

## **Program Assessment Plan**

**Program: Doctor of Philosophy in Engineering** 

**Department:** 

College/School: Parks College of Engineering, Aviation and Technology, School of Engineering

Date: Summer 2018

**Primary Assessment Contact: Dr. Riyadh Hindi** 

Note: Each cell in the table below will expand as needed to accommodate your responses.

#	Program Learning Outcomes  What do the program faculty expect all students to know, or be able to do, as a result of completing this program?  Note: These should be measurable, and manageable in number (typically 4-6 are sufficient).	Assessment Mapping From what specific courses (or other educational/professional experiences) will artifacts of student learning be analyzed to demonstrate achievement of the outcome? Include courses taught at the Madrid campus and/or online as applicable.	Assessment Methods  What specific artifacts of student learning will be analyzed? How, and by whom, will they be analyzed?  Note: the majority should provide direct, rather than indirect, evidence of achievement.  Please note if a rubric is used and, if so, include it as an appendix to this plan.	Use of Assessment Data  How and when will analyzed data be used by faculty to make changes in pedagogy, curriculum design, and/or assessment work?  How and when will the program evaluate the impact of assessment-informed changes made in previous years?
1	Apply knowledge of advanced concepts and analytical skills within engineering that enhances or adds to the scientific consensus.	Qualifying Exam; Doctoral Oral Examination; Dissertation Proposal and Defense; Written Dissertation  Courses: AENG 6994; BME 5990; CVNG 6990; MENG 5990	Results forms from Qualifying Exam, Doctoral Oral Examination, and final Defense and written Dissertation; Annual Student Review; internship experience; Teaching Assistant assignment(s); Rubric being developed	The program chair will gather a committee of faculty to review performance of students and applicable paperwork on a rotating schedule so one of the three outcomes is reviewed once a year to determine if changes to program are necessary.
2	Communicate clearly and creatively a mastery of topics required to solve complex engineering problems through peer-reviewed research and oral presentations.	Doctoral Oral Examination; Dissertation Proposal and Defense; Peer-reviewed publications; Conference Presentations; Written Dissertation Courses: AENG 6994; BME 5990; CVNG 6990; MENG 5990	Results forms from Doctoral Oral Examination and final Defense and written Dissertation; Annual Student Review; Teaching Assistant assignment(s); Rubric being developed	The program chair will gather a committee of faculty to review performance of students and applicable paperwork on a rotating schedule so one of the three outcomes is reviewed once a year to determine if changes to program are necessary.

3	Conduct independent research that addresses problems in broader contexts.	Doctoral Oral Examination; Dissertation Proposal and Defense; Peer-reviewed publications; Written Dissertation Courses: AENG 6994; BME 5990; CVNG 6990; MENG 5990	Results forms from Doctoral Oral Examination and final Defense and written Dissertation; Annual Student Review; Rubric being developed	The program chair will gather a committee of faculty to review performance of students and applicable paperwork on a rotating schedule so one of the three outcomes is reviewed once a year to determine if changes to program are necessary.
---	---	---	---	---

## **Additional Questions**

1. On what schedule/cycle will faculty assess each of the above-noted program learning outcomes? (It is <u>not recommended</u> to try to assess every outcome every year.)

Faculty will access one outcome every year so all three outcomes will all be reviewed within a 3-year cycle.

2. Describe how, and the extent to which, program faculty contributed to the development of this plan.

This plan was vetted by the Parks Faculty Assembly and the Parks Graduate Committee.

3. On what schedule/cycle will faculty review and, if needed, modify this assessment plan?

The whole assessment plan will be reviewed as a whole on a 3-year cycle once all 3 learning outcomes have been reviewed once.

IMPORTANT: Please remember to submit any assessment rubrics (as noted above) along with this report.