

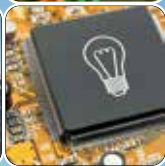


UNIVERSITY OF
KWAZULU-NATAL™
INYUVESI
YAKWAZULU-NATALI

SCHOOL OF ENGINEERING

Electronic Engineering

we power **er** we connect



INSPIRING GREATNESS

The Electronic Engineering curriculum is designed to prepare students for a career in the all-pervasive discipline of electronic information handling, which has become crucial to the promotion of efficiency and productivity in so many facets of both commercial and industrial life. This includes all aspects of telecommunications, the design of computers and microcomputer systems, microwave engineering, electronic equipment manufacture, and many other similar activities. We believe we achieve this by offering a degree with a strong emphasis on the principles of electronic communication, while at the same time permitting a wide range of different applications of electronics to be studied. For example, in the third year, the curriculum includes such courses as Electronics, Digital Systems, Electromagnetic Theory, Physical Electronics, Communications, Control Systems and Power Electronics. Like Computer and Electrical Engineers, Electronic Engineers also attend a course on Engineering Management and Labour Practices in preparation for the world of industry.

Final year students are required to take the Engineering Business and Entrepreneurship courses. They also take six courses covering detailed aspects of electronic engineering and include the following: Digital Communications, Digital Processes, Electronics, Digital Signal Processing, Control Systems, and Embedded Systems. A number of optional courses, from which students choose three, are also offered. These include: Acoustics, Artificial Intelligence, Microwave Engineering, Superconductivity, Data Communications, Image Processing, Automation and Power Electronics.

Practical Experience

For the integration of the theory with the practice of engineering to take place, the student is required to complete a minimum period of 13 weeks of practical vacation work in



industry. This is normally undertaken during the long vacations of second and third years. After each such period of training the student is required to submit a formal report on the work completed. In addition, second year students are required to attend a one-week general workshop training course held in the Electrical & Electronic Engineering Buildings during the July/August vacation.

Career Opportunities

With the tremendous growth of the information, manufacturing and telecommunications industries there are many challenging and exciting jobs awaiting each graduating Electronic Engineer.

Profession Registration

The Bachelor of Science degree in Engineering (Electronic Engineering) is recognised as the qualifying degree for registration as a professional engineer with the Engineering Council of South Africa under the Professional Engineers Act 1969. A period of at least three years of relevant postgraduate experience is required before full registration as a Professional Engineer. Professional registration is currently a requirement, in South Africa, for those wishing to become consulting engineers, whether in the private or public sectors.



Subject Requirements

- NSC degree pass
- Mathematics and Physical Science Level 6 (70%)
- English and Life Orientation Level 4 (50%)
- 3 other subjects with at least 2 from the designated list

Application Requirements

The discipline of Electronic Engineering accepts only a limited number of students into first year on the Durban campus. A smaller additional number are accepted to do first year in Pietermaritzburg but have to transfer to Durban from second year onwards.

Prospective students are invited to visit Electronic Engineering to discuss their future careers with members of staff, attend a University Open Day, or phone the contacts listed below.

The actual application is done through the Central Applications Office (CAO). Apply to UKZN online at: www.cao.ac.za. Contact the CAO on: 031 268 4444

Should you have any queries please contact one of the staff members below who will assist you:

For Teaching and Learning Enquiries only:

Ms Dumisile Ngcobo/Ms Bennedin Mokoena

Electronic Engineering, Howard Campus, UKZN

Tel: 031 260 2753/2744

Email: ngcobod@ukzn.ac.za/mokoena@ukzn.ac.za

ADMISSION ENQUIRIES FOR NEW ADMISSIONS

Undergraduate:

Tel: 031 260 8038/1220/3218; Email: engineering@ukzn.ac.za

Postgraduate (MSc and PhD): Ms Aussie Luthuli

Tel: 031 260 1668; Email: luthulia@ukzn.ac.za

Ms Nombuso Dlamini

Tel: 031 260 2070; Email: dlaminin7@ukzn.ac.za