



Faculty of Engineering, the Built Environment & IT

Bachelor of Information Technology

Does your interest lie with computers, cell phones, communication networks and the like? Then Nelson Mandela University School of Information Technology (ICT) is the place for you! Allow our group of dedicated Information Technology (IT) experts to assist you in realising your goal, whether it is to become a sought-after IT professional or starting your own business in the field of IT.

The courses in the School of ICT are designed to give you a world class grounding in the fundamental principles underlying your chosen field. A significant part of your tuition time will be spent in our modern, well equipped laboratories, this emphasising the practical and applied nature of the subject matter. In the

School of ICT, you will be prepared for an interesting, challenging and rewarding career.

What makes the Bachelors in Information Technology different?

The Bachelors in Information Technology (BIT) addresses the gap between vocational-focused diploma programmes and broad-based degree programmes (Computer Science and Information Systems) related to the computing disciplines.

BIT supports Nelson Mandela University's mission to "offer a diverse range of quality educational opportunities". Basing the qualification on the ACM/IEEE 2008 IT Curriculum ensures adherence to the Faculty of Engineering, the Built Environment and Information Technology's mission to offer "internationally recognised academic

programmes”, while delivering graduates competent to implement, maintain and support enterprise systems.

BIT graduates are complementary to computer science graduates in that they will focus on systems integration, often using existing components as developed and fine-tuned by computer scientists. As such BIT graduates are particularly well positioned to take responsibility for the implementation and operation of enterprise systems.

Admission requirements

- Minimum NSC statutory requirements for degree entry must be met.
- An applicant with NSC Grade 12 Mathematics or Technical Mathematics requires a minimum Applicant Score of 370.
- NSC achievement rating of at least 50% for Mathematics or Technical Mathematics.

What is unique about the BIT degree?

Information Technology can be characterised as the most integrative of the computing disciplines, and the strength of the proposed curriculum therefore lies in its breadth: the IT graduate should be able to recognise any computing need, and know something about the possible solution.

The proposed curriculum therefore covers a wide variety of computing-

related topics. However, the proposed curriculum also recognise that computing does not happen in isolation and must consider the context. Learners therefore have a choice of application area to allow them to apply their IT skills within a specific user context.

As these graduates can be seen as the first port of call for enterprise users for their computing needs, and may serve as an interface between users and other computing graduates such as computer scientists or software engineers, the proposed curriculum emphasises communication skills and professional conduct as critical in this user advocacy process. The purpose of this programme is to develop Information Technology Professionals that can implement, maintain and support enterprise systems.

Finally the proposed curriculum is characterised by a 30-credit capstone project in the final semester which will assess the graduates’ ability to integrate all of their gained knowledge in an effective way within the selected application area.

Application areas

1. Health Informatics
2. Manufacturing
3. Marine/Maritime

The BIT qualification can lead to further studies towards a BIT (Hons) Information Technology, which is currently designed and waiting for approval. One can then continue on to a Master of Information Technology (MIT) degree, which is followed by a PhD (Information Technology)

