

University of North Dakota
Department of Electrical Engineering
Graduate Program Assessment Plan

Mission:

The mission of the Department of Electrical Engineering master of science program is to promote critical thinking and creative skills based on the theory, principles, and techniques of electrical engineering. Graduates will be prepared for careers in private industry, government, and/or doctoral studies in electrical engineering or related fields.

Student Learning Goals:

1. Students will develop a comprehensive and in-depth understanding of electrical engineering through graduate-level coursework.

Objective 1.1. Students will complete a program of study that includes electrical engineering courses at the graduate level.

2. Students will develop critical thinking skills through research activities or focused project activities.

Objective 2.1. Students will develop skills to formulate and interpret and engineering problem.

Objective 2.2. Students will develop and apply their critical thinking skills by conducting research activities under the supervision of a graduate faculty advisor.

3. Students will develop skills to communicate the results of their research in an effective and professional manner.

Objective 3.1. Students will complete a thesis presenting the results and interpretation of their research project.

Objective 3.2. Students will present the findings of their research at an oral presentation.

Student Learning Goals & Objectives	Educational Experiences	Assessment Methods	Timeline	Responsibilities	Use of Results and Process for Documentation & Decision-Making
<p>Goal 1: Students will develop a comprehensive and in-depth understanding of electrical engineering through graduate-level coursework.</p> <p>Objective 1.1: Students will complete a program of study that includes electrical engineering courses at the graduate level.</p>	<p>Students will complete a program of study including 30 credits approved by their faculty advisory committee – Thesis option</p> <p>Students will complete a program of study including 32 credits approved by their faculty advisor – Non-thesis option</p>	<p>Program of Study forms</p> <p>Course exam data and written work.</p>	<p>Exam and/or project report data from one elective course with graduate standing will be collected each semester.</p>	<p>Course instructors will be responsible for collecting these data.</p>	<p>Data will be reviewed by the graduate faculty annually during the spring assessment meeting.</p>
<p>Goal 2: Students will develop critical thinking skills through research activities or focused project activities.</p> <p>Objective 2.1: Students will develop and apply their critical thinking skills by conducting research activities under the supervision of a graduate faculty advisor.</p>	<p>Completion of a thesis (EE 998) – Thesis option</p> <p>Completion of a final project (EE 997) – Non-thesis option</p> <p>Thesis Defense</p> <p>Final project report – Non-thesis option</p>	<p>Thesis/Project Report Evaluation forms</p> <p>Thesis Defense Evaluation forms</p>	<p>Thesis and Thesis Defense Evaluation forms will be completed by the thesis committee at the completion of the thesis defense.</p> <p>Project Report evaluation forms will be completed by the faculty advisor upon completion of</p>	<p>Thesis committee</p> <p>Faculty Advisor</p>	<p>Data will be reviewed by the graduate faculty annually during the spring assessment meeting.</p>

Objective 2.2: Students will develop skills to formulate and interpret and engineering problem.			the final project – Non-thesis option		
<p>Goal 3: Students will develop skills to communicate the results of their research in an effective and professional manner.</p> <p>Objective 3.1: Students will complete a thesis presenting the results and interpretation of their research project.</p> <p>Objective 3.2: Students will present the findings of their research at an oral presentation.</p>	<p>Completion of a thesis (EE 998) – Thesis option</p> <p>Completion of a final project (EE 997) – Non-thesis option</p> <p>Thesis Defense</p> <p>Final project report – Non-thesis option</p>	<p>Thesis/Project Report Evaluation forms</p> <p>Thesis Defense Evaluation forms</p>	<p>Thesis and Thesis Defense Evaluation forms will be completed by the thesis committee at the completion of the thesis defense.</p> <p>Project Report evaluation forms will be completed by the faculty advisor upon completion of the final project – Non-thesis option</p>	Thesis committee Faculty Advisor	Data will be reviewed by the graduate faculty annually during the spring assessment meeting.

University of North Dakota
Department of Electrical Engineering
Thesis/Project Report Evaluation

Candidate: _____

Date: _____

Degree: _____

Please rate the thesis in the following areas using a scale of one (1) to five (5) with a score of one (1) for poor and a score of five (5) for excellent.

Organization: Does the thesis have a logical flow?	1	2	3	4	5
Clarity: Is the writing and grammar clear and proper?	1	2	3	4	5
Literature Review: Does the literature review support and justify this work?	1	2	3	4	5
Development: Is the theoretical or experimental development sufficient?	1	2	3	4	5
Interpretation: Are the results interpreted rather than simply reported?	1	2	3	4	5
Conclusion: Are the results and interpretations properly summarized?	1	2	3	4	5
Publication: Have the results been submitted for publication?	1	2	3	4	5
Contribution to Knowledge: Do the results advance the field?	1	2	3	4	5

Comments:

University of North Dakota
Department of Electrical Engineering
Thesis Defense Evaluation

Candidate: _____

Date: _____

Degree: _____

Please rate the presentation in the following areas using a scale of one (1) to five (5) with a score of one (1) for poor and a score of five (5) for excellent.

Organization: Does the presentation have a logical flow?	1	2	3	4	5
Clarity: Is the material presented in a clear manor?	1	2	3	4	5
Questions: Are the answers satisfactory?	1	2	3	4	5
Conclusion: Are the results and interpretations properly summarized?	1	2	3	4	5

Comments: