

# **University of the District of Columbia**

## **Graduate Thesis/Dissertation Guidelines & Procedures**

**Submitted by the Graduate Council Sub-committee on Thesis/Dissertation Guidelines**

**January 2014**

## Table of Contents

Table of Contents.....	2
Chapter 1: Introduction.....	3
Chapter 2: Approval of Thesis Topic .....	4
Chapter 3: Revision of Thesis/Dissertation Topic or Title.....	6
Chapter 4: Electronic Thesis/Dissertation .....	7
Chapter 5: Publication of Theses/Dissertations.....	7
Chapter 6: Document Appearance.....	10
Chapter 7: Arrangement of Content.....	11
Chapter 8: Table & Figures.....	19
Appendix A Sample Cover Page .....	22
Appendix B Department Program of Study Form.....	23
Appendix C IRB Application Forms.....	24

## **Chapter 1: Introduction**

This handbook provides the guidelines and policies for graduate students completing a thesis as a partial requirement toward graduation set forth by the Graduate Council. Individual departments may have additional requirements, specify requirements in greater details, or occasionally contradict these guidelines if they do not reflect best practices for the specific discipline. In such case, the Department Chairperson must approve the modification. The Graduate Council will support such modifications if it is dictated by the formatting conventions commonly used by that discipline. For assistance with formatting questions not specifically addressed by this document, the student is encouraged to utilize the University Writing Center or style manuals specific to the discipline.

Students should consult their Graduate Student Handbook or faculty advisor for information regarding deadlines for submitting thesis/dissertation topic proposal, applications for graduation and submission of electronic thesis/dissertation.

## **Chapter 2: Approval of Thesis Topic**

Before starting the thesis/dissertation research, the student must choose a major advisor. The student in consultation with his major advisor must form an advisory committee chaired by the major advisor to approve the thesis topic and expected outcomes and deliverables of the thesis/dissertation. The minimum requirements for forming such committees and the scope of their responsibilities can be found in their Graduate Student Handbook. Each department may have additional requirements for forming such committees or expand the scope of their responsibilities to include, for example, the approval of the student's program of study. The thesis/dissertation topic proposal should, in general, follow the general features of a research proposal. A typical format is as follows:

- **Introduction:** General background, importance of the subject area.

- **Research Objective:** A concise statement of the purpose or objective of the proposed research; this should flow logically from the introduction and be short and specific.
- **Methods:** General plan, specific methods, sampling or experimental design, duration, and projected procedure for data analysis; these methods should be appropriate for directly addressing the purpose or objective.
- **Necessary Resources:** List all resources needed to complete the proposed research.
- **Expected Results:** Expected results of theoretical investigations, experiments, field sampling, computer simulations, data analyses, hardware design, etc. should be clearly stated.
- **Significance:** Why is this investigation justified? What is the scientific or practical contribution?
- **References:** A list of references should be provided.
- **Timeline/Work plan:** The timeline helps to assess whether the proposed research is feasible as planned and establishes milestones. Periods when there are activities which could slow progress should be highlighted when accounted for when selecting milestones. The timeline should also indicate when likely outputs (e.g., scientific paper and reports) will be produced.
- **Institutional Research Board:** If students use human subjects, their thesis/dissertation research proposal must be submitted to the Institutional Research Board (IRB). The IRB uses IRBNet for all IRB submissions. Detailed instructions as to how to submit an application can be found on the IRB website [www.udc.edu/irb](http://www.udc.edu/irb) . All submissions must be accompanied by a completed Application for Review by the Institutional Review Board, including any applicable attachments. Please refer to the website <http://www.udc.edu/irb> to access the Application for IRB Review form. To apply to the IRB, the student must first register with IRBNet. To register, go to [www.irbnet.org](http://www.irbnet.org) and click new user registration on the left side of the screen. Use your first initial and last name as your User ID. For specific instructions please click the link for IRB Login Registration Tips. Student research subject to IRB review includes studies intended to satisfy the academic requirements for independent study, Master's thesis, or doctoral dissertation; intended to result in publication, presentation outside the classroom, or public dissemination in some other form; and those studies

conducted outside the classroom and/or departmental research participant pool if they involve minors, or populations of adults whose ability to give informed consent freely may be compromised. For UDC students conducting research as part of an academic program including theses, all requests for review must list the faculty member as the PI, and the student researcher as the Co-PI and both must digitally sign the submission. The approved thesis proposal should be attached to the Thesis Proposal Approval form. The research thesis/dissertation proposal needs to be recommended for approval by the Chair and all other members of the committee. The thesis/dissertation proposal form needs to be signed by the Chair and all other members of the committee, and the program director if applicable.

### **Chapter 3 Revision of Thesis/dissertation Topic or Title**

The student must file a revision of thesis/dissertation topic proposal if there are major changes including title changes. Minor word addition or deletion need not be filed. A revision of the proposal for thesis/dissertation topic or title must follow the same procedure used for a new proposal.

#### Checking Thesis/Dissertation Format

The student is fully responsible for the accuracy of the contents of his/her thesis/dissertation. The student is also fully responsible for ensuring that his/her writing follows the approved format. It is recommended that the student's committee perform a thorough review for the accuracy of the content and style of writing of a thesis or dissertation. A professional review for the document may be needed for dissertations.

## Chapter 4: Electronic Thesis and Dissertation

The University no longer accepts bound copies of the thesis or dissertation for the Learning Resources Center. The completed document must be electronically submitted to the Learning Resources Center.

### File Formats

The Final thesis document to be submitted to the Graduate School must be in Adobe Portable Document (PDF). Microsoft word (.doc, and .docx), Rich Text Format (.rtf) files can easily be converted to PDF documents. All used fonts should be embedded in the document. Internal links to multi-media are acceptable. Acceptable multi-media file formats include the following

<b>Images</b>	<b>Video</b>	<b>Audio</b>
GIF (.gif)	Apple Quick Time (.mov)	AIF (.aif)
JPEG (.jpeg)	Microsoft Audio Video Interleaved (.avi)	MP3
PDF (.pdf) use Type 1 PostScript Fonts	MPEG (.mpg)	WMA
TIFF (.tif)		WAV (.wav)
		MPEG-2
		SND (.snd)

### File Naming Conventions

The name of a thesis or dissertation file should follow the following naming convention:

Lastname\_firstname\_middleinitial\_term\_degree.pdf

The format for the term YYYYT where the T represents the term of graduation, S for Spring, M for Summer, and F for Fall. The word “degree” should be replaced by “mas” or “phd”. Multi-media files should follow the following naming convention

Lastname\_firstname\_middleinitial\_term\_degree\_filename.filetype

Multi-media file names follows the same convention used for naming thesis or dissertation files with the addition appropriate file name and suffix.

### Bounded Copies

Although, the university no longer display bounded copies in the Learning Resources Center, departments may require students to submit a bounded copy to be maintained in the department. After the thesis/dissertation has been successfully defended and all corrections have been made in a satisfactory manner, if requested, copies should be made on approved bond paper (permanent white paper of at least 25% cotton). One brand of paper should be used throughout. Copies of the signature page should also be made and included in the bounded copies. Copies of the thesis or dissertation are produced and bound through arrangements made personally by the student. The student's advisor or the program director can help determine who expects to receive copies and how copies should be presented, but it is the student's responsibility to obtain bounded copies.

## **Chapter 5: Publication of Thesis/Dissertation**

### Policy on publication of Thesis/Dissertation

The University of the District of Columbia policy states that Master Thesis and Doctoral Dissertations should be openly published. It is anticipated that all doctoral work and thesis research will be published in the open, refereed literature. However, upon request of the student and the consent of the student's major advisor, a thesis or dissertation, in both electronic and paper format, can be withheld from circulation for no more than one year.

### Use of Copyrighted Material

According to the United States Copyright office Website, the use of a copyright statement is no longer required. However, the use of a copyright notice is important because it informs the public that the work is copyright protected and identifies the owner of the work and shows the year of its publication. The optional copyright notice can be included in the last line of the title page using the following format:

Copyright © <student full name> <first year of publication>

Copyright Fees and forms are obtainable online: <http://lcweb.loc.gov/copyright/> .

## Chapter 6: Document Appearance

The overall appearance of a thesis or dissertation should be professional and consistent.

### Fonts and Type Style

A single font type and size should be used throughout the thesis or dissertation document. The UDC Graduate Council recommends the use of Times New Roman, size 12 or Arial, size 11. Other fonts may be used with prior approval from the Graduate School. Such fonts include:

Courier	11 or 12
Century Gothic	11 or 12
Helvetica	11 or 12

Fonts of size 14 may be used consistently in the top level headings of the title and preliminary pages, chapters, references, bibliography, and appendices. Font sizes 10 may be used for tables, figures computer programs, mathematical equations, and items included in the appendices, if necessary. Each major header must be identical in font size, type face, location, bold, style, amount of space in-between the header and the first line of text, etc.

### Margins

Bottom and right margins on each page must always be one inch wide. Left margin in each page should be 1.5 inch wide. For major headings such as title page, first page of each chapter, etc., the top margin should be 2 inches wide. For text pages, the top margin should be one inch wide.

All tables, figures, and copies of reprinted materials such as computer programs and manuscripts included in the thesis or dissertation must conform to the margin requirements.

### Justification

Except for major headings all text should be left justified. All major headings should be centered on the top of the page.

### Line Spacing

Text spacing should be consistent throughout the entire thesis or dissertation as follows:

- Text spacing should be a space and half.



- Table of contents, long quotations, table and figure captions, legends, footnotes, computer printouts, and references (1.5 spacing between entries) should be single-spaced.
- Leave two blank lines before and after tables and Figures except at the very top or bottom of a page.

### Page Numbers

The format requirements for page numbers are as follows:

- Page numbers should be placed at the bottom center of a page within the 1 inch bottom margin.
- Preliminary pages, i.e., pages before Chapter 1 should be numbered consecutively using small Roman numerals. The title page and the approval page counts as pages i and ii. However, page numbers should not appear on these pages.
- The first page to bear a Roman numerals is the dedication page (if exist).
- Arabic numbers begins at the first page of Chapter 1, which is understood to be “1”. However, traditionally, no number appears on that page. The numbering begins at 2 and consecutively continues to the end of the thesis document with all pages counted including blank pages.

### Landscape Pages

Landscape pages may be used, if necessary, for tables and figures. When a page is rotated to landscape orientation, the page number may automatically or manually be rotated to the new location.

### Widows and Orphans

Set the word processing software to prevent both widows and orphans. A widow is a single line of a paragraph at the bottom of a page. An orphan is a single line ending a paragraph at the top of next page. Also, do not leave a heading or subheading without at least two lines of text at the bottom of a page.

### Hyphenation

The last word in the page should not be hyphenated. The number of hyphenated words per page should be minimized as possible.

## Footnotes

All footnotes should be typed using the same font used in text pages. Smaller font sizes no less than 9 should be used. All footnotes should be single-spaced and conform to the margin requirements.

## **Chapter 7: Arrangement of Content**

### Introduction

Every thesis/dissertation should have the following three content divisions

- Preliminary pages
- Text pages
- End pages

In addition an abstract page should also be provided. The format requirements for the abstract page, the order of pages in each of the three document divisions as well as their format requirements follows.

### Abstract Page

The Abstract is separate page and is not part of the thesis or dissertation. The abstract page provides the most important results of the thesis/dissertation research. The abstract page helps researchers determine if they want to read the entire thesis or dissertation. The abstract page is limited to 400 words maximum for Thesis and 600 words for dissertation. Thesis/Dissertation abstract pages will be published by the University to showcase student work and achievements.

The Abstract page Format requirements are as follows:

- Margins: one inch all around.
- Spacing: Single or one and half spacing may be used.
- Font: The same typeface and font size used in the thesis or dissertation.
- The word “Abstract” should not be used as the title of the abstract. The title of the abstract page should match exactly the title of the thesis or dissertation given in the title page.
- Leave a blank line
- The student name.
- Leave a blank line.

- No. of pages: should be the same as the last Arabic numeral in the thesis or dissertation.
- Leave a blank line.
- Begin the text of the abstract.

### Document Order of pages

The contents of each division and their formatting rules are as follows:

#### a. Preliminary pages

The order of the preliminary pages is as follows:

- Title page (required)
- Approval page (required)
- Dedication (optional)
- Epigraph (optional)
- Biography (optional)
- Acknowledgement (required)
- Table of Contents (required)
- List of Tables (required if tables were used)
- List of Figure (required if Figures were included)
- List of Symbols, Abbreviations, or Nomenclature (optional)
- List of Attachments (optional)
- Summary (required)

#### Body pages

Body pages are divided in chapters.

#### End pages

- References (required)
- Appendices (optional)

### Preliminary pages

The contents of preliminary pages and their formatting requirements are as follows:

## Title Page

### Title Page Formatting Rules

- There is no page number on the title page. However it is counted as page “i”.
- All lines in the title page are horizontally centered. The text should cover the whole page vertically.
- Unless specified, use font size 12 and do not bold, italic or underline words.
- The title of the thesis or dissertation is a major heading. The full name of the title should be placed at the top of the title page.
- Use base font size 14 and bold type face for the title only.
- Capitalize first letter of all important words.
- If the title does not fit in one line, it must be: a) formatted as inverted pyramid; b) the lines are single-spaced.
- No period at the end of the title.
- Leave 10 single-spaced lines.
- Type the word “by”
- Leave one line.
- Type the Author’s name.
- Leave 6 single-spaced lines.
- Type the following single-spaced text

A thesis (or dissertation) submitted to Graduate Faculty of the  
University of the District of Columbia  
in Partial Fulfillment of the  
Requirements for the Degree of  
(Master of Science/Master of Arts/ Doctor of Philosophy/Doctor of Education) in  
(Degree Program)

Note: the word Degree Program should be replaced by the words such as Electrical Engineering

- Leave 6 single-spaced lines
- Type “Washington, DC”
- Leave a single line
- Type the month and year degree conferred
- The last line of the title page may contain the optional copyright statement as follows:

Copyright © <student Name and Year Goes Here>

- Example of a title page is found in xx1

### Approval Page

The thesis/dissertation advisory committee is normally formed before the thesis research begins. The thesis advisory committee must approve the topic, methodology and the deliverables of the research. Upon successful completion of the thesis/dissertation oral defense, all members of the thesis committee must sign the Certificate of Approval of Thesis/Dissertation. This certificate may also need the approval of the Graduate Dean. The certificate should have the title of the thesis as it appears in the title page, the student name, and the list of the advisory committee members and their affiliations. A few copies of the certificate may be signed to accompany the bounded copies of the thesis/dissertation. The Certificate of Approval of Thesis/Dissertation cannot be included in electronic version of the thesis/Dissertation. A thesis approval page without the signature should be included in the electronic version of the thesis or dissertation.

### Dedication Epigraph, Biography and Acknowledgement pages

These Sections may contain personal information about the student and other appropriate information that the student may share with the readers of his thesis or dissertation. These sections may include pictures, poems, quotes, etc. However, these sections may not have any material that is not appropriate for general audience.

#### Dedication (optional)

In the dedication page, the student thanks one or more persons for their support and guidance while working on his thesis or dissertation. Foreign language may be used in the dedication page if followed by English translation. If included, the dedication page will be the first page with a displayed page number. The page number should be lower-case Roman numeral ii. The dedication does not appear in the Table of Content.

#### Epigraph (optional)

An epigraph is a brief quotation, phrase or poem placed at the beginning of a document to suggest its theme. If included

- The word Epigraph may not be used to label this page.
- The text should be centered on the page.
- Quotation mark should not be used.

- The name of the quotation author and the reference title should be given. The full reference should be included in the reference list pages.
- The page should be counted but not numbered.
- The epigraph does not appear in the Table of Contents.

### Biography (Optional)

The biography contains appropriate academic, professional, and personal information about the student. If a dedication page was not included, the biography page will be the first page with a displayed page number (lower-case Roman numeral ii). Otherwise, the biography will have a lower-case Roman numeral following the page preceding it.

### Acknowledgements (Required)

In the acknowledgment page, the student thanks everyone who provided support with successfully completing his/her work. Permission to quote copyrighted material and acknowledgment of financial assistance including grant and special funding should be listed on this page. A disclaimer stating that personal views, expressed in the thesis or dissertation are not necessarily the views of the funding agency may also be included on this page. If included, the acknowledgements page must have a lower-case Roman number page number following the page number preceding it.

### Table of Contents (Required)

The table of content is a topic outline of the thesis or dissertation. The table of content does not list itself or any preliminary pages preceding it. The List of Tables is the first entry in the Table of Contents. All of the major headings and subheading are listed exactly as they appear in the body and end pages. It is not necessary to list all levels of subheadings in the table of content. The titles of chapters, sections, and the primary and secondary headings should be listed in the Table of Content. However, if a particular level of any topic is included, all headings of that level must be included. Use Microsoft Word to automatically generate the Table of Contents. Manually modify the generated table such that

- The heading “Table of Contents” should be centered at the top of the page.
- The page numbers of Table of Contents is lower-case Roman numeral following the page number preceding it.

- Leave one blank line between all main title entries (e.g. Dedication, Acknowledgement, List of Tables, List of Figures, Summary, Chapter Headings, References, and Appendices)

#### List of Tables/List of Figures/ List of Symbols/ List of Abbreviations or Nomenclature/ List of Attachments

A List of Table should be included if the thesis or dissertation has two or more tables. Similarly, a List of Figures should be included if there are two or more figures. Each table or figure must be listed using its unique number, exact title as it appears in the table or figure and the page number where it is located in the document. However, if these titles are long, these lists should include information up to the first terminal punctuation. When many symbols or abbreviations/Nomenclature are used, a separate List of Symbols, List of Abbreviations or Nomenclature should be included for the sake of clarity. A List of Attachments should also be included if one or more attachments are referenced in the body or appendices of the thesis or dissertation. The list of attachment must include attached file names. The separate lists should be placed on separate pages. If included, these lists should appear with the following order: a) List of Table; b) List of Figures; c) List of Symbols; d) List of Abbreviations or Nomenclature; and e) List of Attachments.

The Formatting requirements for all lists are as follows:

- The header of each list should be centered on the top of the page. The lists should have the following headers: List of Table, List of Figures, List of Symbols, List of Abbreviations or Nomenclature, List of Attachments, respectively.
- The page header and the text should be separated by two blank lines.
- The page number of each list must be lower-case numerals following the page preceding it.

Additional formatting requirements for the List of Tables and List of Figures

- The page numbers for listed tables and figures should line up flush right to follow the same style used in the Table of Contents.

#### Summary Page

The summary provides a one-page executive summary of the contents of the thesis including methods used, findings, and deliverables. The summary page may include the same text used in

the Abstract page or an expanded version of it. The summary page should be formatted as follows:

- The heading “Summary” must be centered on the top of the page.
- The thesis /dissertation title should not be included.
- Leave two blank lines between the heading and the text.

### Document Body

The body of the document may be included in one part or divided into parts. Each part is divided into chapters. Each chapter is divided into sections and subsections. All headings and subheadings must be formatted consistently throughout the document. The same font, font size, typeface, subheading positioning and numbering, paginations, and formatting of mathematical equations and symbols, tables, figures should be used consistently throughout the document.

The style of writing should follow the convention used in the student’s discipline in terms of contents and number of chapters included in the document. Typically, each document should have a) an introductory chapter (Chapter 1) to introduce the research topic(s) their important, and outline the topics included in the rest of the document; b) a literature survey chapter to describe relevant and related research; c) A chapter describing the work done; d) a chapter describing experiments or simulation done to verify the correctness of the work; and e) a results and conclusion chapter(s).

Each chapter should start on a new page and with a major heading (title). The first page of Chapter 1 should have page number listed using Arabic numeral “1”. All pages after that should have consecutive Arabic numeral numbers.

### End pages: List of References, Literature Cited or Bibliography (Required)

A thesis or dissertation that references other original literature relevant to the research presented in the body of the thesis or dissertation must provide a reference listing of these sources. Words such as “LITERATURE CITED”, or “BIBLIOGRAPHY” may be used instead of “REFERENCES” if that is the convention in the discipline of that area of research. The list of references, literature cited, or Bibliography must be listed in the table of content. The list of references should be placed at the end of the work. The form, style, and content of references should follow what is generally accepted in the student’s field of study. The two commonly used methods of referencing sources



within text are: a) to use the author's name and date of publication, as in "(John, 2011)"; or b) to use "[x]" where x is the number assigned to that reference in the list of references.

#### List of References, Literature Cited or Bibliography Page Format

- Type the heading REFERENCES, LITERATURE CITED or BIBLIOGRAPHY centered at the top of the page.
- The heading must have identical font, size, format, and position/location in the page as other major headings.
- Double-space in-between the header and text.
- References may be listed alphabetically or in a sequential order as they appear in the text.
- All references should be single-spaced internally and one and half space between the list entries.
- All hyperlinks must be changed to appear black and no underline.
- Web site references should include the URL, author if known, title if available, and the date the URL was accessed by the student.

#### Appendix/Appendices (Optional)

One or more appendices may be included at the end of the document. These appendices should include materials that are not appropriate to include in the body of the documents. Such material may include: Large program printout, raw data used, surveys, correspondence with others, letters of permission to reprint copyrighted material etc.

#### Attachments

Very large files such as spreadsheets, maps, architectural drawing, audio or video materials should be loaded as attachments. The attachment sheet will list all attached names and types. The table of content is a topic outline of the thesis or dissertation. The table of content does not list itself or any preliminary pages preceding it. The List of Tables is the first entry in the Table of Contents. All of the major headings and subheading are listed exactly as they appear in the body and end pages. It is not necessary to list all levels of subheadings in the table of content. The titles of chapters, sections, and the primary and secondary headings should be listed in the Table of Content. However, if a particular level of any topic is included; all heading of that level

must be included. Use Microsoft Word to automatically generate the Table of Contents.

Manually modify the generated table such that

- The heading “Table of Contents” should be centered at the top of the page.
- The page numbers of Table of Contents is lower-case Roman numeral following the page number preceding it.
- Leave one blank line between all main title entries (e.g. Dedication, Acknowledgement, List of Tables, List of Figures, Summary, Chapter Headings, References, and Appendices)

## **Chapter 8: Tables and Figures**

### **Definitions**

In this guide, the definition of the tables and figures are as follows:

- **Table:** The term “Table” is used to designate tabulated numerical data used in the body and appendices of the thesis/dissertation.
- **Figure:** The term “Figure” is used to designate any non-text material used in the body and appendices of the thesis/dissertation such as photographs, maps, drawings, images, plates, charts, computer printout sheets etc. However, the word “Figure” cannot be used to describe digital audio or video materials.

### **Tables and Figures format Requirements**

Many theses and dissertations include tables and figures either in the text and/or in the appendices or both. Tables and figures should be numbered in separate series. The series may run consecutively throughout the work, including the appendices, or the series may restart at each section or chapter using a decimal system. If available, all tables and figures must:

- Be listed in the List of Tables and List of Figures pages, respectively.
- Follow the style adopted in the scholarly journal in the field of study consistently.
- Bear a unique number in its own series.

- Have a unique descriptive title. If the title needs to be more than one line, it should be single-spaced. Tables and Figure numbers and titles must have the same font and typeface as the rest of the thesis or dissertation. The style of the titles must be consistent for all tables and figures.
- Be placed as close as possible to its first citation in the text. If a table or a figure is placed in an appendix, this fact must be stated in the body of the text.
- Be separated from the text, above and below, by double spacing except if they are at the very top or bottom of a page, in which case the margin can substitute for the two blank lines.
- Be placed in the center of the page.
- Not be placed side-by-side.

In addition, a tables or figures may:

- Be placed rotated landscape and/or shrunk to conform to the margin requirements.
- Be centered in a separate page if it is more than one-half page in length.

#### Tables Additional Format Requirements

- All tables must use the same font as the rest of the document.
- Font sizes smaller than 10 points should not be used.
- The titles of a table must be placed above the tables and must exactly match the corresponding entry in the List of Tables page.
- Must be placed in the center of the page.
- If any table continues to a following page, the line above the table as it continues on the subsequent page should read "Table XX (continued)" without repeating the table title.

#### Figures Additional Format Requirements

- If photographs are used, they must be of professional quality and have high resolution
- Figures important from external sources may have text with different fonts, typeface and size.
- Text in diagrams, drawings, computer printouts, etc. must be neat and fully-legible.
- The title of a figure must be placed below the figure and must exactly match the corresponding entry in the List of Figure page.
- Color figures may be used.

- A figure containing several related parts too large to be placed on a single page may be continued onto subsequent pages. The line below the figure as it continues on the subsequent pages should read “Figure XX (continued)”

#### Citations of Tables and Figures in text

When making reference to a table/figure in the body of the text, a full word and number must be used, e.g. Table 1, Table 1.3, Figure 11, or Figure 3.7.

## **Appendix A: Sample Cover Page**

# Implementation and Evaluation of Edge-Detection Algorithms

by

<student Name Goes Here>

A thesis submitted to Graduate Faculty of the  
University of the District of Columbia  
in Partial Fulfillment of the  
Requirements for the Degree of  
Master of Science in  
Electrical Engineering

Washington, DC  
May 2012

Copyright © <student Name and Year Goes Here>

## Appendix B: Department Program of Study Form

Various forms will be inserted here. A program of study form is shown below



University of the District of Columbia

<Department name>

<program name, for example MSEE> Program of Study

*Important: The advisory/thesis committee must be approved before reviewing the MSEE student program of study (POS). It is recommended to submit the POS by the end of the second semester of registration. Approved committee members should review and sign the form before submitting it to the Graduate school for approval.*

Student Name:

Student ID:

### I. Planned Graduate Program

*Important: if transferring graduate credits from another university, a transcript must be attached. All graduate course taken for graduate credits must be included in this form. Courses taken for zero graduate credits may be shown in the POS for information purposes.*

Line	Course Number	Course title (abbreviate to fit on one line)	Credits	Semester/Year
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

### II. Approvals

Name – Major Professor (typed and signed)		Name – Committee Member (typed and signed)	
Name – Committee Member (typed and signed)		Name – Committee Member (typed and signed)	
Name – Committee Member (typed and signed)		Name – Committee Member (typed and signed)	
<b>Office Use Only</b>	Student's Signature		Date:
	Recommended by: MSEE Program Director		Date
	Recommended by: ECG Department Chair		Date
	Approved by: Dean of Graduate School		Date

## Appendix C IRB Application forms

*University of the District of Columbia*

*Institutional Review Board*

### APPLICATION FOR APPROVAL TO USE HUMAN PARTICIPANTS

IRB No: \_\_\_\_\_

Date Received: \_\_\_\_\_

#### **Instructions to the applicant:**

1. Please review the UDC IRB *Guidelines* [udc.edu/irb](http://udc.edu/irb) and complete this application form.
2. Attach a copy of the informed consent form, any recruitment notices, research survey instruments, psychological tests, interview forms, or scripts to be used. (The attached Sample Informed Consent Form and Checklist are useful guides.)
3. Attach a certificate of completion of training in the protection of human research subjects, completed within the last three years, from <http://phrp.nihtraining.com/users/login.php> or other appropriate source.
4. If your application has been approved by another IRB, kindly attach a copy.
5. Submit completed application documents electronically in a single file to IRBNet.org and deliver two signed originals (each copy stapled as a single document) to the Institutional Review Board, c/o Dr. Kathleen Dockett, University of the District of Columbia, 4200 Connecticut Avenue, NW, Washington, DC 20008, Building 44, Room 200-36, 202-274-5705.

6. Sign this application form (electronically in irbnet.org submission).

---

I. Administration

Principal

Investigator: \_\_\_\_\_ Faculty Rank: \_\_\_\_\_

Department: \_\_\_\_\_ Office Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Co-Investigator: \_\_\_\_\_ Faculty Rank: \_\_\_\_\_

Department: \_\_\_\_\_ Office Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Project Title: \_\_\_\_\_

Source of funding: \_\_\_\_\_

Dates of Proposed Project From: \_\_\_\_\_ To: \_\_\_\_\_

Type of application:             New             Renewal             Revision

Date of Submission to IRB: \_\_\_\_\_



## II. Project Information

1. Is this proposal qualified as exempt research? Yes ( ) No ( )

If yes, please check the following items to indicate why this proposal qualifies for exemption.

If no, please complete items 2 to 9

- a. Does the research involve normal educational practice? Yes ( ) No ( )
- b. Does the research involve the use of educational tests, surveys, interviews, and observations of public behavior? Yes ( ) No ( )

If yes:

Can information be linked to the subject? Yes ( ) No ( )

Will disclosure of information place subject at some risk? Yes ( ) No ( )

- c. Does the research involve the use of educational tests, surveys, interviews or observations of public behavior not exempt under (b) above, where participants are elected or appointment of public officials or candidates for public office? Yes ( ) No ( )
- d. Does the research involve only the collection of existing data, documents, records or pathological specimens? Yes ( ) No ( )

If yes:

- |   |         |        |
|---|---------|--------|
| Are these sources publicly available?   | Yes ( ) | No ( ) |
| Can information be linked to the subject?                                     | Yes ( ) | No ( ) |
| e. Is research conducted by or subject to approval of Federal agencies?       | Yes ( ) | No ( ) |
| f. Is research an evaluation of taste, food quality, and consumer acceptance? | Yes ( ) | No ( ) |
| g. Does the procedure meet government safety regulations?                     | Yes ( ) | No ( ) |

2. Human Participant Pool (Please mark the appropriate space(s).)

Children: \_\_\_\_\_ Age Range: \_\_\_\_\_

College Students: \_\_\_\_\_

Prisoners: \_\_\_\_\_

Pregnant women: \_\_\_\_\_

AIDS patients: \_\_\_\_\_

Persons with disabilities: \_\_\_\_\_

Other (please specify): \_\_\_\_\_

3. Does the study involve:

University public records?	Yes ( )	No ( )
----------------------------	---------	--------

University non-public records? Yes ( ) No ( )

4. Does the study potentially involve:

Physical risks to the participants? Yes ( ) No ( )

Social risks to the participants? Yes ( ) No ( )

Psychological risks to the participants? Yes ( ) No ( )

Discomfort to participants? Yes ( ) No ( )

Invasion of privacy? Yes ( ) No ( )

Disclosure of information possibly damaging to participant(s) or others? Yes ( ) No ( )

5. Are participants clearly informed about:

The nature and purposes of the study? Yes ( ) No ( )

The procedures to be followed including alternatives? Yes ( ) No ( )

Any risks and/or discomfort? Yes ( ) No ( )

Any sensitive questions? Yes ( ) No ( )

Any benefit to be derived? Yes ( ) No ( )

The right to refuse or withdraw from the study? Yes ( ) No ( )

The confidential handling of data? Yes ( ) No ( )

The compensation policy (for more than minimal risk)? Yes ( ) No ( )

Whom to contact? Yes ( ) No ( )

6. Will a signed or oral consent be obtained?

Yes ( ) No ( )

If yes,

From participants? Yes ( ) No ( )

From parent or guardian? Yes ( ) No ( )

7. Will a copy of the disclosure consent form be given to the participant/guardian?

Yes ( ) No ( )

8. Will precautions be taken to safeguard confidentiality and protect the anonymity of participants?

Yes ( ) No ( )

9. Will proposal involve collaboration with an institution, agency, or individual etc.?

Yes ( ) No ( )

If yes, please specify below:

III. Project Description

- a. Please attach, insert or append a description of the project’s purpose, hypothesis, research design and methodology
- b. Please attach, insert or append a statement describing the involvement of human participants, including how you will accomplish the items answered “Yes” above.

IV. Brief Biographical Sketch of the Principal Investigator:

- a. Name: \_\_\_\_\_  
Rank: \_\_\_\_\_

- b. Education:

Highest Degree	Institution	Year Completed	Field of Study
----------------	-------------	----------------	----------------

- c. Research and/or Professional Experience: Please list in chronological order: previous employment, experience and honors. Please also list in chronological order the titles of all publications during the past three years pertinent to this application.

V. Commitment to Human Subjects Protection

I, the Principal Investigator, declare that the information provided in this application is correct and complete to the best of my knowledge. I agree to abide by the rules and regulations governing the rights and welfare of human participants in research as set forth by the Institutional Review Board (IRB) of the University of the District of Columbia. I will

Not conduct the project involving human subjects unless and until it is approved by the IRB. I also agree to submit documents/information pertinent to this project as requested by the IRB. I will retain properly executed consent forms as part of my record of this project and I will immediately notify the Chairperson of the IRB of any adverse reactions encountered and corrective measures taken. I will also provide Notice to the Board of any changes to be instituted in the protocol and seek approval from the Board during this investigation.

Principal Investigator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: (O): \_\_\_\_\_ (H): \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

***For Official Use Only***

Exempt

Expedited Review

Full Review

IRB Recommendation: (if disapprove, give reasons)

**Approve**       **Need modification**       **Disapprove**

Reason (s)/modification (s):

---

---

---

**Signature:**

Chairperson: \_\_\_\_\_ Date: \_\_\_\_\_

Member: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_ Date: \_\_\_\_\_

Vice President for the Academic Affairs or designee: ( ) Approve ( ) Disapprove

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



# **SAMPLE INFORMED CONSENT FORM**

## **INFORMED CONSENT FOR PARTICIPATION IN RESEARCH ACTIVITIES**

- I. **PURPOSE OF THIS RESEARCH STUDY:** “I have been asked to participate in this research study because...” “The purpose of this study is to ...” “My participation in this study is expected to last ...”
  
- II. **WHAT WILL BE DONE/PROCEDURES:** State the protocol objectives, in lay language, and duration of the subject’s participation.
  
- III. **POSSIBLE BENEFITS** “I have been informed that my participation in this research may Not benefit me...” OR “I have been informed that my participation in this research will Not benefit me directly...”
  
- IV. **POSSIBLE RISKS AND DISCOMFORTS:** I have been informed that the risks and discomforts of this study are {or “include”] ...
  
- V. **CONFIDENTIALITY OF RECORDS**

Any information learned from this study in which I might be identified will remain confidential and will be disclosed only with my permission, to the extent allowed by law. All records **(and tapes - use if applicable)** will be stored in a locked file cabinet in a locked room. Only the investigator and members of the research team will have access to these records. If information learned from this study is published, I will Not be identified by name. By signing this form, however, I allow the research study investigator to make my records available to the University of the District of Columbia (UDC) Institutional Review Board (IRB) Office and regulatory agencies as required by law. **(review consent form instructions for additional information regarding this section)**

**VI. OFFER TO ANSWER QUESTIONS AND RESEARCH INJURY**

**NOTIFICATION:**

The principal investigator, Dr./Mr./Ms. **[name of principal investigator]** or a colleague Dr./Mr./Ms. \_\_\_\_\_, responsible for this research study, has offered to and has answered any and all questions regarding my participation in this research study. If I have any further questions **or in the event of a research related injury**, I can contact Dr./Mr./Ms. **[name of principal investigator]** at (202) \_\_\_\_\_ **[principal investigator's telephone number]**.

**(review consent form instructions for additional information regarding this section)**

**VII. SPONSOR OF THE RESEARCH** [Name of external sponsor] is the sponsor of (or “is funding”) this research study. [If there is No sponsor, delete this section and renumber.]

**VIII. COST TO THE SUBJECT / PAYMENT TO SUBJECT FOR PARTICIPATION**

**[Delete and renumber if Not applicable.]**

**IX. EXPLANATION OF TREATMENT AND COMPENSATION FOR INJURY:**

**(review consent form instructions for additional information regarding this section)**

**X. VOLUNTARY PARTICIPATION WITH RIGHT OF REFUSAL:** I have been informed that my participation in this study is completely voluntary. I am free to withdraw my consent for participation in the study at any time

**XI. IRB REVIEW AND IMPARTIAL THIRD PARTY:** This study has been reviewed and approved by the UDC Institutional Review Board (IRB). A representative of that Board, from the IRB Office, is available to discuss the review

process or my rights as a research subject. The telephone number of the IRB Office is (202) 274-5705.

**XII. SIGNATURE FOR CONSENT:** The above-named investigator has answered my questions and I agree to be a research subject in this study.

Participant's Name: \_\_\_\_\_ Date:

Participant's Signature: \_\_\_\_\_ Date:

Parent/Guardian Signature: \_\_\_\_\_ Date:

**(for participants under the age of 18)**

Investigator's Signature: \_\_\_\_\_ Date:

Translator's Signature: \_\_\_\_\_ Date:

I have translated this form into the \_\_\_\_\_ language.

## Informed Consent Checklist - Basic and Additional Elements

	A statement that the study involves research
	An explanation of the purposes of the research
	The expected duration of the subject's participation
	A description of the procedures to be followed
	Identification of any procedures which are experimental
	A description of any reasonably foreseeable risks or discomforts to the subject
	A description of any benefits to subject or others which may reasonably be expected from the research
	A disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject
	A statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained
	For research involving more than minimal risk, an explanation as to whether any compensation, and an explanation as to whether any medical treatments are available, if injury occurs and, if so, what they consist of, or where further information may be obtained

<p>( ) Research Qs</p>	<p>An explanation of whom to contact for answers to pertinent questions about the research and research participants' rights, and whom to contact in the event of a research-related injury to the subject</p>
<p>( ) Rights Qs</p>	
<p>( ) Injury Qs</p>	
	<p>A statement that participation is voluntary, refusal to participate will involve No penalty or loss of benefits to which the subject is otherwise entitled, and the subject may discontinue participation at any time without penalty or loss of benefits, to which the subject is otherwise entitled</p>
<p><b>Additional elements, as appropriate</b></p>	
	<p>A statement that the particular treatment or procedure may involve risks to the subject (or to the embryo or fetus, if the subject is or may become pregnant), which are currently unforeseeable</p>
	<p>Anticipated circumstances under which the subject's participation may be terminated by the investigator without regard to the subject's consent</p>
	<p>Any additional costs to the subject that may result from participation in the research</p>
	<p>The consequences of a subject's decision to withdraw from the research and procedures for orderly termination of participation by the subject</p>

	A statement that significant new findings developed during the course of the research, which may relate to the subject's willingness to continue participation, will be provided to the subject
	The approximate number of participants involved in the study