

# BACHELOR OF ARCHITECTURE

## (Extended curriculum programme with foundation provision)

(Fields of specialisation: Design or Technology)

BArch - NQF Level 8 (480 credits)

**Qualification type: Professional Bachelor's Degree**

**Qualification code: BPARF2**

SAQA ID: 110794, CHE NUMBER: H/H16/10740/HEQSF

Campus where offered: Pretoria Campus

### REMARKS

a. Admission requirement(s) and selection criteria:

• **FOR APPLICANTS WITH A SENIOR CERTIFICATE OBTAINED BEFORE 2008:**

**Admission requirement(s):**

A Senior Certificate with a matriculation endorsement or an equivalent qualification, with a D symbol (50 – 59%) at Higher Grade or a C symbol (60 – 69%) at Standard Grade for English.

**Selection criteria:**

To be considered for this qualification, applicants must have an Admission Point Score (APS) of at least **25** (six subjects).

• **FOR APPLICANTS WITH A NATIONAL SENIOR CERTIFICATE OBTAINED IN OR AFTER 2008:**

**Admission requirement(s):**

A National Senior Certificate, with a bachelor's degree endorsement (four subjects with a minimum score of 4 in the subjects), or an equivalent qualification, with an achievement level of at least 4 for English (home language or first additional language).

**Selection criteria:**

To be considered for this qualification, applicants must have an Admission Point Score (APS) of at least **25** (excluding Life Orientation).

• **FOR APPLICANTS WITH A NATIONAL CERTIFICATE (VOCATIONAL) AT NQF LEVEL 4:**

**Admission requirement(s):**

A National Certificate (Vocational) at NQF Level 4, with a bachelor's degree endorsement, issued by the Council for Quality Assurance in General and Further Education and Training (Umalusi), with at least 50% (APS of 4) for English, 50% (APS of 4) for Mathematics or Mathematical Literacy, 50% for Life Orientation (excluded for APS calculation) and at least 60% (APS of 5) for any four other vocational subjects.

**Selection criteria:**

To be considered for this qualification, applicants must have an Admission Point Score (APS) of at least **25** (excluding Life Orientation).

• **FOR APPLICANTS WITH QUALIFICATIONS ON THE HIGHER EDUCATION QUALIFICATION SUB-FRAMEWORK (HEQSF) OFFERED BY UNIVERSITIES OF TECHNOLOGY:**

The applicant will be considered for admission to the programme if a qualification is in Architecture or Architectural Technology or a related field of study on NQF Level 5 or above with an average of at least 60% for all modules completed.

**Selection criteria:**

Admission will be based on academic performance; availability of space; and an interview.

**b. Assessment procedure(s):**

After passing the initial administrative screening, all applicants will sit for additional assessment arranged with the Department. The purpose of the assessment is to select only those applicants who are most likely to be successful in their studies in Architecture. After consideration of the Departmental Student Enrolment Plan, only the top ranking applicants will be selected. Please contact the Department for information pertaining to the assessment. Information pertaining to the assessment is available on the Department's website: [www.tutarchitecture.co.za](http://www.tutarchitecture.co.za).

Once a programme is full, a waiting list will be in place to provide an opportunity for applicants to fill places of those who did not register on time. Applicants will be informed of their status per official letter from the Office of the Registrar, alternatively, they can check their application status on the TUT website, [www.tut.ac.za](http://www.tut.ac.za).

**c. Recognition of Prior Learning (RPL), equivalence and status:**  
See Chapter 30 of Students' Rules and Regulations.**d. Intake for the qualification:**  
January only.**e. Presentation:**

Day classes. Classes and assessments may take place on Friday afternoons and/or Saturdays.

**f. Minimum duration:**  
Five years.**g. Exclusion and readmission:**  
See Chapter 2 of Students' Rules and Regulations.**h. Class timetables and class times:**

Students will only be permitted to register for modules in different year groups if the scheduled contact sessions for those modules do not coincide. Students should therefore take note of scheduled contact sessions and class times before registering.

**i. Degree validation and accreditation:**

The South African Council for the Architectural Profession (SACAP) accredits both the fifth-year specialisation options for registration in the SACAP category of Candidate Senior Technologist. The qualification is internationally validated through the Canberra Accord (CA). The CA facilitates the portability of educational credentials amongst participating member countries by recognising the similarity of professional architecture degrees. CA signatories include Canada, China, Korea, Mexico, South Africa, the USA and a further 35 countries represented by the Commonwealth Association of Architects (CAA).

## CURRICULUM

**FIRST YEAR**

**Upon first registration for this academic year, the following modules and their combinations must be taken concurrently:**

- ACDF05P and ALPF05P
- ACDF05P and FDTF25P
- ACDF05P and CSTF05P
- PFRF25P and CSTF05P

**In the event of failing, non-completion and/or de-registering any of the above modules, the following rule(s) will apply:**

- ALPF05P may not precede ACDF05P, because ALPF05P is based on ACDF05P.



- If ACDF05P was passed previously, a student may continue with ALPF05P.
- FDTF25P may not precede ACDF05P, because FDTF25P is based on ACDF05P.
- If ACDF05P was passed previously, a student may continue with FDTF25P.
- CSTF05P may not precede ACDF05P, because CSTF05P is based on ACDF05P. If ACDF05P was passed previously, a student may continue with CSTF05P.
- PFRF25P may not precede ACDF05P, because PFRF25P is integrated with ACDF05P. If PFRF25P was passed previously, a student may continue with CSTF05P.

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
ACDF05P	Foundation Architectural Design I	(5)	(24)	
ALPF05P	Foundation Architectural Language and Presentation Techniques I	(5)	(12)	
CSTF05P	Foundation Construction I	(5)	(12)	
FDTF25P	Foundation Technical Architectural Drawing I (block module)	(5)	(6)	
PFRF25P	Foundation Professional Practice I (block module)	(5)	(6)	
TOTAL CREDITS FOR THE FIRST YEAR:			<b>60</b>	

## SECOND YEAR

Upon first registration for this academic year, the following modules and their combinations must be taken concurrently:

- ACD005P and THR005P
- ACD005P and CST005P
- BPS005P and CST005P

In the event of failing, non-completion and/or de-registering any of the above modules, the following rule(s) will apply:

- THR005P may not precede ACD005P, because THR005P is integrated with ACD005P. If THR005P has been passed previously, a student may continue with ACD005P.
- CST005P may not precede ACD005P, because CST005P is based on ACD005P. If ACD005P was passed previously, a student may continue with CST005P.
- BPS005P may not precede CST005P, because BPS005P is based on CST005P. If BPS005P was passed previously, a student may continue with CST005P.

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
ACD005P	Architectural Design I	(5)	(24)	Foundation Architectural Design I
BPS005P	Building Physics and Systems Design I	(5)	(6)	
CAR025P	Computer Applications in Architecture I (block-module)	(5)	(6)	
CST005P	Construction I	(5)	(9)	Foundation Construction I
PFR025P	Professional Practice I (block module)	(5)	(3)	Foundation Professional Practice I
PTR005P	Presentation Techniques I	(5)	(6)	Foundation Architectural Language and Presentation Techniques I
THR005P	Theory and History of Architecture I	(5)	(6)	
TOTAL CREDITS FOR THE SECOND YEAR:			<b>60</b>	



### THIRD YEAR

Upon first registration for this academic year, the following modules and their combinations must be taken concurrently:

- ACD216P and THR216P
- ACD216P and CST216P
- BPS216P and CST216P

In the event of failing, non-completion and/or de-registering any of the above modules, the following rule(s) will apply:

- THR216P may not precede ACD216P, because THR216P is integrated with ACD216P. If THR216P has been passed previously, a student may continue with ACD216P.
- CST216P may not precede ACD216P, because CST216P is based on ACD216P. If ACD216P was passed previously, a student may continue with CST216P.
- BPS216P may not precede CST216P, because BPS216P is based on CST216P. If BPS216P was passed previously, a student may continue with CST216P.

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
<b>FIRST OR SECOND SEMESTER</b>				
ACD216P	Architectural Design II	(6)	(48)	Architectural Design I Construction I Theory and History of Architecture I
BPS216P	Building Physics and Systems Design II	(6)	(6)	Building Physics and Systems Design I
CAR226P	Computer Applications in Architecture II (block-module)	(6)	(6)	Computer Applications in Architecture I
CST216P	Construction II	(6)	(12)	Architectural Design I Construction I Theory and History of Architecture I
PFR216P	Professional Practice II	(6)	(36)	Professional Practice I
THR216P	Theory and History of Architecture II	(6)	(12)	Architectural Design I Construction I Theory and History of Architecture I
TOTAL CREDITS FOR THE THIRD YEAR:			<b>120</b>	

### FOURTH YEAR

Upon first registration for this academic year, the following modules and their combinations must be taken concurrently:

- ACD307P and THR307P
- ACD307P and CST307P
- BPS307P and CST307P

In the event of failing, non-completion and/or de-registering any of the above modules, the following rule(s) will apply:

- THR307P may not precede ACD307P, because THR307P is integrated with ACD307P. If THR307P has been passed previously, a student may continue with ACD307P.
- CST307P may not precede ACD307P, because CST307P is based on ACD307P. If ACD307P was passed previously, a student may continue with CST307P.
- BPS307P may not precede CST307P, because BPS307P is based on CST307P. If BPS307P was passed previously, a student may continue with CST307P.

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
ACD307P	Architectural Design III	(7)	(54)	Architectural Design II Construction II Theory and History of Architecture II
BPS307P	Building Physics and Systems Design III	(7)	(12)	Building Physics and Systems Design II



CAR327P	Computer Applications in Architecture III (block-module)	(7)	(18)	Computer Applications in Architecture II
CST307P	Construction III	(7)	(18)	Architectural Design II Construction II Theory and History of Architecture II
PFR327P	Professional Practice III (block module)	(7)	(6)	Professional Practice II
THR307P	Theory and History of Architecture III	(7)	(12)	Architectural Design II Construction II Theory and History of Architecture II
TOTAL CREDITS FOR THE FOURTH YEAR:			<b>120</b>	

## FIFTH YEAR

One of the following options (as determined by the Head of the Department):

### OPTION 1: ARCHITECTURAL DESIGN:

In order to continue with this option, students have to obtain a minimum mark of 70% in the final examination for Architectural Design III. Should they not meet this requirement, they will only be allowed to continue with this option if recommended by the examination panel for Architectural Design III and Theory and History of Architecture III and the subsequent endorsement by the Head of the Department.

**Upon first registration for this academic year, the following modules and their combinations must be taken concurrently:**

- ACD408P and THR408P
- ACD408P and CST418P
- BPS418P and CST418P

**In the event of failing, non-completion and/or de-registering any of the above modules, the following rule(s) will apply:**

- THR408P may not precede ACD408P, because THR408P is integrated with ACD408P. If THR408P has been passed previously, a student may continue with ACD408P.
- CST418P may not precede ACD408P, because CST418P is based on ACD408P. If ACD408P was passed previously, a student may continue with CST418P.
- BPS418P may not precede CST418P, because BPS418P is based on CST418P. If BPS418P was passed previously, a student may continue with CST418P.

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
ACD408P	Architectural Design IV	(8)	(54)	Architectural Design III Construction III Theory and History of Architecture III
CAR428P	Computer Applications in Architecture IV (block-module)	(8)	(12)	Computer Applications in Architecture III
THR408P	Theory and History of Architecture IV	(8)	(12)	Architectural Design III Construction III Theory and History of Architecture III

### FIRST SEMESTER

BPS418P	Building Physics and Systems Design IV	(8)	(12)	Building Physics and Systems Design III
CST418P	Construction IV	(8)	(18)	Architectural Design III Construction III Theory and History of Architecture III
PFR418P	Professional Practice IV	(8)	(12)	Professional Practice III
TOTAL CREDITS FOR THE FIFTH YEAR FOR OPTION I:			<b>120</b>	



**OPTION 2: ARCHITECTURAL TECHNOLOGY:**

Upon first registration for this academic year, the following modules and their combinations must be taken concurrently:

- STW408P, CST418P and ACC418P
- STW408P, BPS418P and ABP418P
- CST418P and ACC418P
- BPS418P and ABP418P
- PFR418P and APC418P

In the event of failing, non-completion and/or de-registering any of the above modules, the following rule(s) will apply:

- CST418P and ACC418P may not precede STW408P, because CST418P and ACC418P are based on STW408P. If CST418P and/or ACC418P were passed previously, a student may continue with STW408P.
- BPS418P and ABP418P may not precede STW408P, because BPS418P and ABP418P are based on STW408P. If BPS418P and ABP418P were passed previously, a student may continue with STW408P.
- ACC418P may not precede CST418P, because ACC418P is based on CST418P. If ACC418P was passed previously, a student may continue with CST418P.
- APC418P may not precede PFR418P, because APC418P is based on PFR418P. If APC418P was passed previously, a student may continue with PFR418P.

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
CAR428P	Computer Applications in Architecture IV (block-module)	(8)	(12)	Computer Applications in Architecture III
STW408P	Studio Work IV	(8)	(30)	Architectural Design III Construction III Theory and History of Architecture III

**FIRST SEMESTER**

BPS418P	Building Physics and Systems Design IV	(8)	(12)	Building Physics and Systems Design III
CST418P	Construction IV	(8)	(18)	Architectural Design III Construction III Theory and History of Architecture III
PFR418P	Professional Practice IV	(8)	(12)	Professional Practice III

**SECOND SEMESTER**

ABP418P	Advanced Building Physics and Systems Design IV	(8)	(12)	Building Physics and Systems Design IV Professional Practice IV
ACC418P	Advanced Construction IV	(8)	(12)	Architectural Design III Construction III Construction IV Theory and History of Architecture III
APC418P	Advanced Professional Practice IV	(8)	(12)	Professional Practice IV

TOTAL CREDITS FOR THE FIFTH YEAR FOR OPTION 2: **120**

TOTAL CREDITS FOR THE QUALIFICATION: **480**



## MODULE INFORMATION (OVERVIEW OF SYLLABUS)

The syllabus content is subject to change to accommodate industry changes. Please note that a more detailed syllabus is available at the Department or in the study guide that is applicable to a particular module. At time of publication, the syllabus content was defined as follows:

### A

#### **ADVANCED BUILDING PHYSICS AND SYSTEMS DESIGN IV (ABP418P) CONTINUOUS ASSESSMENT** *(Module custodian: Department of Architecture and Industrial Design)*

Expert study of advanced building physics and systems design, focusing on: (1) Hygrothermal movement in built structures. (2) Building acoustics. (3) Light properties of buildings. (4) Buildings components. (5) Simulation tools. (6) Optimisation algorithms; and (7) Efficient energy management of buildings and neighbourhoods. (Total notional time: 120 hours)

#### **ADVANCED CONSTRUCTION IV (ACC418P) CONTINUOUS ASSESSMENT** *(Module custodian: Department of Architecture and Industrial Design)*

Expert study of advanced construction technologies, focusing on: (1) 3D printing. (2) Computer-aided design and computer-aided manufacturing (CAD/CAM). (3) Modular construction. (4) Off-site manufacturing. (5) Prefabrication and pre-assembly; and (6) Smart technologies. (Total notional time: 120 hours)

#### **ADVANCED PROFESSIONAL PRACTICE IV (APC418P) CONTINUOUS ASSESSMENT** *(Module custodian: Department of Architecture and Industrial Design)*

Expert study of Architectural Project Management, focusing on: (1) Project management tools and techniques; (2) Project management methodologies. (3) Project success through the application of project management methods. (4) Planning tools supporting design project management, and (5) Specifications. Intermediate study of Quantity Surveying, focusing on: (1) The methodology of measuring. (2) Building cost estimates. (3) Feasibility studies. (4) Economic design. (5) Contract administration; and (6) Valuation of buildings. (Total notional time: 120 hours)

#### **ARCHITECTURAL DESIGN I (ACD005P) CONTINUOUS ASSESSMENT** *(Module custodian: Department of Architecture and Industrial Design)*

Fundamental Architectural Design processes and concepts, focusing on: (1) Small-scale design problems. (2) Design methods, principles, skills and techniques. (3) Primary elements in architecture. (4) Spatial composition and spatial relationships. (5) Shelter and habitation. (6) Anthropometry and ergonomics. (7) Design presentation using drawings and models. (8) Determining visual literacies and developing architectural vocabulary and design communication. (9) Product design and manufacturing, and (10) Independent thinking and decision-making. (Total notional time: 240 hours)

#### **ARCHITECTURAL DESIGN II (ACD216P) CONTINUOUS ASSESSMENT** *(Module custodian: Department of Architecture and Industrial Design)*

Intermediate Architectural Design processes and concepts, focusing on: (1) Design problems ranging from the small group to a broader urban environment. (2) Spatial design and form-making in response to precedent, tectonic and contextual influences. (3) Social and spatial densities. (4) Programmatic and organisational strategies in the design process. (5) Product design and manufacturing; and (6) Independent thinking and decision-making. (Total notional time: 480 hours)

#### **ARCHITECTURAL DESIGN III (ACD307P) CONTINUOUS ASSESSMENT** *(Module custodian: Department of Architecture and Industrial Design)*

Advanced Architectural Design processes and concepts, focusing on: (1) Design projects negotiating the complex issues of program, macro-climate, micro-climate, site, structure, technology, form and construction. (2) Specific cultural contexts which produce appropriate architecture. (3) Landscape design. (4) Urban networks and ecology. (5) Design competitions. (6) Product design and manufacturing; and (7) Independent thinking and decision-making. (Total notional time: 540 hours)



**ARCHITECTURAL DESIGN IV (ACD408P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Expert Architectural Design processes and concepts, focusing on: (1) Complex design projects in the urban realm. (2) The relationship between the urban fabric and a design solution. (3) Elements of cities and urban environments. (4) The interpretation of local heritage, urban condition, climatic influences and social structures in design proposals. (5) Speculative design and lateral thinking. (6) Design competitions. (7) Product design and manufacturing; and (8) Independent thinking and decision-making. (Total notional time: 540 hours)

**B****BUILDING PHYSICS AND SYSTEMS DESIGN I (BPS005P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Fundamental Building Physics and Systems Design, focusing on: (1) Basic principles. (2) Passive methodologies for a temperate environment. (3) Codes, standards, and guidelines. (4) Different systems supplying building services; and (5) The basic concept of structures. (Total notional time: 60 hours)

**BUILDING PHYSICS AND SYSTEMS DESIGN II (BPS216P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Intermediate Building Physics and Systems Design, focusing on: (1) The basic theory of structures (Forces, moments, stresses, strains, Young's Modulus, structural components - including beams, columns and trusses); (2) Systems design thinking (Natural resources, human-made resources, resource efficiency and ecological design principles), and (3) Advanced systems supplying building services. (Total notional time: 60 hours)

**BUILDING PHYSICS AND SYSTEMS DESIGN III (BPS307P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Advanced Building Physics and Systems Design, focusing on: (1) Unconditioned spaces. (2) Thermal zoning and compartmentalisation. (3) Indoor environmental quality. (4) Heating and cooling. (5) Renewable energy. (6) Green building rating systems, and (7) Application of structural theory to design architectural structures (using a project completed in the Architectural Design III module). (Total notional time: 120 hours)

**BUILDING PHYSICS AND SYSTEMS DESIGN IV (BPS418P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Expert study of Building Physics and Systems Design, focusing on: (1) Material selection. (2) Schedules, sequences and affordability. (3) Quality in green building design and construction, and (4) Built environment rating tools. (Total notional time: 120 hours)

**C****COMPUTER APPLICATIONS IN ARCHITECTURE I (CAR025P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Fundamental Computer Applications in Architecture, focusing on: (1) Raster and vector graphics editing software; (2) 3D modelling computer programs; and (3) Building information modelling software (BIM). (Total notional time: 60 hours)

**COMPUTER APPLICATIONS IN ARCHITECTURE II (CAR226P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Intermediate Computer Applications in Architecture, focusing on Building information modelling software (BIM). (Total notional time: 60 hours)

**COMPUTER APPLICATIONS IN ARCHITECTURE III (CAR327P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Advanced Computer Applications in Architecture, focusing on: (1) 3D modelling computer programs. (2) Building information modelling software (BIM); and (3) 3D Rendering software. (Total notional time: 180 hours)

**COMPUTER APPLICATIONS IN ARCHITECTURE IV (CAR428P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Expert study of Computer Applications in Architecture, focusing on: (1) 3D modelling and computational design software. (2) Building information modelling software (BIM). (3) 3D Rendering software (artificial reality and virtual reality); and (4) Energy and thermal modelling software. (Total notional time: 120 hours)





**CONSTRUCTION I (CST005P)****CONTINUOUS ASSESSMENT**

*(Module custodian: Department of Architecture and Industrial Design)*

Fundamental Building Construction, focusing on: (1) A visual lexicon of the South African dwelling. (2) A single-storey building, including: Building site; Foundation, basement, floor, wall and roof systems; Building envelope; Construction materials, construction methods and detailing; Moisture and thermal protection; Building services, fittings and finishes; and Special construction. (3) Relevant SANS 10400 and other regulations, standards and codes; and Preparing a set of working drawings for Local Authority submission adhering to all the applicable conventions (using a project completed in the Architectural Design I module). (Total notional time: 90 hours)

**CONSTRUCTION II (CST216P)****CONTINUOUS ASSESSMENT**

*(Module custodian: Department of Architecture and Industrial Design)*

Intermediate Building Construction, focusing on: (1) A double-storey building with a basement; Building site; Foundation, basement, floor, wall and roof systems; Building envelope; Construction materials, construction methods and detailing; Moisture and thermal protection; Building services, fittings and finishes; and Special construction. (2) Relevant SANS 10400 and other regulations, standards and codes; and (3) Preparing an advanced set of working drawings for Local Authority submission adhering to all the applicable conventions (using a project completed in the Architectural Design II module). (Total notional time: 120 hours)

**CONSTRUCTION III (CST307P)****CONTINUOUS ASSESSMENT**

*(Module custodian: Department of Architecture and Industrial Design)*

Advanced Building Construction, focusing on: (1) Structural design of high rise buildings with multi-level basements; (2) Technical properties and applications of construction materials and methods. (3) Building services, fittings and finishes. (4) Relevant SANS 10400 and other regulations, standards and codes, and (5) Preparing design development drawings and a full-scale model of the detail representing the whole (using a project completed in the Architectural Design III module). (Total notional time: 180 hours)

**CONSTRUCTION IV (CST418P)****CONTINUOUS ASSESSMENT**

*(Module custodian: Department of Architecture and Industrial Design)*

Expert study of Building Construction, focusing on: (1) Advanced construction within Industrial Economies. (2) Building typologies and precedent studies. (3) Building regulations and codes in the context of climate change; (4) Pertinent green building rating tools and (5) Component and detail drawings. (Total notional time: 180 hours)

**F****FOUNDATION ARCHITECTURAL DESIGN I (ACDF05P)****CONTINUOUS ASSESSMENT**

*(Module custodian: Department of Architecture and Industrial Design)*

Introduction to Architectural Design processes and concepts, focusing on: (1) Principles of architectural design and the design process. (2) Planning principles and spatial relationships. (3) Ergonomic design principles. (4) The influence of structure and construction during design decision-making. (5) Design informants (including context, historical precedents and contemporary precedents). (6) Architectural theory and meaning. (7) Product design and manufacturing, and (8) Independent thinking and decision-making. (Total notional time: 240 hours)

**FOUNDATION CONSTRUCTION I (CSTF05P)****CONTINUOUS ASSESSMENT**

*(Module custodian: Department of Architecture and Industrial Design)*

Fundamental Building Construction, focusing on: (1) A visual lexicon of the South African dwelling. (2) A single-storey building, specifically, the building site; Foundation, basement, floor, wall and roof systems; Building envelope; Construction materials, construction methods and detailing; Building services, fittings and finishes; and (3) Relevant SANS 10400 and other regulations, standards and codes. (Total notional time: 120 hours)

**FOUNDATION ARCHITECTURAL LANGUAGE AND PRESENTATION TECHNIQUES I (ALPF05P)****CONTINUOUS ASSESSMENT**

*(Module custodian: Department of Architecture and Industrial Design)*

Introduction to Architectural Language and Presentation Techniques, focusing on: (1) Architectural presentation techniques including artistic media and model building. (2) Communicating design ideas and concepts using verbal presentation, public speaking and written communication; and (3) Formulating a normative position informing design decisions. (Total notional time: 120 hours)



**FOUNDATION PROFESSIONAL PRACTICE I (PFRF25P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Introduction to Professional Architectural Practice, focusing on: (1) The structure and regulation of the architectural profession; and (2) Local Authority building plan submission requirements and approval processes. (Total notional time: 60 hours)

**FOUNDATION TECHNICAL ARCHITECTURAL DRAWING I (FDTF25P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Introduction to Technical Architectural Drawing, focusing on: (1) Drawing by hand; and (2) Drawing by computer using related software and hardware to present design projects. (Total notional time: 60 hours)

**P****PRESENTATION TECHNIQUES I (PTR005P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Fundamental architectural presentation drawings and sketching, focusing on: (1) Drawing concepts (perception and relationships of lines, shapes and spaces). (2) Techniques (line work, typography and hatching). (3) Model building. (4) Contextual and scaling elements. (5) Layout and composition. (6) 3D sketching, perspectives and graphic presentation; and (7) Self-expression and meaning in a drawing. (Total notional time: 60 hours)

**PROFESSIONAL PRACTICE I (PFR025P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Written and oral communication in the architecture profession, focusing on: (1) Relevant terminology and professional vocabulary. (2) Report writing. (3) Academic writing and referencing; and (4) Verbal presentation. Local Authority building plan submission and approval processes, focusing on: (1) Town planning schemes (building lines, street setback, zoning etc.). (2) Preparing drawings for approval. (3) Preparing required application forms and other documentation for submission; and (4) Checklists for Local Authority submission. Fundamental Building Surveying, focusing on: (1) Basic surveying methods. (2) Practical levelling and contouring. (3) Setting out of buildings. (4) Introduction to Geographic Information Systems (GIS). (5) Basic use and application of the Global Positioning System (GPS). (6) Cadastral, referencing and photogrammetry software; and (7) Fieldwork practice. (Total notional time: 30 hours)

**PROFESSIONAL PRACTICE II (PFR216P)****WORK-INTEGRATED LEARNING****(Module custodian: Department of Architecture and Industrial Design)**

Intermediate Professional Architectural Practice, based on the Work-Integrated Learning experience during a supervised internship at an approved architectural practice, including the following aspects: (1) The structure and regulation of the profession, specifically: Overview of the profession; Statutory and voluntary bodies; Categories of registration; and the Building delivery process (with reference to the SACAP work stages). (2) SAIA practice manual, specifically: Role of the principal-agent and consultants; Agreement between architect and client; and the Relationship between and responsibilities of the architect / consultants / client / contractor and subcontractors. (3) Contracts and tenders, specifically: Types of building contracts; Tender procedures; Building contract; Forms of subcontractors; and Dispute resolution. (4) Local Authority, specifically: Town planning schemes (building lines, street setback, zoning, etc.); Preparing drawings for approval; Preparing required application forms and other documentation for submission; Submission of drawings for approval; and Follow-up visits to obtain approval. (5) Architectural projects, specifically: Management of architectural projects, and Accompanied site inspections and attending site meetings. (6) Office management, specifically: Office procedures and protocols; and the Issuing of drawings and other documentation. (7) Professional demeanour, specifically: Attributes of an architectural professional and techniques for time management, efficiency and productivity. (Total notional time: 360 hours)

**PROFESSIONAL PRACTICE III (PFR327P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Advanced Digital Building Surveying, focusing on: (1) Pertinent hardware and software used for photogrammetry and 3D-object scanning. (2) Field exercises, resulting in data collection, data translation and object production, and the (3) Documentation, presentation ; and transfer of collected data to other applications. (Total notional time: 60 hours)



**PROFESSIONAL PRACTICE IV (PFR418P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Expert study of Professional Architectural Practice, focusing on: (1) The legal implications of professional architectural services. (2) Ethics in architectural practice. (3) SACAP (Client-Architect agreement, Board Notices and other published documents). (4) Professional indemnity insurance. (5) SAIA Practice Manual. (6) Pertinent South African laws. (7) Different building contracts; and (8) Dispute resolution. Expert study of Architectural Practice Management, focusing on: (1) The economics of professional architectural services. (2) Management styles and approaches. (3) Financial management. (4) Establishing a small business; and (5) Entrepreneurship. Fundamental study of Quantity Surveying, focusing on: (1) The methodology of measuring. (2) Building cost estimates. (3) Feasibility studies. (4) Economic design. (5) Contract administration; and (6) Valuation of buildings. (Total notional time: 120 hours)

**S****STUDIO WORK IV (STW408P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Expert architectural studio work, focusing on: (1) The overall process of 'design, develop, model and make'. (2) A hands-on, studio-based learning environment moving projects from proposal to an interactive product; (3) Prototyping skills from carpentry to digital fabrication, electronics, and coding; and (4) Research contribution to the WikiHouse project. (Total notional time: 300 hours)

**T****THEORY AND HISTORY OF ARCHITECTURE I (THR005P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Fundamental theory and history of architecture, focusing on: (1) Ancient and contemporary architecture. (2) General characteristics of African architecture. (3) Geographic influences on African architecture. (4) Religious influences on African architecture. (5) Palaces and shrines. (6) Vernacular architectures; and (7) Timelines of African architecture and pertinent artefacts. Architectural theory and history is studied through the theoretical lenses of: (1) Geometric principles of organisation. (2) Form and space. (3) Proportion and scale resulting in a normative position on architecture. (Total notional time: 60 hours)

**THEORY AND HISTORY OF ARCHITECTURE II (THR216P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Intermediate theory and history of architecture, focusing on: (1) Historical development of infrastructures and services. (2) African artefacts c. 24 000 BCE to the present, and (3) Architecture without architects. Architectural theory and history is studied through the theoretical lenses of: (1) Elements of architecture. (2) Mass production and craftsmanship. (3) Problem-solving and art practice. (4) Pattern, form and meaning, resulting in a normative position on architecture. (Total notional time: 120 hours)

**THEORY AND HISTORY OF ARCHITECTURE III (THR307P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Advanced theory and history of architecture, focusing on: (1) The architecture of the African diaspora. (2) South African modernity. (3) Afro-futurism. (4) Architectures of resistance. (5) Rhetoric and ideology in architecture; and (6) Moxomatsi and the Bokoni. Architectural theory and history is studied through the theoretical lenses of: (1) Politics. (2) Power, difference and embodiment. (3) Aesthetics, pleasure and excess. (4) Nation, world and spectacle. (5) Memory, tradition and identity, resulting in a normative position on architecture. (Total notional time: 120 hours)

**THEORY AND HISTORY OF ARCHITECTURE IV (THR408P)****CONTINUOUS ASSESSMENT****(Module custodian: Department of Architecture and Industrial Design)**

Expert study of theory and history of architecture, focusing on: (1) The City, the metropolis and territory. (2) Building typologies. (3) Pre-colonial African cities. (4) Contemporary African and Global South cities, and (5) Humanitarian projects. Architectural theory and history are studied through the theoretical lenses of: (1) Sequence. (2) Montage, collage and composition. (3) Nature, ecology and sustainability. (4) Science, technology and virtuality. (5) Design, production and practice. (6) Nomadic place-making resulting in a Normative position on architecture. (Total notional time: 120 hours)

