurial acumen in students, to appreciate the importance of entrepreneurship to the individual and in nation building, to analyse and explain how PESTLEG factors affect the entrepreneur. Students will be able to evaluate various options available to the entrepreneur to go global. , identify business opportunities and generate business ideas; develop a bankable business plan; understand the characteristics of a successful entrepreneur; identify the challenges being faced by

	Zimbabwean entrepreneurs; analyse the nature of business environment and apply different tools and models to minimize the effects of the PESTLEG forces; identify different ways of starting a business; appreciate different supporters of entrepreneurship in Zimbabwe; understand marketing and management in Small to Medium Enterprises; and identify available options to go global.
BLP1206 Principles of Town Planning	This module examines the development planning process and paradigms including comprehensive, sectorial transport, strategic and contingency planning, development Plans (Master and Local plans, layout, site and building plans, subdivisions and consolidations, incorporations, zoning changes of reservations and development controls are covered. It also covers participatory, advocacy and lobbying works, the planning theories and models and their influences on the urban space (Practice). Problems of Urban growth and solutions are explored. Different types of land reforms and tenure systems, Property development and reforms and institutional economics. It also covers rural properties, rights of access, control and ownership of common properties
BQS2201 Theory and Practice of Quantity Surveying II	A continuation of the module from Semester 1
BCS2001 Measurement II	Introduction to Measurement of plumbing and drainage, complex structures e.g. reinforced concrete multi-storey frames – the framed foundations, stepped foundations, reinforced concrete beams, columns, slabs, flat roofs, complex roofs, alterations and additions to existing structures. The module shall be examined at the end of Semester 2. The course will equip students with in-depth understanding of and practical application skills for relevant Standard Methods of Measurement of Building Works. The module is a pre-requisite to BQS3001 industrial attachment
BQS2003 Construction estimates, pricing and computer applications	Concepts and techniques of estimating cost of engineering, construction and service operations, equipment, projects and systems; preliminary, detailed procedures, for example elemental, analytical etc., considering qualitative and quantitative aspects and using computer method. The module shall cover practical application of computer software in Quantity Surveying context
BCM2101 Construction Technology II	The module introduces structural systems and their underlying physical principles, using historical and contemporary precedents. Simple methods of calculation are introduced, and field trips and laboratory demonstrations are included. The module investigates a range of conventional construction systems, for foundations, walls, suspended floors, and roofs. Systems are compared in timber, steel, masonry, and reinforced precast concrete. Lecturers are supplemented by demonstrations and site visits. Students are

	also exposed to the application of Modern Methods of Construction (MMC) under different circumstances and be able to make a recommendation on whether to use traditional methods or MMC in such circumstances. Focus is given to ease and speed of construction and role in achieving sustainability in construction.
BQS2110 Engineering Surveying	The module introduces students to definitions, classes and branches of surveying. It also covers theory of errors; Chain surveying; Theodolites; triangulation; calculations and theory resection; calculations of volumes, setting out engineering plans and specifications, curve ranging, quality take off, planning and scheduling deformation survey
BCM2102 Building services and systems 1	A study of infrastructural services of water supply, drainage, sewage treatment: electricity: and telephone installations
BCS2102 Aspects of structural design	An introduction to the static and dynamic behaviour of the major structural systems applied in architecture. An examination of monolithic wall, post-lintel and multi-story framed construction, tunnels, vaults and domes, suspended, catenary and tensile structures, etc., to enable the students to develop their understanding of the structural principles that underlay their physical structural forms
BCS2103 Construction Law	Lectures and seminar discussions covering in detail topics of contracts including preparation of documents utilized by construction professionals which include proposals and bidding, technical investigations, test reports and design documents.
BCM2202 Building services and systems II	The study covers mechanical, electrical and telecommunications systems that enable large complex buildings to function efficiently. Air conditioning systems and Acoustics are also covered. The Course will look at installation, maintenance and management issues using concepts of supply chain management, life cycle costing and whole life cycle costing amongst others.
BQS2204 Construction economics aspects	The module focuses on fundamental principles and basic techniques used in economic comparisons of various investment options, project appraisals, considering the time value for money, inflation, depreciation, maintenance and related costs. Principles of engineering/technological economics, including compound interest, present worth, annuity, sinking fund, capital recovery, equivalence and uniform gradient series, are conceptualized. An examination is made into the cost implications of various building forms, functional requirement and construction methods. Influences of site and market conditions, and economics of fabrication and industrialisation, as well as in use techniques in Building design, are also studied.
BCM2203 Construction Technology III	Lectures will cover exclusion of rainwater and underground water from complex construction works and buildings; basement construction and retaining walls, cladding;

	demolition works; temporary works like shoring, scaffolding; underpinning; The lectures are supplemented by demonstrations and site visits
BQS2202 Research Skills	The module is an introduction and development of use of exploring and preparation of specialised and technical information, document research organisation format and style. It covers drafting and interpretation of in-depth technical reports, proposals and dissertations. Data analysis techniques, histograms, standard estimations and their distribution, confidence intervals, hypothesis testing, and linear regression. Comprehensive specification in the various forms of surveying, construction and engineering shall be prepared.
SHE3102 Safety, health and environment	Advanced analysis of legislation on safety, health and the environment for developing fundamental safety, health and environmental policies and plans. The role of the construction manager in managing safety, health and environmental aspects on construction projects. Risk management and organizational structures that conform to safety, health and environmental requirements on sites.
BQS3001 Industrial Attachment	The 4-year Bachelor of science honours in Quantity Surveying degree programme shall have 28 weeks of supervised industrial attachment either with a professional Quantity Surveying firm or with a building contractor. The attachment period shall expose the student to commercial systems and practicalities not encountered in the classroom. The industrial attachment shall be taken during Part III of the programme before they return for the final year.
BQS4001 Quantity surveying research project	Focus is on preparation of dissertations. With practice and lectures, students shall choose topics of their choice and prepare a dissertation individually. The module shall be examined at the end of Semester 2.
BQS4102 Contracts administration I	A practical application of the standard forms of contract for building and civil engineering
BQS4103 Construction site management	Focus on fundamentals of on-site planning, monitoring and control of construction projects and resources. Site organisation, Site establishment and mobilisation, resources procurement and management, site demobilisation.
BQS4106 Construction Accounting	Examination and analysis of the practices of financial and management accounting in the construction industry, including accounting processes, internal control, cost elements, overheads allocation and financial reports
BQS4107 Measurement III, civil and structural	This module introduces students to measurement of different types of civil engineering works and structural steel works. The focus is on external works in roads, bridges, and surface and subsurface drainage systems.

BQS4108 Construction equipment and methods	Advanced study in method of planning and scheduling projects related to heavy and large-scale construction with focus on plant and equipment. The principles of operations management, including Network Analysis, Transport and Assignment models, are conceptualized. Team Research Projects.
BQS4202 Contracts administration II	A technical and legal assessment of market potential that develops overseas strategies, appraising alternative funding opportunities, estimating and tendering joint venture and partnerships
BQS4203 Construction project finance	Exploring the critical factors in national, regional and local markets that determine development opportunities, business and construction cycles, regional and urban growth trends restructuring of urban space, commercial and industrial location theories, and demographic analysis and projection techniques; principles of managerial finance focusing on financial markets, financial statement analyses, planning and control, working capital management and international finance, discussion centred on the research required to find the best financial packages projected development, including assessment of market potential strategies, appraising alternative funding opportunities, capital budgeting and estimating debt, cash flow and appraisal techniques, joint ventures and partnerships, various loan structures, and micro-computer applications.
BQS4208 Property studies	Lecture and discussion topics include techniques for selecting, organising, and managing the development team, scheduling and risk management, negotiating strategies, utilising government financing and subsidy programmes and marketing, managing completed projects, tax assessment procedures and appeals, negotiating public private partnerships, various loan structures, and micro-computer applications
BQS4201 Professional practice and procedure	Lectures and discussions; exploration of the ethics of the profession: values, ethical theory and practice; moral reasoning; morality in law and codes, Professional standards and societies; extensive use of case studies.
BQS4204 Measurement IV	The module is to equip students with skills of measurement with special focus on electrical and mechanical services. It also includes measurement of specialist items found in building works. The module shall be examined based on 50% examination and 50% continuous assessment

Name of Programme	**BACHELOR OF SCIENCE HONOURS IN CONSTRUCTION MANAGEMENT DEGREE**
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Minimum Credit Load	480
Maximum Credit Load	
ZNQF Level	

Entry Requirements	Tick
Normal Entry	√
Special Entry (National Diploma exemption from core modules with a total of 52 credits, Higher National Diploma year one exemption = 124 credits)	√
Mature Entry	√
Other (indicate)	

LEARNING OUTCOMES
1. Understand construction and engineering services technologies and the impact of these designs on the costs and timing of construction activities.
2. Measure buildings in accordance with the standard methods of measurement documents.
3. Prepare estimates of work from first principles and including interpreting historical cost data, including Construction management computer applications
4. Manage projects throughout the design and construction phases of the projects.
6. Manage workloads and meet deadlines.
7. Understand the principles of law relating to the construction industry.
8. Apply taught theoretical aspects in real life projects through industrial attachment

Programme Assessment (Describe and indicate percentage [%])	
Coursework	60%, 50%, 100%
By thesis	
Written Examinations	40%, 50%
Other	

Basis of Allocating Credits		
Activity	**Time in Hours**	**Credits**
Contact Time/Time on task		
Lectures	1620	162
Tutorials	448	44.8
Field Visits		
Laboratory Work		
Workshops		
Work Integrated Learning (WIL)/Industrial Attachment/Clinical Practice/Teaching Practice etc.	1200	120
Scheduled Assessment Time		
Final written examinations	87	8.7
In-class tests	86	8.6
Online Testing and Examinations		
Seminar Presentations	107	10.7
Independent Study Time		
Preparation for scheduled sessions	268	26.8
Reading	501	50.1
Written assignments	557	55.7
Revision Work	162	16.2
Maximum Credits for the 80% Courses /Modules Threshold	**503.6**	

BACHELOR OF SCIENCE HONOURS IN CONSTRUCTION MANAGEMENT DEGREE (4 YEARS) **(580 Hour Credits)**		
YEAR I (148 Hour Credits)		
Semester 1 and 2		**Hour Credits**
BCS1001	Measurement I	26

Semester I		
BCM1101	Construction materials	10
BCM1102	Construction technology I	10
BCS1102	Principles of economics	12
BCS1101	Construction drawing	12
ILI1105	Communication skills	10
BCM2103	Theory and practice of construction management I	12
Semester II		
BCS1202	Principles of construction law	10
BCS1201	Statistics	12
CBU2115	Entrepreneurship and innovation	10
BLP1206	Principles of town planning	12
BCM2201	Theory and practice of construction management II	12
YEAR II (144 Hour Credits)		
Semester I		
BCM2101	Construction technology II	10
BCS2101	Site Surveying I	12
BCS2102	Aspects of structural design	10
BCM2102	Building services and systems I	10
BCS2203	Construction law	12
BCS2202	Introduction to construction estimates and pricing	10
Semester II		
BCM2203	Construction technology III	12
BQS2208	Construction economics aspects	12
BCS2201	Site surveying II	12
BCM2202	Building services and systems II	10
BQS2205	Research Skills	10
BCS3202	Built environment sectors	16
SHE3102	Safety, health and the environment	12
YEAR III (120 Hour Credits)		
Semester I and II		
BCM3001	Industrial attachment	120
YEAR IV (168 Hour Credits)		
Semester 1 and 2		
BCM4001	Construction management research project	30
BCM3002	Site management	18
Semester I		
BCM4101	Construction contracts administration	14
BQS4108	Construction equipment and methods	16
BCM4101	Principles of sustainable construction	14
BQS4203	Construction project finance	14
Semester II		

BCM4102	Project planning and resource management	14
BCM4201	Professional practice and procedure	16
BCM4203	Advanced construction management	16
BCM4202	Cost and management accounting	16

MODULE SYNOPSIS

MODULE	SYNOPSIS
BQS1001 Measurement I	This is an introduction to Mensuration and Measurement in accordance with the System of Measurement of simple structures e.g. foundations, brickwork, surface beds, carpentry, joinery and ironmongery, glazing, doors, windows, floors and paving. Lectures shall also focus on measurement of simple structures e.g. internal and external finishes, and roof work. The module shall be examined at the end of Semester 2. The module is a prerequisite to BQS2001 Measurement II.
BCM1101 Construction Materials	An introduction review of the materials used in construction, of their physical properties and characteristics, and the processes they undergo to convert them to building materials.
BCM1102 Construction Technology I	The module examines the construction process and the materials used in construction of simple structures through lectures, case studies and project assignments. Students shall be required to study a building under construction and create a portfolio for documenting the project.
BCS1102 Principles of Economics	The course offers students an understanding of how the general economy operates. It introduces students to microeconomic issues like the theory of demand, theory of supply and cost. Students are also taught on the behaviour of economic agents especially consumer behaviour and firm behaviour (under cost and production theory). The course introduces macroeconomic aspects that include, national output determination under a closed economy and open economy assumptions, money and banking sector, macroeconomic problems of inflation and unemployment, growth, external sector and exchange rate regimes.
BCS1101 Construction Drawing	This module introduces the purpose of architectural drawings and the process of communication through presentation and working drawings, types of two-dimensional drawings and their uses. Architectural lettering, relationship between scale and degree of detail, the use of hatching, the layout of architectural drawing sheets, dimensions- are some of the topics also covered in this module. Construction professionals deal with working drawings and architectural presentation drawings. The main aim and objectives of this module is to make students able to interpret the architectural presentation and working drawings in detail.

ILI 1105 Communication Skills	Lectures will equip students with skills to enable them to plan and present oral and written reports and prepare and write business and technical reports
BCM2103 Theory and practice of Construction management I	History and development of construction management. Duties and responsibilities of construction managers. An overview of the construction management processes, the scope of the activities of construction and discussion of the work environment in site construction. Functions of construction managers; organizational structures, decision making, communication, centralization and decentralization, delegation, leadership and motivation, budgetary and non-budgetary controls.
BCS1202 Principles of Construction Law	Lectures covering Law of Contract, Law of Delict as it arises in Roman Dutch Law, Law for Surveyors, including a detailed study of relevant statutes such as on Town Planning, Sale and Lease of Property, Safety, Health and Environment.
BCS1201 Statistics	The module focuses on mathematical and statistical concepts, tools, skills and techniques in analysis interpretation and application of numerical information and testing of theoretical fundamentals. It encompasses basic concepts of marketing statistics, representation of statistical results, measures of central tendency and dispersion including probability concepts, confidence intervals, hypothesis testing, index numbers, time series analysis, regression and correlation analysis and financial calculations (Simple and compound interest, annuities, sinking funds and amortisation schedules).At the end, students must be able to demonstrate knowledge of the basics of inferential statistics by making valid generalisations from sample data and have the ability to interpret statistical outputs to inform business-oriented decisions.
CBU2115 Entrepreneurship and innovation	The aim of this module is to develop entrepreneurial acumen in students, to appreciate the importance of entrepreneurship to the individual and in nation building, to analyse and explain how PESTLEG factors affect the entrepreneur. Students will be able to evaluate various options available to the entrepreneur to go global. , identify business opportunities and generate business ideas; develop a bankable business plan; understand the characteristics of a successful entrepreneur; identify the challenges being faced by Zimbabwean entrepreneurs; analyse the nature of business environment and apply different tools and models to minimize the effects of the PESTLEG forces; identify different ways of starting a business; appreciate different supporters of entrepreneurship in Zimbabwe; understand marketing and management in Small to Medium Enterprises; and identify available options to go global.
BLP1206 Principles of Town Planning	This module examines the development planning process and paradigms including comprehensive, sectorial transport, strategic and contingency planning, development Plans (Master and Local plans, layout, site and building plans, subdivisions and

	consolidations, incorporations, zoning changes of reservations and development controls are covered. It also covers participatory, advocacy and lobbying works, the planning theories and models and their influences on the urban space (Practice). Problems of Urban growth and solutions are explored. Different types of land reforms and tenure systems, Property development and reforms and institutional economics. It also covers rural properties, rights of access, control and ownership of common properties
BCM2201 Theory and Practice of Construction Management II	A continuation of the module from Semester 1
BCS2202 Introduction to construction estimates and pricing	An introduction of estimating methods, tools and techniques and pricing methods. The course introduces the student on how to develop cost estimations for a variety of projects, including residential and commercial construction projects, manually and with estimating software. The student learns to factor in aspects that affect construction costs, such as construction materials, labor, equipment, company overhead and profit.
BCM2101 Construction Technology II	The module introduces structural systems and their underlying physical principles, using historical and contemporary precedents. Simple methods of calculation are introduced, and field trips and laboratory demonstrations are included. The module investigates a range of conventional construction systems, for foundations, walls, suspended floors and roots. Systems are compared in timber, steel, masonry, and reinforced precast concrete. Lecturers are supplemented by demonstrations and site visits. Students are also exposed to the application of Modern Methods of Construction (MMC) under different circumstances and be able to make a recommendation on whether to use traditional methods or MMC in such circumstances. Focus is given to ease and speed of construction and role in achieving sustainability in construction.
BCS2101 Site Surveying I	The module introduces students to definitions, classes and branches of surveying. It also covers theory of errors, chain surveying.
BCM2102 Building services and systems 1	A study of infrastructural services of water supply, drainage, sewage treatment: electricity: and telephone installations
BCS2102 Aspects of structural design	An introduction to the static and dynamic behaviour of the major structural systems applied in architecture. An examination of monolithic wall, post-lintel and multi-story framed construction, tunnels, vaults and domes, suspended, catenary and tensile structures, etc., to enable the students to develop their understanding of the structural principles that underlay their physical structural forms
BCS2103 Construction Law	Lectures and seminar discussions covering in detail topics of contracts including preparation of documents utilized by construction professionals which include proposals and bidding, technical investigations, test reports and design documents.

BCM2202 Building services and systems II	The study covers mechanical, electrical and telecommunications systems that enable large complex buildings to function efficiently. Air conditioning systems and Acoustics are also covered. The Course will look at installation, maintenance and management issues using concepts of supply chain management, life cycle costing and whole life cycle costing amongst others.
BQS2204 Construction economics aspects	The module focuses on fundamental principles and basic techniques used in economic comparisons of various investment options, project appraisals, considering the time value for money, inflation, depreciation, maintenance and related costs. Principles of engineering/technological economics, including compound interest, present worth, annuity, sinking fund, capital recovery, equivalence and uniform gradient series, are conceptualized. An examination is made into the cost implications of various building forms, functional requirement and construction methods. Influences of site and market conditions, and economics of fabrication and industrialisation, as well as in use techniques in Building design, are also studied.
BCS2201 Site Surveying II	Theodolites and theodolite work, total stations: Practical Assessments will be undertaken. Calculations and theory Resection: Calculations Areas and Volumes: Setting out engineering plans and specifications. Curve Ranging; Quality take off, planning and scheduling Deformation Survey. Practical Assessments will be undertaken
BCM2203 Construction Technology III	Lectures will cover exclusion of rainwater and underground water from complex construction works and buildings; basement construction and retaining walls, cladding; demolition works; temporary works like shoring, scaffolding; underpinning; The lectures are supplemented by demonstrations and site visits
BQS2202 Research Skills	The module is an introduction and development of use of exploring and preparation of specialised and technical information, document research organisation format and style. It covers drafting and interpretation of in-depth technical reports, proposals and dissertations. Data analysis techniques, histograms, standard estimations and their distribution, confidence intervals, hypothesis testing, and linear regression. Comprehensive specification in the various forms of surveying, construction and engineering shall be prepared.
BCS3202 Built environment sectors	Lecture and discussion topics including techniques for selecting, organising, and managing the development team, scheduling and risk management, negotiating strategies, utilising government financing and subsidy programmes and marketing, managing completed projects, tax assessment procedures and appeals, negotiating public private partnerships, various loan structures, and micro-computer applications
SHE3102 Safety, health and environment	Advanced analysis of legislation on safety, health and the environment for developing fundamental safety, health and

	environmental policies and plans. The role of the construction manager in managing safety, health and environmental aspects on construction projects. Risk management and organizational structures that conform to safety, health and environmental requirements on sites.
BCM3001 Industrial Attachment	The 4-year Bachelor of science honours in Construction Management degree programme shall have 28 weeks of supervised industrial attachment either with a project management firm or with a building contractor. The attachment period shall expose the student to commercial systems and practicalities not encountered in the classroom. The industrial attachment shall be taken during Part III of the programme before they return for the final year.
BCM4001 Construction Management research project	Focus is on preparation of dissertations. With practice and lectures, students shall choose topics of their choice and prepare a dissertation individually. The module shall be examined at the end of Semester 2.
BCM3002 Site Management	Focus on fundamentals of on-site planning, monitoring and control of construction projects and resources. Site organisation, Site establishment and mobilisation, resources procurement and management, site demobilisation.
BCM4101 Construction Contracts Administration	A practical application of the Standard forms of Contracts for Buildings and Civil Engineering. The student will be taught to appreciate the different standard forms of contract, how to select the right form for different project classes and the roles of the different professionals under each standard form. Issues such as treatment of claims, management of risk and dispute avoidance are also covered.
BQS4108 Construction equipment and methods	Advanced study in method of planning and scheduling projects related to heavy and large-scale construction with focus on plant and equipment. The principles of operations management, including Network Analysis, Transport and Assignment models, are conceptualized. Team Research Projects.
BQS4203 Construction project finance	Exploring the critical factors in national, regional and local markets that determine development opportunities, business and construction cycles, regional and urban growth trends restructuring of urban space, commercial and industrial location theories, and demographic analysis and projection techniques; principles of managerial finance focusing on financial markets, financial statement analyses, planning and control, working capital management and international finance, discussion centred on the research required to find the best financial packages projected development, including assessment of market potential strategies, appraising alternative funding opportunities, capital budgeting and estimating debt, cash flow and appraisal techniques, joint ventures and partnerships, various loan structures, and micro-computer applications.

BCM4202 Cost and management accounting	Lectures on cost accounting and management accounting for the construction manager for on-site construction project management.
BCM4102 Project planning and resource management	Lectures and discussion topics on the project management body of knowledge. An overview of the project management phases. Introspection into the project management techniques for achieving goals and objectives of construction projects
BCM4201 professional practice and procedure	Lectures and discussions; exploration of the ethics of the profession: values, ethical theory and practice; moral reasoning; morality in law and codes, Professional standards and societies; extensive use of case studies.
BCM4203 Advanced construction management	Lectures on Lean construction, Value and Risk management in construction, management of change and organisational learning, technological advances in construction and quality management
BCM4101 Principles of sustainable construction	Lectures and discussions on sustainable construction principles and how they can be achieved within the construction industry. Consideration of International sustainability development agendas is essential.

Name of Programme	**BSc (HONS) PROPERTY DEVELOPMENT AND ESTATE MANAGEMENT**
Duration	4 years
Minimum Credit Load	480
Maximum Credit Load	
ZNQF Level	

Entry Requirements	Tick
Normal Entry	√
Special Entry (National Diploma exemption from core modules with a total of 52 credits, Higher National Diploma year one exemption = 124 credits)	√
Mature Entry	√
Other (indicate)	

LEARNING OUTCOMES
Demonstrate knowledge and understanding of real estate development fundamentals
Grasp property industry value chain in terms of practice, technology applications and the associated products
Capitalise on all situations that have the potential for development into business and entrepreneurial ventures
Share and spread knowledge through formal teaching and other informal channels such as seminars, workshops, exhibitions, symposia, etc.
Develop best practice and technologies that enhance efficiencies and outputs of the property industry
Apply supervisory and management skills
Demonstrate knowledge and understanding of real estate development fundamentals

Programme Assessment (Describe and indicate percentage [%])	
Coursework	30, 50%, 100%
By thesis	
Written Examinations	50%, 70%
Other	
Basis of Allocating Credits	

Activity	Time in Hours	Credits
Contact Time/Time on task		
Lectures	1620	162
Tutorials	448	44.8
Field Visits		
Laboratory Work		
Workshops		
Work Integrated Learning (WIL)/Industrial Attachment/Clinical Practice/Teaching Practice etc.	1200	120
Scheduled Assessment Time		
Final written examinations	87	8.7
In-class tests	86	8.6
Online Testing and Examinations		
Seminar Presentations	107	10.7
Independent Study Time		
Preparation for scheduled sessions	268	26.8
Reading	501	50.1
Written assignments	557	55.7
Revision Work	162	16.2
Maximum Credits for the 80% Courses /Modules Threshold	**503.6**	

BACHELOR OF SCIENCE HONOURS IN PROPERTY DEVELOPMENT AND ESTATE MANAGEMENT DEGREE (4 YEARS)		
(513 Hour Credits)		
YEAR I (120 Hour Credits)		
Semester		**Hour Credits**
Semester I		
BLP 1101	Principles of Property Development	10
BLP 1102	History of Urban Development	10

BCM 1102	Construction Technology	
BLP 1104	Principles of Economics	10
BCM 1101	Construction Materials	10
ILI1105	Communication skills	10
Semester II		
BLP 1205	Land Economics	10
BLP 1207	Statistics for the Built Environment	10
BCM 1202	Principles of Construction Law	10
CBU2115	Entrepreneurship and innovation	10
BLP1206	Principles of town planning	10
BLP 1208	Introduction to Information Technology & Application	10
YEAR II (126 Hour Credits)		
Semester I		
BLP 2102	Property Valuation I	12
BLP 2104	Building Economics	10
BLP 2105	Property Law I	10
BLP 2106	Municipal Services	10
BLP 2107	Estate Planning	15
BLP 2111	Aspects of Architectural Design	10
Semester II		
BLP 2201	Property Valuation II	12
BLP 2202	Property Law II	10
BLP 2204	Research Tools and Techniques	10
BLP 2208	Property Management	12
BLP 211	Property Construction Materials	10
YEAR III (125 Hour Credits)		
Semester I and II		
BCM3001	Industrial attachment	120
BLP 3002	Real Property Information systems	15
YEAR IV (142 Hour Credits)		
Semester 1 and 2		
BLP 4001	Property Studies Research Project	20
Semester I		
BLP 4101	Property Valuation III	12
BLP 4103	Property Taxation	10
BLP 4104	Project Planning and Management	10
BLP 4105	Urban Management	12
BLP 3102	Property Accounting	15
BLP 4106	Property and Facilities Management	12
Semester II		
BLP 4201	Property Valuation IV	12
BLP 4202	Professional Practice and Procedure	10
BLP 4204	Property Development Finance	10
BLP 4205	Real Property Marketing	10
BLP 4206	Sustainable Property Development	12

COURSE SYNOPSIS

MODULE	SYNOPSIS
BLP 1101 Principles of Property Development	Understanding nature and structure of the construction industry, characteristics of the construction industry, actors in the construction industry, actors on a building project, construction industry and the economy, property development process and management, classification of real property, contractual obligations and Environmental Impact Assessments.
BLP 1102 History of Urban Development	City in history, [Palaeolithic, Mesolithic and Neolithic period]. A general survey is made of major development theories and contemporary issues and the characteristics of high, medium and low-income societies that establish contexts for development planning and policy- making. Industrial cities and their problems, urban Legislation, Public Health Act 1848 and 1875, need for urban planning, design concepts [Radburn, neighbourhood concept], the post world war industrial city [modern city], new towns concept. The operations of several cities and metropolitan areas are analyzed
BLP 1104 Principles of Economics	The course offers students an understanding of how the general economy operates. It introduces students to microeconomic issues like the theory of demand, theory of supply and cost. Students are also taught on the behaviour of economic agents especially consumer behaviour and firm behaviour (under cost and production theory). The course introduces macroeconomic aspects that include, national output determination under a closed economy and open economy assumptions, money and banking sector, macroeconomic problems of inflation and unemployment, growth, external sector and exchange rate regimes.
ILI 1105 Communication Skills	Theories of communication will be addressed in order to develop effective speaking, writing, listening and reading strategies, specifically in English. Simultaneously, the important aspect of non-verbal communication will also be addressed. The main emphasis, however, will be on raising reading, writing, speaking and listening standards, and it is here that students must demonstrate university-level competency if they are to pass the course. Module Assessment: 100% Continuous Assessment
BCM 1101 Construction Materials	An introduction review of the materials used in construction, of their physical properties and characteristics, and the processes they undergo to convert them to building materials.
BCM 1102 Construction Technology	The module examines the construction process and the materials used in construction of simple structures through lectures, case studies and project assignments. Students shall be required to study a building under construction and create a portfolio for documenting the project.
BLP 1205 Land Economics	Supply and demand of land, location theory, determination of the price of land, rent-earning capacity and land use thresholds, a general pattern of urban land use, the impact of government economic policy objectives on land resources, urban land zoning, subdivisions and consolidations and land values.

BLP 1206 Principles of Town Planning	The module examines the development planning process and paradigms. These include comprehensive, sectoral, transport, strategic and contingency planning. Development Plans (master and local plans, layout, site and building plans), subdivision and consolidation, incorporations, zoning, changes of reservation, and development control are covered. It also covers participatory, advocacy and lobbying works. The planning theories and models and their influences on the urban space (practice). Problems of urban growth and solutions are explored. Different types of land reforms and tenure systems, property development and reforms and institutional economics. It also covers rural properties, rights of access, control and ownership of common properties.
BLP 1207 Statistics for the Built Environment	This module covers basic concepts of statistics and probability theory. The topics covered include concepts of probability, basic statistical inference procedures of estimation, confidence interval and hypothesis testing, descriptive statistics, normal and Poisson distributions, T-test, analysis of variance, multiple regression, non-parametric procedures and the analysis of categorical data directed towards application in property development and estate management.
BCM 1202 Principles of Construction Law	Lectures covering Law of Contract, Law of Delict as it arises in Roman Dutch Law, Law for Surveyors, including a detailed study of relevant statutes such as on Town Planning, Sale and Lease of Property, Safety, Health and Environment
CBU 2115 Entrepreneurship and Innovation	The aim of this module is to develop entrepreneurial acumen in students, to appreciate the importance of entrepreneurship to the individual and in nation building, to analyse and explain how PESTLEG factors affect the entrepreneur. Students will be able to evaluate various options available to the entrepreneur to go global. , identify business opportunities and generate business ideas; develop a bankable business plan; understand the characteristics of a successful entrepreneur; identify the challenges being faced by Zimbabwean entrepreneurs; analyse the nature of business environment and apply different tools and models to minimize the effects of the PESTLEG forces; identify different ways of starting a business; appreciate different supporters of entrepreneurship in Zimbabwe; understand marketing and management in Small to Medium Enterprises; and identify available options to go global.
BLP 1208 Introduction to Information Technology and Application	Coursework based computer aided designs and applications to provide an insight into the use of computers in design and functionality of Modern CAD and GIS integrated systems. Emphasis is placed on the generation and use of software applications in property development and estate management such as MS Project, Primavera, Model Marker, Spreadsheets and so forth. Students should always be kept updated and abreast with IT changes and improvements. Module Assessment: 100% Continuous Assessment
PART II	
BLP 2102 Property Valuation I	Introduction to property valuation, reasons for valuation, methods of valuation (comparative, residual valuation, contractors' method investment method), factors affecting property values. Discussions on real property rights/interests and the effect on property values and management.

BLP 2104 Building Economics	Concepts and techniques of pricing, forecasting and estimating using preliminary methods of estimating [unit, cube superficial, approximate quantities, storey enclosure method] on building projects; Discussions of the fundamental principles and basic techniques used in economic comparisons of various investment options, project appraisals , cost analyses of equipment and facility/property ownership, retirement and replacement, considering the time value for money, discounted cash flow analysis, inflation, depreciation, maintenance and other related costs - principles of engineering/technological economics as they apply to evaluation of construction projects, assets, plant and equipment.
BLP 2105 Property Law I	Property rights and legal descriptions (real vs personal rights, fixtures, minerals, air & water rights; estates in land), Land tenure systems, Legal interests in real property [freehold, leasehold, condominium, etc], landlord and tenant law, private restrictions on ownership (liens, covenants, easements, licences, encroachments), licences in real property, real property sales contract, case laws will be used in the course of study.
BLP 2106 Municipal Services	A study of the infrastructural services of water supply, drainage, and sewerage and sewage treatment: electricity: and telephone installations.
BLP 2107 Estate Planning	The module covers estate planning, probate, inheritance, shall trusts, revocation, conveyance, hereditaments and the Administration of Estates Act and related legislation. Students should familiarize themselves with other relevant legal instruments. Estate planning and administration issues are covered. East planning processes such as probate, revocation and inheritance laws and systems. Formation and types of shall and trusts. The effects of tenure, real rights and title systems on property and Afro-centric systems are explored.
BLP 2111 Aspects of Architectural Design	The module gives an introduction to the purpose of architectural designs and drawings. It considers an appreciation of site layout planning, two to three dimensional drawings and their uses and the relationship between scale and degree of details, lettering, hatching, shading and colour detailing and their meanings. The overall elevations and three-dimensional presentations in different forms are explored. Module Assessment: 100% Continuous Assessment
BLP 2201 Property Valuation II	Mathematics of valuation, compound interest, present worth (uniform series, dual rate), term and reversionary valuations, Annual sinking fund, capital recovery [annuity $1 will purchase], application of mathematics of valuation to practical valuation of properties.
BLP 2202 Property Law II	Extracts and cases as they relate to the business of real estate: Estate Agency Act, Valuers Act, RTCP Act, Urban Councils Act, Rural District Councils Acts, Deeds Registry Act, Land Acquisition Act, Environmental Management Act, Utilities and Infrastructure related Acts and Commercial and Residential Rent Regulations, Property transactions laws & procedures, commission and other statutory fees.
BLP 2204	Research approaches and design, research topic formulation, data collection methods, objectives setting, hypothesis formulation, data

Research Tools and Techniques	presentation and analysis, research design, ethics in research, sampling techniques, questionnaire design, data gathering techniques, research proposal writing skills, research project documentation and reporting skills. Issues relating to professional communication and academic writing will be covered.
BLP 2205 Building Services	The course is organized to impart design skills and or knowledge on the structure, components and operation systems of services that are rendered in modern buildings so that they are live buildings. The teaching method lays emphasis on class lecturers and student conducted seminars. Upon completion of this course students should be able to: Describe electricity supply in buildings and design implications of its installation; Design illumination requirements in buildings; Classify fires and recommend the most appropriate fire-proofing installation in different buildings; Design acoustically controlled sound studios; Evaluate the supply of cold and hot water in buildings in relation to building fabric; Design lifts in buildings and design implications of other transportation systems; and Identify various building management system (BMS).
BLP 2208 Property Management	Introduction to property management, estate setting, formation of estates, Lease agreements, management agreements, rent regulations in Zimbabwe, property management functions; property inspections, rent determination for retail, residential, industrial, office use; approaches to property management, role of Estate Agents in Property Management; property management plans Identification and assessment of building defects; Repair and maintenance of buildings; aspects of architectural additions and alterations on buildings.
BLP 2211 Property Construction Materials	A continuation of the module through site visits and field studies, with an examination of construction systems, and the ways in which materials are used in construction and various financial and environmental costs implications. Aspects of Construction materials modelling and simulations are explored. Project based assignments and models and assessed as continuous assessment (CA). Module Assessment: 100% Continuous Assessment
YEAR III	
BLP 3001 Industrial attachment	One year industrial attachment in compliance with University Regulations and Procedures. Students may be attached to professional Valuers and Estate Agents firms, Estates Department of Local Authorities, Parastatals, Central government, Building Societies and Commercial Banks, Insurance companies, contractors and property developers. This attachment should expose students to practical property development processes and applications, valuation, management and conveyancing experiences. Furthermore, students are expected to use the attachment period to identify potential research areas in preparation for their dissertations in Part IV
BLP 3002 Real Property Information systems	The role of Information systems in real estate development, management, valuation practices and marketing; elements / aspects of a property information system, the economics of integrating real property information systems in real estate practice,

	practical exercise on using appropriate information systems / technologies / software.
PART IV	
BLP 4001 Property Studies Research Project	Lectures and discussions on preparation for dissertations. With the aid of lectures, students will choose topics of their choice and prepare a dissertation individually.
BLP 4101 Property Valuation III	The course applies theories, principles and concepts of valuation to different sectors of real property. Emphasis will be put to practical valuation assignments of office blocks, industrial properties, plant and equipment. Also included in this course is the preparation of a valuation reports, certificates, and calculation of professional fees for valuation using prevailing scale of fees. Risk and uncertainty, investment appraisal, component variables of a valuation.
BLP 4103 Property Taxation	General direct taxation and land resources, income tax, capital gains tax, stamp duty, estate duty, tax concessions in special areas, effect of taxation on property transactions. Computations of various forms of taxes and assessing their effect on real estate business/
BLP 4104 Project Planning and Management	The course introduces the student to general management principles as applied to construction projects. Areas to be covered include: construction theory and practice, project planning and control, project scheduling, the project manager's role, project quality management principles, project proposal writing, project appraisal/assessments, project internal and external environment, project procurement requirements and process, project resources management.
BLP 4105 Urban Management	The course focuses on the provision and management of urban infrastructure, housing and related community facilities. These include transport, water, sewage, electricity and communication supply services. Intervening issues; such as waste management, urban agriculture and disaster management systems. Addresses governance, legal and policy frameworks for sustainable urban and land development projects. Considers the paradigm shift from traditional systems to the development and management of sustainable city concepts. Provision and maintenance of urban infrastructure services through the use of Public Private Partnerships (PPP) arrangements. Creation and management of urban institutions & urban governance systems.
BLP 3102 Property Accounting	Lectures and discussions accounting for property rentals/commission; cash transfers and disbursements that include associated accounting records, reconciliation statement, financial statement, financial reports, cash flow statements, contract accounting, accounting ratios, trading, profit and loss account and stock control procedures. It also focuses on the production of balance sheets, assets and liabilities with particular reference to the real estate industry. Trust accounting, management of trust funds
BLP 4106 Property & Facilities Management	Understanding property portfolio and its development, investment analysis, principles behind portfolio and strategy, asset-mix ratio, getting tenants for property portfolio, tenant mix, managing a property portfolio, legal issues related to estate management, insurance regarding real property, scheduling of operation and maintenance of buildings and its environs, property management reports on management of public estates and institutions, management of the environs and facilities in and around the

	property, environment, health and safety of users of the building space, waste management, space allocation and management, demolition of leased premises & security deposit, role of facilities manager, integrated property and facilities management
BLP 4201 Property Valuation IV	The course builds on the provisions of the previous valuation courses. It intends to prepare the student to the practical realm of valuation of real property as they graduate. The course will focus on advanced valuation of specialized property like hotels, chalets, recreational properties. Also included is statutory valuation (for taxation, compulsory acquisition etc), and deceased estates valuation, valuation of property in a rural setting. More emphasis shall be placed on the legal issues relating to valuation of such properties.
BLP 4202 Professional Practice and Procedure	This course aims to inculcate the expected minimum expectations of a property professional. Class discussions and seminars on ethical procedures, professionalism and duty of care when dealing with other people's properties and cover issues of corruption and gender in property industry. Professional role of a property valuer and manager and how the property professional should diligently execute his/her professional duties.
BLP 4204 Property Development Finance	Exploring sources finance for real property development, private versus public sources of capital, cost of capital, types of loans & mortgages to finance real estate, factors affecting financing of real property development, exploring the critical factors in national, regional and local markets that determine real property development opportunities; business and construction cycles, principles of managerial finance focusing on financial markets, planning and control, working capital management and international finance, discussions centred on finding best financial packages for property development, including assessment of market and potential strategies, appraising alternative funding opportunities and estimating debt, cash flow and capital investments appraisal techniques.
BLP 4205 Real Property Marketing	Concept of real estate asset & space markets, pricing of various categories of real estate, principles of marketing, methods/ strategies of marketing real property, property marketing research techniques, real property conveyancing (complete and incomplete buildings), memorandum of agreement, deeds of sale, change of ownership of real property, registration of property, commission and other statutory fees, challenges in marketing of real property.
BLP 4206 Sustainable Property Development	The aim of this course is to allow students to learn on the concept of sustainability and how it is fused into property development and its practices. It is important for Property Development students to develop problem-solving capabilities, and understand the basics on Sustainable Development theories and their practical application in property development, together with communication and client presentation skills. The course recaps from Property Development 1 then introduces Sustainable Development to real property. Other concepts to be covered include Sustainability principles, Location and sustainability of buildings, property-related environmental issues, the economics of sustainable buildings, the use of sustainability rating tools in real property, design & procurement of

	sustainable buildings, environmental laws, stakeholder participation on sustainable / green projects.

BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PROPOSED (5 YEAR) BACHELOR OF ARCHITECTURAL STUDIES. (HONOURS) DEGREE STRUCTURE			Credits 520
PART I			**100**
COURSE CODE	**COURSE NAME**	**SYNOPSIS**	
BAR1001	Design Studio I – (Semesters 1 & Semester 2)	The teaching of architectural design in the studio is the core of the programme of architectural studies and is the foundation of the education of every architect as a discipline architectural design is a synthesis of the principles of composition animated by the designer's creativity, and the functional requirements of human needs and purposes. An architect long ago identified the essential ingredients of architecture a commodity, firmness and delight. The first two components require the architect to be a social scientist, knowledgeable about and responding to human needs and the ordering of society, and a technologist, capable of ensuring that his buildings are structurally sound, and work efficiently; the final component, delight, is less tangible, less easy to define. This draws on the Fine Art exercises that are offered in the Design Studio to engender creativity, and the ability to conceive designs for buildings and spaces, to visualise design concepts, through learning the theories of Art and various practice exercises and to convey these in a comprehensible way graphically to people who have no architectural training is a talent few people are born with, but all can acquire. The capacity to create buildings that lift the spirit, give pleasure to the user and the visitor, and that enhance the environment requires the architect to be an artist. Architectural students, therefore, need to acquire skills and develop capabilities in all three areas, as social scientists, as technologists, and as artists: and to apply these skills and capabilities holistically. All the theoretical and practical Courses in the three-year Bachelor of Architectural Studies programme teach skills and develop capabilities in one or other of these three areas. Design Studio in every year of the programme, not only nurtures the architectural student as a creative designer, as an artist but also draws all the areas of knowledge, all the disciplines together in one indivisible whole. At the end of the year, students assemble a portfolio for review by staff to determine their attainment of the necessary design knowledge and skills for continuing into Year II. **Course Assessment: 100% Continuous Assessment**	**40**
BAR1102	Architectural Presentation I	An introduction to the purpose of architectural drawings and the process of communication through architectural drawings. Types of two-dimensional	**10**

		and three-dimensional drawings and their uses. The relationship between scale and degree of detail. Architectural lettering, the use of hatching and shading, the layout of the architectural drawing sheet. The second semester continues with more complex presentation techniques: exploded 3-dimensional projections, 1, 2 and 3-point perspectives. Applications of Descriptive Geometry, Reprographic Techniques. The nature and function of working drawings. **Course Assessment: 100% Continuous Assessment**	
BAR1110	History &Theory of Architecture I	The course aims to demonstrate the relevance of architectural history to contemporary practice, to equip the student with basic vocabulary and the ability to recognise and interpret critical historical architectural forms and ideas and to impart an enthusiasm for historical architecture, rather than rote learning of facts and figures. A study, through selected readings and discussions, of the relationship between types of settlement and community structure and the built environment, and of how men and women, through the way they live and the work they do, shape their environment. The course will provide an introduction to basic aesthetic concepts in architecture, terminology and methods of analysis and interpretation in relation to selected examples. It will also illustrate theoretical concepts from the history of Architecture as taught. **Course Assessment: 60% Coursework 40% Examination**	**5**
BCM1101	Construction Materials	A review of the materials used in construction; their physical properties and characteristics, and the processes they undergo to convert them into building materials. Students will acquire knowledge about on the basic characteristics of structures (support capacity, protection, presentation) in regard to essential scientific and technical aspects, including their effects on the design process; measures of materials and structures as well as relevant physical characteristics of building materials;; knowledge of design principles regarding sound and fire protection; gain ability to analyze construction tasks and formulate requirements concerning optimal thermal efficiency and moisture protection; the ability to analyze design tasks, formulate goal-oriented quality requirements and follow up on the feasibility of design ideas. **Course Assessment: 70% Coursework 30% Examination**	**5**
ILI1105	Communication Skills	Lectures will equip students with skills to enable them to plan and present oral and written reports and prepare and write business and technical reports **Course Assessment: 50% Coursework 50% Examination**	**5**

BAR1107	Fine Art Studio	Creativity, the ability to conceive designs for buildings and spaces, to visualize design concepts and to convey these in a comprehensible way graphically to people who have no architectural training is a talent few people are born with but all can acquire. This Course and its successors in Part I are designed to enable students to develop their individual creativity through a variety of fine art experiences. The Fine Art Studio programme begins with life drawing, line drawing, sketching, freehand artistic drawing, still life drawing and various freehand sketching techniques that are key to the architect's visual and graphical data recording, creative processes as well as representation of graphical ideas through various techniques, materials, and mediums. **Course Assessment: 100% Continuous Assessment**	**5**
BAR1202	Architectural Presentation II	An introduction to the purpose of architectural drawings and the process of communication through architectural drawings. Types of two-dimensional and three-dimensional drawings and their uses. The relationship between scale and degree of detail. Architectural lettering, the use of hatching and shading, the layout of the architectural drawing sheet. The second semester continues with more complex presentation techniques: exploded 3 - dimensional projections, 1, 2 and 3- point perspectives. Applications of Descriptive Geometry, Reprographic Techniques. The nature and function of working drawings. The Course introduces use of other software for presentation such as Corel draw, Photoshop, Lumion, and Google Sketch up. **Course Assessment: 100% Continuous Assessment**	**10**
BCM1202	Principles of Construction Law	Lectures covering Law of Contract, Law of Delict as it arises in Roman Dutch Law, Law for Surveyors, including a detailed study of relevant statutes such as on Town Planning, Sale and Lease of Property, Safety, Health and Environment. **Course Assessment: 50% Coursework 50% Examination**	**5**
CBU1211	Entrepreneurship Skills	The aim of this Course is to develop entrepreneurial acumen in students, to appreciate the importance of entrepreneurship to the individual and in nation building, to analyse and explain how PESTLEG factors affect the entrepreneur. Students will be able to evaluate various options available to the entrepreneur to go global. , identify business opportunities and generate business ideas; develop a bankable business plan; understand the characteristics of a successful entrepreneur; identify the challenges being faced by Zimbabwean entrepreneurs; analyse the nature of business environment and apply different tools and models to minimize the effects of the PESTLEG forces; identify different ways of starting a business; appreciate different supporters of entrepreneurship in Zimbabwe; understand marketing and management in Small to Medium Enterprises; and identify available options to go global. **Course Assessment: 50% Coursework 50% Examination**	**5**

BAR1210	History & Theory of Architecture II	The second semester examines the major architectural and urban design developments of the 19th and 20th Centuries, and the underlying theories of form, function, composition and expression. In the second semester, the Course introduces students to the basic principles of African cultures and the architectural and settlement formation patterns derived from those principles. The impact of the slave trade, of colonisation and the modern global economy, on African development is examined, and the ways these impacts are reflected in the built environment. **Course Assessment: 60% Coursework 40% Examination**	**5**
BCM1102	Construction Technology I/II	The Course examines the construction process and the materials used in construction through lectures, case studies and project assignments. Students shall be required to study a building under construction and create a portfolio for documenting the project. The second semester of the Course investigates a range of conventional construction systems, for foundations, walls, suspended floors and roofs. Systems are compared in timber, steel, masonry, as well as reinforced and precast concrete. Lectures are supplemented by demonstrations and site visits. **Course Assessment: 50% Coursework 50% Examination**	**5**
	LEVEL 2		**100**
BAR2001	Design Studio II	The main emphasis in the second-year studio is the integration of structural and environmental factors (as taught in the parallel lecture Courses) into the design of a building of moderate size and complexity. The studio shall investigate the application of a variety of constructional, structural and environmental systems, and assess the appropriateness of alternative technologies. Also, students shall continue to develop an understanding of the decision-making processes of architectural design; they shall continue to develop their critical and analytical skills, and how to learn from architectural precedent. They shall prepare and submit a major integrated design project at the end of the year. Students are expected to reveal the perception, application and use of colour in a variety of media in the projects. **Course Assessment: 100% Continuous Assessment**	**40**
BAR2102/ BAR2202	Computer-Aided Architectural Design I/II	Coursework focuses on thinking skills, creativity and expression and provides a practical introduction to the use of computers in design, various electronic graphic representations used in a design, and functionality and structure of modern CAD systems. Students are later given a theoretical and practical introduction to the computer-based drawing and design tools and techniques through lectures and hands-on instruction and demonstration. Emphasis is	**10/10**

		placed on the creation of three-dimensional models using computer facilities, which includes PCs, plotters, digitisers, laser printers etc. **Course Assessment: 50% Coursework 50%**	
BAR2104/ BAR2204	Environmental Design I /II	An introduction to the ways in which buildings respond to and modify the environment, with emphasis on thermal, acoustic and lighting performance. Simple methods of calculation are introduced. An investigation of the climatic factors derived from several global climatic zones, the influence of topography, surrounding buildings and open spaces on the micro-climate of buildings, and the principles of thermal comfort. In the second semester, students shall be given guidance on the environmental design of their integrated design project in the studio and shall be required to present a detailed report. **Course Assessment: 60% Coursework 40%**	**5/5**
BAR2105	Structural Design	An introduction to the static and dynamic behaviour of the significant structural systems applied in architecture. An examination of a monolithic wall, post-and-lintel and multi storey framed construction, tunnels, vaults and domes, suspended, catenary and tensile structures, and more complex structural systems. Simple methods of calculation are introduced, and field trips and laboratory demonstrations are included. Students are shown a range of contemporary structures, and the rationale underlying their use. Special emphasis shall be placed on the enclosure of space, and the relationship between the functional uses of underlying (or overlying) spaces and the form of structure that encloses (or supports) them. Attention is given to the detailed design and jointing systems. Students shall be given guidance on the choice and design of structure for their integrated design project in the studio, and shall be required to present a detailed report. **Course Assessment: 60% Coursework 40% Examination**	**5**
BAR2108	**Site Surveying for Architects**	The Course introduces students to definitions, classes and branches of surveying. It also covers theory of errors, chain surveying. It equips Architecture Students with a scientific appreciation of topographical and physical conditions through the application of various surveying techniques and use of equipment. It also covers basic techniques of geotechnical survey of site soil conditions. It introduces students to the Surveying along the full project cycle: from Physical topographical and tacheometric surveying of Virgin Sites; Identifying pegs; Building Setting Out; Surveying Buildings and structures under construction; Surveying of Existing Buildings and Structures. Reporting Survey information through the creation of contour maps, Soil tests and Geotechnical Reports. **Course Assessment: 100% Continuous Assessment**	**5**

BAR2102	Construction Technology II	An initial review of the materials used in construction; their physical properties and characteristics, and the processes they undergo to convert them into building materials. The Course in the second semester explores constructional systems and their use in construction; with visits to construction sites. **Course Assessment: 50% Coursework 50% Examination**	**5**
BAR2208	Housing I	An investigation of the various types of housing that have been provided traditionally by local communities, and more recently by (1) the state, (2) by individuals, non-governmental agencies and community groups, in terms of planning, design, production and delivery systems, and household satisfaction. **Course Assessment: 50% Coursework 50%**	**5**
BAR2202	Construction Technology III	The Course examines the construction process and the materials used in construction through lectures, case studies and project assignments. Students shall be required to study a building under construction and create a portfolio for documenting the project. The second semester of the Course investigates a range of conventional construction systems, for foundations, walls, suspended floors and roofs. Systems are compared in timber, steel, masonry, and reinforced and precast concrete. The roles of the various tradesmen involved in their respective work. Demonstrations and site visit supplement lectures. **Course Assessment: 70% Coursework 30% Examination**	**5**
BAR2106	Building Design Economics	The objectives of the Course are to familiarize students with the basic principles of economics and the relationship between economics and development. Topics covered include: Basic Principles of Economics; Macro - The economic basis of national development, and the role of the building industry; Micro - The cost influences of site, building form, space, floor area, building materials, construction techniques and systems, maintenance and remodelling, demolitions. The relationship between the urban economy of cities and the national economy. Within the scope of economics, this Course will introduce issues of sustainability – the influence of design types, material and development activity on the environment and society in terms of resource depreciation; The roles of property, infrastructure, and investment in the development of the urban economy; The effects of globalisation on the national economy; The roles of international agencies (e.g. the World Bank) and Multi-national corporations in national development.	**5**

		Course Assessment: 60% Coursework 40%	
	LEVEL 3		**110**
BAR3001	Design Studio III	The main emphasis in the third-year studio is the integration of Architectural Design Studies, so that students can understand the relationships, in formal and social terms, between the city, the settlement, the individual building, and the people who live or work in them. Emphasis shall be placed on urban morphologies, and the spaces between buildings, and the interrelationships between form, structure, Technology and detail. Selected specialised building types shall be explored within the urban context. Architectural and Urban Design Projects shall be set requiring students to develop their design brief, study and analyse the site, apply appropriate design methods to develop their design proposals and to present these to develop their design competence in the related Building Construction, Building Services, Environmental Design and Structural Design. **Course Assessment: 100% Coursework**	**40**
BAR3104	Contemporary History and Theory of Architecture I/II	At the end of the Courses, the student should be able to identify and classify historical and theoretical facts about the twentieth century architecture through their characteristics, as well as apply the same in practical use, in the process of application of these facts in their own discussions, works and designs. **Course Assessment: 100% Coursework**	**5**
BAR3109	Housing II	A series of lectures/seminars exploring the issue of housing in consideration of specific topics as related to socio-cultural, economic and political factors, building materials, structural systems, shelter accessories, and manufacturing technologies. The Course examines major development theories and contemporary design issues and characteristics of low-income housing needs and housing delivery systems. It also examines the formal and informal housing sector and asks why the housing sector is important for both national governments and international organisations. **Course Assessment: 50% Coursework 50% Examination**	**5**
BAR3113	Spatial Planning	The Course examines the evolution and operations of the city and rural settlements in history and their contemporary manifestations in Africa and world-wide. A general survey is made of major development theories and contemporary issues and the characteristics of high, medium and low-income societies that establish contexts of the development of spatial planning and policy-making. The Course provides the theoretical basis	**5**

		for the Urban Design Project to be undertaken in Design Studio III. It examines settlement patterns, education, health and recreational facilities, streets and circulation/transportation networks, infrastructural provisions and services, and reviews and evaluates rural and urban management systems. Students shall be introduced through design exercises to the vocabulary of design elements, both natural and artificial, that are available to the landscape architect, and to the scope of landscape planning at regional and district levels, and of landscape design in urban and rural context. It introduces Architecture students to the application of Town planning and Urban Design manuals in Zimbabwe. The Course offers a multi-disciplinary approach leading to the understanding of the political, socio-economic, and technological framework of urban and rural systems and their dynamic interrelationships. **Course Assessment: 100% Coursework**	
BAR3111/ BAR3211	Construction Technology IV /V	These Courses shall deal with the construction process and techniques of larger buildings and special topics in construction practice. Subsoil analysis and foundations for larger buildings, Floors, roofs and wall construction systems for larger buildings, Exclusion of rain water, Internal components and finishes, Industrial buildings. Structural fire protection. Temporary works: formwork systems, shoring, scaffolding, etc. Underpinning. Demolition works, Construction plant and equipment. External work: roads, paving, etc. Durability and maintenance, Building codes. (Site visits and site reporting shall be an integral part of the Course). **Course Assessment: 50% Coursework 50% Examination**	**10**
BAR3112	Building Services & Systems I/II	The courses introduce students to the important subject of building services, giving sufficient coverage of the topics to provide solid theoretical groundwork together with practical knowledge of the infrastructural services required in buildings. These include cold water supply and distribution, hot water supply and distribution, solid waste and rain water drainage, sewage treatment and its disposal, refuse/garbage removal and disposal, electrical and telephone services for buildings, ventilation and air conditioning, acoustics, services access (lifts and escalators), external access to buildings, fire fighting. Apart from lectures, students are required to use their knowledge and understanding on practical projects in Design Studio. Investigative assignments are also undertaken on chosen sites which require students to liaise with public offices such as City Planners, Engineers and Surveyors. This enhances skills in preparation for office practice. **Course Assessment: 60% Coursework 40% examination**	**10**
BAR3214	**Safety, Health & Construction Environments I**	Introduces students to the various Legislations on Safety, Health and the Environment for developing fundamental safety, health and environmental policies and plans. The role of the Architect in managing safety, health and environmental aspects on construction projects. Risk management and	**5**

		organizational structures that conform to safety, health and environmental requirements on sites. **Course Assessment: 60% Coursework 40% Examination**	
BAR3210	Introduction to Architectural Office Practice	An introduction to the practice of architecture within the architectural office. Topics covered include preparation and execution of working drawings, compliance with building codes and byelaws, professional rules of conduct and ethical standards, office and site meeting procedures, Construction Law, Project Management. Students shall be attached to architectural offices, to work as architectural assistants for a minimum period of 8 months of supervised Industrial Attachment. During their Industrial Attachment, students are required to complete Log Sheets and an Industrial Attachment Report as part of the training process. **Course Assessment: 100% Coursework**	**5**
BAR3207	Research Methods	The purpose of the Course is to introduce the student to the role and purpose of research in the study and practice of architecture, and to research principles and techniques generally; to guide him/her in the selection of a research topic and the preparation and drafting of a research proposal; and to instruct the student in the techniques of research writing. This course has particular relevance to the selection and approval of the student's dissertation topic. This course is a pre-requisite for Dissertation I BAR4002 **Course Assessment: 100% Coursework**	**5**
	Architectural Photography - Elective	This Course introduces Architecture students to a sub genre of the photography discipline in which the primary subject are buildings and the built environment in general. These can be for indoor or outdoor environments, but with an objective of capturing the most aesthetically accurate and pleasing aspects of the subjects. It introduces the students to various types of Cameras, Lenses, accessories and other related equipment, as well as to the techniques, perspective control, lighting and light effects, as well as time lapses that can bring out the unique but accurate views of buildings. Architectural photography is a useful tool for marketing architectural work, as well as general presentations in Architectural Consultancy, Real Estate business, Magazines, and Websites etc. **Course Assessment: 100% Continuous Assessment**	**5**
	Interior Design - Elective	Interior design is the art and science of decoratively enhancing the interior space of a building or structure. An interior designer needs to have a good knowledge of historic design periods, colour theory, and classic design	**5**

		ranges. They need to have an eye for style when selecting furniture, fittings and equipment required for each unique project. Interior designers need to be good communicators and construction project managers. While architecture generally delivers the building shell and rudimentary spaces for the various functions, Interior Design then appropriates/customizes the interior spaces for their specific and respective uses. If Architecture delivers a House, then Interior Design delivers a home. It does this through the incorporation of themes, forms, materials, light, and fabrics, colour, objects, furniture, addressing issues of user comfort, aesthetic themes, acoustics, building structure, safety and general context. **Course Assessment: 100% Continuous Assessment**	
	Calligraphy - Elective	Highly stylistic form of writing that gives form to signs in an expressive, harmonious, and skilful manner. It makes use of special brushes and ink and materials as opposed to the mundane forms of writing. It involves the development of original writing fonts as well as the application of historical fonts, for high-end presentations and themes, such as inscriptions, epitaphs, drawings, certificates, and other memorial objects and documents. Calligraphy has developed into various stylistic ages in the different parts of the world, and continues to gradually evolve. **Course Assessment: 100% Continuous Assessment**	**5**
	Graphic Design - Elective	Graphic Design is the art and practice of composition of aesthetically engaging visual surfaces and forms through the use of lines, colours, shapes, textures and forms arranged to form patterns, hierarchies, rhythms, contrasts or harmonies; in a way that is overall visually affective and communicates underlying messages. It finds application in the many facets of our everyday life. It is themed and often creates the subtle backdrop against which most of our everyday graphic and visual communication is laid or conveyed. Graphic Designers make use of a very wide range of writing instruments, inks, colours, writing backgrounds, 3 dimensional objects and these have expanded into the computer based virtual space. **Course Assessment: 100% Continuous Assessment**	**5**
	LEVEL 4 – INDUSTRIAL ATTACHMENT		**100**
BAR4002	Dissertation I	The students shall select a topic of their own, to be approved, upon which they will write a proposal and proceed to undertake a supervised research throughout their level 4. Introduction; Literature Review; Research Methodology. Data Gathering and all Fieldwork, are to be completed,	**20**

		constituting the bulk of Chapters 1 – 4, is to be presented at organised periodic seminars throughout this year. Supervision shall be provided and periodic seminars shall be held to review progress during the year. In Semester 2 of the programme of study, the dissertation chapters 1 -4 are submitted for examination. A successfully completion of Dissertation I, leads into the Dissertation II course, in the first Semester of the Final Year. **Course Assessment: 100% Continuous Assessment**	
BAR4005	Architectural Office Practice	During their year of Industrial Attachment, students are required to complete log sheets as part of the training process. **Course Assessment: 100% Continuous Assessment**	**60**
BAR4006	**Safety, Health & Construction Environments II**	Introduces students to the practical implementation and compliance with the various Legislations on Safety, Health and the Environment for developing fundamental safety, health and environmental policies and plans. Playing the role of the Architect in managing safety, health and environmental aspects on construction projects. Implementation of Risk management and organizational structures and protocols that conform to safety, health and environmental requirements on sites. Students to write a SHE Report for the various for the various projects that they will have been involved in during the industrial Attachment period **Course Assessment: 100% Continuous Assessment**	**10**
BAR4001	Industrial Attachment	Architecture students are required to document into a report, their practical experiences during their participation in real life projects during their attachment to Architecture firms **Course Assessment: 100% Continuous Assessment**	**10**
	LEVEL 5 – FINAL YEAR		**110**
BAR5001	Advanced Design Studio	In Semester 1, through the medium of a major urban design/comprehensive development project for a down town area of a major city, issues of urban design, and landscaping of major public open spaces, architectural integrity, conservation of historic buildings, commercial viability and social and cultural acceptability are examined. The integration of technology, construction and services with the overall architectural and urban design concept is a major objective of the individual design projects developed by each student. The final Design Project which occupies the whole of Semester 2 is a major building or group of buildings of the student's own choice for a site also	**40**

		selected by the student, subject to the approval of the Departmental Board. The project is intended as a vehicle for the demonstration of the designer's competence in all aspects of design and technology, and is developed in depth and in detail and presented graphically. The Project Report completes the regular sequence of supporting studies required by students working on their graduation project. It is devoted to the development of the project proposal. Students shall also programme and develop a site analysis. Weekly seminars shall be held during each Semester to monitor progress. The final written report establishes the feasibility of the project and contains all the relevant research data and developmental design studies is an essential component of the Graduation Project. The Project Report is descriptive and analytical record of the development of a complex architectural project. **Course Assessment: 100% Continuous Assessment**	
BAR5103	Dissertation II	The course carries over from Dissertation I, from which all fieldwork and data collection would have been completed. Dissertation II focuses on the completion of the remaining 2 or 3 Chapters of the document under Supervision, as well as the draft document. This draft document is to be ready for periodic presentation seminars during Semester I. The final stages of the production of the dissertation are completed, and the dissertation submitted for examination at the end of the First Semester of Part 5. The successfully completed Dissertation shall be hardbound and submitted to the Department. **Course Assessment: 100% Continuous Assessment**	**20**
BAR5106	**GIS & Earth Observation**	Knowledge of Geographic Information Systems (GIS) is an increasingly sought after skill in virtually all professional fields. This specialization teaches students the skills they need to successfully use GIS software in an architectural setting. It teaches how to analyze spatial data, use cartography techniques to communicate your results in maps and Remote Sites, and to collaborate with peers in GIS and GIS-dependent fields. Students will be introduced to a range of softwares available for GIS that can be combined for various data identification and collection, analytical map development, and spatial analysis techniques. **Course Assessment: 100% Continuous Assessment**	**5**
BAR5105	**Environmental Impact Assessment**	This course introduces students to the systematic step by step decision-making process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related, socio-economic, aesthetic, cultural, biotic and abiotic impacts, both beneficial and adverse. EIA aims to predict environmental impacts at an early stage in project planning and design, find ways and means to mitigate adverse impacts, shape projects to suit the local environment and present the predictions and options to	**10**

		decision-makers. Screening, Scoping, Stakeholder analysis, Assessment and evaluation of impacts and development of alternatives, Reporting the Environmental Impact Statement (EIS) or EIA report, Review of the Environmental Impact Statement (EIS), Decision-making, Monitoring, compliance, enforcement and environmental auditing. **Course Assessment: 60% Coursework 40% Examination**	
BAR5102	Advanced Construction Technology	The Course investigates a range of innovative building construction systems, their applications and techniques generally, and with specific reference to Zimbabwe: industrialised building systems; portal frames; claddings to framed structures; pre-stressed concrete; and innovative roof structures - space frames, conoid shell roofs, folded plate roofs, tensile structures, etc. **Course Assessment: 60% Coursework 40% Examination**	**10**
BAR5206	Issues of Sustainable Design	This Course introduces the students to the global issues of sustainability, and the concepts and issues of environmental planning, ecological awareness, and conservation with regards to the impacts of human activities and strategies for coping with the changing environment. This Course assesses the contribution of the individual building to the environmental ills; and a deliberate refocus on minimising and mitigating those negative impacts. Using Case Studies, students learn to design building ecosystems, and to retrofit existing buildings to improve their performance. It introduces students to environmental performance standards such as BREEM; LEED; GreenStar; etc. and their assessment criteria. Environmental Impact Assessment in Zimbabwe, the objectives, statutory provisions, techniques and analyses; mitigatory measures; and project implementation. **Course Assessment: 100% Coursework**	**10**
BAR5104	Professional Practice	This Course provides a lecture/seminar format to discuss the historic development of the profession, role of the architect in contemporary society, current forms of practice and emerging trends, contractual relationships, contract law, ethical responsibility, project management, office management and promotion. Case Studies are used to demonstrate the practical application of information as well as analytical techniques to strengthen design and planning abilities. **Course Assessment: 60% Coursework 40% Examination**	**5**
BAR5202	**Final Design Project Report**	This Course involves the documentation of the entire design process leading up to the Graduation Design Project which must provide evidence of the student of the wholesome understanding of the design process and procedures, Environmental, Legal, Philosophical Formal, Spatial Conceptualization, as well as rationale for all the design designs reached	**5**

		during the buildup of their Graduation Design Project. Students are required to consult their Studio Supervisors during the build up of their final design report. The successfully completed Design Project Report shall be hardbound and submitted to the Department. **Course Assessment: 100% Coursework**	
BAR5204	Topics in Urban Design - Elective	This course offers a multidisciplinary approach to the understanding of the political, socio-economic and technological framework of urban systems and its dynamic interrelationships. Understanding the typologies and structure of the City. Challenges and prospects of the current cities: issues such as urban sprawl, water and energy, economic challenges, initiatives under the global development agendas such as the smart city, walkable city, New Urbanism, Green City Movement, etc Urban as an existing built up fabric. Building an understanding of the role of the architect, and regulations governing the operation, performance and maintenance and replacement of the stock of existing buildings, urban grain. **Course Assessment: 100% Coursework**	**5**
BAR5203	Topics in Rural Design - Elective	This course offers a multidisciplinary approach to the understanding of the political, socio-economic and technological framework of rural systems and its dynamic interrelationships. Understanding the typologies and structure of the rural areas. The developmental objectives of rural areas. Interdependency networks between rural and urban areas. Theories and Approaches to rural development eg Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), Community Design, The role of government agencies, non-governmental agencies, private initiatives as well traditional leadership in the development of rural areas. Developmental controls vs. evolution and urbanization of rural areas, **Course Assessment: 100% Coursework**	**5**

Name of Programme	**MASTER OF SCIENCE DEGREE IN CONSTRUCTION PROJECT MANAGEMENT**
Duration	18 months for full time and 36 months for part time
Minimum Credit Load	270
Maximum Credit Load	270
ZNQF Level	Level 9

Entry Requirements	Tick
Normal Entry: An honours degree in the following disciplines: Quantity Surveying, Architecture, Building Economics and Civil Engineering. Other programmes offered in the Built Environment shall be considered on individual merits. A minimum overall pass of lower second class (2.2). Have at least one year post qualification experience.	√
Special Entry	
Mature Entry	

LEARNING OUTCOMES
1. Identify project goals, constraints, control needs deliverables, performance criteria, and resource requirements in consultation with stakeholders.
2. Implement project management knowledge, processes, lifecycle and the embodied concepts, tools and techniques in order to achieve project success

Programme Assessment (Describe and indicate percentage [%])	
Coursework	60%, 100%
By thesis	
Written Examinations	40%
Other	

Basis of Allocating Credits		
Activity	**Time in Hours**	**Credits**
Contact Time/Time on task		
Lectures	366	36.6
Tutorials	24	2.4
Field Visits	107	10.7
Laboratory Work		
Workshops		
Work Integrated Learning (WIL)/Industrial Attachment/Clinical Practice/Teaching Practice etc.		
Scheduled Assessment Time		
Final written examinations	27	2.7
In-class tests		
Online Testing and Examinations		
Seminar Presentations		
Independent Study Time		
Preparation for scheduled sessions	128	12.8
Reading	705	70.5
Written assignments	965	96.5

Revision Work	74	7.4
Maximum Credits for the 80% Courses /Modules Threshold	**270**	

NB: Please refer to the ZIMCATS Document for further guidance

Summary of Modules arranged in logical sequence, and allocation of Notional Hours and Credits	
Module name	**Total Notional Study Hour Credits**
Part I (Total 90 Credits)	
BCM 5101 Contracts Procurement and Administration	20
BCM 5102 Construction Project Planning and Management	30 20
BCM 5103 Project Cost and Financial Management	20
BCM 5104 Policy and Project Environment for Construction	20
	20
Part II (Total 100 Credits)	20
BCM 5201 Research Methods	20
BCM 5206 Safety, Health and Construction Environments	
BCM 5208 Contracts Law	20
BCM 5212 Construction for Sustainability	20
ELECTIVES (Students to select 1 elective)	80
BCM 5213 Project management integrative Studies	
BCM 5214 Design Management	
Part III (Total 80 Credits)	
BCM 6100 Dissertation	

MODULE	**SYNOPSIS**
BCM 5101 **Contracts Procurement and Administration**	This module aims to provide an understanding of the principles required for the efficient development, negotiation, management and administration of contracts in the project including provision for and treatment of sub-contractors The objectives are to determine procurement requirements, establish agreed procurement processes, conduct procurement process activities, implement contracts and manage contract finalization procedures.
BCM 5102 **Construction Project Planning and Management**	This module shall cover project planning and control, project internal and External Environment, Project Planning and Development, Project Management and Systems Theory, Project Organisation and Administration, The Project Manager's Role, Project Quality Management Principles, Project Appraisal, Project Management and Management Techniques, Project Practice and Management. The module forms the basis of managing the construction process. The aim is to take students through the project execution process from the time the project starts right up to the time the project closes. Areas to be covered include project start up, project execution plan, material management, construction productivity, cost control, resource allocation, resource estimation, forecasting and availability, supply management and project close up, information technology and equipment technology. The need to possess strong skills in organizational planning, team building, acquire resources and to undertake projects within the stipulated time are the cornerstone of resources management. The module provides students with a variety of tools and techniques of dealing with human resources, time management, procurement techniques, construction economics, plant and equipment. These are critical inputs in Project Management since they are the key determinants to project completion.
BCM 5103	The module provides students with competency in cost and financial management principles, theory and practice as applicable to the construction industry, cost budgeting,

Project Cost and Financial Management	cost planning, cost monitoring and control, project appraisal, capital investment appraisal techniques and their suitability to different client requirements.
BCM 5104 **Policy and Project Environment for Construction**	The aim of the module is to provide a working knowledge on and critic of local, regional and international policies that support the construction industry.
BCM 5201 **Research Methods**	The module consists of comprehensive essays of Project Management topic of the student's choice. Areas to be covered shall include; foundation of empirical Research, the scientific Approach, Conceptual Foundation of Research, Ethics in research, design, and structuring research, sampling and sample designs, data collection, observation methods and questionnaire construction. The module provides theoretical basis on areas such as secondary Data Analysis, Data Processing and Analysis, Data Preparation and Analysis, the Universal Distribution, Bivariate Analysis; Control, Elaboration and Multivariate Analysis, Index Construction and Scaling Methods; Inferences.
BCM 5206 **Safety, Health and Construction Environment**	The module covers areas such as understanding the work and health standards in construction environments; construction safety, based on constructions codes and safety standards and personal protection, equipment and accident investigation.
BCM 5208 **Contracts Law**	The module covers introduction to the legal system, law of contract; law of restitution, contract formation, and contractual terms, misrepresentation, duties and undue influence, illegal contracts, discharge and contractual obligation, contracts and negotiations, conflict management, law of purchase and sale, credit agreement law and arbitration.
BCM 5212 Construction for Sustainability	The module covers sustainable development dimensions and their integration into the construction industry. It also outlines the sustainable construction principles, goals,

	processes and technology as well as sustainable construction practices in the construction industry.
BCM 5213 **Project management integrative Studies**	Students are expected to simulate real life situations and apply project management techniques to a project throughout the project life cycle. They must be able to prepare marketing brochures, project briefs, and project proposals, carry out feasibility and project appraisal reports and produce professional services contracts.
BCM 5214 **Design Management**	The module covers the function of design management in the project management process. Appreciation and the importance of Client needs in devising and applying techniques for the design of construction projects is undertaken.
BCM 6100 **Dissertation**	Students are required to select a dissertation topic of their own choice with tutorial guidance, and to prepare a plan of work for reading, survey and documentation, research and analysis, and writing, editing and production stages of its execution. The dissertation shall on its own constitute the final Part of the programme.

Name of Programme	**MASTER OF PHILOSOPHY IN CONSTRUCTION MANGEMENT**
Duration	Minimum of 2 years and maximum of 4 years
Minimum Credit Load	240
Maximum Credit Load	240
ZNQF Level	Level 9

Entry Requirements	Tick
Normal Entry: An honours degree in the following disciplines: Construction Management, Quantity Surveying, Architecture, Building Economics, Property Management and Civil Engineering. Other programmes offered in the Built Environment shall be considered on individual merits. A minimum overall pass of Lower second class (2.2).	√
Special Entry	
Mature Entry	
Other (indicate)	

LEARNING OUTCOMES
1. Understand research techniques and processes for problem solving
2. Undertake and complete a construction related robust and rigorous research

Programme Assessment (Describe and indicate percentage [%])	
Coursework	
By thesis	100%
Written Examinations	
Other	

Basis of Allocating Credits		
Activity	**Time in Hours**	**Credits**
Contact Time/Time on task		

Lectures		
Tutorials		
Field Visits		
Laboratory Work		
Workshops	50	5
Supervision	50	5
Scheduled Assessment Time		
Final written examinations	200	20
In-class tests		
Online Testing and Examinations		
Seminar Presentations	100	10
Independent Study Time		
Preparation for scheduled sessions		
Reading	2000	200
Written assignments		
Revision Work		
Maximum Credits for the 80% Courses /Modules Threshold	**240**	

Summary of Modules arranged in logical sequence, and allocation of Notional Hours and Credits	
Module name	**Total Notional Study Hour Credits**

(Total 240 Credits) BCM 7001 Thesis	240

MODULE	**SYNOPSIS**
BCM 7001 **THESIS**	Focus is on preparation of a thesis. With practice and lectures, students shall choose topics of their choice and prepare a thesis individually. Examination also includes acceptance of a peer reviewed journal article.

Name of Programme	**MASTER OF PHILOSOPHY IN CONSTRUCTION ECONOMICS**
Duration	Minimum of 2 years and maximum of 4 years
Minimum Credit Load	240
Maximum Credit Load	240
ZNQF Level	Level 9

Entry Requirements	Tick
Normal Entry: An honours degree in the following disciplines: Construction Management, Quantity Surveying and Building Economics. A minimum overall pass of Lower second class (2.2).	√
Special Entry	
Mature Entry	
Other (indicate)	

LEARNING OUTCOMES
1. Understand research techniques and processes for problem solving
2. Undertake and complete a construction related robust and rigorous research

Programme Assessment (Describe and indicate percentage [%])			
Coursework			
By thesis	100%		
Written Examinations			
Other			
Basis of Allocating Credits			
Activity		**Time in Hours**	**Credits**
Contact Time/Time on task			
Lectures			

Tutorials		
Field Visits		
Laboratory Work		
Workshops	50	5
Supervision	50	5
Scheduled Assessment Time		
Final written examinations	200	20
In-class tests		
Online Testing and Examinations		
Seminar Presentations	100	10
Independent Study Time		
Preparation for scheduled sessions		
Reading	2000	200
Written assignments		
Revision Work		
Maximum Credits for the 80% Courses /Modules Threshold	**240**	

Summary of Modules arranged in logical sequence, and allocation of Notional Hours and Credits	
Module name	**Total Notional Study Hour Credits**

(Total 240 Credits) BCE 7001 Thesis	240

MODULE	**SYNOPSIS**
BCE 7001 **THESIS**	Focus is on preparation of a thesis. With practice and lectures, students shall choose topics of their choice and prepare a thesis individually. Examination also includes acceptance of a peer reviewed journal article.

Name of Programme	**MASTER OF SCIENCE IN URBAN DESIGN**
Duration	1 and 1/2 years
Minimum Credit Load	312
Maximum Credit Load	320
ZNQF Level	Level 9

Entry Requirements	Tick
Normal Entry: An honours degree in the following disciplines: Architecture, Rural and Urban Planning, Property Development and Estates Management and Civil Engineering. Other programmes offered in the Built Environment shall be considered on individual merits. A minimum overall pass of lower second class (2.2).	√
Special Entry	
Mature Entry	
Other (indicate)	

LEARNING OUTCOMES
Demonstrate knowledge and understanding of Urban Design fundamentals
Apply value chain in terms of practice, technology applications and the associated products
Demonstrate knowledge on capitalisation on all situations that have the potential for development into business and entrepreneurial ventures
Share and spread knowledge through formal teaching and other informal channels such as seminars, workshops, exhibitions, symposia, etc.
Yield supervisory and management skills of urban environs

Develop best practice and technologies that enhance efficiencies and outputs of the sustainable city development.

Programme Assessment (Describe and indicate percentage [%])	
Coursework	50%, 100%
By thesis	
Written Examinations	50%
Other	

Basis of Allocating Credits		
Activity	**Time in Hours**	**Credits**
Contact Time/Time on task		
Lectures	576	57.6
Tutorials	40	4.0
Field Visits	88	8.8
Practical	1254	125.4
Scheduled Assessment Time		
Final written examinations	24	2.4
In-class tests	16	1.6
Orals	23	2.3
Practicals	19.9	1.99
Independent Study Time		
Preparation for scheduled sessions	227	22.7
Reading	272	27.2
Written assignments	242	24.2
Revision Work	214	21.4
Maximum Credits for the 80% Courses /Modules Threshold	**312**	

NB: Please refer to the ZIMCATS Document for further guidance

Summary of Modules arranged in logical sequence, and allocation of Notional Hours and Credits	
Module name	**Total Notional Study Hour Credits**
STAGE I BUD 5101 Urban Design Theory BUD 5102 Policy Analysis for Urban and Infrastructure Development and Management BUD 5103 Ecological-based Design BUD 5104 Urban Design Studio I BUD 5105 Urban Design Methods and Techniques	**88 CREDITS** 16 Credits 14 Credits 14 Credits 30 Credits 14 Credits
STAGEII BUD 5202 Research Methods for Urban Design BUD 5203 Urban Design Studio II BUD 5204 Issues in Contemporary Urban Design BUD 5205 Application of Geographic Information Systems in Urban Design	**74 CREDITS** 12 Credits 30 Credits 18 Credits 12 Credits
STAGE III BUD 6101 Urban Design Project BUD 6102 Dissertation	**140 CREDITS** 60 Credits 80 Credits
* One e*lective will be offered per semester provided a minimum of five students sign up for the module and are also subject to the availability of resources and teaching staff.* **BUD 5106 Transportation Planning and Management** **BUD 5107 Project Planning and Management** **BUD 5108 Professional Practice for Urban Design**	10 Credits 10 Credits 10 Credits

MODULE SYNOPSES (For all the 80% Modules Threshold. **NB:** Synopses are very central in that these are summaries of the key concepts to be taught in each module.

MODULE	SYNOPSIS
BUD 5101 Urban Design Theory	This course covers theories that inform urban design, and main economic forces that lead to the existence of cities and regional agglomeration, theories of composition of mass and space, theories of collage city, space syntax and finding los space in explaining physical shape of cities. It studies the economics of cities and urban problems by understanding the effects of geographic location on the decisions of individuals and firms.
BUD 5102 Policy Analysis for Urban and Infrastructure Development and Management	Against relevant aspects of land use theory and implications for site planning, the course introduces the principles and practice of site planning and infrastructure design for large urban developments. Topics include reclamation, land use and density thresholds, settlement capacity, infrastructure master planning, utilities planning, site layout and future design trends.
BUD 5103 Ecological Based Design	The course aims at introducing students to issues of environmental awareness with regards to the impacts of human activities and strategies for coping with the changing environment. The course is conducted through lectures, case studies and seminars. The following broad topics are relevant: the ecology, preservation, conservation, reliance and sustainability of the environment; The design of environmental spaces both external and internal spaces versus natural environment. Continuous Assessment- 100%
BUD 5104 Urban Design Studio I	Introduction to urban design graphics and computer aided design: an introduction to basic drafting, graphics and computer-related tools and techniques in professional practice. The module shall cover: two urban design projects **Project I** a series of sessions encompassing practical drawing and sketches of urban design proposals for selected sites in Zimbabwe.; and **Project II** A group project which will normally be a real-life large-scale urban design and development project involving land reclamation and infrastructure provision leading to a 3-D built form. Designed to professional standards involving relevant urban

	design theory and implementation criteria and conducted with participation of professionals in both public and private sectors. Continuous Assessment- 100%
BUD 5105 Urban Design Methods and Techniques	The course covers basic theory and practice of urban design. Topics include history of urban form; buildings and spaces; urban design analysis; urban design approaches; efficiency of urban design and evaluation criteria; case studies. A student shall not proceed to do Principles and Practice of Urban Design II before clearing this course. Continuous Assessment- 100%
BUD 6101 Urban Design Project	This is an in-depth urban design project based on a specific urban case study. The expected work at this level is of advanced standing and allows an in-depth exploration of complex design problems. In addition, it must be conducted in collaboration with city agencies addressing identified needs. Continuous Assessment- 100%
BUD 5202 Research Methods for Urban Design	The course focuses on various methods and techniques fundamental in data collection, analysis and presentation. The overall objective of the course is to impart skill to students that can assist them in preparing technical reports and dissertations. Continuous Assessment- 100%
BUD 5203 Urban Design Studio II	Urban design project 3: a series of sessions encompassing the practical management and implementation of urban design proposals involving larger sites, considering issues such as land acquisition, planning approvals, concept development, financing, the consultancy team, construction, marketing among others. Continuous Assessment- 100%
BUD 5204 Issues in Contemporary Urban Design	This is a cross cutting course in which seminars introduce students to the designing and management of urban places. The focus is on issues arising in current urban design practice. The subject matter includes current contexts for urban design; the role of urban design in the development process; different urban design roles and levels of influence; public sector urban design, framework plans, design guidelines and implementation strategies. The module addresses urban economic analysis in the planning and development of urban areas from the point of view of practitioners and community studios

	in the field as well as feedbacks. During the course of the semester, each student will prepare a thesis proposal. The course emphasizes citizen and community participation frameworks in urban planning, design and sustainable development and management. Continuous Assessment- 100%
BUD 5205 Application of Geographic Information Systems in Urban Design	This course builds on spatial land-use analysis techniques. Focus is on the advanced theory and practice of Geographic Information Systems (GIS); GIS applications; design and implementation of GIS applications.
BUD 6102 Dissertation `	This is an in-depth investigation of urban design or development issues which relate directly to the physical planning problems and potentials of urban areas. The topic chosen should be both academic and practical in nature and a report not exceeding 20,000 words or equivalent is required.
Elective Courses	Only two electives will be selected from the following list: (Candidates will not be permitted to choose elective courses they have already studied).
BUD 5106 Transportation Planning and Management	Focus is on the traditional transport study which focuses on trip generation, trip distribution, modal distribution and trip assignment; land-use modeling; the town and regional planner's contribution to transport planning.
BUD 5107 Project Planning and Management	This course will cover a wide range of issues relating to project planning and control, project internal and external environment, project planning and development, project organization and administration, the project manager's role, project quality management principles, project appraisal, project management techniques, project practice and management. Project management knowledge areas such as cost, scope, time, risk, quality, performance, communication and so forth.
BUD 5108 Professional Practice for urban Design	This course examines practice management and project management in the built environment professions. Topics in practice management include: ethical practice; the character and operation of practices; legal requirements; corruption; running a business; professional memberships and its registration; risk and professional liability; and personal career planning. Topics in project management include project stages; procurement and feasibility; statutory requirements; management

	of time, cost and quality; and contracts and contract administration in private and public realms. Alternative and innovative pathways through the profession are also considered.

Name of Programme	MASTER OF ARCHITECTURE DEGREE
Duration	18 months
Minimum Credit Load	270
Maximum MBK/S Credit Load	215
Maximum Credit Load	270
ZNQF Level	9

Entry Requirements	Tick
Normal Entry (Bachelor of Science Honours Degree in relevant fields)	√
Special Entry	
Mature Entry	
Other (indicate)	

LEARNING OUTCOMES:
The main focus of the Master of Architecture is architectural design and practice. The degree provides graduates with:
Design skills that will contribute to the improvement of the built environment; the cognitive, creative skills to develop and evaluate a design concept that demonstrates the exercise of theoretical reflection, critical choice, imagination and professional responsibility, through the exploration, testing and refinement of different technical and aesthetic alternatives; the technical and creative skills to produce a design that demonstrates an appreciation of economic factors, environmental issues, social and cultural issues, building systems and materials.
A grounding in the rich lessons of architectural history, theory, technology and contemporary practice is enabling them to develop an innovative architecture, relevant to time and place, people and culture.
Manage an architectural practice and work within teams; a knowledge of current practice contexts, including environmental, technological, regulatory and project-delivery systems. The technical and communication skills to generate design and contractual documentation that conveys information to both specialist and non-specialist audiences, and that enables a design project to be realised. Involvement in the management of construction works and building administration.
Use resources, materials and technologies to produce responsible and sustainable architecture. Knowledge of research and design-research methodologies and methods relevant to the discipline of architecture.

Programme Assessment (Describe and indicate percentage [%])	
Coursework	100%
By thesis	
Written Examinations	
Other	100% are Continuous assessment-based modules

Summary of Modules arranged in a logical sequence, and allocation of Notional Hours and Credits	
Module name	**Credits**
LEVEL 1	**110**
Design Studio	30
Research for Architectural Design	20
Professional Practice and Management	20
Advanced Architectural Theory	20
Construction Project Planning & Management	20
LEVEL 2	**70**
Design Studio	30
Policy Analysis for the Built Environment	20
Safety, Health & Construction Environment	20
LEVEL 3	**35**
Design Studio	35

MODULE	SYNOPSIS
Design Studio	The Design Studio is an opportunity for graduate students to explore and develop their understanding of and competence in aspects of architecture which are of particular interest to them, with the tutorial guidance of staff and visiting professional architects. Initially, students must identify the architectural issues which are to form the basis for their final projects. When the nature and scope of those issues have been identified, then the appropriate building type and location can be identified. The objectives of the module are to test the ability of the students to identify and define architectural issues and design opportunities and to plan the programme for the

	completion of the project within the time frame of the academic year. The self-selected structural problem must contain sufficient complexity and potential richness opportunity to enable the students to reveal and demonstrate their knowledge, competence and maturity as architectural designers, and their ability to integrate theoretical design issues with technological substantiation at a high level. Students shall be required to present and defend their final projects before a panel of staff and invited critics and submit a design project prospectus.
Research For Architectural Design	Within the architectural profession, design work is often preceded and substantiated by research studies in a variety of fields and disciplines. This module provides the student with an introduction to and overview of the significant areas of design research and offers appropriate methodologies. Through the study of professional examples and through exercises that focus on and apply specific methodologies, the students carry out relevant research for their Design Thesis Studio project and equip themselves for their future role as design professionals. The module includes an overview of the following major areas of design research. Urban Analysis (site and context), Historical Precedent and Typology, Anthropological, Sociological and Behavioural Studies; Technological Strategies; and Project management and Cost Control.
Professional Practice And Management	The module introduces the student to the contractual, administrative managerial and legal responsibilities of and constraints on the practising architect in principle, and registered architectural practices in Zimbabwe. Issues of professional indemnity insurance, arbitration and litigation are examined. With specific reference to the student's final project of Design Thesis Studio, students are assigned three pieces of coursework: Pre-contract Programme; Post-Contract Programme; Cost Plan including simulated office.
Advanced Architectural Theory	Provides a lecture/seminar series format to discuss the various contemporary theories in architecture, urbanism and general human settlements development, and the changing role of the architect throughout these emerging demands and changing contexts. Case Studies are used to demonstrate the practical application of the information as well as analytical techniques to strengthen design and planning abilities. The module provides a theatre for

	discussions around the core issues of focus of the discipline of architecture, away from the traditional visual emphasis, to that of performance in terms of Form, Space, Structure, Materials, Environments, Sociology, Economics, Heritage, Conservation and to provide for dynamic human aspirations.
Policy Analysis For The Built Environment	The aim of the module is to provide a working knowledge on and critic of local, regional and international policies that support the construction industry. Continuous Assessment- 100%
Construction Project Planning And Management	This module shall cover project planning and control, project internal and External Environment, Project Planning and Development, Project Management and Systems Theory, Project Organisation and Administration, The Project Manager's Role, Project Quality Management Principles, Project Appraisal, Project Management and Management Techniques, Project Practice and Management. The module forms the basis of managing the construction process. The aim is to take students through the project execution process from the time the project starts right up to the time the project closes. Areas to be covered include project start up, project execution plan, material management, construction productivity, cost control, resource allocation, resource estimation, forecasting and availability, supply management and project close up, information technology and equipment technology. The need to possess strong skills in organizational planning, team building, acquire resources and to undertake projects within the stipulated time are the cornerstone of resources management. The module provides students with a variety of tools and techniques of dealing with human resources, time management, procurement techniques, construction economics, plant and equipment. These are critical inputs in Project Management since they are the key determinants to project completion.
Safety, Health & Construction Environment	The module covers areas such as understanding the work and health standards in construction environments; construction safety, based on constructions codes and safety standards and personal protection, equipment and accident investigation.

Name of Programme	MASTER OF PHILOSOPHY IN CONSTRUCTION MANAGEMENT
Duration	Minimum of 2 years and maximum of 4 years
Minimum Credit Load	240
Maximum Credit Load	240
ZNQF Level	9

Entry Requirements	Tick
Normal Entry: An honours degree in the following disciplines: Construction Management, Quantity Surveying, Architecture, Building Economics, Property Management and Civil Engineering.	√
Special Entry	
Mature Entry	
Other (indicate) Other programmes offered in the Built Environment shall be considered on individual merits.	

LEARNING OUTCOMES
1. Understand research techniques and processes for problem solving
2. Undertake and complete a construction related robust and rigorous research

Programme Assessment (Describe and indicate percentage [%])	
Coursework	
By thesis	100%
Written Examinations	
Other	

Summary of Modules arranged in logical sequence, and allocation of Notional Hours and Credits	
Module name	**Credits**
LEVEL 1 Thesis	**240** 240

MODULE	SYNOPSIS
THESIS	Focus is on preparation of a thesis. With practice and lectures, students shall choose topics of their choice and prepare a thesis individually. Examination also includes acceptance of a peer reviewed journal article within the field of study.

Name of Programme	MASTER OF PHILOSOPHY IN CONSTRUCTION ECONOMICS
Duration	Minimum of 2 years and maximum of 4 years
Minimum Credit Load	240
Maximum Credit Load	240
ZNQF Level	9

Entry Requirements	Tick
Normal Entry: An honours degree in the following disciplines: Building Economics, Construction Management and Quantity Surveying.	√
Special Entry	
Mature Entry	
Other (indicate)	

LEARNING OUTCOMES
1. Understand research techniques and processes for problem solving
2. Undertake and complete a construction related robust and rigorous research

Programme Assessment (Describe and indicate percentage [%])	
Coursework	
By thesis	100%
Written Examinations	
Other	

Summary of Modules arranged in logical sequence, and allocation of Notional Hours and Credits	
Module name	**Credits**
LEVEL 1 Thesis	**240** 240

MODULE	SYNOPSIS
THESIS	Focus is on preparation of a thesis. With practice and lectures, students shall choose topics of their choice and prepare a thesis individually. Examination also includes acceptance of a peer reviewed journal article within the field of study.

Name of Programme	MASTER OF PHILOSOPHY IN PROPERTY STUDIES

Duration	Minimum of 2 years and maximum of 4 years
Minimum Credit Load	240
Maximum Credit Load	240
ZNQF Level	9

Entry Requirements	Tick
Normal Entry: An honours degree in the following disciplines: Property Development and Estate Management, Construction Management, Quantity Surveying and Building Economics.	√
Special Entry	
Mature Entry	
Other (indicate)	

LEARNING OUTCOMES
1. Understand research techniques and processes for problem solving
2. Undertake and complete a construction related robust and rigorous research

Programme Assessment (Describe and indicate percentage [%])	
Coursework	
By thesis	100%
Written Examinations	
Other	

Summary of Modules arranged in logical sequence, and allocation of Notional Hours and Credits	
Module name	**Total Notional Study Hour Credits**
LEVEL 1 Thesis	**240 Credits** 240

MODULE	SYNOPSIS
THESIS	Focus is on preparation of a thesis. With practice and lectures, students shall choose topics of their choice and prepare a thesis individually. Examination also includes acceptance of a peer reviewed journal article within the field of study.

Name of Programme	Master of Landscape Architecture
Duration	18 months
Minimum Credit Load	270
Maximum MBK/S Credit Load	215
Maximum Credit Load	270
ZNQF Level	9

Entry Requirements	Tick
Normal Entry (Bachelor of Science Honours Degree in relevant fields)	√
Special Entry	
Mature Entry	
Other (indicate)	

LEARNING OUTCOMES
Demonstrate knowledge and understanding of Landscape Architecture fundamentals
Apply value chain in terms of practice, technology applications and the associated products
Capitalise on all situations that have the potential for development into business and entrepreneurial ventures
Share and spread knowledge through formal teaching and other informal channels such as seminars, workshops, exhibitions, symposia, etc.
Yield supervisory and management skills of urban environs
Develop best practice and technologies that enhance efficiencies and outputs of the sustainable city development.

Programme Assessment (Describe and indicate percentage [%])	
Coursework	50% 100%
By thesis	
Written Examinations	50%
Other	

Summary of Modules arranged in logical sequence, and allocation of Notional Hours and Credits	
Module name	**Credits**
LEVEL 1	**70**
Landscape Architecture Studio I	30
Landscape Architecture Theory and Practice	10
Landscape Sciences	10
Landscape Construction I	10
History of Design in the Environment	10
LEVEL 2	**70**
Landscape Architecture Studio II	30
Rural and Urban Landscape Planning	10
Landscape Construction II	10
Design with Plants and Management of Organic Landscapes	10
Research Methods in Urban Design	10
LEVEL 3	**75**
Landscape Design Studio Project	35
Dissertation	40

MODULE	SYNOPSIS
Landscape Architecture Studio I	This is a timetabled studio-based module involving, briefing and critiques. These will include abstract design exercises, and life design projects for up to 6 weeks duration. The focus is on introductory projects that help to understand fundamental design compositional principles and developing a hand and

	digital-based approach to exploring design problems
Landscape Architecture Theory and Practice	This module shall be bases on lectures and seminars in natural processes, social processes, methodology, technology and values. The module explains the modern designed landscape as a distinct mode of cultural production. It examines design treaties, manifestos and contemporary theoretical writings from outside the design field.
Landscape Sciences	This module shall be based on lectures and practicals in basic geology, soils, ecology, and horticulture. Field skills that are necessary for reading the land such as identification of plant communities, orientation, geology, hydrology, topography and soils will also be explored. Using this knowledge, site design issues will be explored and how they relate to be urban and non-urban environments.
Landscape Construction I	The module shall be based on lectures site visits and exercises. Focus will be on site investigation, earthworks and grading, land drainage, roads paving and hard surfaces, fences, gates and walls. It empowers students with tools and skills for exploring, designing and critiquing the interrelationships of sites and the dynamic ecological systems that shape them.
History of Design in the Environment	Lectures in the history of design with focus on African, European, and Eastern examples of design and the environment concepts, historic purposes of designs, religious, symbolic display and function. Understanding of design concepts will be from the scale of the city, developing an understanding of the design process and compositional strategies in architectural and landscape architecture.
Landscape Architecture Studio II	This is an in-depth urban design project based on a specific urban case study. The expected work at this level is of advanced standing and allows an in-depth exploration of complex design problems. In addition, it must be conducted in collaboration with city agencies addressing identified needs.
Rural and Urban Landscape Planning	Lectures and essays in organization of land uses, settlement patterns, communications based on scientific data, site analysis and aesthetic and social considerations
Landscape	Lectures, site visits and set exercises with focus on simple

Construction II	structures, pools and water features, uses and detailing of timbers, metal, bricks, stone and concrete
Design with Plants and Management of Organic Landscapes	Lectures on the use of plans for functional purposes and aesthetic effect, management of plant and sites through time to retain design quality and achieve a sustainable environment. Focus will be on plant will be on plant characteristics i.e. horticultural/ plant design issues and recording plant and landscapes insitu from the point view of the designer and the naturalist. Emphasis will also be on understanding of plants (primarily native) from the perspective of their successional attributes, their hydri – mesic – yeric affiliation and their relative position within a watershed
Landscape Design Studio Project	This is an in-depth urban design project based on a specific rural or urban case study
Dissertation `	This is an in-depth investigation of urban design or development issues which relate directly to the physical planning problems and potentials of urban areas. The topic chosen should be both academic and practical in nature and a report not exceeding 20,000 words or equivalent is required.