CUE 495: Culminating Undergraduate Experience

Written Thesis Content Requirements & Format Specifications

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Please note changes to formatting rules in the Title Page.

The intent of this publication is to provide the writer an efficient means to locate information for writing the thesis document.

CCUE DISCLOSURE STATEMENT

Students are required to review this document and adhere to the guidelines outlined within for the writing of the thesis. Students who fail to comply with these guidelines and submit a poorly formatted thesis will have the thesis returned with no format review and be required to resubmit according to the Kettering formatting requirements stated within this document. Basic formatting is already established in the writing template; however, please refer to this guide for all required formatting rules. Please comply in order to streamline the time involved with CCUE's format review process as well as the number of revision submissions on behalf of the student.

Please note: This document does not conform to the format requirements of the Kettering thesis. Non-conformance was deemed necessary in order for students to use this resource effectively. However, example pages provided in this document are formatted according to the Kettering thesis formatting guidelines.

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I. GENERAL FORMAT REQUIREMENTS

A. Font

All type must be 12 point - Times New Roman.

B. Margins

- 1. The left margin must be $1\frac{1}{2}$ " throughout the entire thesis document.
- 2. All other margins, including the top, bottom, and right margins, must be 1" throughout the entire thesis.

C. Page Numbering

- 1. Do not print a page number on the title page, but count it as page.
- 2. Number all other pages consecutively, with Arabic numbers (2, 3, 4, etc.) centered between the 1 ½" left and 1" right margins and typed ½" from the bottom edge of each page without parentheses throughout the entire thesis document, Appendix included.
- 3. Consecutive page numbering must continue even with scanned in documents, Appendix included.
- 4. All pages containing full-page figures and tables must have page numbers typed in the required position ½" from the bottom edge of the page, even if these graphics are turned sideways in "landscape" position.
- 5. All page numbers must be typed in the same font and size: 12 point Times New Roman.

D. Spacing

Double-line spacing is required throughout the thesis; however, exceptions to this rule are identified where necessary.

E. Main Headings

- 1. In addition to the Disclaimer and Preface pages, main headings must appear on the Table of Contents and List of Illustrations pages. They must also appear on the first page of all new chapters, the References page, the Glossary page, and all Appendix/Appendices divider pages.
- 2. All main headings must begin on a new page with a 1" top margin.
- 3. All main headings must be typed in all caps, bold and centered with no underline, followed by three (single-spaced) blank lines.
- 4. The side ends of a main heading must have at least a 2 ½" left margin and a 2" right margin. In other words, the length of the heading line(s) cannot be wider than 4".
- 5. If more than one line is needed for the main heading, single-space within the lines.
- 6. The top line portion of the heading must be wider than the length of any lower line portion.
- 7. The lower line portion cannot be extremely shorter than the line above it, such as only one word or two short words.
- 8. Leave three (single-spaced) blank lines below all main headings.

F. Paper Type & Printing

- 1. Theses must be printed and submitted on square-cornered, unpunched, 8 ½" x 11" white paper.
- 2. Print is one-sided
- 3. Do not staple document.
- 4. No blank pages are permissible.
- 5. Black and white printing may be allowed on preliminary review copies even if you have included figures; however, verify with your Faculty Advisor first. The Final Review Copy and Final for Binding Copy submissions are required to be in color, where necessary in the document.
- 6. No heavy stock paper is allowed as it causes a problem for thesis binding.

II. CONTENT REQUIREMENTS w/FORMAT RULES

A. Title Page

- 1. All theses must include a cover page known as the thesis title page. Be sure to use the correct title page template depending upon which CUE option you are pursuing. The title pages are slightly different with regard to the company name and the signature lines (see Examples 1, 2, 3 & 4).
- 2. The title page must include the correct thesis title typed in all caps, bolded, and centered.
- 3. Titles and all main headings cannot be any wider than 4" (see Example 6).
- 4. Single-space within the multiple title lines.
- 5. The top line must always be wider than the line that follows it; however, the line that follows it cannot be extremely shorter than the line it falls under (see Example 6.)
- 6. Pay attention to the vertical spacing and format style of each text line in regards to capitalization and bold typeface.
- 7. Your degree(s) must be included along with your name typed in all caps, bolded, and centered with no underline.
- 8. It is permissible to type your degree all on one line even if the line is wider than 4".
- 9. If you are receiving two degrees, include both degrees; each on its own line separated by the word (and), also on its own line. The word "and" must be typed in lowercase letters with no bold or parentheses. Single space within the lines (*see Example 5*).
- 10. Your expected graduation year must be included and typed with no bold.
- 11. If you are graduating in December and not sure if you will finish in time for a December degree, create a second title page with the following year typed for the graduation year.
- 12. Signature lines are typed and positioned as shown on the specified title page example for your thesis. Include enough blank lines above the section of signature lines to result in a 1" bottom margin.

B. Disclaimer Page

- 1. Kettering theses must contain a Disclaimer page worded and formatted exactly as shown in the Thesis Template with the exception of noting your own specific degree(s) and employer.
- 2. The main heading (DISCLAIMER) must be typed in all caps, bold and centered with no underline, followed by three (single-spaced) blank lines.
- 3. If you are receiving more than one degree from Kettering, include all degrees.

C. Preface Page

- 1. All Kettering theses must contain a Preface page formatted exactly as shown in the Thesis Word Template.
- 2. Acknowledges the thesis as fulfilling the culminating undergraduate experiences requirement for the appropriate degree.
- 3. Identifies the project and thesis as the culminating undergraduate experience with appropriate references made to academic courses and projects, as well as to work experience assignments.
- 4. Details the assistance of others during the thesis project.
- 5. The main heading (PREFACE) must be typed in all caps, bold and centered with no underline, followed by three (single-spaced) blank lines.
- 6. The preface page should be worded according to the Preface page in the Thesis Template.
- 7. It may be desirable to incorporate very brief information to familiarize the reader with the thesis project.
- 8. A good preface can be written in a maximum of two pages.
- 9. If desired, first-person pronouns may be used in a preface (*I*, *me*, *my*).

- 10. The acknowledgements of what others have contributed must not be written in such a way as to suggest or indicate that any employee of the employer has endorsed or approved the conclusions or opinions expressed in the thesis.
- 11. Acknowledgements of support should be limited to expressing appreciation to the employer for the opportunity presented and to thanking those people who provided data and made themselves available for interviews in connection with the preparation of the thesis.
- 12. Appreciation should be expressed for appropriate specific contributions by the employer advisor and the faculty advisor. Individuals' formal names, titles and company or university affiliation must be identified.
- 13. It is permissible to acknowledge family members and friends.

D. Table of Contents Page

- 1. All theses must contain a Table of Contents listing all main headings and 1st level subheadings (*see Example #7*). If your thesis contains 2nd, 3rd, or 4th level subheadings, it is not necessary to list these subheadings within the Table of Contents; however, if you list even one 2nd, 3rd, or 4th level subheading in the Table of Contents, you must list all subheadings.
- 2. The main heading must be typed in all caps, bold and centered with no underline, followed by three (single-spaced) blank lines.
- 3. Do not list the "Table of Contents" in the Table of Contents.
- 4. The wording of all main headings and subheadings listed in the Table of Contents must match exactly with the wording used on the actual pages.
- 5. Be sure all page numbers shown are correct. Recheck after revisions.
- 6. Use ½" tabs for proper alignment.
- 7. Use bold typeface only on the main heading (TABLE OF CONTENTS).
- 8. Be certain that all chapters are assigned Roman numerals.
- 9. Check for any chapter numbers that may repeat or be out of sequence.
- 10. Do not assign Roman numerals to the Glossary or Reference page headings.

E. List of Illustrations Page

- 1. If a thesis contains figures or tables, a List of Illustrations, placed immediately after the Table of Contents on a new page, must be included in the thesis (see Example #8).
- 2. The main heading must be typed in all caps, bold and centered with no underline, followed by three (single-spaced) blank lines.
- 3. The wording of all figure captions and table headings listed in the List of Illustrations must match exactly with the wording used on the actual pages.
- 4. Make sure all page numbers shown are correct. Recheck after revisions.
- 5. If a figure caption or table heading will not fit onto one line (without running into the page number), carry the remaining words to a second line, aligning it with the 1st letter of the 1st word of the figure caption or table heading.
- 6. Single space within the multiple lines. (The dot leader should only appear on the last line of the figure caption or table heading when multiple lines appear.)
- 7. Include the actual figure caption in the List of Illustrations and be sure to match all wording. Do not include the word "Figure" or the number that follows. (Figure 1.)
- 8. Include the <u>exact</u> wording of the table heading (without the table number identifier line of Table 1) in the List of Illustrations

F. Body of the Thesis

1. **Writing Style** - the body of thesis is required to be written in third person.

2. **Chapter 1 Content – Introduction** (Required for all theses.)

Following a brief introductory paragraph, the Introduction chapter requires six subheadings as listed. Each subheading should be margin flush, bold, and underlined utilizing headline style capitalization (level 1 subheading).

a. Problem Topic

- Under the subheading, Problem Topic, bring into focus in a single clear statement, the exact problem addressed and the nature of the end result sought.
- The problem itself must not be stated in terms of a desirable goal or solution but rather as a current or potential negative situation, result, etc. that needs to be eliminated or avoided.
- If sub-problems are involved they should be stated here.

b. Background

- Under the subheading, Background, provide helpful orientation regarding the problem addressed by the thesis.
- It may be necessary to clarify the situation in which the problem arose.
- The nature of the student's experience with that situation might also be appropriate information to include.
- Concerns expressed by managers, customers, or others may be relevant background.
- All the material presented should enable the reader to understand the exact nature of the problem and its importance especially to the organization.
- The background should not give elaborate overly-generalized, obvious, or nonessential information.
- Facts that should be reported in a later chapter should not be included.
- If a history of the organization is relevant it should be placed in an Appendix.

c. Criteria and Parameter Restrictions

- Under the heading Criteria and Parameter Restrictions, identify the criteria and parameters imposed if the thesis project concerns the creation of a design.
- Sometimes parameters are also briefly identified earlier under the heading Problem Topic, as part of the problem or the problem situation).
- If the thesis project does not concern the creation of a design, the heading may simply be Criteria or perhaps Standards.
- For all topics, criteria or standards should be identified as the basis for judging the data later presented in supporting (developing) chapters.
- The appropriateness of each criterion or standard must be briefly justified.

d. Methodology

- Under the subheading, Methodology, give the major specific steps of the procedure used in solving the problem so the reader will immediately know that the solution was achieved in a systematic and valid way.
- Identify the general types of data sources, e.g., the writer's direct observations, tests, department records, and technical publications.

e. Primary Purpose

Under the subheading Primary Purpose, state that the thesis presents the results of the investigation. One sentence will suffice.

f. Overview

Under the subheading, Overview, briefly summarize in sentences in a concluding paragraph the content and order of subsequent thesis chapters.

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- 3. Chapter 2 Content Conclusions and Recommendations (Required for all theses.)
 The Conclusions and Recommendations chapter is placed directly after the Introduction chapter.
 The student author should make sure both advisors agree on this format choice before the
 Preliminary Thesis is submitted. After a brief introductory paragraph the chapter should achieve
 the following goals clearly and concisely: (1) Answer the main question or issue pertinent to the
 problem posed in the first chapter. (2) Identify the major reasons for the validity of that answer
 (i.e., the conclusions that support it). (3) State the course(s) of action justified by the conclusions.
 The following are further considerations:
 - a. Focus After a brief introductory paragraph the section of Conclusions should be opened by first directly giving the "big answer" conclusion to the major problem. The reader understands the subsequent supporting elements best when the overall outcome conclusion is first made clear. Each supporting conclusion statement listed must clearly stand as a reason for the validity of the "big answer" initially provided.
 - b. Integration Next, the concluding elements should be grouped in a way that is most useful to the reader. For example, individual conclusions, key findings, and recommendations that are directly related to each other should be kept together and appropriately identified as such. Thus, those elements should not just be separated under headings of Findings," "Conclusions," etc. If some recommendations are not specific responses to a particular conclusion they may be presented under the heading General Recommendations as the final section of the chapter.
 - c. Content of Recommendations This is of major importance to the Conclusions and Recommendations chapter. Each recommendation should be stated as one or more action steps to be taken, not merely as a goal to be achieved. Certainly a recommendation may be expressed as the means that would likely achieve a desirable goal or would likely advance toward achieving such a goal. Also the probably implications of implementing each recommendation should be noted, with some brief identification of the benefits that may be expected from it, as well as its cost. If a more lengthy discussion of these matters is appropriate it should be placed in an Appendix with a reference to it at the end of the recommendation. Extensive information and guidance for implementing a recommendation should also be provided in an Appendix and so noted.
 - d. Subheadings Any subheadings needed should be used to clearly group related items. In most instances the headings or subheadings should be phrased in terms of the appropriate portions of the subject matter with which they dealt.
 - e. Lists Listing is usually desirable but the relationships of listed items must be clear.
 - f. Linking of Facts to Conclusions This is of major importance to the Conclusions and Recommendations chapter. Each supporting conclusion must be explicitly linked to its key supporting facts. State them briefly and cite their page numbers in parenthesis from one of more developing chapters. Those key facts must be thereby correlated to the text in developing chapters where they are presented in more detail. This strategy allows the reader to turn directly to the full evidence that supports any conclusions that may be questioned. Each criterion identified in Chapter I must also be clearly identified again here and explained as the basis for generating a conclusion in order to clarify its validity.
 - g. Graphics Comparative finds can best be summarized in a table. Graphs and other illustrations can also be used to give a condensed overall view of the evidence in a figure. The paragraph text must introduce and briefly explain the key information in a table or a figure. For example, suppose alternative solutions were considered. A table would be constructed so that one axis indicated the alternatives and the other axis indicated the criteria used. The degree to which each criterion was met would appear in the resulting "boxes." The text discussing the table would emphasize the respects in which the recommended alternative was best.

- h. Conclusions Regarding a Design If the project deals with a design the concluding elements will be somewhat modified. The conclusions will begin with the "big answer," by indicating whether or not a successful design was evolved. The rest of the chapter briefly points out the major features that made the design satisfactory or the obstacles that made it unsatisfactory. It specifically shows how each parameter and criterion was met, or not, generally in the order the criteria were listed in the Introduction. Reference should be made to the relevant key details in the description of the design as well as the key facts that justify the inclusion of those details. Again, the key facts must be cited by page numbers in parenthesis, to correlate those facts to text in developing chapters where they are presented in more detail. If the design was test, test results should be summarized.
- 4. Chapter 3 Content Supporting Chapters are required only for the Co-op Thesis, Research Thesis, and Professional Practice Thesis Options. E-ship Theses require a Business Plan in the Appendix. The supporting chapters should be introduced by a brief overview paragraph. The beginning-middle-end principle applies to the organization of the remaining content. Subsections, each logically and clearly developed, are marked off by headings (e.g., background, statement of general problem addressed in a chapter, statement of the phase of the investigation, steps in the solution, or categories of information). Supporting data and a full explanation of research procedures are needed by the reader to judge the validity of the main conclusions of the thesis. Thus the methodology used for collecting, processing, and interpreting data must be described adequately. The data must be relevant, accurate, specific, and conclusive with both procedure and supporting data organized and presented in the most convenient and useful way. This requirement means that the reader should not have to reference an Appendix frequently or search for what elaborate arrays of data may signify. The main point is that the reader should be able to find, in detail, the significant steps taken and the facts gathered to generate the conclusions and recommendations presented in the thesis.

5. Format Rules for Body of Thesis

a. Headings

- Chapter Headings
 - Each chapter heading must be assigned a Roman numeral (in sequential order). Note: Do not assign a Roman numeral to your Reference or Glossary headings.
 - Type the Roman numeral in all caps, followed with a period, two character spaces, and the chapter heading. (i.e. I. INTRODUCTION).
 - o All main headings must begin on a new page with a 1" top margin.
 - o All main headings must be typed in all caps, bold and centered with no underline, followed by three (single-spaced) blank lines.
 - o The side ends of a main heading must have at least a 2 ½" left margin and a 2" right margin. In other words, the length of the heading line(s) cannot be wider than 4".
 - o If more than one line is needed for the main heading, single-space within the lines.
 - The top line portion of the heading must be wider than the length of any lower line portion.
 - o The lower line portion cannot be extremely shorter than the line above it, such as only one word or two short words.
 - o Leave three (single-spaced) blank lines below all main headings.
- Subheadings Four levels of subheadings are allowed in a Kettering thesis (*see Examples 9, 10, 11, & 12*).
- Level 1 Subheadings
 - o Level 1 subheadings are left justified (margin-flush) subheadings.
 - o Level 1 subheadings must be capitalized headline style, bold and underlined with no punctuation at the end.

- Leave one (single-spaced) blank line above and below all level 1 subheadings. The
 exception would be a level 1 subheading that immediately follows the chapter
 heading.
- Each level 1 subheading must not appear on a page without at least two lines of subsequent paragraph text. To meet this requirement on some pages, it may be necessary to leave a larger than usual bottom margin by moving the subheading (or possibly two subheadings) onto the next page.
- A level 1 subheading should extend no more than about two-thirds of the width of the line of text from the left margin. If two lines are needed, the subheading should be roughly divided in half, with the longer half as the top line, using single-spacing within the multiple lines.

• Level 2 Subheadings

- o Level 2 subheadings are indented subheadings.
- o They must be capitalized sentence style, bold and underlined with no punctuation at the end.
- o Leave one single-spaced blank line above and below all indented subheadings.
- o Each level 2 subheading must not appear on a page without at least two lines of subsequent paragraph text. To meet this requirement on some pages, it may be necessary to leave a larger than usual bottom margin by moving the subheading (or possibly two subheadings) onto the next page.
- o A level 2 subheading should extend no more than about two-thirds of the width of the line of text from the left indentation. If two lines are needed, the subheading should be divided roughly in half, with the longer half as the top line, using single spacing within the multiple lines.

• Level 3 Subheadings

- o Level 3 subheadings are centered subheadings.
- o They must be capitalized headline style, bold, and centered with no punctuation and no underline.
- o They should be no wider than 4". If this occurs split the subheading into two or more lines using single-spacing within the lines and center all lines.
- o Be sure the paragraph text that follows reverts back to the 1 ½" left margin with first-line indent.

• Level 4 Subheadings

- o Level 4 subheadings are centered subheadings.
- They must be capitalized headline style and centered with no bold, no underline and no punctuation.
- They should be no wider than 4". If this occurs split the subheading into two or more lines using single-spacing within the lines and center all lines.
- o Be sure the paragraph text that follows reverts back to the 1 ½" left margin with first-line indent.

b. Reference Citations

- All sources cited in the References list must also be cited within a chapter at least once as the origin of the specific information presented.
- If an identified source contains page numbers, the citation must also include, in its parenthesis, the specific page number(s) from which the thesis writer obtained the data presented (See Example 13).
- When information has been gained orally from an individual through personal communication, it should not be cited in parenthesis as such if the means of obtaining the data is obvious in context.
- For all other citations, please refer to the APA manual for correct formatting style.

c. Figures

- Figures Created by the Writer
 - o All figures created by the writer of the thesis must be identified and labeled in a figure caption that appears directly below the figure (see Example 14).
 - Figure captions must begin by identifying the figure with an Arabic numeral (<u>Figure 1.</u>). Follow the number with a period and two character spaces. Underline (do not bold) the word Figure and its accompanying number as shown.
 - O All figures must be numbered consecutively but separately from tables throughout the entire main body of the thesis (e.g. Figure 1., Figure 2., Figure 3., etc.)
 - o Type the figure caption in sentence style caps with no bold and end with a period.
 - Center the figure caption directly under the actual figure when it is less than one full line...
 - When longer than one full line, use left justification and single spacing within the multiple lines.
 - o If a figure continues onto consecutive pages type the entire caption on the first page. Each additional part of the figure must be identified by a shortened figure caption that appears centered below the figure. (e.g. <u>Figure 1.</u> (cont.)
 - Leave 3 (single-spaced) blank lines under all figure captions when paragraph text follows.
- Figures Not Created by the Writer
 - o Figures not created by the writer must follow all the above figure format specifications.
 - o Source information is required for a figure not created by the writer.
 - o Type the figure caption first. Then type the word "Note" (underlined and followed by a period; i.e. <u>Note</u>.). Follow with the source citation (*see Example 15*).
 - o If the writer plans to publish the thesis commercially, a copyright permission statement must be included at the end of the note with an identification of the copyright holder. Without the word "Adapted," a graphic not created by the writer must include every original detail, including the original caption. (Exception: The label number may be different.)
 - o If you need more than 1 full line for the caption and additional information or source note, use left justification and single spacing within the lines. Be sure to divide web addresses, if needed, to make use of the full line before beginning a new line.

d. Tables

- Tables Created by the Writer
 - O All tables created by the writer must be identified by numbers and table heading lines. Both heading lines must appear above the table, aligned with the left edge of the table (see Example 17).
 - o The 1st heading line identifies the table by number (e.g. Table 1) and is followed with a double-space return to leave one (single-spaced) blank line under this line.
 - O Number all tables consecutively, but separately from figures throughout the entire main body of the thesis; (e.g. Table 1, Table 2, Table 3) in the first heading line. (No underline, bold or period)
 - o The 2nd heading line is the actual heading of the table and also begins aligned with the left edge of the table followed with a double-spaced return to leave one (single-spaced) blank line between the table heading and actual table.
 - o Type the actual table heading line in headline style caps and fully underline it. Do not use bold or end with a period.
 - o If a table continues onto consecutive pages, each extension of the table must be identified by a shortened table heading that appears above the table aligned with the table's left edge. (e.g. Table 1 (cont.))

o The right edge of the table heading line should not extend past the right edge of the table. If this happens, divide the heading line accordingly, using single spacing within the lines. The top line should always be the longest line. Exceptions are made for tables that are extremely short in width.

• Tables Not Created by the Writer

- o When using information/data acquired from other sources, source information must be acknowledged in a note below it (see Example 18).
- O Place a notation in single-spaced text directly beneath the bottom of the table, aligned with the table's left edge and begin with the word "Note" and a period (Note.). This word is followed by any necessary explanation about the table's source citation.
- o A source citation is followed by any explanatory note that is directly referenced by an asterisk to an item within the table.
- O All lines of a table's notation should normally extend no farther than the right edge of the table. (Exceptions are made for tables that are extremely short in width.)
- o If the writer plans to publish the thesis commercially, a copyright permission statement must be included at the end of the note, plus an identification of the copyright holder. Without the word "Adapted," a graphic not created by the writer must include every original detail, including the original caption. (Exception: The label number may be different.)
- O All photocopies must be scanned into the electronic document. It is not necessary to reformat these pages; however, the margin, page numbering, and figure caption requirements for the thesis document must also be met on all pages that contain these photocopies.

e. Displayed Equations

- Displayed equations are complex equations or equations which must be numbered for later reference.
- In the main body of the thesis, all displayed equations are numbered consecutively (1, 2, 3, 4, etc.) but separately from figures and tables, near the right margin in parentheses (see Example 20).
- Displayed equations must follow the paragraph where they are first mentioned.
- A displayed equation must appear centered on a line of its own. The centering must be
 done manually to allow for the positioning of the equation number at or near the right
 margin.
- Leave three (single-spaced) blank lines above and below each displayed equation.
- Leave only one set of three (single-spaced) blank lines between consecutively displayed equations.

G. References Page

- 1. Include a main heading of REFERENCES typed in all caps, bold, and centered with no underline, followed by three (single-spaced) blank lines (see Example 22).
- 2. Alphabetize all entries.
- 3. Use hanging indentation, using up an entire line before continuing onto a second line. You may need to divide web addresses to accomplish this.
- 4. Use single-spacing within each reference when more than one line is needed and double-space between each reference.

H. Glossary Page

1. Most theses will require a Glossary page to give definitions of any words or phrases used in the thesis consisting of a technical nature. You may also list acronyms and the definitions on this page. The Glossary page should follow the Reference page but appear in front of the Appendices (see Example 23).

- 2. Include a main heading of GLOSSARY typed in all caps, bold and centered with no underline, followed by three (single-spaced) blank lines.
- 3. Alphabetize all entries.
- 4. The first line of the glossary word or phrase must be aligned with the first line of its description. Note: If your word or phrase continues onto a second line, it may be easiest to format all information into a table and delete the borders when finished in order to align the first lines of each column.
- 5. Use an appropriate tab space to separate the two columns.
- 6. Single space within the term or phrase and also within the description.
- 7. Double-space between all terms or phrases and the descriptions.
- I. **Appendix or Appendices** All theses will contain at least one appendix for the ABET Program Outcomes along with a divider page or pages.

1. ABET Program Outcomes – Content Requirement

- a. ABET Program Outcomes for each degree program are provided near the back of the Word Template. You must locate the outcomes for your specific degree and include each of the statements/outcomes for your specific degree, and then type a response appropriately as to how the thesis project relates to the statement/outcome. If the program statement/outcome does not apply to the thesis, include a brief explanation as to why the outcome is non-applicable. Delete all other degree program outcomes.
- b. Single-space within the program outcomes and responses. Double-space between them.
- c. Use appropriate indentation of $\frac{1}{2}$ " within the responses.
- d. Keep at least two lines of the response text on the same page as the outcome to which it responds.
- e. If the student is receiving multiple degrees from Kettering, the student must address the ABET Program Outcomes for each degree. Include all degree outcomes in one Appendix, each one beginning on a new page, with its own heading typed in headline-style caps, centered and bold with no underline.

2. Format Rules for Appendix/Appendices

a. **Divider Page(s)**

- If the ABET Program Outcomes is the only appendix, it should be separated from the body of the thesis by a divider page which includes a first heading line that reads APPENDIX and a second heading line that reads ABET PROGRAM OUTCOMES.
- Both lines must be centered with all caps, and bold, with no underline. Leave three (single-spaced) blank lines between the two lines (see Example 24).
- If the thesis contains more than one appendix, a main divider page entitled APPENDICES," typed in all caps, bold and centered, with no underline, must be placed first (see Example 25).
- In addition to the main Appendices divider page, each individual Appendix provided must be preceded by its own divider page which includes a 1st heading line that reads APPENDIX and the letter associated with the Appendix (APPENDIX A) along with a 2nd heading line telling the reader what the appendix contains (see Example #26).
 - o Both heading lines are typed in all caps, centered and bolded, with no underline.
 - o Leave three (single-spaced) blank lines between the two heading lines.
 - If the heading of the Appendix requires two or more lines, single space within the multiple lines using the same heading division format that is used on all main headings with multiple lines.

b. Figures

• In the Appendices all figures must conform to the same format specifications as required in the main body of the thesis with the exception of a different numbering sequence and

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- not having to call out the figure in a paragraph that precedes each figure (see Example 16).
- Number all figures in the Appendices consecutively, but separately, within each Appendix; e.g. <u>Figure A-1.</u>, <u>Figure A-2.</u>, <u>Figure A-3.</u>, etc. (If an Appendix contains only one figure, use only the letter; (e.g. <u>Figure A.</u>)
- List all Appendix figure captions in the List of Illustrations under the subheading Appendices which appears immediately following the list of figures in the main body of text.
- Figures w/Format Exceptions
 - o An exception is made for Appendices that contain photocopies from sources that have applied a format style that is not in compliance with Kettering's format specifications.
 - o All of these photocopies must be scanned into the electronic document.
 - o It is not necessary to reformat these pages; however, the margin and page numbering requirements for the thesis document must also be met on these pages.
 - o An exception is also made for any Appendix that contains only a large number of the same type of figures which can be described with one main Appendix heading.
 - O Some type of consistent heading should be centered above each figure to tell the reader specifically what each figure is showing.

c. Tables

- In the Appendices all tables must conform to the same format specifications as required in the main body of the thesis with the exception of a different numbering sequence and not have to call out tables in a paragraph that precedes the table (see Example 19).
- Number all tables in the Appendices consecutively, but separately within each Appendix: (e.g. Table A-1, Table A-2, Table A-3). (If an appendix contains only 1 table, use only the letter: e.g. Table A)
- List all tables that appear in the Appendices in the appropriate location within the List of Illustrations using only the actual table heading with exact wording.
- Tables w/Format Exceptions
 - o An exception is made for any Appendix that contains only a large number of the same type of tables that can be described with one main Appendix heading.
 - o Some type of consistent heading should be centered above each table that tells the reader specifically what type of information is contained in each table.
 - o An exception is made for Appendices that contain photocopies of tables from sources that have applied a format style that is not in compliance with Kettering's format specifications. These particular type of tables become figures and must be labeled with a figure caption and include source information.

d. Display Equations

- All displayed equations in the appendices must conform to the displayed equation format explained in the body of thesis section with the exception of the labeling and numbering.
- All displayed equations in the appendices must be labeled with the corresponding appendix letter and number (e.g. A-1, A-2, A-3) (see Example 21).
- When only one displayed equation appears within an Appendix it must be labeled with only the appropriate letter and no number. (e.g. A).

e. Other Format Specifications

- Each Appendix provided must be cited at least once in the text of one of the thesis chapters, with brief wording to indicate what kind of information the Appendix provides; its title may suffice.
- If the content of an Appendix is photocopied material not created or adapted (revised) by the thesis writer, its format need not be altered to match the formatting requirements, however, all elements of the Appendix document must appear within the required

- margins; photocopying or scanning followed by reduction may be necessary. In any case, the origin of the document, or single graphic, must be identified below it.
- If your thesis has more than one Appendix, the ABET Program Outcomes Appendix must be placed as the last Appendix...

Example #1: Co-op Thesis Title Page

<TITLE>

A Co-op Thesis written for

<EMPLOYER NAME>

and submitted to

KETTERING UNIVERSITY

in partial fulfillment of the requirements for the degree of

BACHELOR OF SCIENCE IN < DEGREE>

by

<STUDENT NAME>

Student	
Employer Thesis Advisor	
Faculty Thesis Advisor	

Example #2: Research Thesis Title Page

<TITLE>

A Research Thesis written for

KETTERING UNIVERSITY

and submitted to

KETTERING UNIVERSITY

in partial fulfillment of the requirements for the degree of

BACHELOR OF SCIENCE IN < DEGREE>

by

<STUDENT NAME>

Student	
Faculty Thesis Advisor	
Committee Member	

<TITLE>

A Professional Practice Thesis written for

COMPANY NAME

and submitted to

KETTERING UNIVERSITY

in partial fulfillment of the requirements for the degree of

BACHELOR OF SCIENCE IN < DEGREE>

by

<STUDENT NAME>

Student	
Company Liaison	
Faculty Thesis Advisor	

Example #4: E-ship Thesis Title Page

<TITLE>

An E-Ship Thesis written by

STUDENT NAME

and submitted to

KETTERING UNIVERSITY

in partial fulfillment of the requirements for the degree of

BACHELOR OF SCIENCE IN < DEGREE>

Student	
Faculty Thesis Advisor	
Committee Member	

Example #5: Dual Degrees on Title Page

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING and BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Example #6: Format for Titles Wider than 4"

THE BOARD OF EDUCATION PRIMARY ANALYSIS OF THE PAST TEN YEARS OF ELECTRONIC VOTING

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Example #7: Table of Contents

TABLE OF CONTENTS

DISCLAIMER2
PREFACE3
LIST OF ILLUSTRATIONS
I. INTRODUCTION (main heading in all caps) Problem Topic (Ist Level Subheading in Headline Style Caps) Background Criteria and Parameter Restrictions Methodology Primary Purpose Overview
II. CONCLUSIONS AND RECOMMENDATIONS
III. SUPPORTING CHAPTER HEADING
IV. SUPPORTING CHAPTER HEADING
REFERENCES
GLOSSARY
APPENDIX: ABET PROGRAM OUTCOMES
(If you have more than just the one appendix delete the above heading line and use the following heading lines:)
APPENDICESAPPENDIX A: HEADING IN ALL CAPSAPPENDIX B: HEADING IN ALL CAPS

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Example #8: List of Illustrations

LIST OF ILLUSTRATIONS

<u>Fi</u>	<u>gures</u>	<u>Page</u>
1.	<use sente<="" td=""><td>nce style capitalization></td></use>	nce style capitalization>
2.		
3.	•••••	
	Appendice	<u>es</u>
	A-1.	
	A-2.	
	B-1.	
	B-2.	
Ta	bles	
1.	<use hea<="" td=""><td>dline Style Capitalization></td></use>	dline Style Capitalization>
2.		
	Appendices	<u>s</u>
	A-1.	
	A-2.	

Example #9: Level 1 Subheading

Level 1 Subheading

Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text.

Example #10: Level 2 Subheading

Level 2 subheading

Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text.

Example #11: Level 3 Subheading

Level 3 Subheading

Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text.

Example #12: Level 4 Subheading

Level 4 Subheading

Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text. Paragraph text.

Example #13: Referencing Sources in Paragraph Text

...According to John and Bates in their landmark study (1992, p. 104), the primary ergonomic effect of ...

... That effect has occurred in 72% of such cases (Johnson and Bates, 1992, pp. 47-48).

...In a recent discussion early last May with Plant Manager James Black, the author learned that the equipment is to be sold ...

... James Black, Plant Manager, has indicated that the equipment is to be sold (personal communication, c. May 5, 1998).

Example #14: Figures Created by the Writer

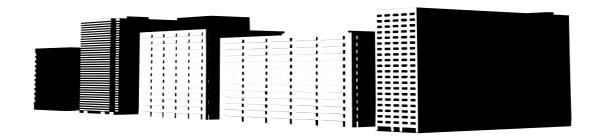
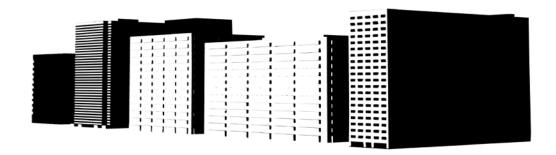
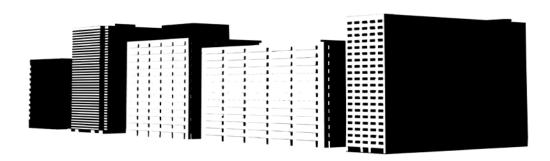


Figure 14. Architectural drawing of the new apartment complexes.



<u>Figure 15.</u> Diamond Construction apartment complex. <u>Note.</u> From Diamond Construction Company internal plans 22370. Printed with permission from the Diamond Construction Company Legal Department, Detroit, MI.

Example #16: Figures in the Appendices



<u>Figure A-1.</u> Architectural drawing of the new apartment complexes.

Table 17

<u>This is a Table Heading that Would Extend Past the Right Edge</u> of the Table and Requires a Second Line of Text

East	West	North
1	2	3

Example #18: Tables Not Created by the Writer

Table 18

Table Example with a Source Citation

Part No.	July 14	August 15	Sept. 16	October 17
Part #11-234	220	220	221	250
Part #11-235	135	134	145	160
Part #11-236	140	140	150	144

Note. From Engineering Report (No. 71-103) (p. 7), by Toyoda Machine Works, Ltd., 1995, n.p.: Author.

Example #19: Tables in the Appendices

Table A-1

<u>This is a Table Heading that Would Extend Past the Right Edge</u>
of the Table and Requires a Second Line of Text

East	West	North
1	2	3

Example #20: Displayed Equations in Main Body

$$(x+a)^n = \sum_{k=0}^n \binom{n}{k} x^k a^{n-k}$$
 (1)

Example #21: Displayed Equations in Appendices

$$(x+a)^n = \sum_{k=0}^n \binom{n}{k} x^k a^{n-k}$$
 (A-1)

Example #22: References Page

REFERENCES

Carter, A. W. (1997, December 17) [Letter to E.M. Brown].

Dulan, C.K. (1994). Technical Writing: Sources of Validity. Journal of Scientific Inquiry, 59 (12), 13-21.

Engineering Analysis Department, Milo Corp. (1995). Daily Index Report (No. 23-873). Chicago: Author unknown.

Felders, E. (1996, January 2). Testing Equipment. Annual Audit: Plant 2 (pp. 14-22). Yorkdale, N.J.: Berko, Inc.

Ferguson, M.A. (1997, November 14). Jason Engineering Co., Chicago [Interview].

Kettering University – Formerly GMI Engineering & Management Institute. (September 5, 2002) Understanding the Human Dimension of Corporate Success [Online]. Available: www.news.kettering.edu/showpage. Cfmp=topstory.

McQueen, J.L. (1997). Assessment of a Total and Transforming Knowledge. Journal of Business Communication, 31, 1-9.

Olson, D.L. (1998a). Collaborative Planning and Transforming Knowledge. Journal of Business Communication, 31, 1-9.

Olson, D.L. (1998b). Writing the Scientific Article. Journal of Business Communication, 31, 287-299.

Smart, T. (1993, October 4). Can Xerox Duplicate its Glory Days? [Online]. Business Week, 61, 56-58. CompuServe. Lexis/Nexis. [1995, November 14].

GLOSSARY

Commencement: The ceremony honoring those students who have received a

degree or are a degree candidate.

Final Review Thesis

Submission:

Submission:

The second of three official submissions of your thesis to the Center for Culminating Undergraduate Experience. This submission is used for an additional content review from your faculty advisor. If final approval is given, a format review will

be completed in CCUE.

Final Thesis The third of three official submissions of your thesis to the

Center for Culminating Undergraduate Experience. This is the last submission before your thesis grade is submitted to the

Registrar's Office.

Graduation: The act of completing all degree requirements, when a degree

is awarded and a diploma issued.

Headline Style

Caps:

Capitalizing the 1st letter of all words, with the exception of

articles and prepositions such as an, is, and, etc.

Location Words that describe where figures, tables or displayed

Description Words: equations are located such as "below," "following", or "on the

next page."

Orphan Lines: The first line of a paragraph that falls at the bottom of a page

with the remainder of the paragraph appearing on the next

page.

Plagiarism: To present the ideas or words of another as one's own.

Preliminary Thesis

Submission:

The first of three official submissions of your thesis to the Center for Culminating Undergraduate Experience. The thesis must be completely written for this submission and include all

required documents.

Sentence Style

Caps:

Capitalizing only the first letter of the first word and the first

letter of proper nouns.

Widow Lines: The last line of a paragraph that appears on the beginning of a

new page.

Example #24: One Appendix – ABET Program Outcomes

APPENDIX

ABET PROGRAM OUTCOMES

Example #25: Multiple Appendices – Main Divider Page

APPENDICES

Example #26: Multiple Appendices – Individual Divider Page

APPENDIX A

TYPE APPROPRIATE HEADING FOR THIS APPENDIX HERE

III. FAQ's & TIPS

- A. Word Spell Check does not alert you to any misspelled words typed in all caps. Word considers these to be acronyms, so you must check the spelling yourself.
- B. APPENDICES and RECOMMENDATIONS are two words commonly misspelled.
- C. It is highly recommended to use the Kettering Thesis Template. The main headings, text and page number alignments in the Table of Contents and List of Illustrations are preset.
- D. The Thesis Template must be downloaded from KqUest and saved in your current version of Word before beginning to type into the template.
- E. The password to unlock the Thesis Template is KETTERING.

IV. PRELIMINARY THESIS SUBMISSION INFORMATION

- A. All versions of your written thesis are required to be submitted through the Center for Culminating Undergraduate Experiences (CCUE).
- B. Your preliminary thesis will be forwarded to your Faculty Thesis Advisor once CCUE has received all required documentation. Please include the following documents with your Preliminary Thesis submission:
 - 1. One hard copy of the written Preliminary Thesis (single sided)
 - 2. Preliminary Thesis Submission Form (available in KqUest under "Preliminary")
 - 3. Company Approval Letter on company letterhead (only needed for Co-Op Thesis)
 - 4. One hard copy of the Thesis Abstract Form (available in KqUest under "Thesis Abstract")
 - 5. One hard copy of the Employer Thesis Advisor Evaluation form (available in KqUest under "Documents" or on the CCUE website only needed for Co-Op Thesis)

Please note:

For Confidential Theses, please also include:

- One copy of the Confidential Agreement signed by your Employer Thesis Advisor (available in KqUest under "Documents")

Additional Items of Note:

In addition, all students are asked to please verify that the Employer Thesis Advisor is correct on your Thesis Abstract form. If the Employer Thesis Advisor has changed and the form is incorrect, please complete the Thesis Advisor Change Form under "Documents" in KqUest.

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The best way to graduate on time is to meet the deadlines for your thesis submissions.

Remember, your Faculty Advisor can take up to four weeks to review each version of your thesis document.

Be aware that the student is responsible to be certain that their thesis meets all format specifications as outlined in the Format Specifications document found in KqUest (under "Documents"). If you have any questions about the formatting of your thesis, please contact Lenore Evennou, Format Coordinator at (810) 762-7920 or levennou@kettering.edu. CCUE will not do a format review until your Faculty Thesis Advisor approves your content on the final review version.

Your Preliminary Thesis submission can be mailed or dropped off at the following address: Kettering University, Center for Culminating Undergraduate Experiences, 1700 University Avenue, Room 3-322 AB, Flint, MI 48504-4898.