



## Your future starts here!

These programmes is recommended for students that would like to pursue a career in **TECHNICAL** or **ENGINEERING RELATED** studies

#### **DURATION:**

1 Trimester per certificate – 3 trimester per year

#### APPLICATION AND REGISTRATION:

- Students MUST apply online on the website online applications and MUST complete the LEARNER PROFILER ASSESSMENT as STEP 1 of the application before continuing with STEP 2 and 3.
- Successful applicants will be notified per SMS/email to come and register, ONLY after the CLOSING DATE of the application.
- 3. Please apply on time as space are limited.

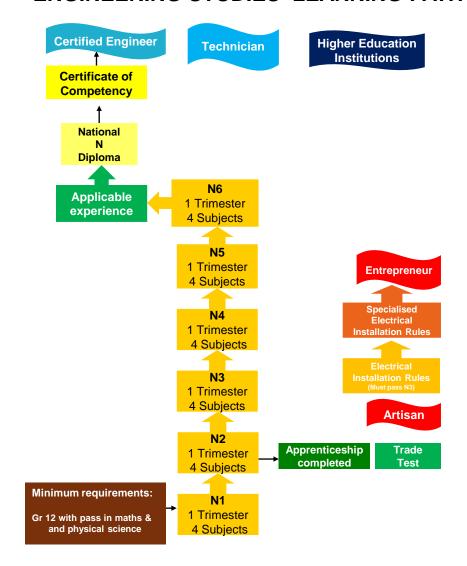
### **MODES OF DELIVERY:**

Full-Time ONLY

#### Please note:

- 1. Westcol reserves the right to ONLY offer programmes that are justified by student numbers, to change the location/venue of the programme and to cancel programme/s.
- Potential student are encouraged to apply for a NSFAS bursary online 
   www.nsfas.org.za
- The cost of text books is included in the fee structure of these programmes.
- 4. Westcol operates a cash free system.
- 5. All monies must be directly deposited in any ABSA BANK.

### **ENGINEERING STUDIES LEARNING PATH**



### **FIELDS OF STUDY OFFERED**

Engineering Studies N1 – N6 Programmes	Carletonville	Krugersdorp- West	Randfontein	Westonaria
Engineering:N1 - N6	X N1-N4	X	X	X N1-N3
Electrical Installation Rules and Specialised Electrical Installation Rules		x	X	
Certificate of Competency	х	х	Х	

## Pre-Vocational Learning Programme (PLP) certificate

- This programme is an entry level foundational learning programme for articulation into learning programmes for students who do not meet the entry requirements.
- The programme prepares a student for enrolment in the relevant NC(V).
- The programme is pitched more or less at NQF level 2.

#### **ENTRY REQUIREMENTS:**

The programme is primarily aimed at students who have passed at Grade 9 with weak/poor literacy and numeracy foundation.

Students with Grade 9 and with weak/poor marks in Mathematics and Science and those who have not been part of the study environment for a few years could also be considered.

#### SUBJECTS:

- 1. Foundational English,
- Foundational Mathematics(not Mathematical Literacy
- 3. Foundational Science
- Foundational Life Skills and Technology

#### Please note:

There is no **NATIONAL EXAMINATION** for **PLP** and the programme follows a continuous assessment process

#### Engineering Studies N1 to N3

Please take note that DHET intends to phased out N1 –N3 in the near future and to replaced with QCTO programmes that will include a practical component

#### **ENTRY REQUIREMENTS - N1**

- 1. Grade 12 statement with pass in Mathematics and English FAL and Physical Science.
- APS score of 18, using the best six NSC / NC (V) L4 subjects inclusive of Mathematics/Technical Mathematics and English.

#### **N1**

#### Compulsory subjects

- 1. Mathematics
- 2. Engineering Science
- Engineering Drawing or Industrial Electronics or Plating and Structural Steel Drawing\*

#### Choose any ONE of the following subjects:

- · Motor Trade Theory\*
- · Electrical Trade Theory
- · Instrument Trade Theory
- · Metal Workers Theory
- · Fitting and Machining

#### Please note: \* Compulsory combination

#### N2

#### Compulsory subjects

- 1. Mathematics
- 2. Engineering Science
- Engineering Drawing or Industrial Electronics or Plating and Structural Steel Drawing\*

#### Choose any ONE of the following subjects:

- · Diesel Trade Theory
- · Electrical Trade Theory
- · Instrument Trade Theory
- · Platers Theory
- · Fitting and Machining
- · Rigging Theory
- · Motor Electrical Trade Theory
- Motor Trade Theory\*

#### Please note: \* Compulsory combination

#### N3

#### Compulsory subjects

(4 subject constitutes a certificate)

- 1. Mathematics
- 2. Engineering Science
- 3. Engineering Drawing
- Engineering Drawing
   Mechanotechnology
- Electrotechnology
- 6. Industrial Electronics7. Instrument Trade Theory

#### Engineering Studies N4 to N6

#### **ENTRY REQUIREMENTS - N4**

- Any of the following NC(V) L4 Certificates:
  - Civil Engineering and Building Construction
  - · Drawing Office Practice
  - · Electrical Infrastructure Construction
  - · Engineering and Related Design
  - Information Technology and Computer Science
  - · Mechatronics
  - Process Instrumentation
  - · Process Plant Operations: or an
- National Certificate: N3 Engineering Studies;
- 3. Equivalent occupational qualification;
- APS score of 24, using double the Mathematical/Technical Mathematics plus one relevant Technology Subject (Civil, Electrical, Mechanical) or Physical Science, plus English and the two (2) next best subjects of NSC.

#### **N4**

- 1. Supervisory Management
- 2. Electrotechnics
- 3. Industrial Electronics
- 4. Industrial Instruments
- 5. Mechanical Draughting
- 6. Mechanotechnics
- 7. Engineering Science
- 8. Mathematics

#### N5

- 1. Supervisory Management
- Strength of Materials And Structures
- 3. Mathematics
- 4. Power Machines
- 5. Mechanotechnics
- 6. Electrotechnics
- 7. Mechanical Drawing And Design
- 8. Fluids Mechanics
- 9. Industrial Electronics
- 10.Industrial Instruments

#### N6

- 1. Supervisory Management
- Strength of Materials and Structures
- 3. Control Systems
- Electrotechnics
- 5. Industrial Electronics
- 6. Industrial instruments
- 7. Mechanical Drawing and Design
- 8. Power machines
- 9. Fluids mechanics
- 10. Mechanotechnics
- 11. Mathematics

# Installation Rules and Specialised Installation Rules (Wireman's Licence)

This programme is compulsory for electricians in order to install electrical wiring of domestic/industrial premises.

External examinations are written in March, July and November.

#### **ENTRY REQUIREMENTS:**

- Qualified artisan
- N3 certificate with Electrotechnology as one of the subjects.

#### **DURATION:**

1 Trimester

#### **ENROLMENT DATES**

January, May and September

#### MODES OF DELIVERY:

On request based on student numbers.

#### **SUBJECTS**

#### **Certificate: Installation Rules**

- 1. Installation Rules
- 2. Electrical Wiring Skills

#### Certificate: Specialised Electrical Installation Codes

 Specialised Electrical Installation Codes

#### **PLEASE NOTE:**

- Pass mark is 50%
- Both programmes consist of two examination papers per subject.
- Only a statement of results is issued to successful candidates.

## Engineering Certificate of Competency (Government Ticket)

It is compulsory for **ELECTRICAL** and **MECHANICAL ENGINEERS** to obtain this qualification in order to be professional recognised.

#### **ENTRY REQUIREMENTS - SUMMARY**

- 1. Receipt of monies paid
- 2. Certified copies of qualifications
- Proof of appropriate practical experience on company letter head and verified by signature of the employer.
- 4. A testimonial of sobriety and conduct signed by an employer.
- Proof of age, name and identification number, i.e. certified copy of ID document or a copy of birth certificate.
- A letter from the Resident Engineer, where possible indicating that the applicant is considered to be a suitable candidate.

#### **COMPUSORY SUBJCTS**

 $\label{eq:main_eq} \mbox{M)} - \mbox{Mechanical Engineering (E)} - \mbox{Electrical Engineering}$ 

- · N3 Engineering Drawing (M) (E)
- N3 N4 Engineering Science (M) (E)
- N4 Industrial Electronics (M)
- N4 Mathematics (M) (E)
- N4 N5 Fluid Mechanics (M)
- N5 Strength of Materials (E)
- N5 Electrotechnics (M)
- N5 N6 Control Systems (M) (E)
- N6 Mechanotechnics (M) (E)
- N6 Power Machines (M) (E)N6 Strength of Materials (M)
- No Strength of Materials (M)
   N6 Fluid Mechanics (M)
- No Fidia Mechanics (M
- N6 Industrial Electronics (E)
- N6 Electrotechnics (E)
- N6 Supervisory Management (M) (E)

#### **N6 CONVERSION COURSE**

To enable holders of the Mechanical Certificate of Competency or vice versa:

- Electrotechnics (M)
- N6 Industrial Electronics (M)
- N6 Strength of Materials (E)
- N6 Fluid Mechanics (E)

The subjects shown are only the highest levels to be attained. All the grades leading to that level must also be attained with a 50% pass mark (e.g. Electrotechnics N6 includes a pass in this subject on the N3, N4 and N5 levels).

#### Examinations

- The letter of acceptance must be submitted when entering for the qualifying subjects at Westcol Campus examination Office and the appropriate examination fees must be paid.
- The examinations are held in June and November and the closing dates for entry are set by the Department of Education.

Application forms for acceptance are obtainable from:

The Secretary Commission of Examiners Department of Labour Private bag X117 Pretoria 0001

Tel.: (012) 309 4111

Website: www.labour.gov.za

### **SELECTION CRITERIA**

## REPORT 191 ENGINEERING STUDIES N1 and N4

PROGRAMME	ADMISSION REQUIREMENTS	
N1	<ul> <li>Grade 12 statement with pass in Mathematics, English FAL and Physical Science.</li> <li>APS score of 18, using the best six NSC/NC(V) L4 subjects inclusive of Mathematics/Technical Mathematics and English.</li> </ul>	
N4	<ul> <li>Any of the following NC (V) L4 Certificates:</li> <li>Civil Engineering and Building Construction</li> <li>Drawing Office Practice</li> <li>Electrical Infrastructure Construction</li> <li>Engineering and Related Design</li> <li>Information Technology and Computer Science</li> <li>Mechatronics</li> <li>Process Instrumentation</li> <li>Process Plant Operations: or an</li> <li>National Certificate: N3 Engineering Studies; or an</li> <li>Equivalent occupational qualification; or an</li> <li>APS score of 24, using double the Mathematical/Technical Mathematics plus one relevant Technology Subject (Civil, Electrical, Mechanical) or Physical Science, plus English and the two (2) next best subjects of NSC.</li> </ul>	

# TRIMESTER PROGRAMMES 2023

## **Engineering Studies: N1 to N6**

Trimester 1		Trimester 2		Trimester 3	
College opens	09 January	College opens	16 May	College opens	04 September
Registration:	09 – 17 Jan	Registration	16 – 18 May	Registration	04 – 12 Sep
Class commence	18 January	Class commence	22 May	Class commence	13 September
Examination	27 March – 20 April	Examination	28 July – 18 August	Examination	20 Nov – 08 Dec
College Closes	20 April	College Closes	18 August	College Closes	08 Dec

CLASS FEES - 2023 ENGINEERING STUDIES						
N1 – N6						
Engineering Studies N1 to N3						
Cash price	R2 000,00					
Cost per subject	R500,00					
Payment options:						
1 & 2 Subjects	Cash only					
3 Subjects	50% deposit R1 000,00					
	2 instalments of R375,00					
40.11	50% deposit R1 000,00					
4 Subjects	2 instalments of R500,00					
Engineering Studies N4 to N6						
Cash price	R2 334,00					
Cost per subject	R583,50					
Payment options:						
1 & 2 Subjects	Cash only					
3 Subjects	50% deposit R1 750,50					
	2 instalments of R875, 25					
4 Cubicata	50% deposit R1 167,00					
4 Subjects	2 instalments of R583,50					
EXAMINATION ONLY						
Cash price per subject	R 490.00					