



The MMed minor dissertation is one of three examination components of the MMed degree. This minor dissertation carries one third of the weight of a full master's dissertation in terms of its credit weighting, i.e. 60 credits (nominally 600 hours of work). In order to register as a specialist in South Africa, the Health Professions Council of South Africa (HPCSA) requires all specialist trainees who register for training after 1 January 2011 to have completed a relevant research study. The MMed Part III fulfils HPCSA research requirements as well as research requirements by the specialties who include a research project as part of their examination process by the Colleges of Medicine of South Africa (CMSA).

Educational aims

The research project should demonstrate that the student:

- can work independently and ethically under supervision (contributions/assistance must be acknowledged);
- is sufficiently acquainted with the relevant literature to provide appropriate motivation for the research question;
- can plan research or clinical audit (write a protocol), which is approved by an assessor group (delegated by the head of department) and ethics committee where relevant, that contributes new or additional data to the collective knowledge base (the specific data has not been presented as part of other research), but need not produce a unique contribution to the scientific literature;
- uses an appropriate method/design/technique and analysis;
- can adequately present and discuss the significance of the results of the study;
- can present the study in an academically acceptable manner.

Type and scope of the research

The following types of studies are acceptable:

- A clinical audit with or without a repeat data collection cycle;
- A systematic review of the literature on its own **with** extraction and extrapolation of data **OR** a meta-analysis using recognised research methods (eg Cochrane, PRISMA);
- A research study – pro-/retrospective lab or clinical or database review;
- Description and analysis of a case series or cohort, deemed sufficient to supply new knowledge/data, even if only contextual or exploratory;
- Epidemiological research;
- Health service/systems/education research;
- Qualitative research;

Noting:

- *The sample size* can be limited by time (Registrars have limited time allocated/available to collect data and write it up concurrently with their clinical training) - data collection and write up should be possible to complete within two consecutive or cumulative months.
- *Data analysis* may use simple descriptive statistics alone – more advanced analysis can be used, but the student must demonstrate (in the write up) insight into the choice of analysis.

- The above limitations may be associated with the use of descriptive cohort studies based on medical record review; exploratory or pilot studies with small convenience samples; or audits without a repeat data collection cycle to prove quality improvement (QI). Despite limitations, these studies can provide an adequate basis for learning research methodology and can add new data to the collective knowledge base – they may also provide the basis for further publishable work such as a second audit to complete a full QI cycle. As long as these limitations are appropriately acknowledged, these studies should still be acceptable.
- The topic, study design and scope of research may depend on the particular discipline and must be agreed on in consultation with the supervisor(s). The topic must be approved as being suitable for MMed dissertation by the Departmental Research Committee (DRC) and/or a group appointed for this purpose by the head of department.

Registration and approval of the research proposal

a) Communication

Registrars should be registered under MMed part 3 during active supervision and must at least be registered during the year of submission for examination.

NOTE: All communication from UCT regarding the MMed and the examination process will occur via student UCT e-mail address – [student number]@myuct.ac.za. Students must also make sure they have username and password and are able to access the PeopleSoft Student Administration Self Service.

Instructions for accessing the PeopleSoft service are available at [Student Self Service Help](http://www.sss.uct.ac.za/sss/students) (<http://www.sss.uct.ac.za/sss/students>) or emailing sss-helpdesk@uct.ac.za.

Administrative announcements and ad hoc training opportunities are disseminated to the uct email address via the Vula Health Sci Postgrads site: <https://vula.uct.ac.za>

b) Registration forms and submitting the research proposal

1. **Register: complete a memorandum of understanding (MOU) with supervisor:** Complete an abridged MOU (**Form ACA47b**) if a provisional title and synopsis is not available. This form includes appointment of up to three supervisors. Complete the full MOU (**Form ACA47a**) if or when a provisional/final title and synopsis outlining your planned research is written – the full MOU outlines expectations of registrar and supervisor. The process of assigning a supervisor and topic is managed according to individual department guidelines. These forms are signed by registrar, supervisor and HOD. By signing this form, the HOD approves that the supervisor has requisite experience. After the forms have been signed, they should be emailed to the post graduate office at the time of registration. Forms available at the Vula Health Sci Post Grad site and at <http://www.forms.uct.ac.za/studentforms.htm>
2. **Appointment of additional supervisors or change supervisor** can be done using the **appointment/change of supervisor form** – available at the Vula Health Sci Post Grad site.
3. **Write a research proposal** according to the structure described in ethics form **FHS 015** and form **FHS 015hlp** (all ethics forms available at <http://www.health.uct.ac.za/fhs/research/humanethics/forms>)
4. **Write synopsis** according to ethics form **FHS014**
5. **Complete a new protocol application:** ethics form **FHS 013** – the supervisor should be the principle investigator on this form. This form must be signed by registrar and supervisor and submitted as below for further signatures.

6. **If funding is received from outside UCT, complete a C1 Clearance form FHS002** – refer to this link to determine whether it is needed:
http://www.health.uct.ac.za/sites/default/files/image_tool/images/116/documents/When%20to%20submit%20FHS%20C1%20form%20080216.pdf
7. **Submit proposal, synopsis, the completed form FHS 013 and a cover letter addressed to the Departmental Research Committee (DRC).** The DRC review process confirms both the scientific validity and the appropriateness for the degree.
8. **Following signed approval by DRC, submit all the same paperwork above to the Human Research Ethics Committee (HREC).** Ensure that all the required Departmental signatures are present in all the forms before submission to HREC.
9. **Following HREC approval, the registrar and supervisor will be sent an approval letter** – this letter must be kept for inclusion in the minor dissertation submission. A copy of this letter should also be sent to the registrar's administrative supervisor/mentor. HREC sends a list of all approvals to the post graduate office on a monthly basis, and all MMed approvals will be published in the relevant Deans Circular for approval by the faculty board.
10. **Obtain approval from the relevant hospital administration and regional Department of health (online).** After the UCT Research Ethics Committee approval has been obtained all research that is taking place in a provincial or local authority health facility, must be submitted to the provincial government for approval and study databases need to be registered on the National Health Research Database: <https://nhrd.hst.org.za>
Teaching hospitals and the local authorities approve research projects in-house – apply to the COO/superintendent for approval. All other province approvals are done via the Directorate: Health Impact Assessment (Sub-directorate: Research) at provincial head office. If research crosses these boundaries, up to five approvals may be needed. Further details can be found at: <https://www.westerncape.gov.za/general-publication/health-research-approval-process>.
A copy of the approval should be appended to the dissertation.

Supervisors

The supervisor must have research experience, ideally a Master's degree, equivalent (eg appropriate publications), or higher; be able relate to the candidate's research project; be available for regular discussion and advice; and be someone with whom the candidate can develop a good working relationship. If the primary supervisor does not have adequate experience, then a secondary supervisor who has appropriate experience will need to be appointed in addition. **Supervisors who have not had extensive experience supervising are required to attend a supervisor training course.** Where specialised equipment and/or laboratory work is required for the study, the supervisor should assist in facilitating access to appropriate facilities.

The primary supervisor may be based outside the candidate's home department, faculty or university. In such a case, a member of UCT staff will also be required as co-supervisor in addition to the primary supervisor, to serve as a guide and link to UCT faculty and discipline-specific procedures. Primary supervisors retain responsibilities to the candidate and the university until the dissertation process is complete.

Timelines

Submission of the research protocol for approval should generally be made within the first 12 - 24 months of the registrar programme, but this varies between disciplines. Heads of Departments or Divisions should meet with their registrars at least biannually to review progress towards their research project. Unless otherwise stipulated by the Division / Department, the research project should generally be completed by the end of Year 3. For a number of specialties, a dissertation must be submitted before writing the Part II examination. Often the research component of specialist training is only initiated after successful completion of the Part I examination.

Annual approval

After 1 year, apply to HREC for continuing approval on ethics form **FHS016** (for intervention study) or **FHS017** (for record review) or submit a study closure form, **FHS010** if the study is complete. If registration in MMED III is required for more than one year then complete **form ACA 48** (Progress and planned activity report for returning masters) and submit to the Post Grad Office when re-registering. Form ACA 48 is available at the Vula Health Sci Post Grad site and at <http://www.forms.uct.ac.za/studentforms.htm>

Do the research

Data collection should not begin before ethics approval. Refer to the faculty resources described on the Vula Health Sci post grad site and to departmental resources. The health sciences faculty provides limited funding to support MMed research activities. The funding and the provision of protected research time may be administered variably in different departments – registrars must apply to their specific department research committees for access to this funding.

Write the dissertation

The dissertation may be presented in one of three formats:

- I: Publication-ready format;
- II: Published (or accepted for publication) paper format;
- III: Monograph format.

As disciplines differ in their requirements, it is important that the format chosen is acceptable to the discipline and appropriate College within the CMSA.

The dissertation should be presented according to guidelines in form D4 (available at the Vula Health Sci Post Grads site), and the publication/already published formats should use the style required by the relevant journal. The following sections should be included, in order:

The title page should contain the candidate's name, dissertation title and the name of the university. It must also state the degree, e.g. Master of Medicine (MMed) in, Medicine, Paediatrics, etc.

The declaration page should include a statement to the effect that the research reported is based on independent work performed by the candidate and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree to any other university. It must also state that this work has not been reported or published *prior to registration* for the abovementioned degree. A plagiarism declaration should be written on this page (wording on form D19 – available at the vula Health Sci Post grad site)

Acknowledgements, format and contributions. This section should describe the format of the thesis and provide the reference if already published or accepted for publication. The author should acknowledge and describe the support or input from supervisors and other co-author(s) if applicable. In a dissertation derived from work started by others, e.g. analysis of data collected for another project, the origin of the data and the candidate's contribution must be clearly stated. The candidate must complete the dissertation after his/her registration for the degree and therefore under supervision. In a published manuscript from a multi-authored project, the candidate must be first author.

The Table of contents: referring to list of appendices, list of tables, list of figures, abbreviations, abstract, chapters, chapter sections, references,

List of appendices

List of Tables

List of Figures

Abbreviations

The abstract should summarise the study rationale, methods, results, discussion and conclusion in fewer than 500 words.

The remainder of the dissertation must be presented according to the chosen format:

I: Publication-ready format

The dissertation must include a manuscript in publication-ready format. The body of the dissertation must be structured as follows:

Chapter 1: Introduction and Literature review

This section must give the background and context of the research question and must include a review of the literature relevant to the subject matter and methods of the study. The review should summarise and interpret the existing knowledge in the field with relevance to the research setting and should identify knowledge gaps and hence the rationale for the dissertation. This chapter should end with a clear statement reflecting the aims and objectives of the research reported in the publication-ready manuscript. References quoted in this chapter should appear at the end of the chapter, not at the end of the thesis. This chapter should be between 2 000 and 5 000 words.

Chapter 2: Publication-ready Manuscript

This chapter must be presented in the form of a manuscript of an article for a named peer reviewed journal, meeting all the requirements of the “Instructions for Authors” of that journal, including the word count and referencing style. Unless specially motivated, the journal chosen should allow for at least 2000 words (not more than 5000 words), excluding abstract, tables, figures and references. The “Instructions to Authors” of the journal must be appended. The co-authors should be listed in the appropriate order, and each of their contributions to the manuscript stated. The journal chosen for publication must be appropriate to the subject matter of the dissertation and listed in the citation index of the Institute for Scientific Information (ISI) or accredited by the Department of Education <http://www.lib.uct.ac.za/medical/index.php?html=/libs/accredjnl.htm&libid=24>; *other journals with similar review processes, particularly South African journals may be acceptable if permission is obtained from the PMC Chair after appropriate motivation is provided.*

Note 1: In this format, the candidate need not have submitted the article for publication, nor is the acceptance of the article for publication a requirement for passing the degree. However, the norm is to publish the study with the supervisor(s) as co-author(s), and candidates are strongly encouraged to submit their manuscript for publication after examination of the minor dissertation.

Note 2: if the research is a full systematic review, there is no need for a separate chapter 1 – the review should be submitted as one chapter.

Appendices

Append all supporting documents including:

- Questionnaire/data capture instrument(s)
- Consent forms and any related participant information sheets
- Technical appendices, including, if considered necessary, any additional tables not included in the main manuscript for the examiner to have available. These should be accompanied by a brief narrative.
- Ethics approval letter from the Faculty Research Ethics Committee (except for a full systematic review) and any other approvals required (e.g. Provincial Government).
- Instructions to Authors of the chosen journal
- Reviewer comments from journal if already accepted
- Letter of acceptance from journal if already accepted and if citation not yet available.

II: Published (or accepted for publication) paper format

A manuscript that has already been published or accepted for publication in a journal that is listed in the citation index of the Institute for Scientific Information (ISI) or accredited by the Department of Education (*other journals with similar review processes, particularly South African journals may be acceptable if permission is obtained from the PMC Chair after appropriate motivation is provided*), may be submitted **if the candidate was the first author, the candidate's contribution was completed under supervision during his/her registration for the degree, and the paper is in line with the educational aims and scope of research described in the first part of this document.**

The dissertation must be submitted in similar format to the publication-ready format – the only differences being: a separate literature review is not required; the accepted publication is submitted as a single chapter following the same format as described above under “Chapter 2”; and the reviewer comments from the journal **MUST** be attached as an appendix. *When this format is used, the contributions of all the authors must be very clearly stated under a sub-heading in the “Acknowledgments, format and contributions” section in the first part of the thesis.*

III: Standard monograph format

Some disciplines and constituent Colleges of the CMSA require a standard monograph presented in a comprehensive and scholarly style to be submitted as part of the examination. The length is typically 16 000 to 20 000 words in length. If the length is not stipulated, the monograph should be 6000 – 16000 words, excluding references and tables.

A recommended structure for the body of the dissertation is as follows;

Chapter 1: Introduction and Literature review

(see guidelines above)

Chapter 2: Methods

Material and methods of the study must be fully described and factually presented.

Chapter 3: Results

Chapter 4: Discussion and conclusions

References

Appendices (see guidelines above, but omit the Instructions to Authors)

Language and writing

Clear, grammatically correct English is essential.

Supervisors may assist candidates in developing scientific communication skills but they are not required to do detailed editing or correction of spelling, grammar, or style. Training in scientific writing is available at the Health Sciences Writing Centre. Registrars need to make an appointment via the website: <http://www.writingcentre.uct.ac.za/about/healthsciences>

Candidates should refer to Form D4, Guidelines on the Layout and Style of the Dissertation or Thesis. As long as the dissertation is readable and internally consistent, any of a number of styles are acceptable. For a publication-ready manuscript, references should be formatted according to the instructions to authors for the journal selected, and candidates should use the same style throughout their dissertation. For a monograph format manuscript, the Harvard style for referencing is recommended, but not compulsory. For reference management, Refworks or Endnote can be downloaded from the ICTS or UCT library website.

Candidates should look at previous examples of Master's dissertations in the library. Master's dissertations are available in the Health Sciences Library. A search will need to be done to obtain a

list of titles and authors. This search can be done using search words (e.g. dissertation, health, health sciences, etc.). The librarian can be asked for assistance. Some of these dissertations are available via: <http://www.medical.lib.uct.ac.za/hsl/theses-dissertations>

Submission of dissertation

INTENTION TO SUBMIT THE RESEARCH

At the conclusion of the research, registrars are required to complete and upload an 'intention to submit' form on PeopleSoft, followed by the upload of their dissertation/thesis. **All communication from UCT regarding the examination process will occur via uct e-mail addresses.**

Upload intention to submit at least 6 weeks before submission of the dissertation.

The following documents must be digitally uploaded, via PeopleSoft:

- Form D8 (Intention to Submit) – details of how to submit are on the form.
- An up-to-date abstract
- Intellectual Property Form D15 (IP Assessment form)
- A copy of the HREC approval letter

After submission of intent to submit, the faculty office will request the supervisor to submit names of examiners and complete a supervisor's form.

SUBMIT THE THESIS TO TURNITIN

Detailed instructions on how to submit the thesis to turnitin can be found at: https://www.uct.ac.za/usr/current_students/postgrad/Using_Vula_and_Turnitin.pdf

and also at (interpretation guides also found here):

<https://libguides.lib.uct.ac.za/c.php?g=182316&p=2575733>

The turnitin report does not need to be submitted with the thesis – instead, a plagiarism declaration that refers to the report (form D19) must be included as described below.

SUBMIT THE RESEARCH

The submission of the dissertation must consist of the following documents uploaded via PeopleSoft:

1. Form D18 (Declaration/Word Count form) – to be uploaded, as a separate pdf document, with the dissertation and abstract.
2. The Thesis (saved as Thesis.pdf) including a signed plagiarism and turnitin declaration page (form D19) – **the plagiarism page must be included within the dissertation, following the title page.**
3. Abstract – see below for naming standards

Detailed submission instructions

Log in to the *Peoplesoft Student Administration Self Service*. Select 'Self-service' and navigate to the 'Research Activities' section. Go to 'Service Requests' and select 'Create New Request'. On the following screen, select the Request Category of 'Thesis/ Dissertation related requests'. Then choose 'Upload Thesis/ Dissertation for Examination' as the request type.

Choose the Request Subtype, (Master's) and the relevant faculty, and upload the dissertation/thesis for examination. All registrars must again upload an abstract (it may have changed since it was first uploaded at the 'intention to submit' stage).

If permission for embargo of your dissertation/thesis has been sought and granted, registrars must additionally provide a neutralised/ restricted abstract which will be placed on *OpenUCT* after examination.

The abstract files must be named as follows:

Abstract-open.pdf (the full abstract)

Abstract-Restricted.pdf (neutralised abstract - sensitive information removed)

This will ensure that the correct versions of the documents are made available on OpenUCT.

Registrars may view what has been uploaded to confirm that the correct file will be submitted. Please type the following confirmation statement in the comment box:

"I confirm that the uploaded document is the thesis/dissertation to be examined." and then click 'Submit'.

Once the dissertation/ thesis has been submitted and processed, registrars will receive an acknowledgement of receipt and will be asked to confirm the word count of the dissertation/thesis. Supervisors will be requested by the Faculty Postgraduate Officer to submit a letter supporting submission, and clearly specifying the format of submission, so that the appropriate instructions are sent to the examiners. This letter should be supplied by the primary supervisor. If this supervisor is external, the internal supervisor must be kept informed at every stage of the process.

Specific submission requirements may be set by individual disciplines or constituent Colleges of the CMSA, and registrars are obliged to ensure that their research projects and dissertations meet these specific requirements. UCT Dissertation submission deadlines:

1. March 15th for June graduation
2. August 15th for December graduation

Note on fees: To avoid attracting fees, dissertations need to be submitted before the beginning of the first quarter (first day of academic year), and before the start of the second semester (mid July) to qualify for a 50% fee rebate.

Examiners

The full dissertation will be submitted for examination through the Postgraduate Office to two examiners (nominated by the supervisors and HOD) – at least one examiner must be external to UCT. An internal examiner must not be involved in the research.

It is the supervisors' responsibility to submit names of three potential examiners (or two examiners who have already agreed to examine pending approval of the Post Graduate Office) to the Faculty Officer when the candidate is ready to submit. Appointment of examiners from outside South Africa is encouraged. These nominations need to be approved by the Deputy Dean: Postgraduate Affairs on behalf of the Faculty Board and submitted to the Faculty Board for ratification via a Dean's Circular. Details required for each examiner are: academic qualifications, postal and/or physical address, telephone and fax numbers and e-mail address, and one paragraph description of their standing in the relevant field (drawn from their CV if need be). The examiners will be sent a copy of these guidelines as well as a guideline for marking. *The candidate may not be informed of the identity of the examiners.* After the outcome of the minor dissertation has been finalised, the examiners' identities are made known if the examiners have indicated that they do not object to this.

Provide the library with a corrected copy of the thesis

After receiving the result of the examination of the dissertation/ thesis, registrars must upload a final corrected copy as a PDF file type for the library in order to be eligible for graduation.

To do this, log in to the PeopleSoft Student Administration Self Service. Select 'Self-service' and navigate to the 'Research Activities' section. Go to 'Service Requests' and select 'Create New Request'. On the following screen, select the Request Category of 'Thesis/ Dissertation related requests'. Then choose 'Library Copy – upload final Thesis/Dissertation for Library' as the request type.

Please choose the Request Subtype, (Master's) and the relevant faculty and upload the corrected dissertation/thesis for the library. Registrars may view the uploaded files to confirm that the correct file will be submitted. Once confirmed, please click 'Submit'.

Once the dissertation/thesis has been submitted and processed, registrars will receive an acknowledgement of receipt and will be asked to confirm that the loaded thesis/dissertation is the corrected version.

Publication agreement

The university has a moral responsibility to publish all research undertaken, when publication is stated as an anticipated output. A candidate who fails to submit a manuscript to a journal for publication within 1 year of submission of their thesis, must accept that their supervisor(s) are entitled to publish their data on their behalf, with the student as co-author - **this should be stated in the memorandum of understanding.**