

3.7 Doctor of Philosophy (PhD) in the Engineering Faculty

3.7.1 Admission requirements and continued admission after your first year of study

To be considered for admission to the PhD-programme you must:

- hold at least an MScEng, MSc, MEng, or MTech degree, all with a significant research component; *or*
- have reached (in another manner) a standard of competence in your field of study which is deemed sufficient for this purpose by the Senate.

Also refer to the postgraduate admission model in Figure 3.1 in Section 3.2 near the beginning of this chapter.

Within your first year of PhD studies, you must get permission to continue your registration. To get this permission you must:

- complete a formal assessment of your research proposal to the satisfaction of the Faculty Board (please refer to the Faculty's "Postgraduate Processes for the Faculty of Engineering"; see Section 1.6 for access details); *and*
- after completing this assessment, receive the Faculty Board's approval of your dissertation topic and supervisor(s).

3.7.2 Selection

Irrespective of the admission requirements above, you must be selected for the PhD programme by the home department of the relevant field of study.

3.7.3 Application procedure

You must apply for admission as a PhD student on the University's online application portal: www.sun.ac.za/english/maties/apply. Provide the information as required on the portal, which will include the following:

- your contact information,
- qualifications you have already completed (also provide certified copies of these qualifications if you did not obtain them from Stellenbosch University),
- the date you intend to begin your PhD studies,
- the name of a supervisor and, if applicable, the names of one or more co-supervisors.

3.7.4 Duration and periods of enrolment

Table 3.1 in Section 3.4.1 earlier in this chapter shows the minimum, normal and maximum time available to you to complete your PhD studies as a full-time or part-time student. Many full-time PhD students complete the programme in three academic years by starting in February of the first year and receiving the degree in March of the fourth year.

3.7.5 Programme composition and requirements for obtaining the PhD degree

The PhD programme comprises 360 credits of research on NQF level 10 that leads to a dissertation.

The University can award the PhD degree to you if you have, in addition to meeting the minimum registration requirements:

- done original research in the field of engineering sciences:
 - under the supervision of a supervisor; and
 - to the satisfaction of the University.

- submitted a satisfactory dissertation which in the Senate's view shows that:
 - you have made a specific contribution that enriches knowledge in the particular subject area, and
 - that you have exhibited independent critical judgement.

Also note that along with the dissertation you must submit a declaration stating that the dissertation has not already been submitted at another university for the purpose of obtaining a degree, and that it is your own work.

- satisfactorily completed an oral examination, except in special circumstances where the Senate has approved exemption from the oral examination; and
- submitted proof at your oral examination that you have already submitted a journal article to a journal of acceptable standard. The article must report the research of your dissertation. If the dissertation is classified as confidential or secret, you must submit the journal article to the examination committee at the oral examination.

You must normally be present at your host department when the oral examination is conducted.

Details about the examination process are given in the Faculty's "Postgraduate Processes for the Faculty of Engineering" (Section 1.6 above indicates how to access this document).

3.7.6 Submitting your dissertation for examination

The examination is arranged according to the procedures given in the Faculty's "Postgraduate Processes for the Faculty of Engineering" (Section 1.6 above indicates how to access this document).

If you want to graduate at the **December graduation** ceremony, you must submit your dissertation for final examination on or before **1 August**, unless your home department specifies differently. For the **March graduation** ceremony, you must submit your dissertation on or before **1 November**, unless your home department specifies differently.

As a PhD candidate you must get written permission from your supervisor(s) to submit your dissertation for examination.

You can submit your dissertation in any of the formats described in the relevant section of the chapter "Postgraduate Qualifications" in Part 1 of the Yearbook. The requirements regarding the number of copies you must submit, as well as the other requirements you must meet before the degree can be awarded to you, are set out in the same chapter.

If your dissertation contains research in the form of published and/or unpublished articles:

- it should at least contain:
 - an introductory overview,
 - an overview of the dissertation's structure with a summary of the most important results,
 - conclusions that detail the originality and importance of the research, and
 - recommendations that explain the basis of future work;
- it may only present research if the research work and the originality of the research are substantially your own work. For each article, the dissertation must include a declaration in which you indicate your contribution to the article in the format prescribed in the relevant section of the chapter "Postgraduate Qualifications" in Part 1 of the Yearbook.

3. Postgraduate Programmes

In this chapter you will find Faculty-wide rules that apply to postgraduate study in engineering at this University. Please contact the relevant departmental chairperson for further details. For contact details, see Section 1.1.3 in the chapter "General Information" above.

3.1 Qualifications and fields of study

Qualifications

The Faculty awards the following postgraduate qualifications:

Please note: Figure 3.1 in Section 3.2 illustrates the postgraduate structure and admission paths.

- **PGDip (Engineering): Postgraduate Diploma in Engineering**
The postgraduate diploma comprises an in-depth study in preparation for a master's programme or a broadened study involving more than one engineering discipline. The PGDip (Eng) does not lead to registration as a professional engineer.
- **PGDip (Engineering Science): Postgraduate Diploma in Engineering Science**
The postgraduate diploma comprises an in-depth study in preparation for a master's programme in engineering science.
- **MEng: Master of Engineering**
Two MEng qualifications are offered by the Faculty:
 - The MEng (Structured) is based on coursework and the emphasis is on the advanced application of engineering sciences in design.
 - The MEng (Research) consists of a research project, which must culminate in a satisfactory thesis about the research project.
- **MEngSc: Master of Engineering Science**
Two MEngSc qualifications are offered by the Faculty:
 - The MEngSc (Structured) is based on coursework and the emphasis is on the advanced application of engineering sciences.
 - The MEngSc (Research) consists of a research project that must culminate in a satisfactory thesis about that research project.
- **PhD: Doctor of Philosophy**
The PhD degree programme comprises a research project and a dissertation on that project. The Faculty will only award the degree if the candidate has generated new knowledge through research.
- **DEng: Doctor of Engineering**
The DEng may be awarded to candidates whose research has, over a number of years, made a substantial contribution towards humanity's knowledge in the field of engineering.

The following qualification has been phased out:

- **MScEng: Master of Science in Engineering**
The last students started in this programme in February 2011.

Fields of study

The PGDip (Engineering), MEng (Structured), MEng (Research) and PhD can be awarded in the following fields of study (home departments are indicated in brackets):

- Chemical Engineering (Department of Chemical Engineering)
- Civil Engineering (Department of Civil Engineering)
- Electrical Engineering (Department of Electrical and Electronic Engineering)
- Electronic Engineering (Department of Electrical and Electronic Engineering)
- Engineering Management (Department of Industrial Engineering)
- Industrial Engineering (Department of Industrial Engineering)
- Mechanical Engineering (Department of Mechanical and Mechatronic Engineering)
- Mechatronic Engineering (Department of Mechanical and Mechatronic Engineering)

Further, the Faculty offers the following qualifications and fields of study (the organisational unit that hosts each one is indicated in brackets):

- PGDip (Engineering Science) (Institute for Biomedical Engineering)
- MEngSc (Structured) in Biomedical Engineering (Institute for Biomedical Engineering)
- MEngSc (Research) in Biomedical Engineering (Institute for Biomedical Engineering)

- MEngSc (Research) aimed at interdisciplinary study (can be offered by any of the Faculty's departments)
- PhD in Biomedical Engineering (Institute for Biomedical Engineering)

Unless stated otherwise, the arrangements given below for the PGDip (Engineering), MEng and PhD also apply to the corresponding programmes in engineering science and biomedical engineering.

Not all the programmes, fields of study and postgraduate modules are presented in a given year.

3.2 Postgraduate admission model for the Faculty of Engineering

The postgraduate programme structure and paths for admission are illustrated in Figure 3.1 below and apply to all postgraduate students who have been admitted from 2005 onwards. If you do not meet the qualification requirements shown in the model, the Faculty Board must first approve your admission to the relevant postgraduate programme.

The credit values in Figure 3.1 correspond to 1 credit for 10 hours of work for you as a student. The NQF levels refer to the National Qualification Framework.

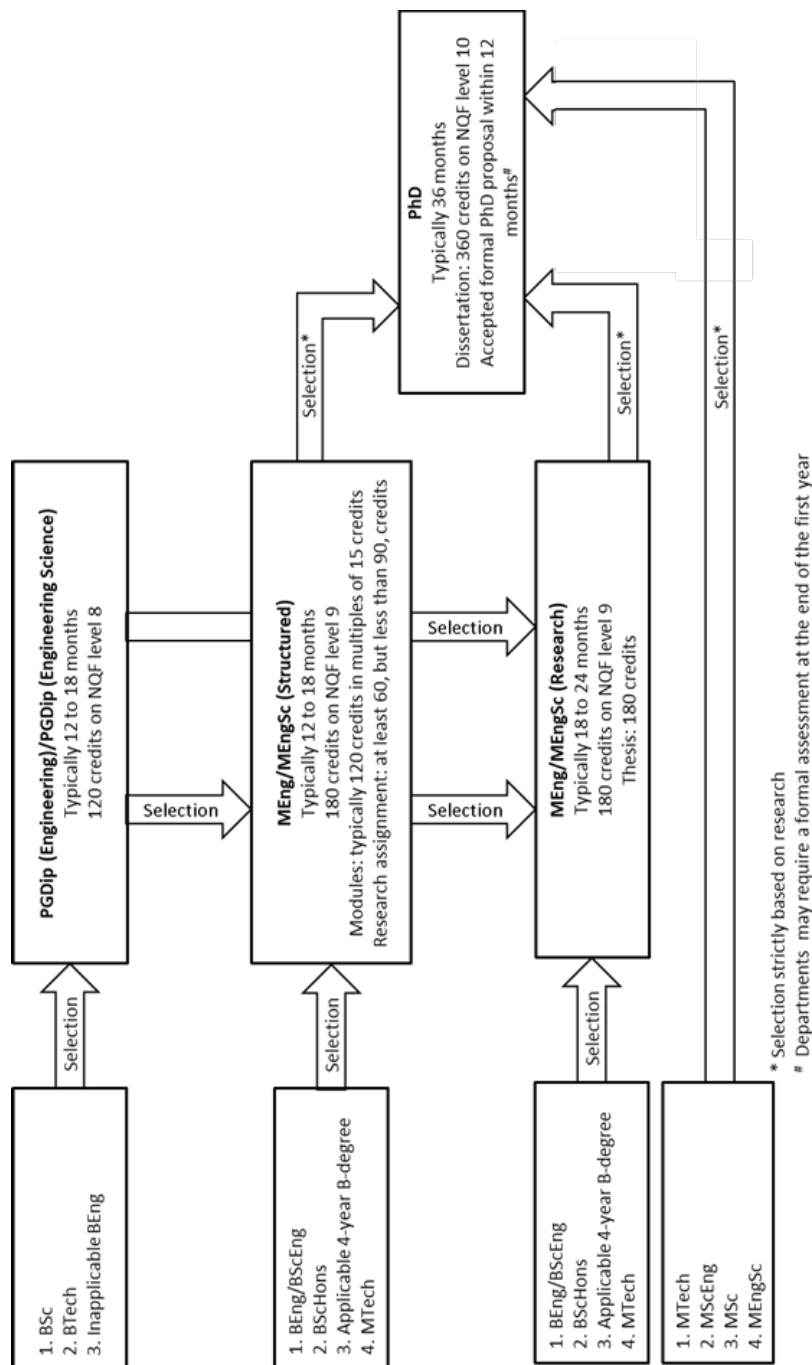


Figure 3.1: Postgraduate admission model

3.3 Recognition of prior learning

Sections 2.4.2.2 and 2.4.2.7 in the chapter "Undergraduate Programmes", regarding the recognition of modules that you have completed elsewhere, also apply here, except for the following:

- Exemption from module(s) can be granted on the strength of short courses you have completed that fall outside of the HEQSF (in other words, non-credit-bearing short courses), on condition that the course contents, duration and assessment of the short course are at least equivalent to the same of the relevant module(s).
- If you hold the required qualification for admission, but did not perform well enough, the departmental committees for Recognition of Prior Learning / Credit Accumulation and Transfer (RPL/CAT) may recognise supplementary learning and work experience to grant you admission, provided that your learning and experience show that you now have the potential to complete the relevant programme successfully.
For example, if you did not achieve 60% in the final year of your previous qualification, but you have completed advanced projects successfully, then an RPL/CAT committee may allow you to enrol for a master's degree.
- Departmental RPL/CAT committees can consider recognising your work experience and projects for module credits, but not for research modules. Note that such work experience and projects must be of an appropriate scope and advanced nature.

3.4 Provisions regarding enrolment and conversion of programmes

3.4.1 Periods of enrolment

Table 3.1 below shows the following for the respective postgraduate programmes:

- the minimum number of years you must be enrolled,
- for how long you can normally expect to be enrolled,
- how many years you may enrol without having to apply for readmission (that is, the maximum period of enrolment for each postgraduate programme, as approved by the Faculty Board in 2004), and
- the year you will require permission for readmission, if you have not completed the programme by then.

Table 3.1: Periods of enrolment for postgraduate programmes

Programme	Years of Enrolment								
	1	2	3	4	5	6	7	8	9
PGDip (Eng) Full-time	M	X	-	-	-	-	-	-	-
PGDip (Eng) Part-time	M	F	X	-	-	-	-	-	-
MEng (Structured) Full-time	M	F	X	-	-	-	-	-	-
MEng (Structured) Part-time	M	N	F	X	-	-	-	-	-
MEng (Research) Full-time	M	N	F	X	-	-	-	-	-
MEng (Research) Part-time	M	N	N	F	X	-	-	-	-
MEngSc (Structured) Full-time	M	F	X	-	-	-	-	-	-
MEngSc (Structured) Part-time	M	N	F	X	-	-	-	-	-
MEngSc (Research) Full-time	M	N	F	X	-	-	-	-	-
MEngSc (Research) Part-time	M	N	N	F	X	-	-	-	-
PhD Full-time (after master's)	M	M	N	F	X	-	-	-	-
PhD Full-time (after BEng, no master's)	M	M	M	N	F	X	-	-	-
PhD Part-time (after master's)	M	M	N	N	N	F	X	-	-
PhD Part-time (after BEng, no master's)	M	M	M	N	N	N	F	X	-

Key:

M	Minimum (mandatory) enrolment period. (Under exceptional circumstances the degree may be completed in this period)	Normal maximum period of enrolment
N	Normal enrolment after minimum. (The period required to complete the degree normally spans M and N)	
F	Final concessional year (may register without having to apply for readmission)	
X	Enrolment only if readmission has been approved by the Faculty Board or, for a PhD, the Senate.	Allowed in exceptional circumstances
-	Further registrations normally not allowed	

3.4.2 Continued enrolment during the maximum period of enrolment

You must register as a student every year for the full duration of your studies, until you are awarded the degree or diploma concerned (see the section "Continuation of Registration for Postgraduate Programmes" in Part 1 of the University Yearbook), except if the Faculty Board approves an interruption of your studies (consult Section 3.4.4, "Interruption of studies", below).

You must make sufficient progress in your studies each year to be permitted to register again. If your progress is insufficient, the relevant departmental chairperson may recommend to the Faculty Board that the Board prevent you from continuing your postgraduate studies. The Faculty Board could, among other things, consider the following:

- whether it is reasonable to expect you to complete the programme within the relevant maximum period of enrolment, taking into account your progress to date; and
- to what extent you have, to date, shown that you can work independently, regarding assignments, theses and dissertations.

3.4.3 Continued enrolment after the maximum period of enrolment

After the normal maximum enrolment period, you may only re-register as a postgraduate student if:

- you apply to be readmitted in order to continue your studies:
 - to the chairperson of the relevant department
 - by **15 January** of the year in which you want to continue your enrolment;
- the particular departmental chairperson recommends approving the application; and
- as a PGDip (Eng), MEng or MEngSc student, you have obtained the Faculty Committee's permission; *or*
as a PhD student, you have obtained the Senate's permission, on the Faculty Board's recommendation.

The Faculty Committee and Board will normally only once grant or recommend that your permitted maximum period of enrolment be extended.

See Table 3.1 above in Section 3.4.1 for the maximum periods of enrolment for the respective postgraduate programmes.

3.4.4 Interruption of studies

The Faculty Board may approve an interruption of your studies according to the section "Interruption of Master's and Doctoral Studies" in Part 1 of the Yearbook (also see the section "Continuation of Registration for Postgraduate Programmes" in Part 1). Otherwise you must register as a student every year for the full duration of your studies until you are awarded the degree or diploma concerned. If the Faculty Board has approved your interruption of studies, the particular period will not be taken into account when it is determined whether or not you have exceeded the maximum allowed enrolment period. If the Faculty Board has not approved the interruption, the period of the interruption will be taken into account.

If you interrupted your studies without approval from the Faculty Board, you must apply anew at the relevant department for admission before you may enrol again. If the interruption was for two or more years, the relevant department may require you to start the programme over, with a different research topic (if applicable).

3.4.5 Permission required for part-time enrolment

If you want to enrol part time, you must obtain approval from the departmental chairperson of your prospective home department. To get this approval, you must show that you will be a bona fide part-time student. Follow your prospective home department's procedures for submitting your application to study part time.

The Faculty will normally not allow you to change from full-time to part-time enrolment in its postgraduate programmes. In exceptional circumstances you may submit an application for such a change during the normal duration of the programme. Follow the procedure of your home department. The relevant departmental chairperson will make a recommendation to the Dean, who will consider permission for the change.

3.4.6 Converting between postgraduate programmes

3.4.6.1 From PGDip (Eng) to MEng

If your case is deserving, the Faculty Board may recommend to the Senate that your registration for a PGDip (Eng) be converted to registration for an MEng. You may convert if you:

- have progressed above the expected standards in your studies and
- want to continue studying at a master's level.

3.4.6.2 From MEng to MScEng

Since the MScEng programme is being phased out, you may no longer convert to it.

3.4.6.3 From MEngSc and MEng (Research) to PhD

If your case is deserving, the Faculty Board may recommend to the Senate that your registration for a master's degree in engineering may be converted to registration for a doctorate degree. This applies only to registration for MEngSc and MEng (Research). Applications are handled according to the rules in Part 1 of the Yearbook.

Disclaimer:

The content above comes from the 2025 Engineering Yearbook. Make sure to consult the full **Engineering Yearbook** to see this extract in context and to check if there have been any changes. Take special note of additional information in the yearbook under section ***3.1 Qualifications and fields of study***.