

DOCTOR OF PHILOSOPHY

PROGRAMME SPECIFICATIONS

1. Programme Name	Doctor of Philosophy (Civil Engineering)
2. Final Award	Doctor of Philosophy (Civil Engineering)
3. Awarding Institution	UTM
4. Teaching Institution	UTM
5. Programme Code	PKAW
6. Professional or Statutory Body of Accreditation	MQA
7. Language(s) of Instruction	English
8. Mode of Study (Conventional, distance learning, etc)	Conventional
9. Mode of operation (Franchise, self-govern, etc)	Self-governing
10. Study Scheme (Full Time/Part Time)	Full Time
11. Study Duration	Minimum : 6 semesters Maximum : 16 semesters
12. Entry Requirement	<p>Master Degree with cumulative grade average of 3.00, or equivalent from a recognized university</p> <p>An international student should satisfy the English language minimum requirement of TOEFL score of 550 or IELTS band 6.0, or equivalent. A local student must produce a satisfactory score from MUET.</p> <p>Accepted by the post-graduate selection committee of the faculty involved.</p> <p>At least one member from the faculty who has at least a Master degree in the field of study is qualified and willing to supervise the candidate.</p> <p>Pass the health, financial and other requirements as specified by the university.</p>
13. Programme Educational Objectives (PEO)	
1	Mastery of competencies and integration of knowledge required in the
2	profession.
3	An appreciation of the value of lifelong learning and possessing enthusiasm and
4	strong commitment to continued acquisition of new knowledge and skills.
5	Advanced research skills that allow professionals to become competent in
	research.
	Highly developed oral and written communications skills that fit at all level,
	appropriate to the field of profession.
	An appreciation of the ethics and integrity in management, leadership and good
	governance, and responsibility to their professions and community
14. Programme Outcomes (PO)	

(a) Technical Knowledge and Competencies				
Code	Intended Learning Outcomes	Teaching and Learning Methods	Assessment	
PLO 1	Advanced Knowledge: Graduate are able to incorporate in-depth relevant knowledge in professional practices for the benefits of both national and international communities. Graduates are able to apply their knowledge and skills in the planning, analysis, design and supervision of works related to the civil engineering discipline	Seminars, laboratory works, directed reading, independent study, active learning, computer hands-on sessions.	Experimental and field work, laboratory report, survey	
PLO 2	Research Skills Graduate are able to formulate hypothesis, design and perform experiments/research scientifically to solve and explain observed phenomena.	Project supervision, laboratory works, directed reading, simulation exercises, independent study, problem-based learning	Seminar report, written research proposal, thesis and publication	
PLO 3	Critical Thinking and Problem Solving Graduate are able to manage conducive working environment qualities problem solving and higher order thinking skills. Graduate are technically competent in solving problems logically, analytically and creatively based on sound facts and ideas.	Project supervision, lectures, tutorials, laboratory works, directed reading, simulation exercises, independent study, problem-based learning	Experimental and field work, laboratory report, survey	
15. Programme Outcomes				
Code	Intended Learning Outcomes	Teaching and Learning Methods	Assessment	
(b) Generic Skills				

PLO 4	Ethics, Values, Professionalism Graduate are able to balance professional and ethical responsibilities including contemporary issues and environmental awareness.	Doctoral's dissertation and presentation, independent study.	Written research proposal, thesis and publication
PLO 5	Communication Graduate are able to apply a wide range of relevant knowledge through effective oral and written communications. Graduates are able to communicate effectively across a range of contexts and audiences.	Doctoral's dissertation and presentation, independent study.	Oral presentation, written report
PLO 6	Life Long Learning Graduate are able to adopt the latest relevant knowledge and cutting-edge technologies through life-long learning process.	Doctoral's dissertation and presentation, independent study.	Experimental and field work, laboratory report, survey

16. Classification of Subjects

No.	Classification	Credit Hours	Percentage
1.	University Elective Course	3	3.3%
2.	Research Methodology	0	0.0%
3.	Doctoral Dissertation	87	96.7%
TOTAL		90	100%

17. Programme structures and features, curriculum and award requirements

The programme is offered on full-time mode and is based on a 6-Semester Academic Session with two compulsory courses need to be taken. Assessment is based on Doctoral's dissertation and viva (oral presentation)

Award requirements:

To graduate, students should:

Attend compulsory courses (University's General Course and Research Methodology Course)

Complete and pass the Doctor of Philosophy dissertation and viva (oral presentation).

Obtained the total Credits for Graduation as determined by the curriculum of the program with academic standing of Good Pass (KB);

18. Our Uniqueness

No. of graduates
Employability rate
Leaders in industry
Diversity of lecturers
Biggest Civil Engineering School in the world
One of the biggest Civil Engineering lab/facilities in the region
ISO 9001:2000 and ISO 17025 accreditations (the only one in the world for Civil Engineering)

19. Career Prospects and Career Path

Graduates of the programme can work as a Project Engineer, Construction Engineer, Hydraulic Engineer, Environmental Engineer, Highway and Transport Engineer or Geotechnical Engineer.

20. Facilities available

List of laboratories:
Structural Engineering Laboratory
Material Engineering Laboratory
Hydraulics and Hydrology Laboratory
Environmental Laboratory
Geotechnical Laboratory
Highway & Transportation Laboratory
Computer Laboratory
CETU
ITUCE
Resource Centre
Surveying Unit

CURRICULUM STRUCTURE

University's General Elective Courses	
UXX XXX3	University's General Elective Course
UAPA 0010 (HW)	Research Methodology
Doctoral Dissertation	
PKAW1100	Sem 1 Year 1
PKAW1200	Sem 2 Year 1
PKAW2100	Sem 1 Year 2
PKAW2200	Sem 2 Year 2
PKAW3100	Sem 1 Year 3
PKAW3200	Sem 2 Year 3
PKAW4100	Sem 1 Year 4
PKAW4200	Sem 2 Year 4
PKAW5100	Sem 1 Year 5
PKAW5200	Sem 2 Year 5
PKAW6100	Sem 1 Year 6
PKAW6200	Sem 2 Year 6
PKAW7100	Sem 1 Year 7
PKAW7200	Sem 2 Year 7
PKAW8100	Sem 1 Year 8
PKAW8200	Sem 2 Year 8
Assessments	
First Stage Proposal Evaluation	2 nd Semester
Progress Presentation	4 th Semester
Continuous Assessments	
Progress Report	Every Semester
Final Assessments	
VIVA (Oral Examination) – End of Study Period	End Semester
Publication Requirement for Thesis Submission	
A doctoral candidate may submit his/her thesis for viva-voce provided that he/she produced at least one (1) indexed journal article or (2) indexed conference proceedings accepted or published in SCOPUS/ERA or WOS.	
Duration of Study	
Full Time	: 6 - 16 semester