

# **The School of Electrical Engineering and Computer Science**

Graduate Thesis/Dissertation

Evaluator: \_\_\_\_\_

Student Name: \_\_\_\_\_

**Learning Outcome #2: Critical Thinking -- Technical contribution of thesis/dissertation**

<b>Score</b>	<b>Criteria</b>	<b>1 Poor</b>	<b>2 Fair</b>	<b>3 Good</b>	<b>4 Very Good</b>	<b>5 Excellent</b>
	Scope and context of the question is well defined	Does not adequately describe the scope and context of the question; critical details are missing	Describes the scope and context of the question in some detail; a few details are missing	Adequately describes the scope and context of the question; sufficient level of detail is provided	Extensively describes the scope and context of the question; level of detail provides great insights	Comprehensively describes the scope and context of the question; level of detail offers greatest insights
	Demonstrates mastery of open literature in the research area	Does not adequately demonstrate knowledge of existing and emerging research on the topic; critical details are missing	Demonstrates some knowledge of existing and emerging research on the topic; a few details are missing	Adequately demonstrates knowledge of existing and emerging research on the topic; sufficient level of detail is provided	Extensively describes existing and emerging research on the topic; level of detail provides great insights	Comprehensively describes existing and emerging research on the topic; level of detail offers additional breadth, depth, and/or greatest insights
	Identifies appropriate methods and tools; makes appropriate selection	Does not adequately evaluate the scope of analytical methods and tools and/or did not select the most appropriate one; some viable options were not considered or the best was not chosen	Evaluates some analytical tools and selected an appropriate one among those considered; some options were overlooked	Adequately evaluates the scope of analytical methods and tools and selected the most appropriate one; all obvious options were considered and the best was chosen	Extensively evaluates the scope of analytical methods or tools and selected the most appropriate one.	Comprehensively evaluates the scope of analytical methods or tools and selected the most appropriate one; new or optional analytical tools were also considered and the best was chosen

Score	Criteria	1 Poor	2 Fair	3 Good	4 Very Good	5 Excellent
	Analyzes the topic at an appropriate level (PhD or MS)	Does not adequately analyze the topic at the appropriate level; important aspects of analysis or evaluation is missing	Topic is analyzed near the appropriate level; some aspects of analysis or evaluation is missing	Adequately analyzes topic at the appropriate level; sufficient level of analysis or evaluation is provided	Extensively analyzes the topic at the appropriate level; extensive analysis or evaluation is provided	Comprehensively analyzes topic at the appropriate level; level of analysis or evaluation offers additional breadth, depth, and/or new insights
	Interprets results within appropriate scope and context	Does not adequately interpret results within the scope and context of the defined question; interpretation is incomplete or lacks rationale	Interprets most results within the scope and context of the defined question; interpretation is mostly complete and rational.	Adequately interprets results within the scope and context of the defined question; interpretation is complete and rational	Extensively interprets results within the scope and context of the defined question; interpretation is complete and rational and offers some additional insight.	Comprehensively interprets results within the scope and context of the defined question; interpretation is complete, rational, and offers additional breadth, depth, and/or new insights.
	Makes recommendations and/or identifies next steps	Does not make recommendations or identify next steps or recommendations and next steps are not justified based on results	Makes a recommendation or next step or some recommendations and next steps are not justified based on results	Makes recommendations and identifies next steps that are commensurate with results	Makes recommendations and identifies some next steps beyond the scope of the project, but which have other relevance	Makes recommendations and identifies numerous steps beyond the scope of the project, but which have other relevance
Learning Outcome #2 Score: _____/30						

Learning Outcome #3a: Written Communication					
Score	Criteria	1 Poor	2 Fair	3 Good	4 Very Good
	Objective and Context	Little focus on the audience, objective of the document, and context.	Moderate focus on the audience, objective of the document, and context.	Strong focus on the audience, objective of the document, and context.	Thorough focus on the audience, objective of the document, and context.
	Content	Content is relevant and centered around simple concepts that are inconsistently developed throughout the work.	Content is relevant and centered around complex concepts that are consistently developed throughout the work	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.
	Conventions	A basic structure is employed to drive document organization	Implements an appropriate document organizational structure	Consistently employs conventions of the field to drive document organization	Conventions are employed extensively and appropriately in forming document organization and stylistic expression
	Logical Flow	Content is presented in a haphazard way; chapters and sections do not generally relate to each other	Content is organized in a moderately logical way; chapters and sections generally relate to each other and flow from one idea to the next.	Content is organized in a very logical way; chapters and sections always relate and flow from one idea to the next.	Content is organized in an expertly logical way; chapters and sections are expertly chosen to lead the reader on a logical journey from background to the conclusion.
	Sources	Sources are drawn haphazardly from the open literature of varying quality and credibility. Many of the sources do not apply to the subject matter.	Uses moderate quality and mostly credible sources that are relevant to the subject matter	Strong use of high quality and credible sources that are relevant to the subject matter	Expert use of highest quality and credible sources that are relevant to the subject matter.
	Mechanics	Explanation is difficult to understand with little clarity; errors are present in critical locations.	Explanation is generally understandable with moderate clarity; some errors are present	Solid explanation of the message with mostly clear word choices and few errors	Expertly explains the message with clarity and fluency with minimal errors.
Learning Outcome #3a Score: _____/24					

**Learning Outcome #3b: Oral Communication**

<b>Score</b>	<b>Criteria</b>	<b>1 Fair</b>	<b>2 Good</b>	<b>3 Very Good</b>	<b>4 Excellent</b>
	Logical Organization	No discernible logical organization used throughout the presentation	A Logical organizational structure is employed intermittently throughout the presentation	A Logical organizational structure is employed clearly and consistently throughout the presentation	A Logical organizational structure is employed clearly and consistently; structure is expertly employed
	Language Clarity	Confusing and obscure language is used that is not aligned with the audience.	Mundane language is used that partially supports the presentation. Language is aligned with the audience.	Thoughtful language is used that generally supports the presentation. Language is well-aligned with the audience	Language is imaginative, memorable and compelling that enhances comprehension; language is expertly tailored to the audience.
	Presentation	Presentation techniques (eye contact, gestures, etc) distract from the goals of the presentation; presenter is uncertain.	Presentation techniques (eye contact, gestures, etc) minimally support the goals of the presentation; the presenter is hesitant.	Presentation techniques (eye contact, gestures, etc) strongly support the goals of the presentation; the presenter is comfortable.	Presentation techniques (eye contact, gestures, etc.) strongly support a compelling presentation; the presenter is confident and professional
	Slides	Slides poorly support the goals of the presentation and detract from the credibility of the presenter. Figures, tables, and other artifacts are of poor quality, but are properly cited.	Slides adequately support the goals of the presentation, and marginally supports the credibility of the presenter. Figures, tables, and other artifacts are of average quality, and properly cited.	Slides strongly support the goals of the presentation, and establishes the credibility of the presenter. Figures, tables, and other artifacts are of high quality and properly cited.	Slides are well crafted and comprehensively justify the goals of the presentation; the credibility of the presenter is placed on a strong foundation; figures, tables, and other artifacts are of publication quality, and properly cited.
	Central Message	The central message is discernible with some effort	The central message is reasonably discernible but is not memorable.	The central message easily discernible and well supported by the slides	The central message is comprehensively established and strongly supported.

**Learning Outcome #3b Score: \_\_\_\_\_/20**