ACCRA INSTITUTE OF TECHNOLOGY

The University of the Future

The Professor Francis Allotey Graduate School

Office of Graduate Studies (OGS)

STANDARD REQUIREMENTS AND GUIDELINES FOR WRITTING
PHD THESIS/RESEARCH PROPOSAL

Introduction

The thesis or dissertation is the single most important element of a research degree. It is a test of the student's ability to undertake and complete a sustained piece of independent research and analysis, and to write up that research in a coherent form according to the rules and conventions of the academic community.

The purpose of this document is to outline the standard requirements and guidelines that a PhD Thesis (and supporting documents like Research Proposal) should adhere to in the area of organisation and writing skills in order to be accepted at AIT.

1. Language and Format

The thesis should be written in English. Quotations should normally be in English, with the original language included in a footnote where appropriate. Exceptions to this may be made in cases where short phrases in Latin or French typically used in English, such as 'raison d'être' or 'inter alia' which should be written in italics.

1.1 Ordering of Parts

Parts of the Thesis/Research Proposal should be ordered as follows:

1. Title page
2. Signed Copyright/Declaration Statement
3. Abstract
4. Acknowledgements or Dedications   Optional
5. Table of contents
6. List of Figures, Tables or Illustrations   Where Appropriate
7. List of Acronyms/Abbreviations   Where Appropriate
8. Body of the Thesis/Research Proposal   Relevant Number of Chapters
9. Appendices   Where Appropriate
10. Glossary   Where Appropriate
11. Bibliography/Reference list

1.2 Layout and Appearance of Thesis/Research Proposal

- The Thesis/Research Proposal should be typed on the computer in Times New Roman, Garamond or Arial 12pt. The document should be double-sided (double-spaced). Paragraphs should be right justified and an empty line left between paragraphs

- Margins should be one inch or 2.5 cm on all sides, and page size should be set to A4, not US letter. Pages should be numbered at the bottom in the centre, using Arabic numerals (1, 2, 3) starting with the first page of the Thesis/Research Proposal proper (i.e. the first page of the introduction). Pages prior to this should be numbered with lowercase Roman numerals (i, ii, iii.)
  - Chapters should start on a new page, but sections and subsections should not.

1.3 Structure of Initial Parts of the Thesis/Research Proposal

1.3.1 Title page

The title page should provide the following information in the following order:

- The Full Title of the Thesis

- Candidate's Full Name and List of Qualifications Obtained [e.g. *John Mensah (BSc (Business Administration) MBA (Finance)*]

- The Document being Submitted (Where Appropriate - e.g. PhD Research Proposal Part 1)

- The Relevant AIT School (e.g. The AIT Business School)

- The statement: *"In partial fulfilment of the requirements for the degree of the Doctor of Philosophy (PhD) in ... (Business Admin, Information Technology, Education etc)"*

- Date of Submission

1.3.2 Declaration of Authorship/Copyright Notice

A declaration of authorship or copyright notice is required and should state:

"This is to declare that, the research work documented in this Thesis/Research Proposal has been carried out by the under-mentioned student under the supervision of the under-mentioned supervisor(s). The student and supervisor(s) certify that the work documented in this Thesis/Research Proposal is the output of the research conducted by the student as part of his/her research work in partial fulfilment of the requirements for the Doctor of Philosophy (PhD) in ....." degree.

Name of Student   Name of Supervisor (s)

_____   _____

   Signature   Signature

1.3.3 Abstract
The abstract should normally be about a page or less briefing and concisely stating: (1) the problem the research sets out to resolve; (2) the methodology used; (3) the major findings. Other information is optional.

1.3.4 Acknowledgements
This is an optional page acknowledging people who provided the author with assistance in the thesis project, notably, but not only the thesis supervisor.

1.3.5 Table of Contents
The thesis must have a table of contents page listing chapter headings, section headings and sub-headings, Appendices and references as well as their corresponding page number. The 'Table of Contents' feature of Microsoft Word (or other word-processing software where permitted by the department) should normally be used to create a table of contents and this should be done after final editing so that pages referred to in the table of contents are correctly numbered.

1.3.6 List of Figures, Tables or Illustrations

If appropriate, a separate list of figures, tables, or illustrations should be included on a separate page immediately following the table of contents.

1.3.7 List of Acronyms and Abbreviations

If the thesis/research proposal makes use of a large number of acronyms and abbreviations that may be unfamiliar to a reader, providing a list of them can act as a useful guide.

1.4 Structure of Final Parts of the Thesis/Research Proposal

1.4.1 Appendices

Appendices may be needed for formulae, maps, diagrams, interview protocols, or any similar data that are not contained in the body of the thesis. These should be provided after the conclusion in the logical order they are mentioned in the main body. A list of appendices should be drawn up, each being given a consecutive number or a letter, and placed in the table of contents. If there are several appendices each should receive a title. If the thesis includes non-paper appendices such as computer data, software, or audio-visual material, students should consult departmental guidelines as to how to append and refer to these.

1.4.2 Glossary

A list of special technical words or acronyms may be necessary. This is particularly true if the subject deals with a new area with a specialised vocabulary that the average reader in the discipline might not be familiar with, such as the Internet. This list should come after the appendices.

1.4.3 Bibliography/Reference List

A list of the sources used in the thesis must be supplied which complies with the same departmental style guidelines used in the body of the thesis – this list should include *only* those sources cited in the thesis.

2. Structure of the Thesis/Research Proposal

The thesis should be divided into logical chapters and include an introduction and a conclusion. The introduction and conclusion may or may not be counted as chapters depending on the nature or the subject matter of the research work. The chapters should reflect the nature and stages of the research.

2.2 Appropriate Use of Headings and Subheadings

Headings should be distinguished from the surrounding text by a larger point size, a different font, bolding, italics, or a combination of these. All headings of the same level should use the same style, and headings at lower levels should be less prominent than those at higher levels.

Example:

CHAPTER 2 – TITLE (ARIAL BOLD SMALL CAPS 14 POINT)

2.1 Heading for section (Arial Bold Italic 12 point)

2.1.1 Heading for sub-section (Times Bold 12 point)

2.1.1.1 Heading for part of sub-section (Arial Bold 10 point)

All headings should be left-aligned, except chapter headings, which may be centred. A heading at the bottom of the page must have at least two full lines of text below it. Otherwise, the heading should begin on the next page. Captions related to visual material (graphs, tables, maps) should appear on the same page as the material itself.

Chapter and section headings should be consistently numbered according to the numbering system recommended in the above example. It should not normally be necessary to go beyond three levels of sections in a PhD Thesis. Use suitable bullets for sections beyond level three.

All tables and figures should also be numbered, either sequentially within each section e.g. 1.1, 1.2 and then restarted sequentially in the next section e.g. 2.1, 2.2. Alternatively, they can be sequentially numbered from Table 1, Table 2, etc., throughout the whole work.

Headings should clearly reflect what the chapter or section is about, and should be expressed in the form of a concise noun phase (normally less than one line), not a sentence. Information which is present in a higher level heading need not be repeated in a subordinate heading. Where possible, headings at the same level of hierarchy should have similar structure (e.g. *3.1 Common Law, 3.2 Continental Law*, and not *3.1 Common Law, 3.2 The Supreme Court*).

3. Text Development and Coherence

The PhD Thesis/Research Proposal should be written for a more specialised audience but should remain comprehensible to any member of the PhD committee. The writer should take care to ensure that sentences and paragraphs flow logically from each other and do not demand knowledge the reader might not be expected to share in order to make these relationships clear. Where there is doubt as to the connection between two ideas, the onus is on the student to make this explicit not on the reader to try to deduce the connection.

3.1 Paragraph Development

A paragraph is a text unit of several sentences dealing with a single issue, topic or aspect. It should not therefore (except in special circumstances), be a single sentence, nor should it deal with a range of topics.

The paragraph should develop one idea, through illustration or analysis, to a conclusion. It should normally start with a topic sentence indicating what it is about, develop this topic through further sentences until the topic is concluded and a new topic or a different aspect is ready to be broached. In linking sentences logically and coherently to one another, the writer should ensure that transition devices (e.g. *however, similarly, in consequence*, etc) are used appropriately wherever there is a danger that the connection between two sentences may become unclear. Reference back to previous sentences (e.g. *this, these, such, this question, these issues, this situation*) should also be used wherever it can help make the flow of logic clearer.

When an already mentioned theme and new information about it are dealt with in one sentence, the theme should normally come first and the new information second, so as to facilitate the reader's understanding.

For more detailed guidelines on paragraph development, students should refer to the AIT Writing Center course materials (www.ait.edu.gh/writingcenter)

3.2 Transition Between Paragraphs

Although a well-structured paragraph is a unit in itself, paragraphs should also logically develop and flow from each other using devices similar to those that link sentences within the paragraph. Where the reason for a shift of topic or approach might be unclear to the reader, this should be explained. Sections, like paragraphs, should have both coherence and cohesion, and should make use of appropriate linguistic devices to lead the reader logically and clearly through the stages of the writer's analysis or exposition.

4. Language and Style

The thesis should be written in an appropriate formal academic style. While it is not possible to prescribe the use or avoidance of the first person or the passive, or the length of sentences, students should make efforts to use the resources available to them, such as style manuals recommended by the AIT Writing Center course materials (www.ait.edu.gh/writingcenter) to assess whether their written style is appropriate to their discipline.

Excessive or superfluous use of jargon or technical terms should be avoided and any term or acronym that would not be understood by a non-specialist reader *within the discipline* should be explained and/or included in a glossary. The thesis should, wherever possible, use gender neutral language, avoiding the use of male-specific words such as 'man' or 'chairman' where these could be considered inappropriately exclusive or discriminatory.

Students should make every effort to ensure that the thesis is free from grammatical, lexical and punctuation errors. Not only should a computer spellchecker be used, but the student should also proof-read the thesis to check that errors do not remain that are not detected by the spellchecker.

The thesis should consistently use **either** American **or** British spelling but should not alternate between the two.

When using numbers in the text, numbers up to one hundred should normally be written in words, and if the first word of a sentence is a number it should be written in words. Numbers above one hundred are usually written as numerals (101, 102).

It is the student's duty to use the available resources during the year so as to master the skills necessary to write a thesis that is as far as possible error free, and so as to be able to proof-read that thesis and correct their own errors.

5. Use of Sources and Citation Style

All source materials, primary or secondary, published or unpublished that are the intellectual property of authors or institutions other than the writer of the thesis must be credited and correctly cited in full, including illustrations, charts, tables, etc.. Students' attention is drawn to the AIT's Policy on "Academic Dishonesty and Plagiarism" as contained in the Graduate Research Handbook

5.1 Use of Citation Styles

All citations should include a reference in the body of the text to the author as well as an entry in the bibliography/reference list. How this should be done is indicated by the citation style chosen for the thesis (e.g. Chicago, Harvard, APA, Blue Book etc.) The thesis should consistently use a single citation style. For precise details on citation style, students should always consult the style manual documented in the Research Methodology Course.

5.2 Quotation, Paraphrase and Summary

Source material should be quoted where the precise wording is specifically relevant or significant, and the quotation always clearly marked as required by the citation style, including page numbers. Sources may be paraphrased or summarised where exact wording is not essential, but care should be taken not to change the original meaning through paraphrase, and all paraphrased and summarised sources must be fully cited, including page numbers. Where a quotation has been changed (for example, capitalisation, punctuation, emphasis changed or a pronoun replaced by a noun), the changes should be clearly indicated according to the citation style used.

Although interaction with existing research in the field is a requirement for all academic writing, no part of the thesis should normally consist purely of summarising the work of others, unless approved by the supervisor. Summarised or quoted source material should not be left to stand on their own, but should be introduced, explained, analysed and the purpose of its use made clear. Where different sources are compared or contrasted, it should be made explicit to the reader why this is being done.

Care should be taken to ensure that the reader is in no doubt as to where a cited author's ideas end and the comments of the author of the thesis begin. Where there is doubt, the cited author's name (or s/he) can be used in the sentence with an appropriate verb reporting what that person has said so as to distinguish it from the ideas of the author of the thesis.

5.3 Data Commentary

Where data are provided in the form of charts, figures or tables, they should be clearly explained. This includes not only a clear reference in the text to the table or figure in which the reader can find the data (e.g. 'as table 1 shows'), and a summary of what the data shows. Trends or irregularities should also be highlighted and the more important findings separated from those that are less important. The explanation should not simply repeat in sentences all the information presented in the diagram but should also discuss implications, problems and/or exceptions in relation to the data in question. As with any other material taken from the work of other researchers, the source of the table, graph, illustration, figure or related materials must be stated at the bottom or in a footnote as specified in the departmental style guidelines.

6. Further Reading and References

6.1 How to Write a Thesis Books and References

Provided below is a list of relevant references on How to Write a Thesis. You can also get additional materials on the Internet.

1.	Anderson, Jonathan and Millicent Poole. Assignment and thesis writing. Brisbane: John Wiley, 1998.
2.	Benn, Ken and Cheryl Benn. Writing a thesis or long document using a word processor: a practical guide. Palmerston North: Dunmore, 1997.
3.	Cryer, Pat. The research student's guide to success. Buckingham: Open University Press, 1996.
4.	Drummond, Wilhelmina. Writing your thesis. Palmerston North: Nagere Press, 1995.
5.	Hampton, John, Lisa Emerson and Bruce McKay. Writing guidelines for postgraduate science students. Palmerston North: Dunmore, 1999.
6.	Mauch, James E. and Jack W. Birch. Guide to the successful thesis and dissertation: a handbook for students and faculty. New York: M Dekker, c 1998.
7.	Parsons, Tony and Peter Knight. How to do your dissertation in geography and related disciplines. London: Chapman and Hall, 1995.
8.	Phillips, Estelle M. How to get a PhD: a handbook for students and their supervisors. 2nd ed. Buckingham: Open University Press, 2000.
9.	Piantanida, Maria and Noreen B. Garman. The qualitative dissertation: a guide for students and faculty. Thousand Oaks, California: Corwin Press, c 1999.
10.	Preece, Roy. Starting research: an introduction to academic research and dissertation writing. London: Pinter, 1994.
11.	Rountree, Kathryn and Patricia Laing. Writing by degrees: a practical guide to writing theses and research papers. Auckland: Longman, 1996.

12. Rudestam, Kjell Erik and Rae R. Newton. Surviving your dissertation: a comprehensive guide to content and process. Newbury Park: Sage, 1992.
13. Smyth, John, Robert Hattam and Geoffrey Shacklock. Pursuing a qualitative/critical research thesis in education. Adelaide: Flinders Institute for the Study of Teaching, 1997.
14. Teitelbaum, Harry. How to write a thesis. New York: Macmillan USA, c 1998.

6.2 Guides to Referencing Styles

Provided below is a list of books and guides on *referencing styles* which may be consulted. Other guides can also be found on the Internet

The Chicago manual of style. 14th ed. Chicago: University of Chicago Press, 1993
Council of Biology Editors. *Scientific style and format: the CBE manual for authors, editors and publishers*. 6th ed. Cambridge: Cambridge University Press, 1994.
Dodd, Janet (ed.) *The ACS style guide: a manual for authors and editors*. 2nd ed. Washington, D.C.: American Chemical Society, 1997.
Gibaldi, Joseph. *MLA handbook for writers of research papers*. 5th ed. New York: Modern Language Association of America, 1999.
Gibaldi, Joseph. *MLA style manual and guide to scholarly publishing*. New York: Modern Language Association of America, 1998.
Li, Xia and Nancy B. Crane. *Electronic styles: a handbook for citing electronic information*. Medford: Information Today, 1996.
MHRA style book: notes for authors, editors, and writers of theses. 5th ed. London: Modern Humanities Research Association, 1996.
Publication manual of the American Psychological Association. 5th ed. Washington, D.C.: American Psychological Association, 1994.
Style book: a guide for New Zealand writers and editors. 5th ed. Wellington: GP Publications, 1995.
Turabian, Kate L. *A manual for writers of term papers, thesis and dissertations*. Chicago: University of Chicago Press, 1996.
Winkler, Anthony and Jo Ray McCuen. *Writing the research paper: a handbook for both the MLA and APA documentation styles*. 4th ed. Fort Worth: Harcourt Brace, 1994.
Write, edit, print: a style manual for Aotearoa New Zealand. Canberra: AGPS Press in association with Lincoln University Press, 1997.