

11 September 2018

Phase-out of the National Diploma in Chemical Engineering and Phase-in of the Diploma in Chemical Engineering

The Department of Chemical Engineering has replaced the existing National Diploma: Chemical Engineering course with a Diploma in Chemical Engineering course in 2018.

The purpose of introducing this new qualification is to align with the new Higher Education qualification sub-Framework (HEQSF) as Gazetted by the South African Department of Education on 2 August 2013. This is a requirement placed on all Higher Education institutions.

The new qualification will ensure that the curriculum offered at CPUT is aligned to qualifications offered at other institutions; not only nationally, but also internationally through the benchmarking process that took place during the development of the new qualification.

Pipeline students will be allowed a certain period to complete the National Diploma in Chemical Engineering, after which they will be articulated onto the new Diploma. Students who are returning to complete their qualification will be admitted on the current National Diploma (ND) qualification if it is still offered at the time of their return and if their outstanding subjects are still offered. If the qualification has been phased out, they will be articulated into the new Diploma (Dip) qualification.

National Diploma in Chemical Engineering: Phase out plan

Year	Remarks										
2017	<p>Last intake for first year students</p> <p>Students who still have S2 subjects outstanding in 2017 must firstly register for the failed subjects before registering for S2 subjects. Note that current S2 subjects in the ND will not be offered in 2018 due to the phase in of the new Dip.</p> <p>National Diploma students who have passed all year one subjects will continue with the normal ND year two subjects in 2018.</p> <p>Students who fail their S2 subjects in 2017 will be provided with opportunities during the winter and summer schools to repeat failed subjects to allow them to progress to the next level or 2nd year. A student who fails the S2 subjects after the 2nd attempt will then still be regarded as a first year student.</p>										
2018	<table border="0"> <tr> <td>Mainstream</td> <td>ECP</td> </tr> <tr> <td>New Dip – 1st year</td> <td>New Dip ECP – year 0</td> </tr> <tr> <td>Current ND – 2nd year</td> <td>Current ND ECP - year 1</td> </tr> <tr> <td>Current ND – 3rd year</td> <td>Current ND ECP – year 2</td> </tr> <tr> <td></td> <td>Current ND ECP – year 3</td> </tr> </table> <p>All 2017 first year students who have not progressed to ND year two will be transferred to the new Dip qualification and will repeat year one in 2018. These are students who failed more than 50% of their registered subjects during the year; students who still owe any of Mathematics 1, Chemistry 1 or Physics 1 in Semester 1; or Chemical Engineering Technology 2 or Engineering Physics in Semester 2 will not proceed to year 2 of the National Diploma.</p>	Mainstream	ECP	New Dip – 1 st year	New Dip ECP – year 0	Current ND – 2 nd year	Current ND ECP - year 1	Current ND – 3 rd year	Current ND ECP – year 2		Current ND ECP – year 3
Mainstream	ECP										
New Dip – 1 st year	New Dip ECP – year 0										
Current ND – 2 nd year	Current ND ECP - year 1										
Current ND – 3 rd year	Current ND ECP – year 2										
	Current ND ECP – year 3										

	These are subjects which are pre-requisites for S3 subjects and will not be available in 2018.	
	National Diploma students who have passed all year two subjects will continue with the normal ND year three.	
	In-service training placement for students who started in 2016 that qualify will continue as normal.	
	Opportunities will be provided during the winter and summer schools for students to repeat failed subjects.	
2019	Mainstream New Dip – 1 st year New Dip – 2 nd year Current ND – 3 rd year (in-service)	ECP New Dip ECP – year 0 New Dip ECP – year 1 Current ND ECP – year 2 Current ND ECP – year 3 (in-service training)
	All students who qualify for in-service training will be assisted with placement in industry.	
	Selected subjects in Semesters 3 and 4 will be offered for students who have outstanding subjects Main stream students who fail any of their ND year 2 (Semesters 3 & 4) subjects will be allowed to register and attend with the ND ECP year 2	
	ECP students who fail any of their year 1 subjects will move over to the new Diploma programme as no ECP year 1 subjects will be offered.	
2020	Mainstream New Dip – 1 st year New Dip – 2 nd year New Dip – 3 rd year	ECP New Dip ECP – year 0 New Dip ECP – year 1 New Dip ECP – year 2 Current ND ECP – year 3 (in-service training)
	In-service training will continue as required.	
	No subject in the National Diploma programme will be offered. Students who have outstanding subjects will need to register for the equivalent subject in the Diploma program and apply for internal recognition of the subject. (A list of subjects as their equivalent subjects are listed below)	
2021	Mainstream New Dip – 1 st year New Dip – 2 nd year New Dip – 3 rd year	ECP New Dip ECP – year 0 New Dip ECP – year 1 New Dip ECP – year 2 Current ND ECP – year 3 (in-service training)
	In-service training will continue as required for those who qualify. This will be the last formal year for IST.	

Equivalent subjects: National Diploma and Diploma in Chemical Engineering

Diploma in Chemical Engineering	National Diploma in Chemical Engineering
Engineering Mathematics 1	Mathematics 1 Mathematics 2
Engineering Chemistry 1	Chemistry 1 - Theory Chemistry 1 - Practical Inorganic Chemistry 2 Physical Chemistry 2 Organic Chemistry 2
Engineering Physics 1	Physics 1
Communication Skills for Chemical Engineers	Communication Skills 1

Computer Applications 1	Computer Skills 1 Drawings: Chemical Engineering
Chemical Engineering Technology I	Chemical Engineering Technology 2
Chemical Process Technology	Chemical Process Industries 2
Transfer Processes	Chemical Engineering Technology – Operations
Chemical Engineering Thermodynamics (Subject will be structured such that the two subjects are covered in different semesters)	Thermodynamics: Chemical Engineering 3 Thermodynamics: Applied 3
Process Fluid Flow	Chemical Plant – Processing
Complementary Studies B	No comparable subject
Chemical Engineering Technology 2	Chemical Engineering Technology 3 - Units
Chemical Engineering Laboratory 2A	No comparable subject
Process Design I - Principles, Safety and Loss prevention	Chemical Process Design Principles 3
Particle Technology	Chemical Plant 3: Equipment
Management and Entrepreneurial skills	Management Skills 1: Structure Management Skills 1: Application
Chemical Engineering Laboratory 2B	No comparable subject
Process Control and Instrumentation	Process Control 3
Engineering Mathematics II	Mathematics 2
Introduction to Chemical Reaction Engineering	No comparable subject
Separations Processes I - Unit Operations	No comparable subject
Investigative Projects	No comparable subject
Chemical Engineering Projects	No comparable subject
Bioprocess and Environmental Engineering	No comparable subject
Computer Applications 2 – Programming	No comparable subject
Process Design II - Equipment Design	No comparable subject
No comparable subject	Engineering Physics 2 (will take this from Applied Sciences)
No comparable subject	In-Service Training 1
No comparable subject	In-Service Training 2

NB: Students will be expected to perform relevant practicals to the subjects that will be recognised. This is because laboratory practicals are not embed in the subjects in the new Diploma programme.

Students are requested to sign the attached acknowledgement sheet that they were informed of the Phase-out of the National Diploma in Chemical Engineering and Phase-in of the Diploma in Chemical Engineering. Acknowledgement forms to be submitted to the Departmental secretary by no later than 28 September 2018.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ikhu-Omoregbe', written in a cursive style.

Prof. D.I.O. Ikhu-Omoregbe, PhD. CEng. MChemE
Head of Department

**Acknowledgement of information regarding the Phase-out of the National Diploma in
Chemical Engineering and Phase-in of the Diploma in Chemical Engineering.**

I hereby acknowledge receipt of information regarding the Phase-out of the National Diploma in Chemical Engineering and Phase-in of the Diploma in Chemical Engineering.

I understand that if I have not progressed according to the letter, I will be transferred to the Diploma: Chemical Engineering qualification. I also understand that there are financial implications in moving to the new program.

Name:

Student Number:

Signature:

Date: