

**ASSESSMENT PLAN TEMPLATE  
Graduate Programs**

<b>Degree: Engineering Sciences, Ph.D.</b>		<b>CIP Code:</b>
<b>Program Mission Statement:</b>		
<b>Graduates of this program will be able to demonstrate the following:</b>		
<b>Outcome 1</b>		
Outcome	The Department's Ph.D. graduates will write and prepare a scholarly technical paper for publication in a refereed journal.	
Methods of Assessment (Please provide links to any instruments used for assessment)	<p>As a graduation requirement, each Ph.D. candidate must publish a paper on his/her dissertation topic in at least one accepted journal. Thus, the journal's editorial review board acts as an assessor of this student outcome.</p> <p>Faculty on the student's graduate committee will review the feedback from editorial reviewers to assess the strengths and weaknesses of student papers submitted for publication. The assessments for all students in the program will be collected and analyzed annually by a group of faculty with a focus on identifying areas of the program that need improvement. (Includes successful and unsuccessful submissions)</p>	
Measures/Levels of Expectation	All students are required to meet this requirement	
Assessment Results	Results would include a content analysis of the reviewer's comments. The analysis would contain a description of the areas where students showed consistent weaknesses and suggestions for changes that could be made in the program to address these weaknesses.	
Use of Results for Program Improvement	This section would contain a description of the responses to the assessment results focusing on changes that were made in the program to address the weaknesses identified.	
<b>Outcome 2</b>		
Outcome	The Department's Ph.D. graduates will demonstrate an ability to use modern research methods to conduct an in-depth study of a current issue in their chosen area of engineering.	
Methods of Assessment (Please provide links to any instruments used for assessment)	Each Ph.D. student has a graduate committee composed of at least 5 faculty members in the student's disciplines and related disciplines. The committee will use a scoring rubric to assess the quality of research within the student's dissertation with a focus on identifying strengths and weaknesses.	
Measures/Levels of Expectation	(Decide level of scores that are acceptable)	
Assessment Results	Results would include scores from the rubric chosen or developed for assessing student dissertations. (For an example of a rubric, see attached.)	
Use of Results for Program Improvement	This section would contain a description of the responses to the assessment results focusing on changes that were made in the program to address weaknesses identified.	
<b>Outcome 3</b>		
Outcome	The Department's Ph.D. graduates will demonstrate an ability to formulate and solve complex engineering problems using relevant data and techniques.	
Methods of Assessment (Please provide links to any instruments used for assessment)	Each Ph.D. student has a graduate committee composed of at least 5 faculty members in the student's disciplines and related disciplines. The committee will use a scoring rubric to assess the quality of the student's performance on comprehensive written and oral examinations focusing on identifying strengths and weaknesses.	
Measures/Levels of Expectation	(Decide level of scores that are acceptable)	
Assessment Results	Results would include scores from the rubric chosen or developed for assessing student dissertations. For an example of a rubric see attached.	
Use of Results for Program Improvement	This section would contain a description of the responses to the assessment results focusing on changes that were made in the program to address identified weaknesses.	