

University of Pretoria Yearbook 2022

BSc (Architecture) (12132018)

Department Architecture

Minimum duration of study 3 years

Total credits 380

NQF level 07

Programme information

Architecture entails the design of buildings and the spaces between those buildings. Art and science are employed to create liveable environments that contribute towards the spiritual and material prosperity of the country. Architects are often innovative, critical thinkers that lead and form part of consultant teams. Although they are employed by organisations involved with development, investment, research, marketing, the industry or even education, many architects prefer to be independent consultants and entrepreneurs.

BScArch is regarded as an exit level that enables the graduate to register as a candidate architectural technologist, and BArchHons as candidate senior architectural technologist, at the South African Council for the Architectural Profession. An architectural technologist is a professional person registered by the SACAP in terms of the Architectural Professions Act (Act 44 of 2000). Such practitioners provide assistance in the practices of the disciplines of architecture, interior architecture, landscape architecture and urban design where their responsibilities would be the documentation of projects, project administration and site management.

Students are advised to work in the offices of an architect to gain practical experience during the university recesses and during a year out after completion of the BScArch degree.

A graduate wishing to become a professional architect must apply for, and pursue, a further two years of full-time studies in the professional degree programme. The Master of Architecture (Professional) degree is recognised by the South African Council for the Architectural Profession as qualifying the graduate to register as a candidate professional architect in terms of the Architectural Professions Act (Act 44 of 2000).

Admission requirements

Important information for all prospective students for 2022

- The admission requirements apply to students who apply for admission to the University of Pretoria with a **National Senior Certificate (NSC) and Independent Examination Board (IEB) qualifications.**
- **Applicants with qualifications other than the abovementioned** should refer to:
 - **Brochure:** Undergraduate Programme Information 2022: Qualifications other than the NSC and IEB, available at [click here](#).
- **Citizens from countries other than South Africa (applicants who are not South African citizens)** should also refer to:
 - **Brochure:** Newcomer's Guide 2021, available at [click here](#).
 - **Website:** [click here](#).

- **School of Tomorrow (SOT), Accelerated Christian Education (ACE) and General Education Development Test (GED):** The University of Pretoria no longer accepts qualifications awarded by these institutions.
- **National Certificate (Vocational) (NCV) Level 4:** The University of Pretoria may consider NCV candidates, provided they meet the exemption for bachelor's status criteria and the programme requirements.

Transferring students

A transferring student is a student who, at the time of application for a degree programme at the University of Pretoria (UP) –

- is a registered student at another tertiary institution, **or** was previously registered at another tertiary institution and did not complete the programme enrolled for at that institution, and is not currently enrolled at a tertiary institution, **or** has completed studies at another tertiary institution, but is not currently enrolled at a tertiary institution, **or** has started with tertiary studies at UP, then moved to another tertiary institution and wants to be readmitted at UP.

A transferring student will be considered for admission based on

- an NSC or equivalent qualification with exemption to bachelor's or diploma studies (whichever is applicable); **and** meeting the minimum faculty-specific subject requirements at NSC or tertiary level; **or** having completed a higher certificate at a tertiary institution with faculty-specific subjects/modules passed (equal to or more than 50%), as well as complying with faculty rules on admission;
- previous academic performance (must have passed all modules registered for up to the closing date of application) or as per faculty regulation/promotion requirements;
- a certificate of good conduct.

Note: Students who have been dismissed at the previous institution due to poor academic performance, will not be considered for admission to UP.

Returning students

A returning student is a student who, at the time of application for a degree programme –

- is a registered student at UP, and wants to transfer to another degree at UP, **or** was previously registered at UP and did not complete the programme enrolled for, and did not enrol at another tertiary institution in the meantime (including students who applied for leave of absence), **or** has completed studies at UP, but is not currently enrolled or was not enrolled at another tertiary institution after graduation.

A returning student will be considered for admission based on

- an NSC or equivalent qualification with exemption to bachelor's or diploma studies (whichever is applicable); **and** meeting the minimum faculty-specific subject requirements at NSC or tertiary level; **or** previous academic performance (should have a cumulative weighted average of at least 50% for the programme enrolled for);
- having applied for and was granted leave of absence.

Note: Students who have been excluded/dismissed from a faculty due to poor academic performance may be considered for admission to another programme at UP. The Admissions Committee may consider such students if they were not dismissed more than twice. Only ONE transfer between UP faculties will be allowed, and a maximum of two (2) transfers within a faculty.

Important faculty-specific information on undergraduate programmes for 2022

- **This is a selection programme. BSc (Architecture) will only be considered as first study choice. The closing date indicates the closure of the application process for this programme.**
- The following persons will be considered for admission: Candidates who have a certificate that is deemed by the University to be equivalent to the required National Senior Certificate (NSC) with university endorsement;

candidates who are graduates from another tertiary institution or have been granted the status of a graduate of such an institution, and candidates who are graduates of another faculty at the University of Pretoria.

- Life Orientation is excluded when calculating the APS.
- Grade 11 results are used for the conditional admission of prospective students.
- A valid qualification with admission to degree studies is required.
- Minimum subject and achievement requirements, as set out below, are required.
- All modules will be presented in English, as English is the language of tuition, communication and correspondence.

University of Pretoria website: [click here](#)

Minimum requirements

Achievement level

English Home

Language or

English First

Additional

Language

NSC/IEB

5

Mathematics

NSC/IEB

4

Physical Sciences

NSC/IEB

4

APS

27

Additional requirements

Please Note: Students wishing to transfer to other programmes in the Department of Architecture must obtain written consent from the admissions committee.

Other programme-specific information

Concurrent presentation

In the third year of study Design, Construction, Design communication, History of the environment and Earth studies must initially be examined in the same year.

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

Promotion to next study year

- A student is promoted to a subsequent year of study after acquiring all the prerequisite module credits of the preceding year of study.
- A student must pass all the modules of the first year of study, before he or she is permitted to register for any module of the third year of study. Module prerequisites remain applicable. Exceptions to this rule will be considered by the Head of Department and the Dean.
- A student is deemed to be in the year of study for which he or she is registered in Design. If the student is not registered for Design the highest passed year of Design determines the year of study.
- Students whose academic progress is not acceptable can be suspended from further studies. Refer to the following important General Academic Regulation: G4 and/or regulations as they appear for the applicable programmes.

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

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

Pass with distinction

The degree is conferred with distinction on a student who, at first registration, passes all modules of the final year of study with a weighted average of 75% (not rounded). The degree must have been completed within the minimum prescribed time and no supplementary/special examinations may have been written.

Curriculum: Year 1

Minimum credits: 124

Fundamental modules

Academic information management 111 (AIM 111)

Module credits	4.00
NQF Level	05
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Economic and Management Sciences Faculty of Humanities Faculty of Law Faculty of Health Sciences Faculty of Natural and Agricultural Sciences Faculty of Theology and Religion
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Information Science
Period of presentation	Semester 1

Module content

Find, evaluate, process, manage and present information resources for academic purposes using appropriate technology.

Academic information management 121 (AIM 121)

Module credits	4.00
NQF Level	05
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Economic and Management Sciences Faculty of Humanities Faculty of Law Faculty of Health Sciences Faculty of Natural and Agricultural Sciences Faculty of Theology and Religion Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Informatics



Period of presentation Semester 2

Module content

Apply effective search strategies in different technological environments. Demonstrate the ethical and fair use of information resources. Integrate 21st-century communications into the management of academic information.

Academic orientation 112 (UPO 112)

Module credits 0.00

NQF Level 00

Language of tuition Module is presented in English

Department EBIT Deans Office

Period of presentation Year

Core modules

Earth studies 110 (AAL 110)

Module credits 8.00

NQF Level 05

Prerequisites No prerequisites.

Contact time 3 lectures per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Semester 1

Module content

Introduction to ecosystemic and systems thinking, ecology, natural resources and stress on the environment; social ecological systems and wellbeing; ecological design principles.

Earth studies 120 (AAL 120)

Module credits 8.00

NQF Level 05

Prerequisites No prerequisites.

Contact time 3 lectures per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Semester 2

Module content

Introduction to natural materials, their basic properties and transformation for application in the built environment.

Construction 111 (KON 111)

Module credits	8.00
NQF Level	05
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Semester 1

Module content

The context of construction technology in dialogue with design, theory, structure, representation and the environment. Introduction to low-complexity construction methods and site responsive applications.

Construction 121 (KON 121)

Module credits	8.00
NQF Level	05
Prerequisites	KON 111 GS
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Semester 2

Module content

Application of construction knowledge in design realisation, representation and material resolution.

Design communication 100 (OKU 100)

Module credits	6.00
NQF Level	05
Prerequisites	No prerequisites.
Contact time	1 lecture per week, 1 studio hour per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Year

Module content

Visual communication, digital visualisation and representation tools, basic computer aided space modelling and drawing conventions to support design and construction projects.

History of the environment 110 (OML 110)

Module credits	6.00
NQF Level	05
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Semester 1

Module content

A broad survey of the intertwining histories of southern Africa and the world. First achieved from the vantage of our campus, and thereafter the focus shifts to the city by investigating settings of ritual to introduce students to local traditions and lexicons of place-making.

History of the environment 120 (OML 120)

Module credits	6.00
NQF Level	05
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Semester 2

Module content

A study of the Mediterranean basin as nexus between the cultures of Asia, Europe, and the pre-colonial civilisations of North and West Africa. Cities, buildings, and gardens will be analysed to relate their form and order to the environmental, political, and philosophical conditions that influenced their making.

Design 100 (ONT 100)

Module credits	60.00
NQF Level	05
Prerequisites	No prerequisites.
Contact time	2 lectures per week, 3 seminars per week, 9 studio hours per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Year

Module content

Introduction to the fundamentals of architectural design supported by pertinent theory and the integration of supporting modules. Understanding the influence of physical, social, cultural and historical informants on the processes that generate meaningful spatial outcomes on an intimate and familiar scale with a human-centred approach. Development of a design vocabulary and visual literacy skills. Students may from time to time be required to undertake experiential learning/practical work, community engagement, or data collection activities related to on-site research in socio-economically underprivileged areas.

Theory of structures 123 (STU 123)

Module credits	6.00
NQF Level	05
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Semester 2

Module content

The theory of structures in architectural applications: Types of structures in architecture; Centre of mass and centre of rigidity – wall arrangements; Stresses and materials; Forces and their applications on trusses and cables, FBD; Equilibrium of equations; Force problems; Introduction to flexural members, determinate beams; Moments, axial and shear forces diagrams.

Curriculum: Year 2

Minimum credits: 134

Core modules

Earth studies 210 (AAL 210)

Module credits	8.00
NQF Level	06
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Semester 1

Module content

Designing towards wellbeing within the built environment: responsive and passive design in natural and mesoscale environments.

Earth studies 220 (AAL 220)

Module credits	8.00
NQF Level	06
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Semester 2

Module content

Designing towards wellbeing within the built environment: inclusive design, health and user comfort in interior environments.

Community-based project 201 (JCP 201)

Module credits	8.00
NQF Level	06
Prerequisites	No prerequisites.
Contact time	1 other contact session per week
Language of tuition	Module is presented in English
Department	Informatics

Period of presentation Year

Module content

This module is integrated into all undergraduate academic programmes offered by the Faculty of Engineering, Built Environment and Information Technology. Main objectives: execution of a community project aimed at achieving a beneficial impact on a section of a socio-economically underprivileged community located in socio-economically deprived areas of our society; awareness of personal, social and cultural values and an understanding of social issues; and development of life skills.

Construction 210 (KON 210)

Module credits 10.00

NQF Level 06

Prerequisites KON 111 and KON 121

Contact time 3 lectures per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Semester 1

Module content

The design and detailing of medium complexity framed construction: substructures and superstructures. The theoretical understanding of technology and its relationship with design. Context responsive construction and material applications. The application of building regulations and standards.

Construction 220 (KON 220)

Module credits 10.00

NQF Level 06

Prerequisites KON 210 GS

Contact time 3 lectures per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Semester 2

Module content

Site manipulations, services and green infrastructure. Building regulations and standards. Application of construction knowledge in design realisation.

Design communication 200 (OKU 200)

Module credits 6.00

NQF Level 06

Prerequisites No prerequisites.

Contact time 1 lecture per week, 1 studio hour per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Year

Module content

Visual communication, digital visualisation and representation tools. Communicating the complexity of projects in design and construction.

History of the environment 210 (OML 210)

Module credits 6.00

NQF Level 06

Prerequisites No prerequisites.

Contact time 2 lectures per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Semester 1

Module content

An introduction to critical readings of history. It covers episodes instrumental in the formation and export of modernity, especially its manifestation in southern Africa as a vehicle for western hegemony, and its influence on contemporary discourse. Exemplar projects are studied to uncover the socio-political forces that shaped the ideas, methods and individual aspirations of architects in the service of patrons.

History of the environment 220 (OML 220)

Module credits 6.00

NQF Level 06

Prerequisites No prerequisites.

Contact time 2 lectures per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Semester 2

Module content

An exploration of modernist and post-modernist approaches to architecture that relate to the socio-political patterns that characterise the contemporary world. The juxtaposition of ideas allows students to debate critical issues within society and the disciplines of design.

Design 200 (ONT 200)

Module credits 56.00



NQF Level	06
Prerequisites	AAL 110, KON 111, KON 121, OML 110, OML 120 and ONT 100
Contact time	2 lectures per week, 3 seminars per week, 9 studio hours per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Year

Module content

The process and product of architectural design supported by pertinent theory and the integration of supporting modules. The design of context responsive spaces and buildings that address private and public interfaces with residential and community orientated programmes on a neighbourhood scale. Students may from time to time be required to undertake experiential learning/practical work, community engagement, or data collection activities related to on-site research in socio-economically underprivileged areas.

Theory of structures 211 (STU 211)

Module credits	8.00
NQF Level	06
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Civil Engineering
Period of presentation	Semester 1

Module content

The theory of structures in architectural applications: Review of determinate structures; indeterminate structures; deflection of beams; strength and behaviour of structural building materials; design of structures, design principles and material selection; design of reinforced concrete structures (beams, slabs and columns).

Theory of structures 221 (STU 221)

Module credits	8.00
NQF Level	06
Prerequisites	STU 211 GS
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Civil Engineering
Period of presentation	Semester 2

Module content

The theory of structures in architectural applications: Review of indeterminate structures; design codes, load combinations and load paths; design of the initial framing system of reinforced concrete structures; foundation systems and retaining walls; stability in structures; design of steel structures; load bearing masonry – loads and sizing.

Curriculum: Final year

Minimum credits: 122

Core modules

Earth studies 310 (AAL 310)

Module credits	6.00
NQF Level	07
Prerequisites	AAL 210 and AAL 220
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Semester 1

Module content

Integrating the creation, change, restoration and protection of ecosystems in design and planning across a range of scales and contexts.

Earth studies 320 (AAL 320)

Module credits	6.00
NQF Level	07
Prerequisites	AAL 210
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Semester 2

Module content

Ecosystemic thinking for the designer in terms of culture, the natural and built environment. The project-specific application of sustainable development and ecological design principles that respond to users, programme and the macro context.

Introduction to construction contract law 322 (KKR 322)

Module credits	8.00
NQF Level	07
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Construction Economics

Period of presentation Semester 2

Module content

An introduction to the principles of construction contract law and an overview of standardised conditions of contract for the built environment.

Construction 300 (KON 300)

Module credits 24.00

NQF Level 07

Prerequisites KON 210 and KON 220

Contact time 1 seminar per week, 1 studio hour per week, 3 lectures per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Year

Module content

The theoretical understanding of technology and its relationship with design. Applied construction technology and design of multistorey buildings. The integrated design of services, structure, circulation and site infrastructure. The design and detailing of low maintenance, sustainable and environmentally responsive buildings. The application of building regulations and standards. The preparation of construction drawings as part of a design realisation integrated with ONT 300 and OKU 300.

Design communication 300 (OKU 300)

Module credits 6.00

NQF Level 07

Prerequisites ONT 200/ONT 202/ONT 203

Contact time 1 lecture per week, 1 studio hour per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Year

Module content

Advanced digital visualisation and representation tools to support design projects. Document and building information management.

History of the environment 310 (OMG 310)

Module credits 6.00

NQF Level 07

Prerequisites No prerequisites.

Contact time 2 lectures per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Semester 1

Module content

A multi-disciplinary reading of southern Africa as a tapestry of cultural landscapes that reflect the histories of and interactions between indigenous, colonial and migrant cultures. It draws from diverse sources and perspectives from fields such as archaeology and art history. This provides the backdrop to a study of current debates, local urbanism and post-colonial architectural discourse.

History of the environment 320 (OMG 320)

Module credits 6.00

NQF Level 07

Prerequisites No prerequisites.

Contact time 2 lectures per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Semester 2

Module content

In part this module delves into the archive and scholarship of the Department to study the lives of South African spatial designers as a means to trace recent history. This sensitises students to the autobiographical: they formulate a conscious approach to architecture concerning the histories presented in preceding courses.

Design 300 (ONT 300)

Module credits 52.00

NQF Level 07

Prerequisites KON 210, KON 220, OML 210, OML 220 and ONT 200

Contact time 2 lectures per week, 3 seminars per week, 9 studio hours per week

Language of tuition Module is presented in English

Department Architecture

Period of presentation Year

Module content

The process and product of architectural design supported by pertinent theory and the integration of supporting modules. The design of socially and environmentally responsible spaces and multistorey buildings with complex programmes in urban contexts. Exploring identity through design and developing a normative position in design. Design realisation developed to construction drawings integrated with KON 300 and OKU 300. Students may, from time to time, be required to undertake experiential learning/practical work, community engagement or data collection activities related to on-site research in socio-economically underprivileged areas.

Practice management 310 (PJS 310)

Module credits	8.00
NQF Level	07
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Architecture
Period of presentation	Semester 1

Module content

Management of an architectural practice and architectural project from inception up to local authority submission.

The regulations and rules for the degrees published here are subject to change and may be amended after the publication of this information.

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations.