

19 September 2017

## **Phase-out of the National Diploma Mechanical Engineering (Mechatronics) and Phase-in of the Diploma in Mechanical Engineering in Mechatronics**

The Department of Mechanical Engineering will be replacing the existing National Diploma: Mechanical Engineering (Mechatronics) (NDMECH) course with a Diploma in Mechanical Engineering in Mechatronics (D3MECH) 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.

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

The Diploma in Mechanical Engineering in Mechatronics will commence in January 2018.

### **National Diploma Mechanical Engineering (Mechatronics) phase-out plan**

<b>Year</b>	<b>Remarks</b>
2017	<p>Last intake for first year students</p> <p>National Diploma students who have passed all S1 and S2 subjects in 2017 will continue with the ND S3 and S4 subjects in 2018. Students who have S1 subjects after 2017, i.e. after two attempts is effectively still first year students and will be moved to the HEQSF aligned Diploma that starts in 2018.</p> <p>Students who fail their S2 subjects in 2017 will be given another opportunity in semester 1 and semester 2 of 2018 in accordance with the S2 &amp; S4 agreement.</p> <p>A student who fails the S2 subjects after the 2<sup>nd</sup> attempt will then still be regarded as a first year student and will be moved to the Dip.</p>

2018	<p>Dip – 1<sup>st</sup> year  Current ND – 2<sup>nd</sup> year  Current ND – 3<sup>rd</sup> year (in-service training)</p> <p>ND students who have passed all S3 and S4 subjects will continue with the ND year three.</p> <p>In-service training placement for students who started in 2016 that qualify will continue as normal.</p> <p>Students will be given another opportunity in semester 1 and semester 2 of 2019 in accordance with the S2 &amp; S4 agreement.</p>
2019	<p>Dip – 1<sup>st</sup> year  Dip – 2<sup>nd</sup> year  Current ND – 3<sup>rd</sup> year (in-service)</p> <p>All students who qualify for in-service training will be assisted with placement in industry.</p> <p>No subject in the National Diploma programme will be offered. Students who have outstanding subjects in the ND program 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)</p>
2020	<p><b>Mainstream students</b>  Dip – 1<sup>st</sup> year  Dip – 2<sup>nd</sup> year  Dip – 3<sup>rd</sup> year</p> <p>In-service training will continue as required.</p>

The extended period to phase out these subjects will be subject to:

1. Sufficient students registering for the subject during the semester to make the offering viable. Where sufficient students do not register the students will have to take the subject the next time it is offered which includes the following semester as part of the normal offering.
2. The department identifying and finding sufficient and suitably qualified staff to lecture these subjects during these periods as this is not part of the normal offering.

**Equivalent subjects: ND Mechanical Engineering (Mechatronics) and Diploma in Mechanical Engineering in Mechatronics**

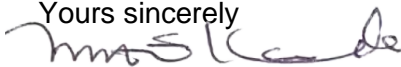
Diploma in Mechanical Engineering in Mechatronics	ND in Mechanical Engineering (Mechatronics)
Engineering Mathematics Physical Science Engineering Mechanics Professional Communication	Mathematics 1 Mathematics2 No comparable subject Mechanics 1 Communication Studies 1

<p>Computer Engineering  Engineering Drawing  Mechanical Engineering Manufacturing  Electrical and Electronics Engineering</p> <p>Embedded Systems  Thermo-fluids 2</p> <p>Strength of Materials</p> <p>Mechanics of Machines  Applied Mathematics  Industrial Automation</p> <p>Control Systems  Mechanical Engineering Design  Computer Aided Manufacturing  Applied Strength of Materials  Thermo-fluids 3  Mechatronic Design  Process Control and Industrial Networking</p> <p>Global Environmental Studies  Engineering Management  Mechatronics Industrial Project - work place based learning</p>	<p>Engineering Professional Studies  Computer and programming skills 1  Mechanical Engineering Drawing 1  No comparable subject  Electrical Engineering &amp; Electronics 1  Electrical Engineering &amp; Electronics 2  Mechatronics Project 1  Fluid Mechanics 2  Fluid Mechanics 3  Strength of Materials 2  Strength of Materials 3  No comparable subject  No comparable subject  Mechatronic Systems 2  Mechatronic Systems 3  Electrical Engineering &amp; Electronics 3  Mechanical Engineering Design 2  Computer Aided Manufacturing 2  Applied Strength of Materials 3  Hydraulic Machines 3  Mechatronic Design  Process Control  Industrial Networking</p> <p>Mechatronics Industrial Project 2</p>
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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 Diploma programme.

**Students are requested to sign the attached acknowledgement sheet that they were informed of the Phase-out of the ND in Mechanical Engineering (Mechatronics) and Phase-in of the Diploma in Mechanical Engineering in Mechatronics. Acknowledgement forms to be submitted to the Departmental secretary by no later than 29 September 2017.**

Yours sincerely



Prof. M Kaunda, PhD. CEng. MChemE  
Head of Department

19 September 2017

**Acknowledgement of information regarding the Phase-out of the ND Mechanical Engineering (Mechatronics) and Phase-in of the Diploma in Mechanical Engineering in Mechatronics**

I hereby acknowledge receipt of information regarding the Phase-out of the ND Mechanical Engineering (Mechatronics) and Phase-in of the Diploma in Mechanical Engineering in Mechatronics.

I am aware that there will be financial implications if I am transferred to the Diploma based on my academic performance.

I understand that if I have not progressed to year two of the National Diploma: Mechanical Engineering (Mechatronics) by the end of 2018, I will be transferred to the Diploma in Mechanical Engineering in Mechatronics qualification and will repeat year one.

I accept to comply with any appropriate actions to overcome any unforeseen WIL implications that may occur due to the phase-out of the National Diploma.

\_\_\_\_\_  
Name:

\_\_\_\_\_  
Student Number:

\_\_\_\_\_  
Signature:

\_\_\_\_\_  
Date:

\_\_\_\_\_  
Signed at: