

# INFORMATION TECHNOLOGY

**T**HE IT (Information Technology) industry is probably one of the most exciting industries worldwide. Rapid technological advances are propelling dramatic changes in the way computers are used to improve our lives.

Graduates have the opportunity to join this exciting industry. They can qualify themselves for a rewarding and incredibly stimulating career where they will have multiple career opportunities for many years to come.

Thousands of vacancies exist in South Africa and many IT professionals find employment outside our borders.

## WHAT DOES THE IT SPECIALIST DO?

IT specialists find themselves in any of a wide variety of computerised environments. Responsibilities may include the maintenance of systems in use, systems analysis and design and/or programming of new systems, network administration, database administration and user support.

## SYSTEMS ANALYST

Systems analysts study the problems and needs of computer users and write specifications for the computer system. They are also responsible for the detailed design of computer systems, which a programmer can convert into a computer language.

## PROGRAMMER

The computer programmer is responsible for the detailed design of how the computer should perform a task and for instructing the computer accordingly. The programmer is the main interface between computer users and the computer itself.

## COMPUTER TECHNICIAN

A computer is a complex collection of electronic and mechanical components and requires specific installation procedures, maintenance and repair, which is done by the computer technician.

## SCHOOL SUBJECTS

Mathematics, Biology or Physical Science

## ADMISSION REQUIREMENTS

**UNIVERSITY:** A Senior Certificate with matrix exemption.

**UNIVERSITY OF TECHNOLOGY:** A Senior Certificate or an equivalent qualification.

## WHERE DO I STUDY?

### UNIVERSITY

BEng: Information Technology

A four-year engineering degree dealing with hardware, software, interfaces and networks are available at universities.

It normally takes three years to complete the BSc (Bachelor of Science) degree. After BSc one-year minimum will complete the BSc (Hons) degree, after which the MSc degree (Master of Science) takes at least one additional year. If you enjoy research you then do a PhD (Doctor of Philosophy), which takes at least two years.

### UNIVERSITY OF TECHNOLOGY

National Diploma: IT

A three year National Diploma at a university of technology, which includes one semester applicable in-service training.

**BTech:** NDip. plus one year study.

### COLLEGES

Nationwide institutes such as CTI specialise in IT training.

The courses are based on a self-paced study approach with instructors to assist and coach students whenever they may require assistance. Various diplomas such as Computer Science and Programming are available.

## CAREER OPPORTUNITIES

The computer industry provides the fastest moving technology in modern industry. Computing skills are highly sought after, and the industry offers a high level of ongoing opportunities and challenges.

## CAREER STATUS

IT specialists can acquire membership of the Computer Society of South Africa and the Information Technology Association (ITA).



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Central University of  
Technology, Free State

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UNIVERSITY OF  
KWAZULU-NATAL

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UNIVERSITY OF VENDA

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University of Fort Hare

*Together in Excellence*

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