

MASTER OF SCIENCE IN INFORMATION TECHNOLOGY (NQF LEVEL 9)

PURPOSE OF THE QUALIFICATION

The Master of Science in Information Technology is designed for people working in information computer technology fields who wish to pursue information computer technology to a higher level. It seeks to empower those in the ICT related fields with management oriented skills within a technical environment.

The development of the Master of Science in Information Technology is in response to Vision 2030. Vision 2030 envisages a knowledge-based Namibian economy revolving on digital information communication technology. This qualification was developed with the involvement of main stakeholders the Ministry of Information and Communication Technology and Mobile Telecommunication (MTC).

To be registered for the Master of Science in Information Technology, the candidate must have a Bachelor Honours Degree in Information Technology or an equivalent. In keeping with the work-based approach to this programme, new entrants:

- Must have a minimum of two years of working experience in an Information Technology sector; and
- Must have been employed in an Information Technology sector. Proof of employment is required.

The above are essential requirements as the instructional design of the programme and course assessments will be integrated with the work place experience.

Holders of the Master of Science in Information Technology are eligible for the Doctor of Philosophy in Information Technology areas of specialization and any other related qualifications at NQF level 10.

OUTCOMES FOR WHOLE QUALIFICATION

Holders of this qualification are able to:

- Demonstrate mastery in the field of software development, systems acquisition, systems implementation or systems integration.
- Demonstrate analytical thinking skills, an innovative mindset and an ethical sense in managing risks, solving problems and identifying opportunities.
- Evaluate critically the current thinking and research within IT and its application to the advancement of the industry.
- Demonstrate an in depth comprehensive range of managerial skills in the IT industry
- Apply initiative, adaptability and professional responsibility in the workplace and rest of the IT industry.
- Originate the necessary skills required for life- long independent and reflective learning (self-evaluation and problem solving).

QUALIFICATION DURATION

The study period for the Master of Science in Information Technology is:

Fulltime mode - Minimum: 2 Years; Maximum: 4 Years

ADMISSION /ENTRY REQUIREMENT

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COURSES

Year 1

- Software Engineering
- Operations Management and Information Systems Strategy
- Information Technology Project Management
- Master's Practicum I
- Information Security Management
- Data Management and Business Intelligence
- Network Computing
- Master's Practicum II
- Electives Courses (choose one)
- Information Technology Law and Ethics
- Advanced Systems Analysis and Enterprise Modelling
- Electives Courses (choose one)
- Distributed and Mobile Systems
- Internet And Web Application Development

Year 2

- Thesis

CREDIT TRANSFER

Credit is the value assigned for the recognition of equivalence in content acquired learning outcomes between different types of learning and/or qualifications. Credit reduces the amount of learning required to achieve a qualification and may be through credit transfer, articulation,

recognition of prior learning or advanced standing. To be awarded these credits, IUM will need to assess the courses or combination of courses as equivalent to IUM courses

Courses awarded as credits need to have been studied within the past 5 years.

Generally, credit will be given if the courses were taken at an accredited institution of higher learning, the course was equivalent to courses offered at IUM, or compatible with Namibian Qualification Authority requirements.

Courses will be evaluated for its current relevance and may not transfer if the material is outdated more than 5 years since the course was attended and examination sat and passed and/or the course was not passed at the first examination sitting.

Credits earned at an unaccredited college may not transfer unless the credit earned is equivalent to courses offered in degree qualification.

Credits earned at IUM are also transferable to other institutions of higher learning.

Acceptance of credits earned at other institutions is limited to 50% of the total credits required for an IUM qualification. No more than half the major area course requirements can be earned through transfer and/or exemption credit.

The IUM reserves the right to reject any or all credits from other institutions, regardless of their accreditation status, when it determines through investigation or otherwise that the quality of instruction at such institutions is for any reason deficient or unsatisfactory. The judgment of the IUM on this question shall be final.

The IUM reserves the right to disallow transfer credit for courses if the student's subsequent grades in required courses in the same subject fall below average.

ASSESSMENT AND EVALUATION

Continuous Assessment (CA) attracts 40% of the final grade. This will come from the examinable activities such as written and/or oral tests and assignments (group and/or individual), and evaluations undertaken by the student during the study period.

Students must score at least 50% in each course/coursework to qualify to sit for the final examinations. This means a student whose continuous assessment mark is below 50%, fails the course.

(a) Final Examinations

The final examination counts for 60% of the overall final mark. The final examination comes at the end of the course. Unless prescribed otherwise, the standard examinations will be of three hours duration. Examiners may, in addition to written examination, test any candidate orally.

(b) Supplementary Examinations

A student who fails a course with an overall mark of 40-49% is eligible to sit for a supplementary examination.

A student who fails the project with a mark of less than 50% will be allowed one opportunity to re-submit the project three months after the publication of results. A student who fails a course with an overall mark of 39% and below will be required to repeat the same course until the course is passed. A student may not proceed from one level to the next higher level carrying more than 50% of the courses or credits

(c) Dissertation Writing

Taken in the last year of study, dissertation writing is meant to engage students in research with a faculty member designated by student and approved by the Post Graduate School in order to generate the research necessary to complete their Master Degree

Each student must complete a 20 000 – 25 000 words dissertation. This project should involve original research on a topic related to the studied field. The dissertation will have a clearly defined problem statement, a review of the existing literature on the chosen topic, original evidence offered to support the dissertation, consideration of alternative rival hypothesis, and a conclusion with recommendations.

Upon completion of the research, the results are to be presented for oral defence before an examination panel. The students shall score a minimum of 50% in order to pass the dissertation.

TEACHING METHODS/STRATEGIES

The teaching and learning processes will take place through lectures, tutorial activities and discussion, school-based activities, collaborative group tasks, practical projects and written assignments

Students must have access to a computer and the Internet and other modern technology especially appreciated in the secondary school instruction. The teaching and learning methods adapted for this qualification are student-centred learning methods. Emphasis will be placed upon the need for a student to read and research extensively in each of the courses. Each student will be mentored to appreciate that one will be expected to be responsible for one's own learning. The role of the lecturer, therefore, is to stimulate learning and to support and guide that process. Guided reading materials and research will support these endeavours.

The delivery methods for this qualification comprise of the fulltime, part time and block release learning mode. Contact hours for block release mode are face-to- face encounters on monthly basis and block periods during IUM academic breaks and other public holidays such as Easter break.

The degree will be offered in collaboration with the other faculties within the university.

ARTICULATION

Holders of the Master of Science in Information Technology are eligible for the Doctor of Philosophy in Information Technology areas of specialization and any other related qualifications at NQF level 10.