Date Submitted: 09/09/22 12:51 pm

Viewing: ELEGPH : Engineering (Electrical Engineering), Doctor of Philosophy

Last approved: 05/18/21 7:06 pm

Last edit: 09/15/22 8:40 pm

Changes proposed by: cljamies

Catalog Pages Using this Program

Electrical Engineering (ELEG)

Submitter: User ID: cljamies ~~ndennis~~ Phone: 3008 ~~5-6011~~

Program Status Active

Academic Level Graduate

Type of proposal Major/Field of Study

Select a reason for this modification

Making Minor Changes to an Existing Certificate, Degree or Program (including 15 or fewer hours, admission/graduation requirements, Focused Studies or Tracks)

Are you adding a concentration?

No

Are you adding or modifying a track?

No

Are you adding or modifying a focused study?

No

Effective Catalog Year Fall 2023

College/School Code

College of Engineering (ENGR)

Department Code

Department of Electrical Engineering (ELEG)

In Workflow

1. ENGR Dean Initial
2. GRAD Dean Initial
3. Director of Curriculum Review and Program Assessment
4. Registrar Initial
5. Institutional Research
6. ELEG Chair
7. ENGR Curriculum Committee
8. ENGR Faculty
9. ENGR Dean
10. Global Campus
11. Provost Review
12. Graduate Council
13. Faculty Senate
14. Provost Final
15. Registrar Final
16. Catalog Editor Final

Approval Path

1. 09/14/22 9:03 am Kevin Hall (kdhall): Approved for ENGR Dean Initial
2. 09/15/22 10:24 am Christa Hestekin (chesteki): Approved for GRAD Dean Initial
3. 09/15/22 3:15 pm Alice Griffin (agriffin): Approved for Director of Curriculum Review

Program Code	ELEGPH
Degree	Doctor of Philosophy
CIP Code	

and Program Assessment

4. 09/15/22 8:40 pm Gina Daugherty (gdaugher): Approved for Registrar Initial
5. 09/16/22 11:52 am Doug Miles (dmiles): Approved for Institutional Research
6. 09/16/22 2:16 pm Juan Balda (jbalda): Approved for ELEG Chair
7. 10/11/22 9:04 am Manuel Rossetti (rossetti): Rollback to ELEG Chair for ENGR Curriculum Committee
8. 10/11/22 9:06 am Juan Balda (jbalda): Approved for ELEG Chair
9. 10/11/22 9:08 am Manuel Rossetti (rossetti): Rollback to ELEG Chair for ENGR Curriculum Committee
10. 11/14/22 10:27 am Juan Balda (jbalda): Approved for ELEG Chair
11. 12/07/22 9:17 am Manuel Rossetti (rossetti): Approved for ENGR

Curriculum Committee

12. 12/07/22 10:46 am Kevin Hall (kdhall): Approved for ENGR Faculty
13. 12/07/22 10:47 am Kevin Hall (kdhall): Approved for ENGR Dean
14. 12/07/22 11:17 am Suzanne Kenner (skenner): Approved for Global Campus
15. 12/07/22 11:28 am Jim Gigantino (jgiganti): Approved for Provost Review
16. 12/19/22 11:24 am Christa Hestekin (chesteki): Approved for Graduate Council

History

1. Mar 13, 2015 by Norman Dennis (ndennis)
2. May 21, 2019 by Connie Howard (cjhowar)
3. May 28, 2020 by Charlie Alison (calison)
4. May 18, 2021 by Robert Saunders (rsaunder)

14.0101 - Engineering, General.

Program Title

Engineering (Electrical Engineering), Doctor of Philosophy

Program Delivery Method

On Campus

Is this program interdisciplinary?

No

Does this proposal impact any courses from another College/School?

No

What are the total hours needed to complete the program?

72

Program Requirements and Description

Requirements

In addition to the requirements of the graduate school, the program of study for the Ph.D. degree must satisfy the following:

The Ph.D. degree requires 36 hours of coursework, as follows:

A student entering the Ph.D. program with a B.S.E.E. will be required to complete a minimum of 36 hours of graded coursework.

A student entering the Ph.D. program with an M.S. degree will be required to complete a minimum of an additional 12 hours of graded coursework on the University of Arkansas, Fayetteville, campus.

All Ph.D. students must complete a minimum of 12 hours of graded coursework on the University of Arkansas, Fayetteville, campus.

The course work specified in item 1a. must include a minimum of 30 hours of course work at the 5000 and 6000 level, and at least 24 of these 5000- and 6000-level hours must be in electrical engineering.

The course work specified in item 1a. must include EMGT 5033 , GRSD 5003 or MSEN 5383.

The doctoral program must include at least 72 hours of course work and thesis or dissertation hours. A maximum of six of these hours may be thesis hours. The remaining hours that are not course work must be dissertation. The Graduate School requires a minimum of 18 hours of dissertation for graduation.

Candidates for the Ph.D. degree must take a Ph.D. Readiness Assessment exam during their first semester of graduate work. This exam is administered by the student's major professor and advisory committee, and is designed to assess the student's readiness to conduct research during his or her graduate work. The student may be required to take whatever undergraduate courses are deemed necessary in addition to the graduate courses specified above.

Students who are applying for the Ph.D. E.E. degree may have the GRE requirement waived providing the student obtained a B.S. degree from an ABET-Accredited program in the United States.

It is emphasized that the course work specified above represents minimums, and many students' programs will include more than this minimum, particularly if the student has an M.S.E.E. degree from a school that is not a recognized graduate school in the United States.

Are Similar Programs available in the area?

No

Estimated Student Demand for Program	N/A
Scheduled Program Review Date	2023-2024

Program Goals and Objectives

Program Goals and Objectives
1. Possess deep knowledge of a specialty area within electrical engineering in order to be recognized as an expert or innovator in that specialty. Graduates should also be competent in related areas of electrical engineering, engineering, science, and mathematics which impact performance in their specialty areas. 2. Formulate a project plan, execute such a plan, generate and analyze results. 3. Communicate effectively using both oral and written presentations. 4. Be prepared for successful careers in industry, government, or academia 5. Possess skills required for life-long learning and professional development. 6. Appreciate the importance of professional responsibility to society in such areas as the environment, social issues, and safety, and should be committed to ethical conduct in all areas. 6. Appreciate the value of leadership & service.

Learning Outcomes

Learning Outcomes
1. Apply knowledge of engineering, science, and mathematics to analyze and solve advanced electrical engineering problems. 2. Locate literature relevant to a specific topic, understand and evaluate it, and apply the information. 3. Conduct independent study to complete a research or a design project, and make effective use of the tools available for those studies. 4. Possess in-depth knowledge of a specialty area within electrical engineering. 5. Communicate effectively using both oral and written presentations. 6. Understand the need for continued learning and professional development. 7. Maintain awareness of current professional issues. 8. Appreciate the importance of professional responsibility to society in such areas as the environment, social issues, and safety, and should be committed to ethical conduct in all areas.

Description and justification of the request

Description of specific change	Justification for this change
Addition of - Students who are applying for the Ph.D. E.E. degree may have the GRE requirement waived providing the student obtained a B.S. degree from an ABET-Accredited program in the United States.	To match wording in ELEG Graduate student handbook

Upload attachments

Reviewer Comments

Alice Griffin (agriffin) (09/15/22 3:15 pm): ATTENTION: This minor program change will require campus approval, as changes were made to the admission requirements.

Gina Daugherty (gdaugher) (09/15/22 8:40 pm): Undergraduate Council removed from workflow.

Manuel Rossetti (rossetti) (10/11/22 9:04 am): Rollback: The new requirement is not clear: What does "may have" mean or imply? Can the candidate have any B.S. degree or must it be in E.E? Why is the requirement only U.S. ABET? ABET accredits programs internationally.

Manuel Rossetti (rossetti) (10/11/22 9:08 am): Rollback: The new requirement is not clear: What does "may have" mean or imply? Can the candidate have any B.S. degree or must it be in E.E? Why is the requirement only U.S. ABET? ABET accredits programs internationally.

Key: 244