

Guidelines for the preparation of the dissertation for the degree of Master of Science in Building Services Engineering as a partial fulfilment of ENR5023 Project in Building Services

1. Document Format

The order of the written dissertation should be as follows:

- title page (appendix A)
- declaration form (appendix B)
- copyright notice (appendix C)
- abstract (not exceeding 500 words)
- acknowledgements (if any) and dedication (if any) of the work being presented
- table of contents
- list of figures (inclusive of page number of figure within text)
- list of tables (inclusive of page number of table within text)
- list of abbreviations and nomenclature
- glossary of symbols
- text: the main body of dissertation should not exceed 100 pages and 20,000 words from the introduction to the conclusion and including appendices, (references and bibliography are not included in this page limit)
- references
- bibliography (if any)
- appendices (if any)
- index (optional)

2. Page Format

The pages shall be formatted as follows:

- (a) page set up: the manuscript should use the style used in this template. Use this document as a template if you are using Microsoft Word. Otherwise, use this document as an instruction set. To display the dialog box, display the page layout tab of the ribbon and click the small icon in the lower-right corner of the page setup group
 - (i) margins tab:

margins:

inside 3.5 cm
outside 2.0 cm
top 2.0 cm
bottom 2.0 cm
gutter 0.0 cm
gutter position left
orientation: portrait

pages: multiple pages: mirrored margins (to allow double sided printing reading for binding, however it may be advisable to apply this setting only on the final manuscript printout)

- (ii) paper tab: paper size A4 (white paper)
- (iii) layout tab:

header from edge: 1.3 cm

footer from edge: 1.3 cm

- (b) paper quality: 80gsm
- (c) font: 12 point, calibri, justified.
- (d) *line spacing*: use one and a half line spacing with an added space before the paragraph, with line spacing option of 0 pt before and 10 pt after.
- (e) page numbers: printed in the centre of the page footer, 10mm from the lower edge of the page
- (f) headings:
- (i) chapter title font: 14 point, Calibri, bold, headings should use mixed upper/lower case, e.g. **3. Title of Chapter Three**
- (ii) main section heading font: 12 point, Calibri, bold, headings should use mixed upper/lower case, e.g. **3.1. Heading of Section**

- (iii) *further subsidiary heading font*: 12 point, Calibri, bold, headings should use mixed upper/lower case, e.g. **3.1.1. Heading of Sub-Section**
 - (iv) no further subsidiary heading is allowed

Note: Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line

- (g) figures: all figures should be consecutively numbered and clearly referenced in the text. Captions should be typed underneath each figure, Calibri, size 12, e.g. Figure 1: [Description]. Figures may be positioned in the main body of the text. Text within figures should be of a size to allow legibility even if reduced. Figure Format: Figures should normally be produced electronically, in JPEG, GIF, Bitmap or TIFF formats, and inserted in to the text. Figure labelling can either be consecutive throughout all the document e.g. Figure 1: [Description of 1, next will be 2] or correspondingly consecutive for each chapter, e.g. Figure 3.1: [Description of 3.1, next will be 3.2].
- (h) tables: tables should be centred in the column. All Tables should be captioned. Captions should be written in Calibri, size 12, centred. Caption should use mixed upper/lower case, e.g. **Table 1:** [Description]. Tables should be numbered consecutively in accordance with their appearance in the text, Place footnotes to tables below the table body and indicate them with superscript lowercase letters. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables does not duplicate results described anywhere in the text. Table labelling can either be consecutive throughout all the document e.g. **Table 1:** [Description of 1, next will be 2] or correspondingly consecutive for each chapter, e.g. **Table 3.1:** [Description of 3.1, next will be 3.2].
- (i) footnotes: Footnotes should be used sparingly. Number them consecutively throughout the synopsis, using superscript numbers. Many word processors build footnotes into the text and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.
- (j) *mathematics and equations*: all mathematical symbols should be in italics, size 12, with subscripts and super scripts in normal font. Each equation should be given a number,

e.g. (1), flush with the right margin. Refered to "(1)," not "Eq. (1)" or "equation (1)," except at the beginning of a sentence: "Equation (1) is"

$$R_{u} = K_{w}L^{2}W\sigma_{c} \tag{1}$$

Equation numbers can either be consecutive throughout all the document e.g. (1) next will be (2) or correspondingly consecutive for each chapter, e.g. (3.1) next will be (3.2).

- (k) word limit: as stipulated in the Bye-laws and is exclusive of initial glossaries, appendices, bibliographies and footnotes
- (l) *number of pages*: total is limited to 150 (i.e. 75 paper sheets) starting from chapter one to one page before inclusive the References
- (m) *title of the dissertation*: is selected appropriately to capture the essential content of the research in a clear, precise and concise way. Overly long titles are to be avoided, not exceeding a maximum of 15 words.
- (n) references: in calibri, size 12. Indicate references by number(s) in square brackets in line with the text and numbered consecutively. Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. The actual authors can be referred to, but the reference number(s) must always be given. E.g.'..... as demonstrated [3, 6]. Barnaby and Jones [8] obtained a different result' Multiple references are each numbered within the same brackets [1-3]. Do not use "Ref. [3]" or "reference [3]" except at the beginning of a sentence: "Reference [3] shows" Reference examples are given at the end of this document. Refer to appendix E for reference examples.
- (o) Appendices: if there is more than one appendix, the appendices must be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: (A.1), (A.2), etc.; in a subsequent appendix, (B.1) and so on. Similarly for tables and figures: Table A.1; Figure A.1, etc.

3. Submision and Printing of Dissertation

The draft version of the dissertation is to be submitted through Turnitin once to obtain the originality report, through the UM VLE portal. The student is to consult with his/her supervisor in the event that this option is not available on VLE.

- (a) Once the dissertation is ready to be submitted for examination, a copy is to be uploaded on Turnitin. The electronic draft copy will be made available to the respective examiners. By default preliminary hard copies of the dissertation submitted for examination are to be *spiral bound* and printed *on both sides* of the paper. At the end of each chapter two blank pages are to be inserted for any required feedback by the examination board. Four copies of the spiral bound dissertation are required. However, the student should also consult with the Departmental secretary to confirm the number of hard copies required.
- (b) The student is to complete the Submission of Dissertation for Examination Form (appendix D), with all relevant signatures. A scanned copy is to be included with the electronic draft copy and the original is to be handed in to the Departmental secretary.
- (c) Following the examination a soft copy for library records and two copies of the final bound dissertation shall be submitted. An additional copy for each co-supervisor is required, if applicable. These copies should include any amendments recommended by the examiners and shall:
 - (i) be bound in cloth (in *black*) with stiff boards and good quality end papers; with lettering (in gold) on the front and spine showing
 - the name of the candidate
 - the title or short title of the dissertation
 - the degree for which the dissertation is submitted
 - the year of submission
 - (ii) maps, diagrams, graphs, printed material, diskettes, etc. should be bound with the dissertation, but if this is not possible such items should be presented separately in special folders or volumes and numbered
 - (iii) be printed on *both* sides of the paper

Appendix A: Title Page Template

(over leaf for a full-page version)

UNIVERSITY OF MALTA Faculty of Engineering

ENGINEERING PROJECT MSc. in Building Services Engineering



< Project Title - Calibri, size 14, Bold, centred, 1 or (max) 2 lines >

by

<Student Name - Calibri, size 12, centred >

Supervised by <Supervisor Name - Times new Roman, size 12, centred > Co-supervisor <Co-supervisor Name - Times new Roman, size 12, centred – if required > (Inclusive of Prof. or Dr or Ing.)

A dissertation submitted in partial fulfilment of the requirements of the award of

MSc. in Building Services Engineering of the University of Malta

< Month spelt in full > <space>20XX



FACULTY OF ENGINEERING

Declarations by Postgraduate Students

Student's ID / Code	
Student's Name & S	urname
Course	
Title of Dissertation	:
(a)	Authenticity of Dissertation
	I, hereby declare that this dissertation is my original work.
	No portion of this work has been submitted in support of and application for another degree or qualification of this or any other university or institution of higher education.
	I hold the university harmless against any third party claims with regard to copyright violation, breachof confidentiality, defamation and any other third party right infringement.
(b)	Research Code of Practice and Ethics Review Procedure
	I declare that I have abided by the University's Research Ethics Review Procedure.
	As a Masters student, as per Regulation 58 of the General Regulation for University Postgraduate Awards, I accept that should my dissertation be awarded as Grade A, it will be made publically available on the University of Malta Institutional Repository.
Signature of student	Name in Block
Date	

Copyright Notice

- (1) Copyright in text of this dissertation rests with the Author. Copies (by any process) either in full, or of extracts, may be made **only** in accordance with regulations held by the Library of the University of Malta. Details may be obtained from the Librarian. This page must form part of any such copies made. Further copies (by any process) of copies made in accordance with such instructions may not be made without the permission (in writing) of the Author.
- (2) Ownership of the rights over any original intellectual property which may be contained in, or derived from, this dissertation is vested in the University of Malta and may not be made available for use by third parties without the written permission of the University, which will prescribe the terms and conditions of any such agreement.
- (3) Publication rights over the academic and/or research results presented in this dissertation are vested jointly in both the Author and his/her academic Supervisor(s), and unless such rights are explicitly waived in writing, both parties must be listed among the authors in any academic publication that is derived substantially from this work. Furthermore, any other public communication / disclosure of any form that focuses on the project must acknowledge that this work has been carried out by the Author and the Supervisor(s) (named explicitly) through the University of Malta.

Appendix D: Submission of Dissertation for Examination Form



FACULTY OF ENGINEERING

Declarations by Postgraduate Students

Student's ID / Code	
Student's Name & Surname	
Course	
Title of Dissertation:	
I hereby submit my dissertation for examination by	y the Board of Examiners
Signature of student	Name in Block
Date	
Submission noted	
Principal Supervisor	Name in Block
 Date	

Appendix E: Reference Examples

(i) Reference to a Journal Publication

- [1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, J. Sci. Commun. 163 (2010), pp 51–59.
- [2] W. Froude, On the Rolling of Ships, Transactions of RINA, Volume n, pp x-y, 1861.
- [3] R. W. Lucky, Automatic equalization for digital communication, *Bell Syst. Tech. J.*, vol. 44, no. 4, pp. 547–588, Apr. 1965.
- [4] D. E. Farrow and E. O. Tuck, Further studies on stern wavemaking, J. Austal Math. Society, vol. 36, pp. 424-437, 1995.

(ii) Reference to a Book

- [1] W. Strunk Jr., E.B. White, The Elements of Style, fourth ed., Longman, New York, 2000.
- [2] M. Young, The Technical Writers Handbook. Mill Valley, CA: University Science, 1989.

(iii) Reference to a Chapter in an Edited Book

- [1] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), Introduction to the Electronic Age, E-Publishing Inc., New York, 2009, pp. 281–304.
- [2] G. O. Young, Synthetic structure of industrial plastics (Book style with paper title and editor), in Plastics, 2nd ed. vol. 3, J. Peters, Ed. New York: McGraw-Hill, 1964, pp. 15–64.

(iv) Web References

As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately

(e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

- [1] G. Xu, Marine Plywood Melamine Plywood, Alibaba.com. [Online] Foshan City Nanhai Goonwa Wood Industry Co., Ltd. http://gd-goonwa.en.alibaba.com/product/223714735-200625440/marine plywood melamine plywood .html. [Cited: February 27, 2011.]
- (v) Unpublished Results and Private Communications

Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list then follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

- [1] B. Smith, An approach to graphs of linear forms (Unpublished work style), unpublished.
- [2] E. H. Miller, A note on reflector arrays (Periodical style—Accepted for publication), IEEE Trans. Antennas Propagat., In Press.
- [3] J. Betts, Faculty of Engineering, Private Communication, June 2013.
- [4] J. Kaufman, Rocky Mountain Research Lab., Boulder, CO, Private Communication, May 1995.