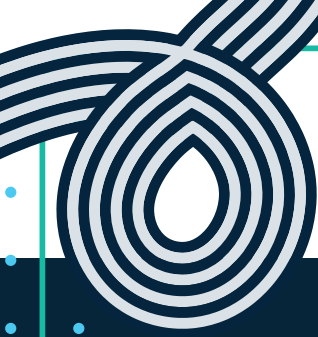




# FACT SHEET

Electrical Engineering  
N4-N6



Private  
Tertiary  
Education

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# Electrical Engineering N4-N6

## FACULTY OF ENGINEERING

### NATED Studies: 2027 Fact Sheet

| Programme Title                                              | SAQA ID | Level | NQF |
|--------------------------------------------------------------|---------|-------|-----|
| National N Diploma: Electrical Engineering<br>SAQA ID: 90674 | 66881   | N4    | 5   |
|                                                              | 66960   | N5    | 5   |
|                                                              | 67005   | N6    | 5   |

## Programme description

The Electrical Engineering programme is the study and application of electricity, electronics, and electromagnetism. Electrical Engineers study the uses of electricity and equipment for power generation and distribution. This dynamic field involves the design of electronic circuits from basic household equipment to complex systems such as aircraft autopilots and state-of-the-art computers. Microelectronics, the manufacture and repair of products like computers, microwaves, and control systems, also falls within the field of Electrical Engineering.

Electrical Engineering provides the knowledge, skills, and management experience needed for technical and professional careers in instrumentation and control, technical sales and field services, electronics manufacturing, and electrical power operations. Electrical Engineering involves the design, study, development, and manufacture of various electrical and electronic systems.

## Admission requirements

- ▶ N3 National Certificate
- ▶ Grade 12 (Pure Mathematics/Technical Mathematics & Physical Sciences/Technical Sciences)
- ▶ NCV Level 4
- ▶ Recognition of Prior Learning (RPL)

## Mode of study | Duration

**Day Classes** (full time): 18 Months, (5 days/week)

**Evening Classes** (part time) 18 Months, (3 x evening classes per week, as well as 2 x Saturday classes per month)

**(6 Months per level)**

**\*Distance Learning** (self study): 24 Months

This is a self-study programme. However, students will be privileged to attend tutorial classes twice a month from 9 am – 4 pm (Optional).

## Programme outline

### First Year 1st Semester Subjects:

- ▶ EMG411: Engineering Mathematics N4
- ▶ ENS411: Engineering Science N4
- ▶ IEE411: Industrial Electronics N4
- ▶ EET411: Electrotechnics N4

### First Year 2nd Semester Subjects:

- ▶ EMG511: Engineering Mathematics N5
- ▶ POM511: Power Machines N5

- ▶ IEE511: Industrial Electronics N5
- ▶ EET511: Electrotechnics N5

### Second Year 1st Semester Subjects:

- ▶ EMG611: Engineering Mathematics N6
- ▶ POM611: Power Machines N6
- ▶ IEE611: Industrial Electronics N6
- ▶ EET611: Electrotechnics N6

## Teaching and Learning Methodology

A blended teaching and Learning methodology is followed. All theory classes will be conducted Virtually through Lecturer-led interactive teaching on a national basis. A flipped classroom approach will be followed in some sessions. This means that students are introduced to content at home and practice working through it during the applicable session, either the virtual theory sessions or the practical sessions.

All students will be allocated to lecturers that are not necessarily based at the campus of enrollment but who will always be subject matter experts. CTU implements a national academic standard and all lecturers have been appointed on the same criteria and use the same academic content in the teaching and learning process. The adherence to a national academic standard is monitored by the Academic Management team at the Head office. Therefore, all students will continue to receive the same quality of education.

Students will attend some practical, group, and research sessions on campus or virtually. The same work and time will be spent on both methods, face to face and VLIT, with students. Extra practical sessions can be booked at the campus with the Campus Operational Manager. Students will be expected to attend practical, group, and research classes on campus a minimum of two days a week, as per the campus schedule.

## Textbooks and e-guides

A list of prescribed textbooks, which shall be for the **student's own account**, will be made available within the programme e-guides. Students will receive electronic copies of the academic guides (e-guides) via the Teaching and Learning platform. Students are advised to consult the **Device Specifications and Stationery List** document for further details regarding programme requirements.

# Electrical Engineering N4-N6

## Technology hardware, software and data requirements

A laptop is required to access the VLIT sessions, all study material, and complete assessments etc.

For additional information please consult the CTU Bring your own device guide.

**A minimum of 20 GB data per month (uncapped recommended) is required to access training material.**

## Student Support

Student support sessions with the facilitator will also take place on a one-on-one basis either virtually or physically at the campus per appointment or per the academic schedule.

## Results and certification

- ▶ Certificates and diplomas are issued by the DHET.
- ▶ All qualifications are nationally recognised by industry and universities
- ▶ All result letters will only be issued by the DHET.
- ▶ Release of statements of results and certificates are dependent on DHET timelines and are not within CTU's control

**Upon successful completion of this programme, learners will receive a:**

- ▶ National Certificate at each level N4, N5, N6
- ▶ National N Diploma in Electrical Engineering (on completion of N4 - N6 and 24 months in-service training).

## International certifications

- ▶ Year 1: MS Word and MS Excel
- ▶ Year 2: MS Powerpoint
- ▶ Year 1 & 2: AutoCAD User

## Career fields

**Students can be employed in the following career fields:**

- ▶ Power Systems Engineer
- ▶ Instrumentation Technician
- ▶ Control Systems Engineer
- ▶ Electrical & Circuit Design Engineer
- ▶ Electrical Technician

## Articulation

A candidate who has successfully completed the N4, N5 and N6 Certificates, may pursue the following path to obtain the National N Diploma, as per Report 191 by the DHET.

**The candidate must have:**

- ▶ A minimum of 12 advanced instructional offerings, with at least a pass in three instructional offerings in each of the following levels: N4, N5 and N6, but with a maximum of five N4 instructional offerings.
- ▶ 2 instructional offerings at N6 level must be relevant to the candidate's vocation.
- ▶ The candidate must obtain work experience of 24 months in an industry that has as its main function

the practical execution of the 2 instructional offerings mentioned above.

## Further studies

**Students may pursue further studies at CTU by enrolling for any of the following:**

- ▶ Higher Occupational Certificate: Architectural Draughtsperson, NQF 5, SAQA - 121692

## Pricing\*

**Per Level**

| Programme | Registration Fees | Tuition fee                                                                          |
|-----------|-------------------|--------------------------------------------------------------------------------------|
| N4        | R6 750            | Contact a CTU campus/ consultant for the latest fee information and payment options. |
| N5        | R6 750            |                                                                                      |
| N6        | R6 750            |                                                                                      |

### N4 - N5 Package

| Programme | Registration Fees | Tuition fee                                                                          |
|-----------|-------------------|--------------------------------------------------------------------------------------|
| N4        | R7500             | Contact a CTU campus/ consultant for the latest fee information and payment options. |
| N5        |                   |                                                                                      |

### N5 - N6 Package

| Programme | Registration Fees | Tuition fee                                                                          |
|-----------|-------------------|--------------------------------------------------------------------------------------|
| N5        | R7500             | Contact a CTU campus/ consultant for the latest fee information and payment options. |
| N6        |                   |                                                                                      |

### N4 - N6 Package

| Programme | Registration Fees | Tuition fee                                                                          |
|-----------|-------------------|--------------------------------------------------------------------------------------|
| N4        | R11250            | Contact a CTU campus/ consultant for the latest fee information and payment options. |
| N5        |                   |                                                                                      |
| N6        |                   |                                                                                      |

**\* Excludes external fees and identified textbooks if applicable.**

## Payment

Visit our website to view the payment method.

[Payment Methods.](#)

**APPLY for Student Loan [HERE!](#)**

## Additional costs

Students must make provision for additional items such as textbooks, stationery, supplementary examinations, research costs and printing, field trips etc.

## Disclaimer

The content of this fact sheet is subject to change without notification due to market trends in the industry, legislation and/or programme version updates. Refer to website for the latest version of the prospectus. CTU Training Solutions (PTY) Ltd reserves the right to change the programme content without prior notice.. Additional international exams may be written but are not included in the programme fee. Minimum student (capacity) group sizes will fall into the Virtual Instructor-Led programme commencing in the months of February & July of each year.

I (Name of student):..... hereby acknowledge that I understand the information stated in this document and fully comprehend the specifics explained above pertaining to this qualification.

Student signature:.....

Signature of legal guardian:.....

Name of legal guardian:.....

Consultant signature:.....

Name of sales consultant:.....

Date:.....

**\* Please note the original signed copy should be kept on the student record file.**

## CONTACT US

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