DUT
DURBAN
UNIVERSITY OF
TECHNOLOGY

FACULTY OF
ENGINEERING
& THE BUILT
ENVIRONMENT

2018 HANDBOOK
ARCHITECTURE

HANDBOOK FOR 2018

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

DEPARTMENT of ARCHITECTURE

Vision

Developing Architectural Minds to respond to context and inspire society.

Mission

We shall adopt a learning paradigm focussing on finding and solving challenges in the built environment. We endeavour to achieve this through broad collaboration, and the appropriate use of technology.

NATURE OF THE ARCHITECTURAL PROFESSION

The Architectural Technologist or Senior Architectural Technologist may be self-employed upon registration with the South African Council for the Architectural Profession (SACAP) or may be employed by an architectural practice in which he /she would be involved in the technical aspects of architectural design and documentation. Responsibilities, however, are broader than drawing and technical documentation and include assistance in architectural design, materials, colours, layouts, site analysis, taking levels on site, measuring existing features and buildings, studies on historical buildings for further use, model making and contract administration. Routine office hours are usually maintained although extra effort will be expected if deadlines are to be met.

In order to make a success of the course and a career in this field, prospective candidates should possess an aptitude for innovative design, construction technology and the ability to grasp technical concepts related to construction methods.

Although the greatest numbers of Architectural Technologists are employed by private architectural firms, employment opportunities also exist with the Public Service, Local Authorities and other building drawing offices. Employment in the building industry is always closely related to the economic situation of the country, thus job opportunities vary accordingly.

What is a University of Technology?

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

CONTENTS OF THIS HANDBOOK

IMPORTANT NOTICE

The departmental rules in this handbook must be read in conjunction with the Durban University of Technology's General Rules contained in the current General Handbook for Students. Except where otherwise laid down n the rules for the Department for specific instructional programmes, the General Rules for all courses shall apply to all instructional programmes in this department.

PLEASE NOTE THAT SMOKING IS BANNED IN THE BUILDING. IF YOU ARE CAUGHT SMOKING THE UNIVERSITY WILL INSTITUTE DISCIPLINARY PROCEEDINGS.

1. CONTACT DETAILS

All Departmental queries to:

Secretary:	Ms Nomtha Sibisi
Tel No:	(031) 373 2857
Fax No:	(031) 373 2006
e-mail:	nomthandazos@dut.ac.za
Location of Department:	S5 Level 5 - Steve Biko Campus

All Faculty queries to: Faculty of Engineering & The Built Environment.

Faculty officer:	Mrs Neetha Singh
Tel No:	(031)373 2548 / 2717
Fax No:	(031)373 2719
e-mail:	singhn@dut.ac.za
Location of Faculty office:	S4 Level 3 – Steve Biko Campus

Executive Dean: Professor Theo Andrew

Tel No:	(031)373 2762
Fax No:	(031)373 2724
e-mail:	prenitan@dut.ac.za
Location of Executive Dean's office:	Steve Biko Campus Block S6 level 5

Departmental website:

http://www.dut.ac.za/faculty/engineering/architectural_technology/

2. STAFFING

HOD:	Mr L. Du Plessis, B.A.S, M. Arch (UKZN), MSAIA
Senior Lecturer:	Mr P Da Costa, B.Bldg.A (UPE), B.Arch (UPE), Arch S.A.
Lecturers:	Mr K. Orie, NHD. Arch (MLST) Mr T Moahloli, B Arch, (UCT) Mrs R J McCarthy, NHD. Arch (TN) Ms. Kyria van Soelen, B Arch, M Arch (UKZN)
Junior Lecturer:	Ms. K. Matangana, ND: Architectural Technology (DUT), B.Tech: Architectural Technology (DUT)
Secretary:	Ms N M Sibisi, N.Dip Office Mngt & Tech, B.Tech Business Admin (DUT)

3. PROGRAMMES OFFERED BY THE DEPARTMENT

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

Qualification	SAQA NLRD Number
*National Diploma: Architecture (NDARC3)	72211
Bachelor of Technology: Architecture (BTARC1)	72113
*Bachelor of the Built Environment (Architecture)	101515

NOTE:

The Department will be running the Bachelor of the Built Environment (Architecture). The National Diploma: Architecture will not be offered for first time entrants from 2018 onwards.

Purpose of the Bachelor of the Built Environment (Architecture)

The Bachelor of the Built Environment (Architecture) (BBE (Architecture)) qualification is aimed primarily at professional registration, but is also intended to provide a means by which such basic professional registration can be the starting point for registration as a Professional Architect. The qualification provides students with a sound knowledge base in the discipline of architecture and the ability to apply their knowledge and skills to particular career or professional contexts, while equipping them to undertake more specialised and intensive learning. This learning programme has a strong professional and career focus and holders of this qualification are normally prepared to enter a specific niche in the architectural profession.

Specifically the purpose of the learning programme is to build the necessary knowledge, understanding, abilities and skills required for further learning towards becoming a competent practicing architectural technologist. This qualification provides:

- Preparation for careers in architecture itself and areas that potentially benefit from architectural skills, for achieving technological proficiency and to make a contribution to the economy and national development;
- The educational base required for registration as a Candidate Architectural Technologist with the South African Council for the Architectural Profession (SACAP).
- Entry to NQF level 8 programmes e.g. Honours and Masters programmes and subsequently Doctoral Programmes

Duration of the Bachelor of the Built Environment (Architecture)

The duration of the programme is 3 years of full-time study. The course is based on semester modules that are assessed either through continuous evaluation or examination. The programme is based on core architecture and general education modules. Students are expected to complete a total of 30 modules for this programme.

4. PROGRAMME INFORMATION AND RULES

- **Entrance Requirements**

In addition to the General Rules pertaining to Entrance Requirements, specific requirements apply to instructional programmes offered in this department and these are set out under *Entry requirements and Selection procedure*.

- **Academic work done during the semester/ year**

A year mark shall be determined according to the General Rules and/or as indicated in the syllabi and/or learner guide lines for the particular subject.

Year marks shall be applicable to subjects assessed by examination.

All deadlines for submission of projects shall be adhered to.

Submissions handed in timeously will be eligible for upgrading once marks are issued for that project.
This applies to continuous assessment subjects only.

The upgrading of academic work for which marks have been awarded during the study period may be resubmitted prior to the portfolio examinations for reconsideration. Final submission dates of revised work will be published by the lecturer concerned.

If a submission deadline is not adhered to, the work will not be assessed or be eligible for upgrade or inclusion in the year end portfolio.

Under no circumstances will first time submissions of projects/academic work be evaluated at the portfolio examinations.

Where circumstances prevail that have prevented timeous submission of work, the matter will be dealt with in terms of the conditions of the Department rule 6 (Assessment Rules).

- **Conduct of students in the studio**

Rules of conduct pertaining to the specific studio, as instituted by the Head of the Department and amended from time to time, shall apply to all students registered for the programme. No smoking, eating or drinking in the studios will be permitted.

- **Work Integrated Learning:**

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

A student must register for experiential learning within two (2) weeks of starting a period of experiential learning.

Unregistered periods of experiential learning will not be considered for credit purposes.

If any of the registered details regarding experiential learning change, the student must advise the department in writing within two (2) working weeks of the new details (e.g. employer, supervisor, address, telephone number).

It is the student's responsibility to obtain procedural steps from the departmental secretary, and to comply therewith, regarding such matters as the logbook, reporting progress and submitting of completed documentation. Logbooks are to be submitted for assessment before the student is allowed to register for his/ her third year.

5. PROGRAMME STRUCTURE

- **Duration and structure of the course**

The National Diploma course is structured over three years, and is strictly full time study. Work whilst studying is not supported by the Department.
The first and third years comprise full-time study at the Durban University of Technology, whilst second year entails working in the professional field for a period of 6 months and studying full time for 6 months.
The Bachelor of Technology degree is a full-time one-year post-diploma course. The Department also offers a part-time, evening only, B Tech course. The course load for this part time offering is structured to be spread over two years only.
The Bachelor of the Built Environment (Architecture) is structured over three years and is strictly full time study. Work whilst studying is not supported by the Department. In order to graduate, all six semesters need to be successfully completed with all modules passed. All semesters are full time study.

- **Experiential training (Work Integrated Learning)**

The second year of the National Diploma is partly devoted to experiential training. Students should be employed by a professional architectural practice, whilst remaining registered at the Durban University of Technology. This work is assessed.

5.1 National Diploma: Architectural Technology (NDARC3)

YEAR I

5.1.1 STUDIO WORK I: SWRK102

Assessment: Continuous Evaluation/Portfolio **Hrs per week**: **6**

SYLLABUS

1. Drawing instruments and materials
2. Lettering, line drawing and geometrical exercises
3. Graphic projections
4. Working drawings of low-rise domestic buildings, including drainage schedules and municipal submission drawings
5. Application of the National Building Regulations
6. Construction detail design and drawing
7. Measurement of existing work
8. Drawing office equipment, filing, storage and library
9. Planning & design exercises in relation to low-rise domestic buildings
10. The role of the architect, architectural technologist, other building professionals, the contractor and the client

5.1.2 PRESENTATION I: PRSN101

Assessment: Continuous Evaluation/Portfolio **Hrs per week**: **6**

SYLLABUS

1. The nature and application of presentation drawing and the differences between presentation drawing and technical drawing
2. Development of freehand sketching and drawing style
3. Design Theory: Form, space, proportions, rhythm, balance, scale, symmetry, texture, pattern, colour, light and shade.
4. Sustainable architectural design – Social, Economic and Environmental
5. Design of Simple low scale architectural projects.
6. Compilation of sets of sketch plans

5.1.3 CONSTRUCTION & DETAILING I: CDET102

Assessment: Continuous Evaluation/Portfolio **Hrs per week:** **6**

SYLLABUS

1. Construction methods and materials for low-rise simple buildings
2. Exercises to foster critical and analytical thinking in basic construction problems
3. Introduction to framed structures
4. Comprehensive Study of Building Materials and Technologies for low-rise simple buildings.
5. General introduction to building services and design and documentation of the following as applied to low-rise buildings:
6. Drainage systems and materials
7. Electrical distribution
8. Hot and cold water supply

5.1.4 COMMUNICATION I: CMMN101

Assessment: Continuous Evaluation **Hrs per week**: **2**

SYLLABUS

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

5.1.5 HISTORY & APPRECIATION OF ARCHITECTURE I: HAAR101

Assessment: Continuous Evaluation/Portfolio **Hrs per week**: **2**

SYLLABUS

1. Introduction to influences on architectural form, its elements and principles; definitions of architecture
2. The evolution of architecture from earliest times to the present day
3. The development of structural devices, building methods & materials

5.1.6 APPLIED BUILDING SCIENCE I: ABSA101

Assessment: Examination 3 Hour Paper **Hrs per week**: **2**

SYLLABUS

1. Basic applied mechanics in terms of the concepts force, stress and deformation
2. The development of an appreciation of the influences of loads on structures
3. Expansion and contraction, convection, conduction and radiation of heat, orientation of buildings
4. Sound and Acoustics in built space
5. Distribution and use of electricity
6. Lighting of buildings
7. Environmental influences on Building Design

5.1.7 COMPUTER-AIDED DRAUGHTING III (PART A): CADG311

Assessment: Continuous Evaluation/Portfolio **Hrs per week:** **2**

SYLLABUS

1. Revision of work done in first year
2. Introduction to principles and range of computer drawing systems
3. Introduction to computer-aided draughting
4. Brief introduction to computer based graphics

5.1.8 COMPUTER APPLICATIONS I: CAPP102

Assessment: Continuous Evaluation/Portfolio **Hrs per week**: **2**

SYLLABUS

1. Introduction to computers
2. Operating systems basics
3. Application programs
4. Entrepreneurship and Office systems

YEAR II

5.1.9 STUDIO WORK II: SWRK 202

Assessment: Continuous Evaluation/Portfolio **Hrs per week:** **6**

SYLLABUS

1. Design of medium scale medium complexity buildings
2. Sketch Plans and models
3. Planning exercises

5.1.10 CONSTRUCTION AND DETAILING II: CDET202

Assessment: Continuous Evaluation/Portfolio **Hrs per week:** **6**

SYLLABUS

1. Construction methods for low-rise medium- complexity buildings
2. Elementary steel, timber and reinforced concreted framed structures
3. Building services for low-rise domestic buildings
4. Construction Drawings and details

5.1.11 PRACTICAL BUILDING STUDIES II: PSTD201

Assessment: Continuous Evaluation/Portfolio **Hrs per week: 2**

SYLLABUS

1. Building materials for low-rise domestic buildings
2. National Building Regulations as they apply to building materials
3. The construction process; on-site practice
4. Schedules
5. Soil and Rock Types

5.1.12 THEORY OF DESIGN II: THDN201

Assessment: Examination: 3 Hour Paper **Hrs per week: 2**

SYLLABUS

1. Theoretical discourse of Architectural Theory of the late 20th century namely Bauhaus, Expressionism, De Still and International Style/Early modernism and postmodernism
2. Critical analysis of theory towards architectural design

5.1.13 HISTORY & APPRECIATION OF ARCHITECTURE II: HAAR201

Assessment: Examination: 3 Hour Paper **Hrs per week: 2**

SYLLABUS

1. Historical development of Architecture
2. Historical and environmental influences and issues which shaped the Architecture of Africa
3. Architectural models of other developing continents specifically relating to environmental issues, innovative use of material
6. Exploring planning issues relating to housing systems and patterns
7. The debate around sustainable development in the built environment an integral subject of delivery

5.1.14 ADVANCED COMPUTER AIDED DRAUGHTING III (PART B): CADG321

Assessment: Continuous Evaluation/Portfolio **Hrs per week: 2**

SYLLABUS

1. Advanced CAD modelling
2. Renders and animation

YEAR III

5.1.15 STUDIO WORK III: SWRK302

Assessment: Continuous Evaluation/Portfolio **Hrs per week: 6**

SYLLABUS

1. Working drawings to cover buildings types as dealt with in Applied Design 111 and Construction Detailing III including all services, schedules, foundation and roof plans, and construction detail
2. Application of National Building Regulations
3. Presentation techniques to expand on those dealt with in First Year, as well as model building
4. Introduction to specification writing a major project taken from initial concept design to final working drawings and specifications
5. Introduction to estimating building cost

5.1.17 CONSTRUCTION AND DETAILING III: CDET302

Assessment: Continuous Evaluation/Portfolio **Hrs per week: 6**

SYLLABUS

1. Exercises to promote the application of critical and analytical thinking to construction problems
2. Methods and materials for building types other than those dealt with in the First and Second Year, steel and reinforced concrete-framed buildings and multi-storey buildings
3. Deep foundations
4. Basements and retaining walls
5. Co-ordination of services
6. Design and detailing of solutions to construction problems in architectural design.
7. Visits to sites of various types of building under construction

5.1.18 PRINCIPLES OF ARCHITECTURAL DESIGN III: PADE301

Assessment: Continuous Evaluation/Portfolio **Hrs per week: 6**

SYLLABUS

1. Contextually responsive architectural design
2. Typical building types with reference to function, circulation, climate, topography and other factors
3. Planning and design exercises space requirements for human activities
4. Principles of mass housing
5. Studies of contemporary South African architectural & planning issues

5.1.19 SURVEY AND LANDSCAPING III: SVLD301

Assessment: Continuous Evaluation/Portfolio **Hrs per week: 2**

SYLLABUS

1. Elementary principles of surveying with optical instruments and preparation of contour drawings
2. Local soil, clay and rock types
3. Land form design and treatment of landscape surfaces
4. Principles and elements of landscape design and practical landscape design projects
5. Required dimensions for vehicle circulation and parking
6. Surface water drainage

5.1.20 OFFICE PRACTICE III: OPRA301

Assessment: Examination 3 Hour Paper **Hrs per week**: **2**

SYLLABUS

1. Office management structures
2. The architect's duties and responsibilities and relationships with other building professionals, the contractor and the client
3. The building contract

5.1.21 BUILDING SERVICES III: BSER302

Assessment: Continuous Evaluation/Portfolio **Hrs per week: 2**

SYLLABUS

1. Drainage and electrical distribution for high-rise buildings and low-rise buildings other than housing
2. Hot and cold water supply and distribution
3. Solar water heating
4. Fire-fighting systems and appliances
5. Surface water drainage
6. Space heating
7. Security systems
8. Introduction to air-conditioning
9. Dimensional requirements for air-conditioning systems, lifts, & escalators
10. The National Building Regulations as they apply to building services
11. Ventilation

5.1.22 THEORY OF DESIGN III: THDN301

Assessment: Examination 3 Hour Paper **Hrs per week: 2**

SYLLABUS

1. Theoretical discourse of Architectural Theory and inter-connected philosophical paradigms of the late 20th century and the early 21st century.
2. Sustainability in architecture
3. Planning issues related to spatial and urban form will be an integral basis of this part of the syllabus.

5.1.23 HISTORY & APPRECIATION OF ARCHITECTURE III: HAAR301

Assessment: Examination 3 Hour Paper **Hrs per week: 2**

SYLLABUS

1. The historical evolution of architecture in the late 20th century to early 21st century
2. Historical evolution of architecture in developing countries
3. Relevance of history in architectural design.

5.2 B. Tech. Architectural Technology (BTARC1)

Please note that due to National legislation, signed into effect by the Minister of Higher Education in the Government Gazette no. 40123 of 6th July 2016, the last permitted enrolment for any non-HEQSF aligned programme will be the 31st December 2019. This means that you will not be able to enrol in a Bachelor of Technology (BTech) degree at DUT, or at any other institution in South Africa after this date.

5.2.1 PRINCIPLES OF URBAN DESIGN IV PUDN401

Assessment: Examination 6 Hour Paper **Hrs per week: 3**

SYLLABUS

1. Historical background
2. An introduction to urban character, elements and structures
3. A short overview of mass urbanization
4. The influence of authorities and development control measures
5. Techniques applied to surveys, analyses and documentation
6. Practical work

5.2.2. THEORY OF DESIGN IV THDN401

Assessment: Examination 3 Hour Paper **Hrs per week: 2**

SYLLABUS

1. Urban Space, Form and Detail
2. Contextualism/Place Theory
3. Sustainability in Architecture
4. Neo Organic Architecture
5. Design methodology
6. The influence of human requirements & behaviour on design & planning

5.2.3 APPLIED DESIGN IV ADES401

Assessment: Continuous Evaluation/Portfolio **Hrs per week: 8**

SYLLABUS

1. Exercises to foster inventiveness
2. Integrated Design projects chosen to represent a diversity of building types (uses)
3. Practical application - by means of design projects - of principles and theory covered in other subjects
4. Design problems and solutions pertaining to aspects of construction technology

5.2.4 HOUSING IV HOUS402 **Hrs per week: 2**

Assessment: Examination 3 Hour Paper

SYLLABUS

1. Historical and present day local and international solutions
2. Legislation and political influences
3. Formative influences
4. Available resources
5. Infrastructure and services

5.2.5 STRUCTURES IV STRU401

Assessment: Examination 3 Hour Paper **Hrs per week: 2**

SYLLABUS

1. Introduction to structures
2. Mechanical properties of building materials
3. Elementary design principles to the major structural components of buildings
4. Application of structural technology in design

5.2.6 OFFICE PRACTICE IV: OPRA401

Assessment: Examination 3 Hour Paper **Hrs per week**: **2**

SYLLABUS

1. Management of Building Projects
2. Dispute resolution
3. The building contract
4. Principles of Contract Law and Case studies

5.3 Bachelor of the Built Environment (Architecture)

The BBE(Architecture) is a three year full-time programme. Its specific purpose is to build the necessary knowledge, understanding, abilities and skills required to register as a candidate architectural technologist with SACAP once graduated. To register with the professional council, an additional period of mentorship and professional practice examinations need to be completed. The modules in the course are outlined below

Module Title	HEQSF level	HEQSF Credit	Period of Study	Block Code	Offering type	Pre-requisite module/s
Architectural Design 1A	5	24	1	**21**	**DI**	-
Construction Technology 1A	5	24	1	**21**	**DI**	-
Settlement History 101	5	12	1	**21**	**DI**	-
Academic Literacy 1A	6	8	1	**21**	**DI**	-
Cornerstone 101	5	12	1	**21**	**DI**	-
Physics 1A	5	8	1	**21**	**DI**	-
Architectural Design 1B	5	24	2	22	DI	Architectural Design 1A
Construction Technology 1B	5	24	2	22	DI	Construction Technology 1A
History & Theory of Design 1	5	8	2	22	DI	-
Academic Literacy 1B	5	8	2	**22**	**DI**	Academic Literacy 1A
Physics 1B	5	8	2	**22**	**DI**	-
Mathematics for the Built Environment 101	5	12	2	**22**	**DI**	-
Architectural Design 2	**6**	24	3	**21**	**DI**	Architectural Design 1B Construction Technology 1B
Construction Technology 2	6	24	3	**21**	**DI**	Construction Technology 1B
History &Theory of Design 2	6	8	3	**21**	**DI**	History & Theory of Design 1
Landscaping & Site Survey 2	6	8	3	**21**	**DI**	-
Urban Settlements 2	6	8	3	**21**	**DI**	-
Work Based Project 2B	6	32	4	**22**	**DI**	Architectural Design 2A Construction Technology 2A
Project Management	6	8	4	**22**	**DI**	-
Principles of Commercial Law 2	6	8	4	**22**	**DI**	-
Research Methods	6	8	4	**22**	**DI**	-
Sociology and Society	5	8	4	**22**	**DI**	-
Architectural Design 3	7	24	5	**21**	**DI**	Work based Project 2B
Construction Technology 3	7	24	5	**21**	**DI**	Construction Technology 2A
History & Theory of Design 3A	7	8	5	**21**	**DI**	History & Theory of Design 2
Law of Building Contracts 3	7	8	5	**21**	**DI**	Principles of Commercial law 2
Property and Land Economics 3	7	8	5	**21**	**DI**	-
Major Integrated Project	7	32	**6**	**22**	**DI**	Architectural Design 3 Construction Technology 3
History & Theory of Design 3B	7	8	**6**	**22**	**DI**	History & Theory of Design 3A
Professional Practice 3	7	12	**6**	**22**	**DI**	-

Though modules are semesterised, they are only offered once per annum. Failing a module will require students to repeat the module in the next academic year.

6. ASSESSMENT RULES

- **Special tests**
  A special test may be granted by the Head of Department to a student who has been prevented from taking a test as a result of,

a) illness on the day of the test or immediately before it, provided that he/she submits medical certificate, which has been signed by a health practitioner.
b) by circumstances which, in the opinion of the Head of Department were beyond his/her control at the time of the test, provided satisfactory evidence is provided within a week of the student first presenting him/herself in the Department thereafter.

- **Supplementary Examinations & Re-Write Examinations**
  Notwithstanding anything contrary to the General Rules, supplementary examinations will only be available in the following examinable (non-continuous assessment) subjects in this department:

National Diploma

First Year

- Applied Building Science I

Second Year

- History & Appreciation of Architecture II
- Theory of Design II

Third Year

- Office Practice III
- Theory of Design III
- History & Appreciation of Architecture III

Bachelor of Technology

- Theory of Design IV
- Housing IV
- Structures IV
- Principles of Urban Design IV
- Office Practice IV

Bachelor of the Built Environment (Architecture)

- Academic Literacy 1A
- Academic Literacy 1B
- Law of Building Contracts 3
- Mathematics for the Built Environment 101
- Physics 1A
- Physics 1B
- Principles of Commercial Law 2
- Professional Practice 3
- Project Management
- Property and Land Economics 3
- Settlement History 101
- Sociology and Society
- Urban Settlements 2

- **Continuous Evaluation / Portfolio Evaluation**
  An average of 40% must be achieved across all assessment tasks that comprise the portfolio. A student that has failed any project may resubmit such prior to final portfolio evaluation date. This means that no new work will be assessed at final portfolio evaluation. Resubmissions may be awarded a maximum mark of 50%.

- **Attendance for lecture / critique / studio sessions**
  Students are required to attend all formal critique sessions.
  Student are required to attend at least 75% of all lecture, tutorial and studio sessions.

  Students not achieving the required attendance for each subject individually may be subject to being excluded from attending the examinations / portfolio for that subject.

  Both submission of work and attendance at portfolio are compulsory.

7. EXPECTED GRADUATE OUTCOMES AND EXIT LEVEL OUTCOMES

The Graduate Outcomes of the BBE(Architecture) will be achieved by meeting the SACAP Exit Level Outcomes (ELO). Architecture students completing this qualification will demonstrate competence in all the following SACAP ELO indicated below.

1: Architectural Design in which the graduate has to demonstrate
- Knowledge of the principles and terminology applicable to architectural design
- Understanding of the fundamentals of the design process
- Ability to do thorough, appropriate planning
- Understanding of problem analysis on a basic level
- Knowledge of social and environmental issues

2. Environmental Relationships in which the graduate has to demonstrate
- Awareness of the issues

3. Construction technology in which the graduate has to demonstrate
- Knowledge of construction methods and uses for materials related to simple low rise building types
- Ability to develop durable, cost effective climatic responsive construction details
- Ability to conduct limited research into construction methods and materials and the appropriate applications

4. Building structures in which the graduate has to demonstrate
- Knowledge of the basic structural concepts pertaining to buildings

5. Contextual and urban relationships in which the graduate has to demonstrate
- Awareness of the issues

6. Architectural history, theory and precedent in which the graduate has to demonstrate
- Knowledge of the basic spatial and aesthetical aspects appropriate to architecture
- Knowledge of architectural history in broad terms

7. Building services and related technologies in which the student has to demonstrate

- Knowledge of the various technological aspects relating to services
- Knowledge of the building regulations pertaining to all building services
- Knowledge of the following technological aspects and building services.
- Drainage and water reticulation
- Electrical and electronic services and lighting
- Communications
- Air and gas supply
- Heating and cooling
- Elevators and escalators
- Fire protection and control
- Acoustics and sound systems

8. Contract documentation and administration in which the graduate has to demonstrate

- Ability to produce a set of working drawings as part of a set of contract documents of a complex building to acceptable practice standards
- Ability to develop durable, cost – effective, climate responsive construction systems and details sensitive to the contextual language of the design concept
- Understanding of component and material specification
- Knowledge of the relevance of appropriate National Building Regulations (NBR) as well as the requirements of the NHBRC
- Knowledge of local authority approval requirements and procedures

9. Computer applications in which the graduate has to demonstrate

- Knowledge of computer technology presently in use in architectural practice and
- Formal / Work Integrated learning with the ability to apply it in the execution of work. Computer software to include web browsers and communication programs, word processing, spreadsheets, architectural drawing, graphic and image editing

10. Office practice, legal aspects and ethics in which the graduate has to demonstrate

- Knowledge of the terminology and basic concepts and principles of architectural practice
- Knowledge of the contents of the various building contracts and the SAIA practice manual
- Formal / Work integrated learning to demonstrate knowledge of the terminology and basic concepts and principles of business practice
- Knowledge of the administrative and logistical support systems in a practice

8. PROGRESSION RULES

Further to Rule G17, a student is required:

- To have passed all first year modules by the end of their second year of registration;
- To have passed all second year modules by the end of their third year of registration;
- To have passed at least half of the third year modules by the end of their fourth year of registration;
- To complete the qualification by the end of five years of registration.

Due to the integrated and scaffolded nature of the qualification and program delivery, students may be required to attend certain minor modules classes informally without working for credits (audit the class) that they may have already passed when completing major modules they have to re-register for. This is to be determined by the HoD at the time of re-registration of a major module.

An average of 40% must be achieved across all assessment tasks / tests for an examination subject.
Failure to achieve a 40% average in year mark will result in the student being excluded from the year end examination.

- **Promotion To Higher Level (National Diploma: Architectural Technology)**
  Students will only be allowed to register for the second year of study provided they have passed the following subjects:
- Studio Work I
- Construction & Detailing I
- Presentation I
- History & Appreciation of Architecture I
- Computer Applications I
- Computer Aided Draughting III

Students will only be allowed to register for the third year of study provided they have passed the following subjects:

- Studio Work II
- Construction & Detailing II
- Practical Studies II
- Completed and signed off their Work Integrated Learning.

Students that have passed the above subjects and have failed either or both of the subjects, History &
Appreciation of Architecture II and/or Theory of Design II, may only register for their minor subjects in
Third Year. Such students will however not be able to register for History & Appreciation of Architecture III and Theory of Design III until they have passed History & Appreciation of Architecture II and Theory of Design II.

- **Refusal to Re-Register**
  A student will not be permitted to re-register with the Department of Architecture for any formal instructional programme if he/she has failed to meet the minimum requirements as set out in the Department's rules, or fails all subjects in any one year of study.
- Students will be entitled to appeal against such refusal of re-registration in terms of Rule G1(9). **However such an appeal will only be favourably considered if the student has attended a minimum of 75% of all lectures in the relevant subjects/s**

9. ENTRY REQUIREMENTS AND SELECTION PROGRAMME

- **National Diploma: Architecture**
  The minimum requirements for application to the National Diploma: Architecture is a National SENIOR CERTIFICATE or equivalent with the following compulsory subjects:
  Mathematics – Level 3 Pass
  English. – Level 3 Pass

  Other recommended subjects (not compulsory): Technology, History, Art, Technical Drawing, Geography.

  In addition to the minimum requirements, as set out above, prospective students with architecture as first choice will be required to undergo a selection ranking test.

  A prospective student must submit an application form through the Central Applications Office (C.A.O.).
- **Bachelor of Technology: Architecture**
  For consideration for admission for entry to the B. Tech Architecture the following entry requirements will apply:
- N.Dip. Architectural (old course) - at least three (3) years approved post – diploma experience in a registered architect's office or bridging course as specified by the Department.
- N.H.Dip. Architectural (old course) - at least three (3) years approved post - experience in a registered Architect's office or bridging course as specified by the Department.
- N.Dip. Architecture - A pass mark of 60% in Studio Work III, Construction and Detailing III and
  Principles of Architectural Design III. If accepted the learner will be permitted to register for all 6
  B.Tech subjects.

Applicants not meeting the above-mentioned criteria may be considered for admission on the submission of a portfolio, provided if accepted, that they may only be permitted to register in their first year of registration for the following subjects; Housing VI, Theory of Design IV, and Structures IV. Additional subjects may be considered at the discretion of the Head of Department under very specific circumstances.

- **Bachelor of the Built Environment (Architecture)**
  The minimum entry requirement is the Senior Certificate (offered prior to 2008); National Senior Certificate or the National Certificate (Vocational) with appropriate subject combinations and levels to achieve an exemption/endorsement for admittance to a Bachelor's degree programme as defined in the Government Gazette, Vol 751, No 32131 of 11 July 2008, and in the Government Gazette, Vol. 533, No. 32743, November 2009. In addition the minimum admission requirements, rule G7, is stipulated in the General Rules Handbook.

  Further to the above, the following are required for admission into BBE(Architecture):
  1) NSC, NCV, SC :

Compulsory Subjects	**National Senior Certificate**	**National Certificate, (Vocational)**	**Senior Certificate**	
	Rating	**Mark**	**HG**	**SG**
Mathematics (Not Mathematics Literacy)	3			
English (Primary), or	3			
English (First additional)	3			
English		60 %		
Mathematics		60 %		
English			E	D
Mathematics			E	D

  Other recommended subjects (not compulsory): Technology, History, Art, Technical Drawing, Geography.

  In addition to the requirements above, applicants with architecture as their first choice at DUT will be required to undergo a ranking test for selection purposes.

Note:

(i) The subject NSC Mathematical Literacy will not be accepted as a substitute for the subject NSC Mathematics.

(ii) The exit certificate of the candidate must qualify the candidate for **degree** study at an institution of higher learning.

Should the minimum NSC admission requirements not be met, prospective applicants may present a qualification in an allied built environment discipline for consideration for admittance. The acceptance thereof is at the discretion of the Head of Department and is to comply with the institutions rules governing alternative access.

10. FINANCIAL AID

The financial service has a limited amount of funding to assist financially needy students. Applications are only considered after students have registered. Funding is limited to South African students only, who have registered full-time for their qualification (diploma). After a student has registered he/she may obtain an application form from the Financial Aid office on his/her campus if he/she wishes to apply for financial assistance.

11. APPLICATION PROCEDURE

All first time entrants into the tertiary educational system MUST apply through the Central Applications Office (CAO), and preferably be done online. Application forms are available from the Central Applications Office (CAO). These forms are also available at the Student Admissions office.

Address letters to:	Central Applications Office, Private Bag X06, Dalbridge, 4014
Telephone:	(031) 268 4444
Fax:	(031) 2684422
Internet:	http://www.cao.ac.za

Applications for Higher qualification (e.g. BTech: Architectural Technology; M.BE; PhD) need to be made through the Department Secretariat. For coursework qualifications (i.e. BTech: Architectural Technology), please ensure applications are in in September of the year prior to intended registration.

12. REGISTRATION PROCESS

Registration takes place in January each year. Application forms should be submitted in the year prior to the year the student intends to register. For further information, contact:

Department of Architecture, Durban University of Technology, Steve Biko Campus, P.O. Box 1334, Durban, 4000 - Telephone: (031) 3732857

Permission for accepted students to attend lectures pending finalization of registration is granted purely at the discretion of the Head of Department and is strictly not open ended. This is done under exceptional circumstances where the chances are high of resolving the issue barring the student from being registered before the expiry date or the cut-off date set by the faculty for finalization of registration.

- This authorization is done in writing and must be applied for before lectures commence.
- This signed form must be presented at each lecture to the relevant lecturer to confirm the eligibility of students to attend and to record their attendance on the form. A record of suitable attendance is vital to complete the late registration process.
- Being granted this permission to attend does not mean a student is registered, nor does it mean that a successful registration can be completed at a later date. Late registration is strictly in accordance with university rules.
- Once the expiry date has been passed, students will no longer be permitted to attend lectures.

13. PLEASE NOTE THE FOLLOWING - Qualification Alignment Process

In order to align all existing qualifications to the requirements of the Higher Education Qualifications Sub Framework (HEQSF) please be advised that the existing NATED 151 National Diploma will be phased out as from 2018. The phase out process will be undertaken as follows:

The final 1st time intake for the National Diploma: Architectural Technology will be in January 2017.

1) From January 2016 all registered students must complete their annual subjects in a maximum of TWO registered consecutive years.

2) The subjects for the National Diploma: Architectural Technology would be offered for the last time as indicated below. Thereafter only for those students who are repeating and dependant on available student numbers, would it be decided on whether to offer a subject or not.

Subjects offered for the last time January 2017: Studio work I, Construction and Detailing I, Presentation I, Applied Building Science I, Communication I, History and Appreciation of Architecture I, Computer Applications I and CAD III Part A.

Subjects offered for the last time January 2019: Studio work II, Construction and Detailing II, Practical Building Studies II, History and Appreciation of Architecture II, Theory of Design II, CAD III Part 3.

No new registration for WIL from January 2019.

Subjects offered for the last time January 2020:

Studio work III, Construction and Detailing III, Principles of Applied Design III, History and Appreciation of Architecture III, Theory of Design III, Services III, Survey and Landscaping III, Office Practice III.

From January 2018, no student will be allowed to transfer to the phase out qualification from either within or external to the institution.

3) From January 2018, existing National Diploma students would only be allowed to transfer onto the new degree program being introduced, should they meet the entrance requirements and pass a make - up test for access. Other students wishing to apply for the degree program can do so by following the application process for the new program.

14. POST-GRADUTE STUDIES

The Department of Architecture is currently in a position to offer registration in a MASTERS DEGREE BY RESEARCH, the Master of the Built Environment and a Doctoral degree, the Doctor of Philosophy in Architecture

NEITHER degree counts towards professional registration, but as a Masters or Doctoral qualification, can articulate towards an academic career in the profession.

All enquiries must be directed to nomthandazos@dut.ac.za

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