No. 134   **13 February 2004**

Established in terms of Act 58 of 1995

SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Architecture

Registered by NSB 12, Physical Planning and Construction, publishes the following qualifications and unit standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the qualification and unit standards upon which qualifications are based. The full qualification and unit standards can be accessed via the SAQA web-site at **www.saqa.org.za**. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, Hatfield Forum West, 1065 Arcadia Street, Hatfield.

Comment on the unit standards should reach SAQA at the address *below and no later than 13 March 2004 2004.* All correspondence should be marked **Standards Setting – SGB Architecture** and addressed to

> The Director: Standards Setting and Development
> SAQA
> *Attention: Mr. D Mphuthing*
> Postnet Suite 248
> Private Bag X06
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JOE SAMUELS
DIRECTOR: STANDARDS SETTING AND DEVELOPMENT

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

TITLE OF QUALIFICATION

National Certificate in Architectural Technology

NQF LEVEL: NQF 05

NUMBER OF CREDITS: **120**

FIELD: **NSB 12 PHYSICAL PLANNING AND CONSTRUCTION**

SUBFIELD: **PHYSICAL PLANNING, DESIGN AND MANAGEMENT**

ISSUE DATE:

REVIEW DATE:

RATIONALE:

- To align a registered academic qualification to the entry level professional registration category "Candidate Architectural Draughtsperson" as defined by the Architectural Professions Act (see International comparability). It is imperative that education providers respond to the requirements for professional registration at each registration category.
- To implement a qualification that has a strong focus on developing skills for employment within the Architectural Profession/s.
- To provide for greater inclusivity in and access to the profession, increasing the human resource base for the profession at large.
- To provide a generic entry-level qualification that allows for greater flexibility to a number of articulation options; horizontal (e.g. Civil Engineering), vertical (e.g. ND Architectural Technology) and diagonal (e.g. Bachelor of Architectural Studies).

THE PURPOSE OF THE QUALIFICATION

- To provide an introduction to the architectural profession and its role within the broader context of the Built Environment.
- Provide the learner with the skills, competencies and academic knowledge required to practice in the Built Environment as a "Candidate Architectural Draughtsperson" and after a period of supervised practical experience and /

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or other requirements as specified by the professional registration body, as an "Architectural Draughtsperson".

- To create an early comprehensive exit level to:
  - Allow ease of movement to other (related) fields of expertise
  - Encourage life- long learning by setting achievable milestones
  - Introduce an academic qualification in the event of interrupted studies.

ACCESS TO THE QUALIFICATION

- Aptitude for the field of Architecture in its broadest sense (drawing, writing and verbal).
- Additional Institution-specific requirements related to minimum access standards for particular discipline and / or subject requirements (e.g. mathematics and language).
- Recognition of prior learning (formal, informal or non-formal) is included in consideration of access to the qualification.

LEARNING ASSUMED TO BE IN PLACE

- FET Certificate at NQF 04 or equivalent.
- Competency in the language of instruction of the provider.
- Numeric proficiency (mathematics, physics, or related fields).

EXIT LEVEL OUTCOMES

Exit level outcomes are grouped into four components which together reflect the work of a "Candidate Architectural Draughtsperson". Component one is worth 24 credits, whilst component two, three and four are worth 36, 18 and 42 credits respectively. The critical outcomes are integrated into the Exit level outcomes.

Component 1
Competencies relating to Architectural Design theory and skills application

The focus of this component is on:
A. Design Theory
- The historical context of Design and Architecture
- The formulation of a design strategy for simple designs
B. Design Skill Application
- Resolving simple planning exercises
- Creative problem solving in the context of the built environment

Exit level outcomes
1.1   Demonstrate an awareness of the relationship between Architecture and its social context
1.2   Demonstrate the ability to resolve a simple design project
1.3   Integrate applied research and design strategy to creatively solve simple design problems

Associated assessment criteria
E evidence shows that:

- Appropriate precedents and case studies sourced from theoretical and physical sources are selected, investigated, analysed and applied.
- Creative design solutions are produced which comply with good practice relating to:
    - Aesthetics
    - Appropriate Technology
    - Planning and Functionality

Component 2
Competencies relating to Construction Technology theory and skills application as it relates to the field of Architecture

The focus of this component is on:
A. Construction Technology Theory
- Elementary principles of:
    - construction technology
    - materials applications and characteristics
    - services (plumbing, drainage and electrical)
- The principles governing SABS specifications and the National Building Regulations
B. Construction Technology Skill Application
- Appropriate application of elementary construction principles and details
- Appropriate use of materials and service installations (plumbing, drainage and electrical)

Exit level outcomes
2.1 Demonstrate an awareness of the relationship between Architecture and its scientific context
2.2 Research appropriate construction precedents
2.3 Apply an understanding of accepted good construction practice
2.4 Produce appropriate construction detailing solutions that comply with relevant constraints
2.5 Design service installations for simple projects
2.6 Consult and coordinate with specialist consultants and trades

Associated assessment criteria
Evidence shows that:
creative technological solutions complying with good practice and understanding of the practical constraints relating to:
    - Materials and methods
    - Site constraints
    - Legislation
    - Services
is demonstrated.

Component 3
Competencies relating to written and verbal communication skills

The focus of this component is on:
A. Theory
- Entrepreneurship
- Industry specific terminology and language skills
- Introduction to research methodology
B. Skill Application

- Basic business communication methods
- Personal self- image projection
- Technical specification writing
- Correct referencing

Exit level outcomes
3.1 Demonstrate an understanding of the dynamics of the business environment
3.2 Communicate effectively and accurately with other professions and trades in the built environment
3.3 Be fully conversant with terminology used in the architectural environment
3.4 Ability to project a professional image

Associated assessment criteria
Evidence shows that:
- Appropriate terminology and syntax is used.
- Appropriate multi- modal communication aids (written, verbal and drawn) are used.
- An ability to employ business writing conventions is demonstrated.

Component 4
Competencies relating to graphic communication skills

The focus of this component is on:
A. Theory
- Conventions of the professions and trades within the built environment
- Understanding of the relationships within the construction industry
B. Skill Application
- Graphic Communication from conceptual design sketches to technologically competent instruction drawings.
- Draughtsmanship
- Incorporating computer technology in presentation and communication methods Creative problem solving in the context of the built environment

Exit level outcomes
4.1 Demonstrate an understanding of the purposes of various drawing types
4.2 Produce a range of technically competent drawings as required by the construction industry, so as to ensure coordination between all users of drawings
4.3 Apply appropriate conventions and high quality draughtsmanship to drawings, using a range of drawing methods
4.4 Read and interpret drawings produced by other professions in the built environment

Associated assessment criteria
Evidence shows that:
- Timeously produce drawings that comply with the requirements of the users
- Produce "Council Submission" drawings as specified by the NBR and local authorities
- Produce details and specifications of
  - Materials
  - Workmanship
  - Methods

- Apply effective cross referencing between drawings

INTERNATIONAL COMPARABILITY

Internationally, the registration categories within the Architectural Profession are mostly limited to first degree and upwards and usually for the category of "Architect" only. The South African Council for the Architectural Profession (SACAP) however has four registration categories. There is no precedent for a programme that is aimed specifically at qualifying a "Candidate Architectural Draughtsperson" for professional registration purposes. It is imperative that South African education providers respond to the requirements of professional registration at each registration category and that a suitable academic outcome is established.

INTEGRATED ASSESSMENT

- Formative evaluation through:
  - Continuous evaluation of projects and assignments
  - Panel evaluation and discussion
  - Portfolio presentations

- Summative evaluation through:
  - Tests
  - Examinations
  - Portfolio presentations

RECOGNITION OF PRIOR LEARNING

Formal Prior Learning

Prior learning of a learner is recognised if evidence is produced that shows that the learner has achieved, at a satisfactory level, the outcomes and associated assessment criteria for admission to programmes of study leading to the qualification. If appropriate, RPL may allow for the achievement of the qualification in part or in full as determined and explained in the RPL Policy documents of providers.

Non- Formal and Informal Prior Experiential Learning

An applicant, whose level of knowledge, skills, competencies and attitudes have not been assessed earlier (in terms of the formal qualification in question) but can demonstrate in appropriate ways; i.e. through assessment by the provider to which application is made, that he/she has acquired those skills and competencies, may be considered for admission to a programme of study leading to this qualification.

An applicant who, after such assessment is deemed to have sufficient potential but is in need of further academic development, will be directed to other suitable learning programmes prior to admission or to parallel programmes after admission.

ARTICULATION POSSIBILITIES

Vertical

Direct access into NQF level 6 National Diploma: Architectural Technology at second year level, subject to institutional discretionary requirements having been met.

Diagonal

For learners with a strong design aptitude, entrance into NQF level 6 Bachelor of Architectural Studies with credit for subjects completed, subject to institutional discretionary requirements having been met.

Horizontal

- Professional registration as Candidate Architectural Draughtsperson and subsequent internship.
- Access to NQF level 6 specific area focused programmes in the career focused track subject to provider's discretionary requirements having been met

MODERATION OPTIONS

Criteria for the registration of Assessors

- Assessors must have the required interpersonal skills, subject matter expertise and assessment expertise as set out by SAQA regulations.
- Assessors may be sourced from
    - trainers / teachers / lecturers internal to the training provider
    - colleagues / peers
    - assessors external to the training provider
- Assessors assessing a learner against the performance criteria set for this qualification must be registered with the relevant ETQA.
- Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines in the relevant qualification and the agreed ETQA procedures.

Moderation options include

- External peer reviews.
- Assessment of standards by the South African Council for the Architectural Profession (SACAP) in terms of the Architectural Professions Act 44 of 2000.
- Compliance with frameworks, regulations, and requirements established by the Higher Education Qualification Committee (HEQC) which includes the appointment of accredited / registered external examiners (external to the provider).

NOTES:

Rules of combination

	COMPONENTS	CREDIT ALLOCATION
FUNDAMENTAL	Verbal and written communication skills Entrepreneurial skills	12 6 **18**
ELECTIVE	Graphic communication skills Design theory / history Applied building sciences Computer Applications	18 12 6 6 **42**
CORE	Architectural Design Skills Construction technology Architectural draughtsmanship	12 18 30 **60**

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

Established in terms of Act 58 of 1995

TITLE OF QUALIFICATION

Bachelor of Architectural Studies:

LEVEL: NQF 06

NUMBER OF CREDITS: 360

FIELD: NSB12 PHYSICAL PLANNING AND CONSTRUCTION

SUBFIELD: PHYSICAL PLANNING, DESIGN AND MANAGEMENT

ISSUE DATE:

REVIEW DATE:

RATIONALE

Architecture is an independent profession within the built environment. The generation of a generic first degree in architecture (non-professional) will provide an opportunity to promote the establishment of curricula with an innovative approach to architectural education in order to achieve the aims of not only inculcating knowledge in a learner, but also imparting skill and values essential for prospective architects.

The Qualification has been developed with a view to enable learners undertaking the programme of study to progress not only towards the professional degree in architecture, but also towards other Qualifications associated with the built environment.

THE PURPOSE OF THE QUALIFICATION

The essential minimum required outcomes and their assessment criteria have been identified in an abstract way and are not linked to a preconceived curriculum. The Qualification sets a minimum standard of outcomes with which all similar Qualifications (regardless of the title) have to comply for accreditation.

The aims of the Qualification are to:

(i) provide learners with the academic knowledge, skills and competencies sufficient to practise in the built environment , after a stipulated period of supervised practical experience as senior architectural technologists.

(ii) equip learners with a foundation for further intellectual development

(iii) provide the built environment with graduates with intellectual capacity, knowledge and skills in architectural design and technology and able to move into related fields of professional activity.

(iv) prepare learners for progression to the Qualification leading to registration as an architect.

(v) produce learners who are able to think laterally, critically and creatively

(vi) produce learners who are prepared for life long learning.

ACCESS TO THE QUALIFICATION

Access to the Qualification must be guided by the learning assumptions in place and can be based on a minimum of a formal Qualification equivalent to a Senior Certificate.

There could be in addition, institution-specific requirements related to minimum access standards for particular disciplines or related to specific subject requirements e.g. mathematics and science.

Recognition of prior learning (formal, informal or non-formal) is included in the consideration of access to the qualification as are foundation courses.

A learner may have to show evidence of talent to study design by submitting a portfolio of creative work and possibly by attending a selection interview.

LEARNING ASSUMED TO BE IN PLACE.

Learners registering at this level are expected to have a talent for design and creativity. They need to have some drawing skills and should be able to communicate comprehensively in the medium of instruction. They should be able to take responsibility for their own learning and progression within structured learning programmes. They should have some ability to evaluate their own performance against given criteria.

EXIT LEVEL OUTCOMES AND ASSESSMENT CRITERIA

A programme leading to the award of the first degree in architecture aims to develop graduates who will possess demonstrateable skill and competence to operate at the level of Senior Architectural Technologists and to:

- communicate effectively in drawing, writing and verbally with clients

- be aware of the impact of architectural activity on society and the environment
- be aware of the role of architectural history
- be competent to work efficiently as an individual in teams and multi-disciplinary situations
- use and apply information technology
- interpret and apply legal principles within the context of the built environment
- be competent to apply knowledge of design, construction, materials, structure and procedure from the first principles to complex architectural solutions
- be competent to collect relevant information necessary for a thorough analysis of an architectural proposition
- be competent to synthesise collected information and produce creative procedural and non-procedural design solutions for an architectural project

On achieving this Qualification

Learners are competent to

i. demonstrate familiarity with and display knowledge and understanding of the content and theory related to architectural practice and procedure at both elementary and intermediate levels

Associated assessment criteria

Assessors should look for the following evidence from learners:

- a set of drawings, a written explanation and an oral presentation that describes an architectural problem, the process of solving the problem and solution to the problem is produced and delivered

ii. demonstrate systematic, well-rounded knowledge and an ability to question basic assumptions to core, theory and basic methodology used in architecture and other disciplines operating in the built environment

- use acquired knowledge and skills to present architectural solutions with all appropriate information

iii. interpret sketch plans and instructions as issued by a senior practitioner and present these as technical documentation for contractual construction purposes

- produce appropriate solutions to a diverse range of architectural problems, deconstruct an architectural problem into separable and overlapping information, both qualitative and quantitative, such that it can be analysed to point the way to an appropriate solution

iv. resolve an architectural project in conceptual and practical terms, to produce and communicate a design that is both creative and responsible for a simple straightforward brief

- successfully design architectural solutions that solve a problem functionally, appropriately and imaginatively

  v. integrate the requirements of climate, sustainability, materials, structure and construction into an architectural design, to provide optimal architectural performance for a simple straightforward brief

- demonstrate an understanding of climate, sustainability, materials, structure and construction and how these inform and integrate into design solutions

  vi. detail and specify materials, finishes, fabrication and assembly methods of a project.
     and in relation to professional outcomes,
     - demonstrate the ability to produce and present designs that are both creative and responsible
     - demonstrate the ability to detail and specify the materials, fabrication and assembly of design projects in a sensible and realistic manner
     - demonstrate an awareness of the requirements in terms of social, cultural values, and environmental criteria of all those associated with the creation of the built environment.

INTERNATIONAL COMPARABILITY

The Qualification is comparable in length and vigour of standard with similar first degrees in the United Kingdom, Australia, New Zealand and many commonwealth countries such as Uganda, Kenya, Tanzania, Singapore and Malaysia. Basically the Qualification gives access to the professional degree in architecture i.e. B Arch or to a postgraduate diploma in those countries.

Comparability in the Commonwealth is made by way of joint accreditation boards on the basis of assessment of academic content and standard.

INTEGRATED ASSESSMENT

Learning and assessment are integrated throughout the programme. There is continuous formative assessment to ensure that learners receive feedback on their progress towards the achievement of specific learning outcomes. Summative assessment concerned with the evaluation of learning achievements relative to exit levels of the Qualification includes overall integrated assessment, which evaluates the learners' ability to combine the various components and modules of the broader scope of knowledge skills and competencies represented by the exit level outcomes leading to the Qualification. In the assessment of whether the described outcome has been achieved (or not) recognition is given to criteria and evaluation methods that adequately and appropriately achieve such assessment

RECOGNITION OF PRIOR LEARNING (RPL)

Formal Prior Learning

Prior learning of a learner is recognized if evidence is produced that shows that the learner has achieved, at a satisfactory level, the outcomes and associated

assessment criteria for admission to programmes of study leading to the Qualification, and, if appropriate, allows the recognition of prior learning for the achievement of the Qualification in part or in full as determined and explained in the RPL policy documents of providers.

Non-formal and informal prior experiential learning

An applicant whose level of knowledge, skills, competencies and attitudes have not been assessed earlier in terms of the formal Qualification in question but can demonstrate in appropriate ways, through assessment by the institution to which application is made that he/she has acquired those skills and competencies, may be considered for admission to a programme of study leading to this Qualification.
An applicant who, after such assessment is deemed to have sufficient potential but is in need of further academic development, will be directed to other suitable learning programmes prior to admission or to parallel programmes after admission.

ARTICULATION POSSIBILITIES.

Vertical

Completion of the Qualification will allow access to the programme of study for the B Arch or M Arch (Professional) degree subject to an acceptable pass mark or to Masters degrees in City Planning & Urban Design, City & Regional Planning MTech Architectural Technology and similar programmes of study, depending on the institution.

It will also allow access to level 7 programmes of study in architecture at other universities.

Horizontal

Completion of the Qualification will allow access to level 6 specific area-focussed programmes in the career-focussed track, subject always to institutional discretionary requirements having been met.

Diagonal

It allows entrance to the B.Tech degree at a technikon for learners with technical aptitude

MODERATION OPTIONS AND CRITERIA FOR THE REGISTRATION OF ASSESSORS.

- The Higher Education Quality Committee (HEQC) has primary responsibility for all higher education quality functions.
  The HEQC programme accreditation framework is expected to make provision for ongoing accreditation of professional Qualifications by professional institutions.

Moderation options include

- external peer reviews
- assessment of standards by the South African Council for the Architectural Profession in terms of The Architectural Professions Act No 44 of 2000
- compliance with the framework, regulations and requirements established by the HEQC which includes the appointment of accredited/registered external examiners (external to the provider)

NOTES

Rules of combination:

The curriculum of any provider leading to the Qualification must comply with the exit-level outcomes and assessment criteria of the Qualification.

These providers are best placed to decide on the final number of credits to be allocated to *fundamental learning, core learning and elective learning* and the best combination of these three components of learning in the light of the purpose, exit-level outcomes and degree of specialisation of their specific learning programmes. Tying the three learning components to specific credit ratings would amount to over-specifying curriculum design for what is a generic Qualification.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

Established in terms of Act 58 of 1995

TITLE OF QUALIFICATION

 Bachelor of Architecture: BArch/Master of Architecture (Professional): MArch (Prof)

LEVEL: **NQF 07**

NUMBER OF CREDITS: **240**

FIELD: **NSB12 PHYSICAL PLANNING AND CONSTRUCTION**

SUBFIELD: **PHYSICAL PLANNING, DESIGN AND MANAGEMENT**

ISSUE DATE:

REVIEW DATE:

RATIONALE

 The Qualification forms part of the programme towards professional registration. The Qualification has been developed to enable learners not only to progress towards the professional degree, but also towards other Qualifications associated with the built environment and to gain entry into other higher Qualifications.

THE PURPOSE OF THE QUALIFICATION

 This Qualification leads to professional qualifying degree in architecture. It provides learners with the knowledge, values and skills to register as candidate architects, preceding full registration after complying with conditions set by the South African Council for the Architectural Profession.

 It requires learners to demonstrate competence in integrating design technology and research through submission of a self-motivated, supervised thesis project.

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In addition, it qualifies learners to study further for higher Qualifications in architecture or in related disciplines.

ACCESS TO THE QUALIFICATION

1) Learners with a degree of Bachelor of Architectural Studies from a University, who has attained such standard as may, from time to time be determined or
2) Learners with a four year degree of Bachelor of Technology in architectural design or technology subject to compliance with a university's standard entrance requirements

LEARNING ASSUMED TO BE IN PLACE

Learners should have an understanding of the social, cultural, economic, environmental and ethical framework within which Architects operate.
They should be competent to design complexes of buildings in a variety of contexts, have a thorough understanding of sustainable building materials and construction techniques and be able to apply this knowledge to their own designs.

The learner should be computer literate in areas of word processing; computer aided design and three-dimensional modeling and be able to communicate effectively, verbally, graphically and mathematically.

EXIT LEVEL OUTCOMES AND ASSOCIATED ASSESSMENT CRITERIA

- *Exit level outcome 1*

The qualifying learner demonstrates in depth knowledge appropriate to the discipline, and critical, analytical thinking to appreciate, research, interpret, refine and modify existing knowledge of architecture

Associated assessment criteria:

The evidence shows that:
- the ability to analyse and interpret knowledge critically is shown
- the ability to analyse and evaluate architectural research materials is demonstrated
- the ability to engage in critical debate in the field of study is displayed
- competence in undertaking independent research is demonstrated

- *Exit level outcome 2*

The qualifying learner demonstrate a knowledge of architectural research methods, skills in the practice of architectural research appropriate to a specific context and the ability to integrate architectural research and design.

Associated assessment criteria:

The evidence shows that:
- A working knowldedge of architectural research methods and procedures is shown

- An appropriate piece of architectural research is selected and motivated for in relation to a design dissertation.

- *Exit level outcome 3*

The qualifying learner shows design competencies at a range of different scales, from the urban, to the level of architectural detailing.

Associated assessment criteria:

The learner is able to
- design questions are framed critically
- A coherent and well resolved architectural designs are produced and demonstrated to show the integration of knowledge of the social, political, economic and professional context that guides building construction
- design briefs are evaluated and critically appraised to ensure that the design response is appropriate to site and context and for reasons such as sustainability and budget, as well as demonstrates competence in the areas of
- architectural design
- technical design

and demonstrates reasonable knowledge of
- urban design
- interior design
- landscape design

and an appropriate theoretical approach which reveals an understanding of theory in a cultural context is demonstrated.

- *Exit level outcome 4*

The qualifying learner is familiar with current technological knowledge and is able to integrate it with design solutions.

Associated assessment criteria:

The qualifying learner shows evidence of familiarity with and able to integrate knowledge of
- current technological norms and practices
- the principles and theories associated with visual, thermal and acoustic environments
- sustainable design and the relationship between climate, built form, construction, life style, energy consumption and human well being and is able to:
- research

- select and
- develop

structural and constructional strategies or a complex building or group of buildings, employing integrative knowledge of

- structural theories
- construction techniques and processes
- the physical properties of building materials
- the provision of building services and
- the environmental impact of specification choices

 In a sustainable manner.

- ***Exit level outcome 5***

The qualifying learner is able to communicate information and their own ideas and options appropriately and effectively in well structured arguments, showing an awareness of audience using academic / professional discourse appropriately.

Associated assessment criteria:

The learner demonstrates skill at communicating ideas and information to people from a wide range of backgrounds
- orally
- in writing
- graphically

using different medium

- ***Exit level outcome 6***

The qualifying learner is able to present material using innovative, effective and appropriate visual techniques in two and three dimensions, showing a high level of technical competence.

Associated assessment criteria:

Materials are presented visually displaying creative ideas
The learner can
- represent creative ideas and

technical drawings are produced both manually and using computer technology innovatively and technically competently.

- ***Exit level outcome 7***

The qualifying learner demonstrates self-directed, systematic, independent thought and practice.

Associated assessment criteria:

In order to perform adequately in addressing all facets of the programme the learner shows time management, prioritisation and initiative at a professional level. The qualifying learner is able to define, motivate and tackle problems with initiative and in an independent manner.

- ***Exit level outcome 8***

The learner work with peers, in group and is also able to work directly with outside parties in a professional manner.

Associated assessment criteria:

The qualifying learner demonstrates professionalism in collaboration, group work and consultation with outside bodies in the architectural discipline when conducting research and in practise.

- ***Exit level outcome 9***

The learner has developed a broad understanding of the wider social and natural systems, which impact on architecture, and has developed an appreciation for cultural and aesthetic diversity.

Associated assessment criteria:

The qualifying learner demonstrates
- an understanding of the influences on the contemporary built environment of individual buildings, the design of cities, past and present societies and wider global issues
- knowledge of the histories and theories of architecture and urban design, the history of ideas and the related disciplines of art, cultural studies and landscape studies and its application in critical debate
- an understanding of the implications of decisions taken on wider systems and the ability to critically appraise and form judgments about the qualities of a design (spatial, aesthetic, technical and social) within the scope of a wider environment
- the values required for participation in society as a respected and respectful citizen.

- ***Exit level outcome 10***

The learner reflects and acts upon a wide range of learning strategies, both existing and innovative.

Associated assessment criteria:

The learner shows:
- the ability to engage in critical assessment of current teaching and learning practice
- the ability to evaluate and improve personal work practices

- the ability to analyse, evaluate, synthesise and make decisions about a future career path.

- *Exit level outcome 11*

The learner has acquired the knowledge, values and practical skills to engage as a candidate professional in professional architectural practice in the community in a responsible, ethical manner, and in accordance with legal and statutory requirements

Associated assessment criteria:

The learner demonstrates a working knowledge of
- architectural practice
- contract and environmental law
- the roles and responsibilities of an architect in relation to building contracts
- project management

The qualifying learner shows the ability to
- reflect upon and act in an ethical manner with communities, individuals and the environment

- *Exit level outcome 12*

The qualifying learner will be equipped to develop entrepreneurial opportunities in a future career.

Associated assessment criteria:

The learner demonstrates
- initiative
- independence of thought and action
- communication and networking skills
- an understanding of financial management and control in a professional situation

INTERNATIONAL COMPARABILTY

The Qualification is comparable in length and vigour of standard with similar five academic year Qualifications throughout the world. It gives access in most countries to registration or licensing as a professional architect subject to experience and examination requirements being met.

INTEGRATED ASSESSMENT

Learners are assessed through written assignments, oral and graphic presentations, written examinations and through a final, independently motivated dissertation project.
This has theoretical, design and technical components. It is examined as an integrated piece of work in an oral examination incorporating verbal, written and visual submissions.

RECOGNITION OF PRIOR LEARNING

Formal Prior Learning

Prior Learning is recognised if evidence is produced that shows that the learner has achieved at a satisfactory level, the outcomes for admission to programmes of study leading to the achievement of the Qualification in part or in full subject to the rules contained in the RPL policy documents of the providers.

Non-formal and informal prior experiential learning

An applicant whose level of knowledge, skills, competencies and attitudes have not been assessed earlier in terms of the formal Qualification in question but can demonstrate in appropriate ways, through assessment by the institution to which application is made that he/she has acquired those skills and competencies, may be considered for admission to a programme of study leading to this Qualification.
An applicant who, after such assessment is deemed to have sufficient potential but is in need of further academic development, will be directed to other suitable learning programmes prior to admission or to parallel programmes after admission.

ARTICULATION POSSIBILITIES

Completion of the Qualification will allow access to:
Master of Architecture Research M.Arch (Research)
Master of Urban Design (MUD)
Master of City Planning and Urban Design (MCPUD)
Master of Science in Building (M Sc Build)
DTech Architectural Technology
Other Qualifications at NQF level 08

MODERATION OPTIONS AND CRITERIA FOR THE REGISTRATION OF ASSESSORS

- The Higher Education Quality Committee (HEQC) has primary responsibility for all higher education quality functions.
  The HEQC programme accreditation framework is expected to make provision for ongoing accreditation of professional Qualifications by professional institutions.

Moderation options include

- external peer reviews
- assessment of standards by the South African Council for the Architectural Profession in terms of The Architectural Professions Act No 44 of 2000
- compliance with the framework, regulations and requirements established by the HEQC which includes the appointment of accredited/registered external examiners (external to the provider)

NOTES:

RULES OF COMBINATION

The curriculum of any provider leading to the Qualification must comply with the exit-level outcomes and associated assessment criteria of the Qualification.
Currently, the number of credits at the six providers of architectural Qualifications at this level varies from 240 to 360 and they are best placed to decide the final number of credits to be allocated to fundamental learning, core learning and elective learning and the best combination of these three components of learning in the light of the purpose exit-level outcomes and degree of specialisation of their specific learning programmes. It should be borne in mind that a minimum of 240 credits are required to achieve this Qualification

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

SOUTH
AFRICAN
QUALIFICATIONS
AUTHORITY

Established in terms of Act 58 of 1995

TITLE OF QUALIFICATION

      Master of Architecture: MArch (Research)

LEVEL   NQF 08

NUMBER OF CREDITS: **240 MINIMUM**

FIELD: **NSB12 PHYSICAL PLANNING AND CONSTRUCTION**

SUBFIELD: **PHYSICAL PLANNING, DESIGN AND MANAGEMENT**

ISSUE DATE:

REVIEW DATE:

RATIONALE

The Qualification has been developed to enable learners to enter the research field with a view to enhancing career opportunities in the academic environment and to open career opportunities through increased status as consultants within the built environment.

Society is benefited through the production of professionals with considerable specialised expertise, research and leadership skills.

THE PURPOSE OF THE QUALIFICATION

- To provide learners with skills in research methods and procedures appropriate to architecture.

- To produce qualifying learners with specialised or advanced skills in the area of design or other architecturally related fields.

- To provide an ability to select and apply research methods effectively and to undertake a research project.

- To produce ingenious learners capable of admission to the PhD degree.

- To produce qualifying learners for the economy with the capacity to work in teams to carry out research in the discipline concerned.

- The qualifying learner will contribute to the development of a sustainable built environment, which responds to the needs, and values of the community.

  ACCESS TO THE QUALIFICATION

- B.Arch or an honours level Qualification or an equivalent Qualification in any discipline appropriate to the research field proposed.

LEARNING ASSUMED TO BE IN PLACE

The Qualification assumes that learners are able to communicate through written oral and visual media at an advanced level using a range of techniques.

They are expected to have grounding in the fields of knowledge appropriate to the discipline of architecture, demonstrating critical analytical thinking and able to, interpret and refine existing knowledge and being exposed to research concepts and methodologies.

Learners are expected to be aware of ethical issues related to society and able to operate in a variety of social and academic contexts.

EXIT LEVEL OUTCOMES AND ASSOCIATED ASSESSMENT CRITERIA

- **Exit Level Outcome 1**

The qualifying learner is competent to identify, evaluate and solve problems within the ambit of the research area and is required to demonstrate a high level or responsibility and ethics both within the immediate context of the problem and with regard to society as a whole.

Associated Assessment Criteria

The evidence shows that:

existing research is critically analysed, synthesized and evaluated and individual
academic / professional research is performed,
research results / findings are appropriately communicated at an international level
catering for the range of audience,
related problems in a wide range of economic and social contexts are solved,
actions that contribute significantly to the development of society through mastery of the research area are displayed.

- **Exit Level Outcome 2**

  The qualifying learner is required to operate effectively in an academic environment with peers and supervisors. Where appropriate to the research area, the learner is required to interact effectively with communities and other groups and individuals outside the academic arena.

Associated Assessment Criteria

The learner demonstrates the importance of the exchange of ideas and knowledge with peers and supervisors.

The learner is able to distinguish between different styles of communication in the quest for information, and can apply these appropriately and effectively, and apply academic ethics and responsibility to all aspects of study and research.

- **Exit Level Outcome 3**

The learner is required to have extensive communication skills and the ability to produce material of an internationally acceptable standard.

Associated Assessment Criteria

The qualifying learner demonstrates a critical understanding of a wide range of strategies for communicating in the pursuit of data collection, and in the transmission of the results and research.
The learner also demonstrates exceptional command of communication in writing, orally, visually and using IT, and can apply these media appropriately in the presentation of research material and is sensitive to cultural diversity in using different modes of communication, both in the collection of data and in presentation of the results/findings of research.

- **Exit Level Outcome 4**

The qualifying learner is required to have extensive skills and knowledge in the area of information retrieval, data collection, analysis, organization and evaluation.

Associated Assessment Criteria

The learner shows:
A comprehensive understanding of different research methods, and
understanding of the impact of research on subjects involved in it and society.
The learner is able to evaluate different methods of data manipulation within a range of scenarios, and understands the social and academic consequences of the choice of method.

- **Exit Level Outcome 5**

The qualifying learner will have built on his/her existing knowledge and is able to evaluate the application thereof in relation to wider local and global environmental concerns.

Associated Assessment Criteria

The qualifying learner is able to:
existing and new approaches are evaluated, applied and developed where appropriate to the research area;
issues within the research area of economic and social systems are critically located and;
learners responded sensitively to the choice of methodology in varied cultural settings.

- **Exit Level Outcome 6**

The learner will be able to locate his/her decision making and proposals within wider social, legal, economic, intellectual and environmental contexts.

Associated Assessment Criteria

The learner demonstrates:
critical awareness of his/her role as researcher in society is demonstrated;
knowledge of the legal frameworks pertaining to the research area is shown taking into account how it relate to them and to the wider legal and ethical contexts;
an understanding of the implications of society's expectations of research is displayed.

Exit Level Outcome 7

The qualifying learner will have developed a high level of self-management with a critical awareness of personal values.

Associated Assessment Criteria

In addressing the requirements of the programme, the learner shows at an advanced level time management, self-motivation, prioritisation and initiative.

- **Exit Level Outcome 8**

The qualifying learner is exposed to a range of sophisticated learning strategies, and is expected to make informed decisions and is required to act responsibly and ethically, with full regard to the needs and aspirations of the society within which he/she operates.

Associated Assessment Criteria

The learner is able to operate to operate in a professional and academic environment.
The learner demonstrates:
cultural and aesthetic awareness and sensitivity and a wide range of strategies in the pursuit of his/her studies.
The learner is aware of career opportunities open to him/her in both an academic and entrepreneurial context.

INTERNATIONAL COMPARABILITY

The learning time is similar to that of Masters degrees in Commonwealth, American and European countries. There is no known formal international system of recognition of Qualifications at this level. Acceptance into a Masters programme is the prerogative of the relevant educational institution.

INTEGRATED ASSESSMENT

The learner is under regular supervision by a supervisor/mentor. He/she is required to submit a dissertation of international academic standard.

The thesis is assessed on the basis of a single summative submission.

RECOGNITION OF PRIOR LEARNING

Applicants who fall outside of the normal admissions process who can demonstrate to the satisfaction of the educational institution that they have a Qualification or experiential- or work based learning which has taken the learner to an equivalent level of a Qualification specified above under "Access to Qualification" may be considered for admission and/or for the recognition of prior accredited and/or prior experiential learning. Applicants who, after such assessment, are deemed to have sufficient potential but are in need of further academic development, may be required to broaden their curriculum to include preliminary programmes prior to admission or parallel programmes after admission.

ARTICULATION POSSIBILITIES

The Qualification provides the basis for further academic study in architecture and related disciplines. It qualifies the graduate for admission to the programmes at a Doctoral level.

MODERATION OPTIONS

Internal University requirements govern how and by whom moderation is performed. For example, external examiners are appointed. Whether an academic person has a professional orientation or not, it is ensured that his/her activities are moderated by internal and external review. The moderating body for Qualifications is the Higher Education Quality Committee.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Internal quality requirements govern how and by whom assessment may be performed to ensure that assessors have the competence required to assess a Qualification of this nature.

At present the academic staff are regarded as registered assessors.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

Established in terms of Act 58 of 1995

TITLE OF QUALIFICATION

Doctor of Philosophy: PhD

LEVEL: NQF 08+

NUMBER OF CREDITS: Minimum 360

FIELD: NSB12 PHYSICAL PLANNING AND CONSTRUCTION

SUBFIELD: PHYSICAL PLANNING, DESIGN AND MANAGEMENT

ISSUE DATE:

REVIEW DATE:

RATIONALE

The aim of the Qualification is to make an original and significant philosophical contribution to knowledge in a chosen field of research and to produce graduates actively employed in the economy as researchers or educators in institutions of higher learning and research-related institutions.

THE PURPOSE OF THE QUALIFICATION

- to produce graduates with advanced skills in research methods and procedures.

- to produce graduates capable of making original contributions to knowledge through research which will be of benefit to the architectural fraternity in particular, and the built environment and broad society in general.

ACCESS TO THE QUALIFICATION

Typically the learner has a masters degree or another approved Qualification in the field of study to be pursued at PhD level and is able to demonstrate awareness of the need to plan independently, co-ordinate and review research work, show initiative and ability to manage himself/herself in an

effective and responsible manner, be culturally and aesthetically sensitive, and communicate in appropriate media and practice lifelong learning. In rare cases a masters degree registration may be converted to a doctorate registration.

However there may not necessarily be direct access to the Qualification. The standing of the candidate and discretion exercised by a Higher Degrees Committee may be the requirements.

LEARNING ASSUMED TO BE IN PLACE

- a Qualification at masters level

- a capacity for research and critical thought at a level appropriate to carry out independent research.

- information retrieval and processing skills

EXIT LEVEL OUTCOMES AND ASSOCIATED ASSESSMENT CRITERIA

- **Exit Level Outcome 1**

  The Qualifying learner possesses highly specialised, authoritative knowledge and is competent to apply that knowledge to independent and original research.

  Associated Assessment Criteria

  The qualifying learner demonstrates highly specialised, authoritative knowledge, and application and development of that expert knowledge, in a specialised field, which could include:
  an expert understanding of the content of the chosen topic of study, with understanding of the context, the ability to work, independently or in a team, to select, apply, evaluate and/or develop the most appropriated approach to the solution of problems, recognising wide-ranging factors which could include financial, environmental, social, cultural, health and technological aspects

- **Exit Level Outcome 2**

  The learner self-direct and is self-critical to contributes to the body of knowledge.

  Associated Assessment Criteria

  The learner completes a thesis by:
  identifying and formulating a research problem which rigorously addresses problems in the area of specialisation within the field of study;
  performing a critical and relevant literature survey on contemporary issues;
  executing, critically reviewing and initiating research showing the mastery and application of appropriate methodologies, techniques and technologies appropriate to the area of specialisation
  assessing the significance of research findings, making the case for original contribution and placing the work in the context of the discipline and wider issues where relevant

producing the thesis of compilation or publishable work in acceptable structure, style and language.

INTERNATIONAL COMPARABILITY

The Qualification follows a similar structure and rigour of standard to doctorates in the Commonwealth, Europe and the United States of America.

INTEGRATED ASSESSMENT

The thesis serves as the medium for integrated assessment. Formative assessment is undertaken on a continuous basis, incorporating seminar presentations, papers and reports on research plans and designs. The assessment instruments are designed to integrate practical, foundational and reflexive competence. Furthermore in order to qualify, the learner must demonstrate the specialised knowledge acquired.

RECOGNITION OF PRIOR LEARNING

Learners who fall outside of the normal admissions process who can demonstrate to the satisfaction of the educational institution that they have a Qualification or which has taken the learner to an equivalent level of a Qualification specified above under Access to the Qualification may be considered for admission. Learners who, after assessment, are deemed to have sufficient potential but are in need of further academic development, may be required to broaden their curriculum to include preliminary programmes prior to admission or parallel programmes after admission.

ARTICULATION POSSIBLILITIES

The Qualification can articulate with equivalent Qualifications offered by a tertiary institution, or with other Qualifications offered nationally and internationally.

MODERATION OPTIONS

Internal requirements govern how and by whom moderation is performed. For example, external examiners are appointed, who are authorities in the field and frequently are of international standing. Whether an academic has a professional orientation or not, it is ensured that his/her activities are moderated by internal and external review. The moderating body for Qualifications is the Higher Education Quality Committee of the Council on Higher Education.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Internal quality requirements govern how and by whom assessment may be performed to ensure that assessors have the competence required to assess a Qualification of this nature. At least one international assessor may be a requirement.

At present academic staff with appropriate PhD Qualifications are regarded as registered assessors.