GLOBAL SURGERY



MSc Global Surgery

MSc(Med) CHM7077W

Global Surgery Division
Department of Surgery
Faculty of Health Sciences
University of Cape Town

Course Outline 2025

Introduction

The University of Cape Town (UCT), through its Division of Global Surgery, has been at the forefront of offering the Global Surgery MPH, MSc and PhD degrees in the international education arena. This well-structured program provides a unique opportunity for healthcare practitioners across public, private, voluntary, and complementary sectors to drive positive change within their respective contexts. Global Surgery serves as the crucial interface between surgical care, health systems, and public policy, with a strong emphasis on strengthening health systems and promoting equity. This is achieved by improving access to surgical care and creating a platform for conducting clinically relevant research to contribute to evidence-based practice.

The Global Surgery Division

The Master of Science in Medicine with specialisation in Global Surgery is convened by the Global Surgery Division in the Department of Surgery, located in the Old Main Building at Groote Schuur Hospital in Block H 53.

Global Surgery Research

Global Surgery is an interdisciplinary field of enquiry, research, practice and advocacy that aims to create greater value in healthcare through equity and improved outcomes for all who need surgical, obstetric and anaesthesia care, with an emphasis on underserved, marginalized and vulnerable populations.

Global Surgery research interrogates both the unmet need for access to care and quality of surgical care, with a focus on health system strengthening. Global surgery solutions are comprehensive and transdisciplinary, and can be used to strengthen surgical healthcare systems.

Global Surgery Division: Scientific Priorities

The scientific priorities in the Global Surgery division include: the need to provide essential surgery in low- and middle-income countries; and the need to strengthen the surgical systems providing care in this environment; improved understanding of how underlying medical conditions contribute to adverse surgical outcomes. We launched our Global Surgery Research Strategy in September 2022. We want to ensure that our research is impactful through a deliberate approach of research prioritisation, in alignment with UCT's Vision 2030.

The Global Surgery Team

MSc Convener

Mr Moses Isiagi E-mail: moses.isiagi@uct.ac.za

Head of Division

Prof Salome Maswime E-mail: salome.maswime@uct.ac.za

Senior Secretary

Ms Pam Magwa E-mail: pam.magwa@uct.ac.za

Chair of the Global Surgery Research Committee

Prof Bruce Biccard E-mail: bruce.biccard@uct.ac.za

PhD Convener

Dr Oluchi Mbamalu E-mail: <u>oluchi.mbamalu@uct.ac.za</u>

Global Surgery Division Staff

Staff	Position	E-mail address
Prof Salome Maswime	Head of Division	salome.maswime@uct.ac.za
Ms Pam Magwa	Senior Secretary	pam.magwa@uct.ac.za
Dr Oluchi Mbamalu	Senior Lecturer	oluchi.mbamalu@uct.ac.za
Mr Moses Isiagi	Lecturer	moses.lsiagi@uct.ac.za
Dr Yvan Zolo	Junior Research Fellow	andre.zoloossou@uct.ac.za
Dr Simon Le Roux	Lecturer	spdpleroux@gmail.com
Dr Mary Kinney	Senior Lecturer	mary.kinney@uct.ac.za
Dr Ravi Oodit	Senior Lecturer	ravioodit@gmail.com

Aim of the Masters

The Global Surgery MSc degree at UCT is a research-based study (i.e., thesis only) with no course work component. The program aims to achieve the following:

- Develop a deep understanding of systemic factors that significantly impact surgical care and healthcare at large
- Gain a critical understanding of research methodologies, techniques and technologies
- Cultivating the ability to actively engage in scholarly debates at the forefront of this specialized area
- An ability to apply knowledge, theory and research methods creatively to complex practical, theoretical and epistemological problems

Programme structure

The Global Surgery masters is an NQF level 9. The program requires completion of 180 credits of dissertation work, with each credit estimated to demand approximately 10 hours of effort. This equates to an average of 1800 hours of work to complete the degree. Additionally, the master's thesis must be a minimum of 50,000 words, meeting rigorous international standards for scholarly and professional writing. Progress reports are submitted to the course convener at the end of every semester with the input of your supervisors.

The applicant

- The candidate should possess the following abilities:
- · Advanced skills in information retrieval and processing
- A compelling ability to effectively communicate research findings and opinions to specialist audiences, using compelling resources for academic and professional discourse
- A persuasive knack for engaging with and effectively communicating findings to nonspecialist audiences

Fellowship programme

New students will have the opportunity to join various Global Surgery events and programmes. Students are encouraged to attend research courses provided by Research Office and by the Faculty of Health Sciences. Students are also required to attend Global Surgery workshops and courses.

Students will be expected to attend the following meetings:

- Global Surgery Research Fellows Workshop in January
- Monthly Fellows' meetings (as scheduled by the masters Convener)
- Monthly academic meetings (as scheduled by the Academic Committee)
- Global Surgery conferences
- International Conference in Innovations for Global Surgery (highly recommended)
- Global Surgery Foundations course (highly recommended)
- Executive Leadership Global Surgery (highly recommended)

Opportunities

Postgraduate students will have the opportunity to join Global Surgery projects in the research, education, and community engagement spaces. Please contact the masters Convener for more information.

The following courses are recommended for master's researchers:

- Understanding Clinical Research (https://www.coursera.org/learn/clinical-research)
- Masters of Public Health elective: Fundamentals in Global Surgery (February to June)
- Executive Leadership in Global Surgery (January to June)

The university offers <u>free seminars and workshops</u> to postgraduate students – these are also recommended for your development as a researcher.

Potential Supervisors

	Name	Discipline	Interests
1	Prof Salome Maswime	Professor and Head of Global Surgery, Obstetrician and Gynaecologist	Obstetric surgeryPerinatal healthPreparedness for surgery
2	Prof Bruce Biccard	Professor and second chair of anaesthesia and perioperative medicine	Perioperative outcomesData systems
3	Dr Oluchi Mbamalu	Senior lecturer	PerioperativeAnti-microbial resistance
4	Dr Mary Kinney	Senior lecturer	Maternal and child health
5	Prof Sithombo Maqungo	Senior lecturer	Trauma and Injuries
6	Mr Moses Isiagi	Lecturer	 Geospatial determinants of Health and social disparities, Healthy cities
7	Dr Rebecca Gray	Paediatric anaesthetist	Paediatric anaesthesia
8	Dr Lebohang Moloi	General Surgeon	Acute care surgery
10	Dr Rowan Dys	Anaesthetis	Peri-operative care and global anaesthesia
11	Dr Mary Kinney	Senior lecturer	Maternal and perinatal health

Concept note

Students are expected to conduct a thorough and comprehensive review of existing literature for their thesis. It is essential that a significant portion of this review is completed prior to the planning phase of their projects. However, they are also required to remain abreast of new publications in their specific areas of research throughout the entire duration of their projects, including the write-up stage. It is imperative that the literature review is current and up to date at the time of submission for examination. Furthermore, students are strongly encouraged to proactively engage with researchers whose research interests overlap with their own projects, both from other UCT departments and from other local and international universities.

Global Surgery concept note guidance

General information

- This document provides guidance on how to develop a research concept note for the Global Surgery Division at UCT.
- The Research Committee of the Global Surgery Division meets once a month to review new concept notes.
- Proposed length: 1-2 pages.
- Please include the names of your supervisors. The primary supervisor must be affiliated with the Global Surgery Division. Greater consideration will be given to students with supervisors (or co-supervisors) from their local context.
- Refer to the Global Surgery Research Framework for potential ideas on Global Surgery topics and themes.
- Refer to the MSc and PhD course outlines for degree specific requirements (pam.magwa@uct.ac.za).

Introduction

The introduction describes the problem that the research aims to address.

The problem should be a Global Surgery, Surgical Systems, or Public Health concern aligned with our Global Surgery Research Framework.

- What do we know about the problem?
- What do we not know about the problem?
- What do we want to know about the problem?
- How will the research contribute to solving the problem, and what possible impact could it have?

Aim/Objectives

The aim of the study should describe the overarching goal of the research.

• Do you have a hypothesis? If so, what is your hypothesis?

The objectives describe what you intend your research to achieve. You can have more than one objective; this can be informed by your research question.

What is your research question?

Study Design/Methods

The study design describes the methods you will employ in your research, for instance, in data collection and analysis. In this section, you will describe your proposed study design, e.g., descriptive or intervention / prospective or retrospective / qualitative or quantitative /systematic or scoping review, etc.

- In what setting will your research be conducted?
- What will you assess to answer your research question(s)?
- How do you intend to collect and analyse your data?

Registration

Accept your study offer

Once you have received your offer to study at UCT, to accept your study offer, log into the <u>UCT Self-Service Portal</u> using your UCT student number and password. If you have forgotten what these are, check your offer letter and follow the prompts to reset your password. Continue to monitor the UCT Self-Service portal regularly for updates to your application status and check your email for any new communication that we may send you.

Check your UCT fees

Tuition fees are charged per course at UCT. Learn more about the Fees structure <u>here</u>. To generate your own proforma invoice of the full tuition fees for the year and other expected costs, visit: publicaccess.uct.ac.za.

UCT has partnered with <u>Flywire</u> for international full degree students to pay for their tuition and accommodation fees. Another preferred method of <u>payment via credit card</u>. Additional payment options can be found <u>here</u>.

An initial minimum payment of your tuition fees and accommodation (if housed through the UCT Student Housing Department) will be required by a specific date before you may register for your UCT courses.

Bursaries

Each student is responsible for their own funding - however from time to time we have grants that allow us to offer bursaries to students. When funding is available students are informed and can apply. We also encourage students to apply for publicly available bursaries.

International Students

As an international student, you'll be joining a diverse community of nearly 4000 other internationals at Africa's premier research university. The International office staff will guide you through preparing for your arrival in Cape Town and settling into campus life. Before your arrival, you'll be invited to a Pre-departure Orientation event online to provide you with essential information on being a UCT student, connecting with us, visas & immigration, fees, orientation, and housing support.

Degree process

1 Application:

- Candidates submit their application, including a concept note, online on the faculty website. Online application <u>link</u>:
- Concept notes are about two pages in length, and describe the following with respect to the research topic: background/introduction, aims/objectives, and study design/methodology of the proposed research. Please see *Appendix A: Global Surgery Concept Note Guidance*.

- Your application should include the names of your supervisors. The primary supervisor must be affiliated with the Global Surgery Division. Greater consideration will be given to students with supervisors (or co-supervisors) from their local context. Please ensure you have contacted your proposed supervisors before submitting their names on the concept note.
- The concept note is reviewed by the Research Committee at the Global Surgery Division, for the approval of the student, topic, supervisors and setting.

2 Research Proposal:

- Following acceptance to the masters programme, a research proposal describing the masters study is written, with input from your supervisors. This will be submitted to the Departmental Research Committee (DRC) of the Department of Surgery, Faculty of Health Sciences.

3 HREC and Other Approvals:

- After approval by the Surgical DRC is granted, the proposal must be submitted to the Human Ethics Research Committee (HREC). Data collection may not commence until HREC approval is received. All MSc studies requiring ethical approval must have UCT HREC approval. This does not negate the need for further ethics and other approvals from other relevant bodies, if required.
- If further approvals (for instance, faculty approvals, or national or provincial health department approvals) are required, approvals must also be obtained from the appropriate research ethics committee, and facilities before data collection can commence.

4 Data Collection:

- Data collection may be done by the student, within the timelines stipulated in the MOU and the proposal.

5 **Data Analysis:**

 Statistical data analysis can be done with the assistance of a Biostatistician, sourced by either the student or the Division. The Faculty of Health Sciences and the Department of Surgery also have Biostatisticians who are available for postgraduate research and students.

6 Write-up

To earn a master's degree, students must be officially registered and enrolled at the institution for a minimum of two years. The program requires completion of 180 credits of dissertation work, with each credit estimated to demand approximately 10 hours of effort. This equates to an average of 1800 hours of work to complete the degree. Additionally, the master's thesis must be a minimum of 50,000 words, meeting rigorous international standards for scholarly and professional writing. The recommended structure at Global surgery is as follows

- Introduction
- literature review
- methods
- results / publication draft/ manuscript
- discussion/conclusion

Read more about UCT masters requirements using the links below:

Masters rules general rules: https://health.uct.ac.za/home/postgraduate-degrees-and-diplomas

Useful forms and information: Downloads | University of Cape Town (uct.ac.za) OpenUCT to view previous master's dissertations: https://open.uct.ac.za/home

Examination

- At the beginning of every year after registration the student is expected to submit an MOU on people-soft with a plan for the year and the expected outcomes
- The supervisor will then review and approve the MOU
- Every year the supervisor's are expected to submit an assessment of the student graded as SAT/UNSAT (satisfactory or unsatisfactory)
- A student who has achieved the satisfactory progress as per the MOU will be graded as SAT
- The thesis is marked by external examiners who meet the institution's requirements for examining doctoral research and dissertation.
- The student is expected to submit an 'intention to submit' form on peoples-soft, whilst working on the final draft of their dissertation
- The supervisors will be requested by Master's Board to submit the nomination of examiners forms
- The student will submit the completed dissertation on people-soft, with a turn-it-in certificate
- The Master's Board will write to the student to inform them of their final mark and to give them a list of corrections and the timeline for them to complete to graduate.

More resources

Please see link to more resources: Postgraduate FAQ's | University of Cape Town (uct.ac.za)

Frequently Asked Questions

1 When do applications open and close?

Applications are open throughout the year, but registration and enrolment must be completed in January to avoid having penalties both for the student and the division and also to enable smooth running and audits of the program

2 Who do I contact for an application form?

You can apply online here: Homepage (uct.ac.za)

If you encounter challenges with the application process, please contact Ms Salega Tape at the UCT Postgraduate office (salega.tape@uct.ac.za or 021406 6340).

3	Who should I contact if I have any other queries related to progress of the degree?			
,	Who should I contact if I have any other queries related to progress of the degree?			
	Please contact the masters Convener, Dr Oluchi Mbamalu (<u>oluchi.mbamalu@uct.ac.za</u>)			
4	How long does It take to complete a masters?			
	University rules indicate a masters student must be registered for a minimum of two			
	years, but the average duration of a masters is 3-4 years.			
	years, but the average duration of a masters is 3-4 years.			
5	What costs are involved?			
	Please see Postgraduate Fees for more information.			
6				
7	Can you tell me more about Global Surgery?			
	The masters degree can be done whilst at UCT full time or part time in ones country of			
	residence with UCT as the home institution and the student having a co-supervisor or			
	expert in their field in their country of residence			
	More information can be found here: http://www.globalsurgery.uct.ac.za/			

Recommended Reading Materials

- 1. Meara J, Leather A, Hagander L, Alkire C, Alonso N, Ameh E, et al. Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. Lancet 2015;386:569-624
- 2. Farmer P, Kim J. Surgery and global health: a view from the OR. World J Surgery 2008;32:533-536
- 3. Biccard B, Madiba T, Kluyts H, Munlemvo D, Madzimbamuto F, Basenero A, et al. Perioperative patient outcomes in the African Surgical Outcomes Study: A 7-day prospective observational cohort study. Lancet 208;391(10130):1589-1598
- 4. Bishop D, Dyer R, Maswime S, Rodseth R, van Dyk D, Kluyts H, et al. Maternal and neonatal outcomes after caesarean delivery in the African Surgical Outcome Study: a 7-day prospective observational cohort study. Lancet Global Health 2019;7(4):E513-E522
- 5. Wladis A, Roy N, Lofgren J. Lessons from the early years of Global Surgery. British Journal of Surgery 2019; 106(2): e14-e16
- 6. Donabedian. Evaluating the quality of medical care. The Milbank Quarterly 2005;83(4):691-729