University of Pretoria Yearbook 2016

BSc (Interior Architecture) Interior Architecture (12132008)

Duration of study	3 years
Total credits	412
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Programme information

Interior architecture is the art and science of the design of designated spaces. It focuses on the needs of the user and the harmony between architectural spaces and the detailed design of spaces and life-style products. Graduates will have the ability to design interiors and products. Attention is given to the design process, building and material technology, building climate, ergonomics, history and visual communication within the context of society, economics, politics and technology. It is very important that students have the ability to visualise spaces, think three-dimensionally and solve problems creatively.

Students are advised to work in the offices of an architect or an interior architect during the university recesses to gain practical experience.

It is recommended that those graduates wishing to become professional Interior architects must hereafter apply to register for the BIntHons degree (one year full-time) and the MInt(Prof) degree (one year full-time). Those candidates wishing to become interior and product designers must hereafter register for the one year full-time honours degree programme in Interior Architecture [BIntHons].

Admission requirements

Applicants who matriculated before or in 2007

The following minimum requirements for admission apply: A grade 12 Certificate with university endorsement and at least 40% (E symbol) in Mathematics and Physical Science on Higher Grade or at least 50% (D symbol) for the same subjects at Standard Grade. A minimum M Score of 18 is required for Grade 12.

Applicants who matriculated in 2008 or thereafter

The following minimum requirements for admission apply: A National Senior Certificate with access to degree studies and a minimum Admission Point Score (APS) of 27; a minimum achievement level of 4 (at least 50%) for Mathematics and Physical Science; a minimum achievement level of 5 (at least 60%) for Afrikaans or English (as home language or first additional language) and an achievement level of at least 4 (minimum 50%) for Life Orientation although this subject is not used in the calculation of the APS. The APS is calculated using two language subjects Mathematics Physical Science and any two

other subjects excluding Life Orientation.

Transfers

Students currently enrolled for other study programmes may apply for permission to transfer to the Department of Architecture. For these applicants round 1 of the selection process will be based on their Grade 12 results (refer to requirements for admission) their academic record and a detailed written motivation explaining reasons for wanting to transfer.

Students who are currently registered at UP should submit their applications directly to the Admissions Officer School for the Built Environment. Students who are registered at other tertiary institutions must apply through the Client Service Centre. Note the closing date. Applicants will not be permitted to register for any modules in advance (prior to having been granted final admission).

National Benchmark Test (NBT)

The Department of Architecture does not require all applicants to take the NBT (generally known as the National Benchmark Test). In special cases the Admissions Officer will inform candidates of the arrangements should the test be an additional requirement. Candidates who also apply at other departments or institutions are advised to enquire if these tests are required elsewhere.

Admission Requirements

- In order to register NSC/IEB/Cambridge candidates must comply with the minimum requirements for degree studies as well as with the minimum requirements for the relevant study programme.
- Life Orientation is excluded when calculating the APS.
- Grade 11 results are used in the provisional admission of prospective students.
- A valid National Senior Certificate (NSC) with admission to degree studies is required.
- Minimum subject and achievement requirements as set out below are required. On first-year level a student has a choice between Afrikaans and English as language medium. In certain cases tuition may be presented in English only for example in electives where the lecturer may not speak Afrikaans or in cases where it is not economically or practically viable.
- Provisional admission to the four-year programme in the School of Engineering is only guaranteed if a prospective student complies with ALL the requirements below.

Note

Candidates who do not comply with the minimum requirements, set out above, but who have obtained a minimum APS of 30, an achievement level of 5 for English or Afrikaans, 6 for Mathematics and 5 for Physical Science, will be considered for provisional admission to either the four-year programme or the ENGAGE programme based on the results of the compulsory NBT.

Admission to ENGAGE in the School of Engineering will be determined by the results of the NBT, NSC

results, an achievement level of 5 in Mathematics and 4 in Physical Science, as well as an achievement level of 4 in Afrikaans or English, together with an APS of 25.

Students may apply directly to be considered for the ENGAGE programme.

Minimum requirements for 2016												
Achievement level												
Afrikaans or English				**Mathematics**				**Physical Sciences**				**APS**
NSC/IEB	HIGCSE	AS-Level	A-Level	NSC/IEB	HIGCSE	AS-Level	A-Level	NSC/IEB	HIGCSE	AS-Level	A-Level	
5	3	C	C	4	3	D	D	4	3	D	D	27

- Will only be considered as first study choice
- Selection programme: Selection includes an interview.

Practical requirement

At least one year of work or travel recommended.

Important dates

The academic year of the University of Pretoria starts in January and ends early in December. It is divided into two semesters (or four quarter modules) with short recesses in April July and September. In order to gain practical experience students are advised to work at a practice during the University recesses. The University calendar is available online at www.up.ac.za/calendars.

1 March: Applications for admission open for the next academic year. Applications should be handed in at the Client Service Centre or can be submitted electronically.

30 June: Last day to submit all undergraduate applications for admission to the Department of Architecture for the following academic year. This closing date also applies to all transfer applications.

June/July/August/September: Departmental selection tests are written on scheduled Saturdays. Dates are automatically allocated and cannot be rescheduled.

October recess: 4 October to 12 October 2015: Final selection interviews for applicants on the shortlist.

31 October: Selection results are available. Applicants are notified of the outcome in writing.

30 November: Last day for selected students to acknowledge their selection and pay deposits or make arrangements for payment.

Additional requirements

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, Environmental studies, Earth studies and Material studies must initially be examined in the same year.

Awarding of degree

The degree is awarded to those students who have obtained 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 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.

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, simultaneously passes both Design 303 and Construction 320 with distinction (75%) with the proviso that the degree is completed within the minimum prescribed time and all other final-year modules are passed on first registration without any supplementary/special examinations.

Curriculum: Year 1

Minimum credits: 116

Fundamental modules

Academic orientation 112 (UPO 112)

Module credits	0.00
Language of tuition	Double Medium
Academic organisation	EBIT Dean's Office
Period of presentation	Year

Academic information management 102 (AIM 102)

Module credits	6.00
Service modules	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 Faculty of Veterinary Science
Contact time	2 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Information Science
Period of presentation	Semester 2

Module content

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

Core modules

Earth studies 110 (AAL 110)

Module credits	10.00
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Architecture
Period of presentation	Semester 1

Module content

Introduction to the basic concepts of ecology, natural resources and stress on the environment; systems thinking; earth as system; changing paradigms and values; ecological design principles; geo-referencing; geo-mapping, basic site survey.

Construction 111 (KON 111)

Module credits	8.00
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 1

Module content

The context of architectural technology and the relationships between technology, theory, structure and materials. Drawing conventions.The typical city site. The construction and materials of a single storey dwelling with masonry walls and a pitched roof, from preparation for building work to substructure, retaining walls and floors.

Construction 121 (KON 121)

Module credits	8.00
Prerequisites	KON 111 GS
Contact time	3 lectures per week, 1 practical per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 2

Module content

Continuation of the construction and materials of a single storey dwelling. Superstructure: walls, opening, roofs, finishes and services.

Design communication 120 (OKU 120)

Module credits	6.00
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 2

Module content
Quarter 3: Introduction to basic computer aided design. Quarter 4: Introduction to the theory of structures: Forces, moments, stresses, strains, Young's Modulus, Structural components: beams, columns and trusses.

Environmental theory 110 (OML 110)

Module credits	6.00
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 1

Module content

Introductory contextualisation of twentieth century artefacts within the framework of history from Antiquity to Modernity. Building types as artefacts of material culture. Approaches and guidelines to the study of history of the environment. Understanding of the process of endemic construction and its monumentalisation, settlement and urbanisation of various ages and environments. An interdisciplinary investigation of living spaces as shapers of social interaction. The history of the environment of the Mediterranean Antique, Bronze Age, Classical and Biblical societies.

Environmental studies 120 (OML 120)

Module credits	6.00
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 2

Module content

The history of the environment of and the link between North-Europe and the Mediterranean area, the Arabic peninsula and the Indies, from the fall of Jerusalem up until the fall of Constantinople in 1453 AD. Tao, Shinto and the landscape of the Far East.

Design 100 (ONT 100)

Module credits	60.00
Prerequisites	No prerequisites.
Contact time	17 studio hours per week, 2 lectures per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Year

Module content

Introduction to design and integration with supporting modules. Design principles, skills and techniques. Small-scale design projects and environmental influences (physical, social, cultural, historical), space requirements and creative interpretation. Acquisition of skills in design communication through imagination, intuition and conceptual thinking. Relation of internal to external space. Anthropometry and ergonomics; visual literacy (visual media, analysis and interpretation) and criticism. The designer as visual thinker. Perception; ideograms. Development of a vocabulary to describe and illustrate the discipline of design. Pertinent theory that informs and supports the design process.

Elective modules

Elective module 110 (ARC 110)

Module credits	6.00
Prerequisites	No prerequisites.
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 1

Curriculum: Year 2

Minimum credits: 134

Core modules

Earth studies 210 (AAL 210)

Module credits	8.00
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Architecture
Period of presentation	Semester 1

Module content

Meso-environment:
Climate: atmospheric constituents and processes, weather systems, heat radiation and transfer, solar charts, sun movement and heat gain control.
Air: airflow patterns around structures, natural ventilation.
Water vapour: diffusivity, transfer and condensation.
Heat: thermal comfort and comfort indices, thermal performance of materials and structures, time lag, decrement and periodic heat transfer.

Earth studies 223 (AAL 223)

Module credits	4.00
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Architecture
Period of presentation	Quarter 3

Module content

The impact of social, economic and political systems on, and the multidisciplinary approach to design decisionmaking for inclusive environments and barrier-free environments. The application of this understanding in developing communities.

Earth studies 224 (AAL 224)

Module credits	4.00
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Both Afr and Eng

Academic organisation	Architecture
Period of presentation	Quarter 4

Module content

Environmental filters and forecasting techniques:
Sound: the physical nature of sound, physiology of hearing, sound and noise sources, transfer, absorption and isolation, noise control; measurement, levels, frequency analysis, A-loading, room acoustics, reverberation periods.
Light: properties of natural light, design criteria, daylight factors, diffusion, quality, energy requirements and saving.

Community-based project 201 (JCP 201)

Module credits	8.00
Prerequisites	No prerequisites.
Contact time	1 other contact session per week
Language of tuition	Both Afr and Eng
Academic organisation	Informatics
Period of presentation	Year

Module content

This project-orientated module is a form of applied learning which is directed at specific community needs and is integrated into all undergraduate academic programmes offered by the Faculty of Engineering, Built Environment and Information Technology. The main objectives with the module are as follows:
(1) The execution of a community related project aimed at achieving a beneficial impact on a chosen section of society, preferably but not exclusively, by engagement with a section of society which is different from the student's own social background.
(2) The development of an awareness of personal, social and cultural values, an attitude to be of service, and an understanding of social issues, for the purpose of being a responsible professional.
(3) The development of important multidisciplinary and life skills, such as communication, interpersonal and leadership skills.
Assessment in the module will include all or most of the following components: evaluation and approval of project proposal, assessment of oral and/or written progress reports, peer assessment in the event of team projects, written reportback by those at which the project was aimed at, and final assessment on grounds of the submission of a portfolio and a written report.

Construction 210 (KON 210)

Module credits	8.00
Prerequisites	KON 111 and KON 121
Contact time	3 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Architecture
Period of presentation	Semester 1

Module content

Double-storeyed buildings: reinforced concrete, steel and timber-framed structures. Offshutter concrete. Load-bearing masonry. Low-pitch roofs and waterproofing, other pitched-roof finishes. Lightweight partitioning. Glass. Joinery. Small precast elements.

Construction 220 (KON 220)

Module credits	8.00
Prerequisites	KON 210 GS
Contact time	3 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Architecture
Period of presentation	Semester 2

Module content

Soil mechanics: foundations, basement construction and waterproofing. Site structures: geotextiles and geomembranes, stairs, walls, retaining walls, fences, ramps, gabions, prefabricated retaining blocks. Built planters, lapas, braais, pavilions, decks.

Environmental theory 210 (OML 210)

Module credits	6.00
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Architecture
Period of presentation	Semester 1

Module content

The history of the environment and the link between North-Europe and a newly discovered world from the time of the circumnavigation of the southernmost Cape Point of Africa till the Industiral Revolution.

Environmental studies 220 (OML 220)

Module credits	6.00
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Architecture
Period of presentation	Semester 2

Module content

History of the environment of Western societies and their dominions from the Industrial Revolution up to the intellectual questioning of Modernism. Southern African housing typologies and Western artefacts as manifestation of socio-political realities since 1488 AD.

Design 203 (ONT 203)

Module credits	60.00
Prerequisites	AAL 110, KON 111, KON 121, OML 110, OML 120 and ONT 100
Contact time	2 lectures per week, 17 studio hours per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Year

Module content

The process and product of design through the integration of supporting modules. Spatial design as response to user. Design of inclusive environments, reuse of architectural space, planning and form-giving processes, production and identity as design determinants. The influence of perception, ergonomics and the tectonics on space making. Scenographic, product, exhibition or installation design. Skills: programming, architectural space analysis, time management, advanced graphic and reprographic techniques. Pertinent theory that informs and supports the design process in interior architecture.

Textiles: Utilities, fibres and yarns 212 (TKS 212)

Module credits	14.00
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	No prerequisites.
Contact time	3 lectures per week, 1 practical per week
Language of tuition	Double Medium
Academic organisation	Consumer Science
Period of presentation	Semester 1

Module content

Utility aspects: basic components of textiles, consumer decision making, utility aspects that include durability, comfort, maintenance, health/safety/protection and aesthetic aspects. Fibres and yarns: Fibre structure and performance including textile chemistry, fibre morphology and formation, fibre properties, classification and identification. Yarn structure and performance (including spun yarns, filament yarns, compound and novelty yarns).

Material studies 223 (MST 223)

Module credits	8.00
Prerequisites	No prerequisites.
Contact time	3 lectures per week

Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 2

Module content

Introduction to materials with applications in the field of interior design: material families, basic properties and selection. Wall (partition), ceiling and floor finishes. Window treatments. Ceramics as architectural finishes. Surface theory 1 (including colour and interior paint applications).

Curriculum: Final year

Minimum credits: 152

Core modules

Earth studies 320 (AAL 320)

Module credits	6.00
Prerequisites	AAL 210
Contact time	2 lectures per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 2

Module content

Ecosystemic thinking for the designer in terms of culture, science and environment. The designer as critic; analysis of precedents. Application of principles of sustainable development and ecological design including energy demand and efficiency and energy dissipation.

Business law 310 (BER 310)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	No prerequisites.
Contact time	4 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Mercantile Law
Period of presentation	Semester 1

Module content

Introduction to law. General principles of the law of contract. Specific contracts: purchase contracts; letting and hiring of work; employment contracts. Agency. General aspects of entrepreneurial law. Dispute resolution – mediation and arbitration.

Construction 310 (KON 310)

Module credits	8.00
Prerequisites	KON 210 and KON 220
Contact time	3 lectures per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 1

Module content

Roads: design and construction, materials and finishes, kerbing. Water features: design and construction. Street furniture. Construction equipment. Site and building services: water lines, sanitary plumbing and pipe systems above ground and indoors, underground sewer systems, electricity and gas. Electrical lighting: light, lamp types, luminaires; lighting requirements. Design application.

Construction 320 (KON 320)

Module credits	8.00
Prerequisites	KON 310 GS
Contact time	2 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Architecture
Period of presentation	Semester 2

Module content

Integration of the foregoing coursework. Introduction to construction norms and standards, technical drawing practice and specifications. Cost estimates, feasibility and payability. Advanced materials: ceramics, polymers, adhesives, paint, metals, glass. Human transportation systems: types, applications. Design of a small commercial building/landscape/interior space (in DESIGN) and the preparation of its construction drawings.

Material studies 313 (MST 313)

Module credits	8.00
Prerequisites	TKS 212 and MST 223
Contact time	3 lectures per week
Language of tuition	English
Academic organisation	Materials Science and Metallur
Period of presentation	Semester 1

Module content

Unconventional construction materials: properties, applications.

Material studies 323 (MST 323)

Module credits	8.00
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	MST 313
Contact time	3 lectures per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 2

Module content

Application of materials in artificial environments:
• Development of modern materials and processes in product design
• Joint theory
• New applications in technical textiles, polymers and other artificial materials
• Material selection and technical development in conjunction with projects in design (ONT 303) and construction (KON 320)

Design communication 313 (OKU 313)

Module credits	6.00
Prerequisites	No prerequisites.
Contact time	2 studio hours per week, 2 lectures per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 1

Module content

Advanced graphic and presentation techniques.

History of the environment 310 (OMG 310)

Module credits	6.00
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Architecture
Period of presentation	Semester 1

Module content

History of the environment of African societies between the tropics within global context until the present.

History of the environment 320 (OMG 320)

Module credits	6.00
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Architecture
Period of presentation	Semester 2

Module content

History of the environment of Southern African societies from the old Stone Age until the present.

Environmental studies 310 (OML 310)

Module credits	6.00
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 1

Module content

Normative positions: Normative positions that guide design thinking: Surface features, broad inclinations and differentiating features. Problems of substantiation. Theory and practise.
Theory of design disciplines: A hermeneutic appraisal of contemporary philosophical directions defining the current intellectual context in which the design disciplines are practised and appraised. Contextualising culture, philosophy and science as the ecosystem of the designer.
Housing studies: Contemporary theory, approaches and projects in housing. Developing a personal approach.

Environmental studies 320 (OML 320)

Module credits	6.00
Prerequisites	OML 310 GS
Contact time	2 lectures per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Semester 2

Module content

The relationship between global intellectual movements and the local debate. Appraising the state of current design production and the establishment of identity through design. Presentation is programme specific.

Design 303 (ONT 303)

Module credits	60.00
Prerequisites	KON 210, KON 220,OML 210, OML 220 and ONT 203
Contact time	2 lectures per week, 17 studio hours per week
Language of tuition	Double Medium
Academic organisation	Architecture
Period of presentation	Year

Module content

Semester 1
The process of design through the integration of supporting modules. The design of spaces with the emphasis on lateral thinking and ritual through adaptive reuse. Skills: technology-backed reprographic techniques, competitions and exhibitions, decision making and time management.
Semester 2
The product of design through the integration of supporting modules. The design of a commercial project in an existing architectural envelope in an urban context with a complex program developed to construction drawings in KON 320. Corporate identity, statutory requirements, feasibility and payability studies, tenant mix.

Practice management 320 (PJS 320)

Module credits	8.00
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Construction Economics
Period of presentation	Semester 2

Module content

The structure of the built environment in South Africa; basic principles and techniques of project management and financial management; methodology of measuring; building cost estimates; feasibility studies; economic design; contract administration; valuation of buildings.