



PROCEDURE-RELATED TO POSTGRADUATE STUDIES

Post-graduate studies and research – 2025

INTRODUCTION

Welcome to post-graduate studies and research at the Department of Mechanical and Mechatronics Engineering. Stemming from our mission to be locally relevant and internationally competitive, the Department of Mechanical and Mechatronics Engineering at Tshwane University of Technology (TUT) places high emphasis on quality research and considers the creation, application, and transfer of knowledge as one of its major functions. The Department responds to the needs of the country by proactively contributing to the shaping of the future.

Included below is information on the structuring of the qualifications, the prerequisites, the procedure to initiate your Masters or Doctoral studies, the approximate cost of studies, the possible fields of study, and general information on supervision and relevant contact details.

STRUCTURE OF THE QUALIFICATIONS

The offered qualifications are as follows:

- Masters of Engineering in Mechanical Engineering (MEng):
- Qualification code: MEME17
 - The minimum duration of studies is 1 year
 - The maximum duration for full-time studies is 2 years
 - The maximum duration for part-time studies is 3 years
- Doctor in Engineering: (DEng):
- Qualification code: DENG17
 - The minimum duration for full-time studies is 2 years
 - The maximum duration for full-time studies is 4 years
 - The maximum duration for part-time studies is 5 years

PRE-REQUISITES

 A Bachelor of Engineering Technology Honours in Mechanical or Mechatronics (BEng Tech Hons) for MEng studies. An MEng is required for entrance into doctoral studies (DEng). Proof of the qualification should be submitted with the application. A 60% average at the BEng Tech Hons level is required for MEng studies.





PROCEDURE

Step 1:

Please send your project proposal abstract (150 – 200) words to: MechPGS@tut.ac.za.

Step 2:

- a) The applicant will be assigned to the relevant field of research in the department. If necessary, the supervisor(s) may contact the applicant to have an interview/ meeting.
- b) If the potential supervisor/s are satisfied with the applicant, and the applicant meets the minimum requirements,
- c) Apply online at www.tut.ac.za, follow the prompts, and attach the required documents:
 - Certified copy of previous academic qualifications;
 - Curriculum Vitae (CV);
 - Full previous academic records;
 - SAQA (South African Qualifications Authority) Certificate of Evaluation (only for foreign students) website: www.saqa.org.za
 - Certified copy of ID or passport/visa; and External Bursary letter (if applicable)
- d) The applicant will proceed with a PGS00, and the supervisor will send the form to the departmental administrator/DRC secretary to serve at the next DRC meeting.
- e) After the DRC approval, the departmental administrator will accept the applicant into the system.
- f) The applicant will receive the acceptance letter from the Postgraduate Office with relevant registration information.
- g) The departmental administrator will accept the student into the system, and the student must continue with online registration.

Step 3: Registration

- a) Accepted applicants must register online.
- b) After registration, the postgraduate student will commence the research under the supervision of the supervisor (s). **Ensure that you always work through your MAIN supervisor regarding all research activities**.
- c) Potential students/applicants in possession of an <u>external</u> bursary letter (not TUT bursary) must urgently inform the supervisor to avoid delays.





Step 4: Proposal writing and approval

- a) Start the literature review.
- b) Compile the full proposal, complete the PGS01 form, and submit all the documents to the supervisor. The student needs to present his or her signed proposal to DRC. Please contact your supervisor for presentation dates (note: booking is <u>compulsory</u> via your main supervisor, who will then inform the departmental administrator/ DRC secretary to make a booking on a first-come first first-served basis, maximum of 4 students per date/session). Note that your supervisor/co-supervisor(s) must attend your presentation.
- c) DRC will then consider the PGS 01 form and its accompanying PGS01 "DRC Evaluation" form for approval. If the proposal is approved, the departmental administrator/DRC secretary will submit these forms to FCPS for final approval.
- d) The proposal should be completed within six months of registration.

Step 5: Implement and complete your research project to the satisfaction of your supervisors.





Step 6: After the completion of the project, with a recommendation from your supervisor(s), a quality assurance presentation (colloquium) is arranged where you must present your research (for Doctoral studies only).

Please note that your supervisor/co-supervisor must attend your presentation. Depending on the outcome of the presentation, the supervisor will advise the student of any changes that need to be made.

Note: Booking is compulsory: first-come first first-served, maximum of 4 students per date/session.

Step 7: Appointment of external assessors, where the PGS 02 form will be completed by the supervisor and recommended and approved by various committees within TUT (DRC, FCPS, and SCPS).

Step 8: Present your research to a defense panel (for Doctoral studies only).

APPROXIMATE COSTS

The approximate costs are as follows:

- MEng.....R 60 000
- DEngR 70 000
- Re-registration fee (returning students continuing their studies, amount per year for every consecutive year of study after the first year)......R2160.00
- A minimum of R 1500.00 is payable upon registration (first registration)
- The registration fees for MEng and DEng studies are payable within the first year of study.
- Note that these fees are approximate costs. The amounts are subject to change and are included here only as an indication. You can enquire about the latest fees at the Student Services Department.

IMPORTANT

- Closing date for applications for the first semester and block 0 (January December)
 31 January.
- Closing date for registration for the first semester and block 0 (January December)
 31 March.
- Closing date for applications for second semester and block 4 (July June)
 31 July.
- Closing date for registration for the second semester and block 4 (July June)
 30 September.

NO LATE APPLICATIONS OR REGISTRATIONS WILL BE CONSIDERED.





STUDY GUIDANCE / SUPERVISION

- Typically, the main study leader/supervisor should have a Doctorate.
- The supervisor needs to provide significant guidance to the student at the Masters level, while more independent work is expected from the student at the Doctoral level.
- The student needs to meet regularly with his/her study leader/supervisor, who should be
 a subject matter expert in the field of study. It is the student's responsibility to arrange
 these meetings. An external study leader may be appointed under special circumstances
 to guide the student, while the internal study leader will be responsible for ensuring that
 the required academic standards are maintained.
- The student needs to submit a monthly progress report to his supervisor/s. The submission date is the last Friday of each month.
- If relevant, ensure that ethical clearance is obtained before you commence your studiescontact your supervisor.
- Note that all work is subject to plagiarism checks. More information can be obtained from: www.plagiarism.org
- Further details will be provided by the supervisor.

FIELDS OF STUDY

The following areas are currently available within the Department of Mechanical and Mechatronics Engineering. The associated supervisor (s) are shown below:

> Material Science: Composites & High Strength Alloys

Dr LW Beneke: BenekeLW@tut.ac.za

Dr TA Adegbola: AdegbolaAT@tut.ac.za

> Structural Dynamics: Mechanical Sound and Vibration

Prof Desai: DesaiDA@tut.ac.za





Dr RK Dunne: DunneRK@tut.ac.za

> Energy: Refrigeration and Heat Pump Systems

Prof Z Huan: <u>HuanZ@tut.ac.za</u>

Dr SM Ngalonkulu: NgalonkuluSM@tut.ac.za

> Mechatronics: Automation and Solar Electric Vehicles

Dr CC Oosthuizen: OosthuizenCC@tut.ac.za





Part-time students/research projects from companies/industry

Should a student wish to select his/her topic, and none of the department's staff is a subject matter expert in that particular topic, an external study leader, who is an expert in that field of study, should be appointed as supervisor. An appropriately qualified lecturer will then be appointed as a co-supervisor.

Summary of procedures related to postgraduate studies

Summary of procedures related to postgraduate studies											
	STEP 1	STEP 2	STEP 3	STEP 4							
Process	Information Evaluation / Selection Granting of equivalence/status Provisional title Provisional study panel Registration	Development and approval of a proposal Final study panel Ethical clearance Drafting and signing of MoU	Conduct research Colloquium Final title Language editing Appointment of assessors Plagiarism report Submission for	Assessment Summary report of an assessment Defense (Doctoral) Final results							
			external assessment								
Documentation	PGS 00	PGS 01 PGS 01 DRC Eval.	PGS 02	PGS 04/05 Requisition for printing form Check List form for							
				hardbound copies Addendums: PGS 04/05							
Amendments PGS 03		↑	↑								
Upgrade PGS 06		1	1								





Timelines	Not exceeding two weeks (excluding students who apply for equivalence/status)		Up to 6 months		Up to 30 months for Masters degrees (Full-time and 42 Part-time), Up to 54 months for Doctoral degrees (Full-time and 78 months Part-time)	
Reporting (supervisor)			1	1 1	↑	
Reporting (PGS)	Date of approval of PGS 00	*Date appro PGS	oval of			Date of approval of PGS 04/05

GENERAL ENQUIRIES

Kindly address all general inquiries to:

Ms. Purity Mtshali (012) 382 5874 (Departmental Administrator)

Email: Mtshalip@tut.ac.za

REGISTRATION ENQUIRIES

Kindly address all registration inquiries to:

Ms Rene Coetzee (012) 382 4257 (Assistant Administrator)

Email: CoetzeeR@tut.ac.za