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# 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

## **Business Systems**

registered by Organising Field 10 – Physical, Mathematical, Computer and Life Sciences, publishes the following Qualification for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the Qualification. The full Qualification can be accessed via the SAQA web-site at <a href="https://www.saqa.org.za">www.saqa.org.za</a>. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the Qualification should reach SAQA at the address below and **no later than 06 July 2009.** All correspondence should be marked **Standards Setting** – **Task** Team for **Business Systems** and addressed to

The Director: Standards Setting and Development SAQA

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D. MAPHOTHING

ACTING DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

## QUALIFICATION: Master: Business Systems

SAQA QUAL ID	QUALIFICATION TITLE		
71529	Master: Business Systems		
ORIGINATOR		PROVIDER	
Task Team - Business S	Systems		
QUALIFICATION TYPE	FIELD	SUBFIELD	
Masters Degree	10 - Physical, Mathematical, Computer and Life Sciences	Information Technology and Computer Sciences	
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUAL CLASS
Undefined	240	Level 8 and above	Regular-ELOAC

This qualification does not replace any other qualification and is not replaced by another qualification.

# **PURPOSE AND RATIONALE OF THE QUALIFICATION** Purpose:

Business analysis is an internal consultancy function that is responsible for investigating business systems, identifying options for improving business systems and bridging the needs of the business with the use of Information Technology. A business analyst works as a liaison among stakeholders in order to elicit, analyse, communicate and validate requirements for changes to business processes, policies and information systems. The business analyst understands business problems and opportunities in the context of the requirements and recommends solutions that enable the organisation to achieve its goals.

This qualification will contribute to the development of learners in that they will gain knowledge and a deep understanding of research and will become specialists in the design, development and applications of computer systems for business operations. Business operations learning will include learning in strategic management, planning, scheduling, forecasting, manufacturing, production management, project management, financial management, marketing, business modelling, multimedia communications, electronic data interchange and other functional areas of business, industry and government.

Recipients of this qualification will be able to:

- Analyse the strategic business dealings of an organisation.
- Analyse strategic information technology for application in the business dealings of an organisation.
- Analyse the quality management system of a business system.
- Conduct independent research in a selected area of business analysis.

## Rationale:

This Qualification meets the needs of the sector by providing a standard against which business systems learners can be educated. This Qualification meets the needs of society by providing competent learners who are able to conduct strategical business analyses and therefore contribute to the overall improvement of the business strategy and economic viability and sustainability of an organisation.

This Qualification will enable the qualifying learner to contribute to the success of an organisation by implementing effective Information Technology based solutions. The learner completing this Qualification will have successfully completed a Professional Qualification or Honours Degree in Business Administration, Information Technology or equivalent prior to attempting this Qualification. The typical learner will occupy a management position in an organisation or act as a consultant where the gained knowledge and researched practices from this Qualification will enable the implementation of new or improved business systems.

This Qualification will allow the learner access to a Doctoral Degree in Business Analysis or an equivalent Doctoral Degree.

## RECOGNIZE PREVIOUS LEARNING?

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## LEARNING ASSUMED IN PLACE

Learners registering for this qualification should be able to:

- Engage in contextualised sustained oral communication.
- Evaluate written and spoken texts.
- Read, analyse and respond to a variety of texts in a wide range of contexts.
- Communicate what they have learned coherently, accurately and comprehensively in the required medium of instruction.
- Take responsibility for their own learning progress.
- Evaluate their own performance against given criteria.
- Search for, access, organise and interpret available information.
- Plan, design and execute a research project independently.

## Recognition of Prior Learning:

This Qualification makes the Recognition of Prior Learning possible, if the learner is able to demonstrate competence in the knowledge, skills, values and attitudes implicit in this Business Analysis Qualification. Recognition of Prior Learning will be done by means of an Integrated Assessment as mentioned in the previous paragraph.

All recognition of Prior Learning is subject to quality assurance by the relevant accredited Education, Training, Quality, and Assurance Body and is conducted by a registered workplace assessor. Because the standards are only core and fundamental, these standards may have been acquired in a range of economic sectors and these will be recognizes as appropriate.

Recognition of Prior Learning can be allocated against course work components but a research project must still be completed.

# Access to the Qualification:

Learners wishing access to this qualification must have successfully completed an Honours Degree in Business Administration, Business Analysis or Information Technology, or equivalent.

## **QUALIFICATION RULES**

All Exit Level Outcome are compulsory. Research forms a compulsory part of this qualification either by completing:

- A single advanced research project, culminating in the production and acceptance of a dissertation.
- A coursework programme requiring a high level of theoretical engagement and intellectual independence and a research project comprising of a minimum of 50% of the programme.

Source: National Learners' Records Database

## **EXIT LEVEL OUTCOMES**

- 1. Analyse the strategic business dealings of an organisation.
- 2. Analyse strategic information technology for application in the business dealings of an organisation.
- 3. Analyse the quality management system of a business system.
- 4. Conduct independent research in a selected area of business analysis.

Critical Cross-Field Outcomes:

This qualification promotes, in particular, the following Critical Cross-Field Outcomes:

- 1. Identifying and solving problems in which responses display that responsible decisions using critical and creative thinking have been made when:
- Analysing the strategic business dealings of an organisation.
- Analysing strategic information technology for application in the business dealings of an organisation.
- Analysing the quality management system of a business system.
- · Conducting independent research in a selected area of business analysis.
- 2. Working effectively with others as a member of a team, group, organisation, and community during:
- The analysis of the strategic business dealings of an organisation.
- The analysis of strategic information technology for application in the business dealings of an organisation.
- The analysis of the quality management system of a business system.
- The conducting of independent research in a selected area of business analysis.
- 3. Organising and managing oneself and one's activities responsibly and effectively when:
- Analysing the strategic business dealings of an organisation.
- Analysing strategic information technology for application in the business dealings of an organisation.
- Analysing the quality management system of a business system.
- Conducting independent research in a selected area of business analysis.
- 4. Communicate effectively using visual, mathematical and/or language in the modes of oral and/or written persuasion when:
- Analysing the strategic business dealings of an organisation:
- Analysing strategic information technology for application in the business dealings of an organisation.
- Analysing the quality management system of a business system.
- Conducting independent research in a selected area of business analysis.
- 5. Collecting, analysing, organising and critically evaluating information to better understand and explain:
- The strategic business dealings of an organisation.
- The application of strategic information technology in the business dealings of an organisation.

- The quality management system of a business system.
- 6. Using science and technology effectively and critically, showing responsibility towards the environment and health of others when:
- Analysing the strategic business dealings of an organisation.
- Analysing strategic information technology for application in the business dealings of an organisation.
- . Analysing the quality management system of a business system.
- Conducting independent research in a selected area of business analysis.
- 7. Demonstrating an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation when:
- Analysing the strategic business dealings of an organisation.
- Analysing strategic information technology for application in the business dealings of an organisation.
- Analysing the quality management system of a business system.
- Conducting independent research in a selected area of business analysis.

#### ASSOCIATED ASSESSMENT CRITERIA

Associated Assessment Criteria for Exit Level Outcome 1:

- 1.1 Strategic business operation and design are analysed for consideration in the business strategy.
- Range: Operation includes but is not limited to strategic and operational business processes and procedures.
- 1.2 The application of strategic business management is analysed in the organisation.
- Range: Strategic business management includes but is not limited to the integrated planning, organising, leading and controlling of resources.
- 1.3 A business strategy is developed which is based on project management practices.
- Range: The business strategy includes but is not limited to the vision, mission, strategic objectives and operational plans.

Associated Assessment Criteria for Exit Level Outcome 2:

- 2.1 The role of information technology is analysed in order to understand how information technology can be integrated with the business strategy.
- 2.2 Past, contemporary and future information technology trends and directions are analysed for application within the business strategy.
- 2.3 Information technology applications and solutions are evaluated for application within the
- 2.4 Issues are analysed which affect the implementation of an information technology strategy.
- Range: Issues includes but is not limited to legal, economic, social and ethical issues.
- 2.5 An information and knowledge management strategy is developed for the business.

Associated Assessment Criteria for Exit Level Outcome 3:

- 3.1 The security of a business system is evaluated in order to determine shortcomings.
- 3.2 A reliability study of a business system is conducted so as to ensure the integrity of the system.
- 3.3 A quality management system is developed for the business system.

Associated Assessment Criteria for Exit Level Outcome 4:

- 4.1 A research problem is identified in the selected area.
- 4.2 The research design is described for the selected type of research in the selected area.
- 4.3 Suitable research methods, procedures and techniques are selected to collect data.
- 4.4 The data is analysed and interpreted for discussion.
- 4.5 A report is compiled reflecting the research process, findings and recommendations.

## Integrated Assessment:

Because assessment practices must be open, transparent, fair, valid, and reliable and ensure that no learner is disadvantaged in any way whatsoever, an integrated assessment approach is incorporated into the Qualification. Learning, teaching and assessment are inextricably linked. Whenever possible, the assessment of knowledge, skills, attitudes and values shown in the Associated Assessment Criteria should be integrated.

A variety of methods must be used in assessment and tools and activities must be appropriate to the context in which the learner is working. Where it is not possible to assess the learner in the workplace or on-the-job, simulations, case studies, role-plays and other similar techniques should be used to provide a context appropriate to the assessment.

The term 'Integrated Assessment' implies that theoretical and practical components should be assessed together. During integrated assessments the assessor should make use of formative and summative assessment methods and assess combinations of practical, applied, foundational and reflective competencies.

Assessors and moderators should make use of a range of formative and summative assessment methods. Assessors should assess and give credit for the evidence of learning that has already been acquired through formal, informal and non-formal learning and work experience.

Assessment should ensure that all Specific Outcomes, Essential Embedded Knowledge and Critical Cross-Field Outcomes are assessed. The assessment of the Critical Cross-Field Outcomes should be integrated with the assessment of Specific Outcomes and Essential Embedded Knowledge.

# INTERNATIONAL COMPARABILITY

Best Practice:

The International Institute of Business Analysis is a world-wide association which has a Business Analysis Body of Knowledge (BABOK®) against which it recommends Business Analysis is practised and practitioners are trained.

Further the following countries were identified as having institutions which offer programmes of best practice in the field of Business Analysis:

- Singapore.
- United States of America.
- Australia.
- United Kingdom.

International Institute of Business Analysis:

The International Institute of Business Analysis has the Business Analysis Body of Knowledge (BABOK®) against which its members are trained. It defines seven knowledge areas that, combined, cover the areas for those performing business analyses:

Enterprise analysis.

- Requirements planning and management.
- · Requirements elicitation.
- · Requirements communication.
- Requirements analysis and documentation.
- Solution assessment and validation.
- Business administration fundamentals.

#### Findings:

All of the above mentioned knowledge areas of the Business Analysis Body of Knowledge are inherent in the Master: Business Analysis, Level 8.

The following component is included in the Master: Business Analysis, Level 8 which is not captured in the Business Analysis Body of Knowledge:

• Conduct independent research in a selected area of business analysis.

## Singapore:

The National University of Singapore offers an MSc Management of Technology. The programme consists of course work with a research project. The course work consists of the following modules:

- Internet protocol management.
- Management of Industrial research and development.
- Management of Technological Innovation.
- Finance for Engineering and Technology Management or cost Analysis and Engineering Economy.
- Systems Approach to Project Management.
- · Creativity and Innovation.
- User-centred Product Development.
- Internet protocol Law for Scientists and Engineers.
- Strategic and New Product Development OR new Product Management.
- Corporate Entrepreneurship.
- · Analysing Hi-Technology Opportunities.
- Technology Intelligence & Internet protocol Strategy.
- · Quality Planning and Management.
- Decision Analysis.
- Industrial Logistics.
- Management and Organization.
- Managing Operations.
- Technopreneurship.
- Systems Architecture.
- Systems Engineering.
- Knowledge Management.

## Findings:

All of the above mentioned courses of the MSc Management of Technology at the National University of Singapore are inherent in the Master: Business Analysis, Level 8.

The following outcome is included in the Master: Business Analysis, Level 8 which does not occur in the MSc Management of Technology:

• Conduct independent research in a selected area of business analysis.

#### United States of America:

The Tepper School of Business at Carnegie Mellon University in Pittsburgh offers an MBA with a specialisation in Technology Leadership. The pre-requisites for the specialisation is an undergraduate degree or major in information technology, management information systems, computer science, computer engineering or a related fields.

Course work consists of the following courses:

- · Managing Software Development.
- Information Security and Privacy.
- Human-Computer Interaction for Technology Executives.
- Mobile and Pervasive Computing Services.
- Inventing the Future of Services.
- Data Mining for Decision Making.
- · Marketing Applications of Data Mining.
- Business Intelligence Tools and Techniques.
- Strategic Uses of Information Technology.
- Emerging Information Technologies.
- High-Tech Product Innovation.
- Information Technology Management.
- Information Resource Management.
- Managing Intellectual Capital and Knowledge Intensive Businesses.
- Web Commerce.
- Technology Commercialization and Business Development.

# Capstone Project:

At the end of their second year learners work in teams on Capstone Projects. These projects involve the development of commercialisation strategies for new technology-based products or services. They can take the form of a business plan or a project conducted under the supervision of an external sponsor.

## Findings:

All of the above mentioned courses of the MBA at the Tepper School of Business are inherent in the Master: Business Analysis, Level 8.

## Australia:

Monash University is a world-wide correspondence university based in Australia which offers a Masters in Business Analysis at all their international campuses. The following competencies are achieved by learners on this Qualification:

- Explain how a business operates.
- Explain the role of information technology in the successful operation of a business.
- Understand, identify and analyse a business undertaking, and manage the resources of the business to design a suitable solution.
- Adapt information technology applications and solutions to the needs of the organisation.
- · Manage projects.
- Store and retrieve data.
- Perform advanced research and investigation in order to locate and retrieve information pertinent to the problems being investigated.
- Manage knowledge and information in an organisation.

- Work independently and as a team to develop solutions.
- Understand trends and directions in the field of information technology, and how these might impact of the success of the organisation.
- Apply decision support and modelling systems.
- Manage people, assets and other resources in an organisation.
- Implement new technologies.
- · Improve quality and reliability.

#### Findings:

All of the above mentioned outcomes of the Masters in Business Analysis at Monash University are inherent in the Master: Business Analysis, Level 8.

The following outcome is included in the Master: Business Analysis, Level 8 which does not occur in the Masters in Business Analysis:

• Conduct independent research in a selected area of business analysis.

## United Kingdom:

The Open University is a world-wide correspondence university based in the United Kingdom which offers a MBA with a specialisation in Technology Management. The programme consists of the following subjects.

## Compulsory subjects:

- · Fundamentals of senior management.
- Managing performance and change.
- Technology management: an integrative approach.
- · Technology strategy.
- The technology management project.

## Electives subjects:

- Strategy.
- · Financial strategy.
- · Creativity, innovation and change.
- Managing knowledge.
- Marketing in a complex world.
- · Project management.
- User interface design and evaluation.
- · Relational database systems.
- Managing the software enterprise.
- Software requirements for business systems.
- · Analysis and design of enterprise systems.
- · Information security management.
- · Multi-service networks: structures.
- Multi-service networks: controls.
- Integrated safety, health and environmental management.
- · Systems engineering.
- Enterprise and the environment.
- Environmental decision making: a systems approach.
- · Manufacture materials design.
- Supply chain innovation, strategy and management.
- · Business operations: delivering value.

Problem solving and improvement.

## Findings:

All of the above mentioned compulsory subjects of the MBA at the Open University are inherent in the Master: Business Analysis, Level 8.

The Henley Business School at the University of Reading offer a BSc Business Analysis. The programme consists of course work with a dissertation project.

The following modules are core modules:

- · Business analysis.
- International business strategy and environment.
- · Regulation.
- Research methods.
- Business strategy in the new economy.
- · Contemporary issues in international business.
- International management and business culture.
- Introductory econometrics.
- Managing innovation.
- · New issues in globalisation.
- · Regional integration and development.
- · Small business economics.
- Technological innovation and industrial competitiveness.

## Findings:

All of the above mentioned modules of the BSc Business Analysis at Henley Business School are inherent in the Master: Business Analysis, Level 8.

The City University in London offers a BSc Business Analysis. The programme consists of the following course work:

- Business engineering with enterprise resource planning Solutions.
- Databases.
- Human-Computer Interaction Design.
- · Information Systems Planning and Strategy.
- Practical Business Systems Consultancy.
- · Project Management.
- Research methods and professional issues.

## Findings:

All of the above mentioned course work of the BSc Business Analysis at City University is inherent in the Master: Business Analysis, Level 8.

## Conclusion:

It was found during the International Comparability that the Master: Business Analysis, Level 8 compares favourably to the above mentioned qualifications and programmes because a majority of the content and learning outcomes are very similar. Best practice is therefore being applied in the Master: Business Analysis, Level 8.

# **ARTICULATION OPTIONS**

Source: National Learners' Records Database

Articulation possibilities within the tertiary institution offering the Business Analysis programme and across tertiary institutions will be subject to institutional discretionary requirements having been met. Vertically the qualification will allow access to the Doctor: Business Analysis, NQF Level 10.

## **MODERATION OPTIONS**

Internal moderation must be available according to the policy of the provider while external moderation must be based on accredited/registered external examiners (external to the provider) who should be recognised experts in their field. Both internal and external moderators should have at least a doctoral degree from a recognised tertiary institution. All moderators must be registered with the applicable ETQA.

## CRITERIA FOR THE REGISTRATION OF ASSESSORS

For an applicant to register as an assessor (internal and external), the applicant needs:

- A relevant Qualification at NQF Level 10.
- To be registered as an assessor with the relevant ETQA.

#### **NOTES**

N/A

## **UNIT STANDARDS**

This qualification is not based on Unit Standards.

LEARNING PROGRAMMES RECORDED AGAINST THIS QUALIFICATION None