Course addition list:

1) CHEN 6333 Nanotechnology for Sensors
2) CHEN 6340 Distillation
3) CHEN 6341 Mass Transfer Operation
4) CHEN 6344 Multimedia Transport Pollutant
5) CHEN 6346 Sustainability Applications
6) CHEN 6363 Process Modeling w/ Neural Network
7) ELEN 6303 Python Programming
8) INEN 6305 Engineering Reliability
9) MEEN 6312 Advanced Topics on Fluid Mechanics
10) MEEN 6332 Advanced Topics in Computational Fluids
11) MEEN 6315 Advanced Engineering Mathematics

2. Several

Table 1. Assessment Results and Analyses for Current Cycle.

| STAGE 1: PLAN | | | | STAGE 2: DO | | STAGE 3: STUDY |
|---|---|---|---|---|---|---|
| Departmental Student Learning Goal | Program Student Learning Outcome | Assessment | Assessment Method/Location | Benchmark Expectations | Data Results | Actions/Goals Based on Data Results* What do the data tell you? How will you use this data? How were data from the last cycle used to make changes during this cycle, and What were the results of those changes? |
| The Doctor of Engineering degree is designed to prepare engineers to study engineering problems of a complex nature and to develop solutions that address the most pressing engineering issues of the future. | *Outcome #1* | Outcome #1 is assessed by the following performance indicators (PIs). 1.1 Math and Engineering Reasoning 1.2 Terminology and Notation 1.3 Strategy/ Procedures | | | | |

Quality of

Table 2. Continuous Improvement Results Since Last Report

| Stage 4: ACT | | |
|---|---|---|
| Actions/Goals Based on Data Results | Status | Discussion of Status |
| Add courses, delete some courses that are no longer needed. There will be continued work on adding engineering math and science courses. | P | Multiple courses were added and removed from the catalog. This is an ongoing effort. Multiple course addition requests are in progress. |
| Review and modify the existing syllabi and change course prerequisites. There will be continued work on reviewing and modifying the syllabi. | P | Some existing syllabi have been reviewed and revised. More course syllabi will be reviewed and revised by the departments. This is an ongoing project. |
| Implement the new DE degree plan. | P | Implement the new DE degree plan. |
| Add course modules to several courses to bridge the gaps between classroom teaching and industry. | P | Several new course modules have been developed and integrated into existing courses. This is an ongoing project. |
| The College of Engineering is increasingly holding seminars in various fields of study, which all DE students are encouraged to attend. | P | There will continue to be a commitment to providing high-quality research lectures for students. |
| | | |

# Appendix1: Doctor of Engineering Assessment Rubrics

*Outcome #1*

| Dimension | 4-Exemplary | 3-Acceptable | 2-Marginal | 1-Unacceptable |
|---|---|---|---|---|
| *Math and Engineering Reasoning* | Uses effective math and engineering reasoning | Some evidence of math and engineering reasoning. | Little evidence of math and engineering reasoning. | No evidence of math and engineering reasoning. |
| *Terminology and Notation* | Correct terminology and notation are usually used, making it fairly easy to understand what was done. | Correct terminology and notation are used, but it is sometimes not easy to understand what was done. | There is little use, or a lot of inappropriate use, of terminology and notation. | There is no appropriate use, of terminology and notation |
| *Strategy/ Procedures* | Typically, uses an effective strategy to solve the problem(s). | Sometimes uses an effective strategy to solve problems but does not do it consistently. | Rarely uses an effective strategy to solve problems. | |

*Outcome #3*

DEPARTMENT OF ELECTRICAL ENGINEERING

| Current From University Catalog | Suggested Modification | Modifications | | | |
|---|---|---|---|---|---|
| | | Title | Description | Pre-Req | New |

INEN 6301 ST: Adv. Technology Entrepreneurship (Fall 22)

Identification: Previously the entrepreneurship course had been offered at the 4000 and 5000 level, but there was a need to offer the course at the 6000 level for our doctoral students.

Improvement: The 6000 level course was offered face to face to accommodate the graduate students, while the undergraduate version was offered online. To ensure that the graduate course was offered at the appropriate level of academic rigor additional requirements were added to the milestone assignments. For example, the doctoral students were required to complete an in-depth analysis of the requirements and constraints for their product design using quality functional deployment. Most assignments also required them to submit more material, for example they had to complete more intellectual property searches and provide more details on manufacturing equipment.