

TO: The Engineering Faculty

FROM: The Interdisciplinary Engineering Team

RE: New graduate course – ENGR 60100 Doctor of Engineering Fundamentals

The Interdisciplinary Engineering team has approved the following new graduate course, which will be available residentially and online. This action is now submitted to the Engineering Faculty with a recommendation for approval.

Name: ENGR 60100 Graduate and Research Fundamentals

Semesters offered: Fall, Spring and Summer

Credits: 1 credit per semester; standard academic calendar

Pre-Requisites: None required

DESCRIPTION:

This one-credit course is designed to guide students in creating individual development plans tailored to their academic and professional aspirations as part of the Doctor of Engineering (D.Eng.) program. Students will learn to assess their skills, interests, and values, aligning them with potential research and academic paths. The course will cover setting realistic goals, identifying resources, and developing strategies for personal and academic growth. The course will also detail the differences between a professional doctorate (D.Eng) and a PhD program. Students will engage in workshops and activities that foster self-reflection and practical planning skills. By the end of the course, students will have a personalized roadmap that outlines the steps necessary to achieve their graduate school objectives.

As the foundational course for the Doctor of Engineering program, students are expected to take this course during their first year of the program.

RATIONALE:

This course was created specifically for online Doctor of Engineering students. Working professionals may need extra support to restart their academic journey and prepare to apply research to practice in real-world, industry settings. Unlike PhD students who work closely to develop their research plan with a Faculty Advisor and mentor, D.Eng. students may not identify their Advisor until a year into their program. Additionally, the research focus of the program will involve analysis and synthesis of existing research vs. the creation of independent research. This course will provide details about how to plan and prepare for these differences and give students the opportunity to map out their degree plan, identify professional gaps, and develop an individual development plan to address those gaps. A tailored and personalized approach will be essential in designing this course to meet the needs of our diverse students as they plan next steps from different locations.



Associate Dean of Graduate and Professional Education

Link to Curriculog entry: [forthcoming](#)

ENGR 60100– Doctor of Engineering Fundamentals

Course Information

Course Number and Title: ENGR 60100 Doctor of Engineering Fundamentals

CRN: TBD

Meeting day(s) and time(s): Online, asynchronous

Mode: Asynchronous, 16-weeks, 1 credit hour

Prerequisites: None

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Learning Outcomes

LO1 - Create an individual development plan (IDE).

LO2 - Understand graduate school and how it aligns with your professional objectives.

LO3 – Develop a workflow and plan for your studies.

LO4 – Critique your individual development plan.

LO5 – Establish professional and academic connections with students and faculty in the D.Eng. program.

LO6 – Identify and engage with potential faculty advisor(s) and dissertation committee members.

Assignments

- Participation in bi-weekly online discussion boards (LO5, LO3) – 15%
- Self-assessment essay on professional strengths and weaknesses in regard to career goals (LO2) - 20%
- Written individual development plan (LO1, LO3, LO6) - 15%
- Peer review of a classmate's individual development plan and your own individual development plan (LO4, LO5) - 20%
- Plan of Study Draft (LO3) - 15%
- Homework assignments (Graduate School and College of Engineering Grad Resources, Professional Development Resources, Identification of potential faculty advisors and research thesis mentors) (LO2, LO5, LO6) - 15%