

Date Submitted: 11/27/18 1:05 pm

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

Last approved: 03/13/15 2:27 pm

Last edit: 03/01/19 8:43 am

Changes proposed by: cjhowar

Catalog Pages Using
this Program

[Electrical Engineering_\(ELEG\)](#)

Submitter: 5-6011 User ID: ndennis Phone:

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 Degree (e.g. changing 15 or fewer hours, changing admission/graduation requirements, adding/changing Focused Study or Track)

Are you adding a concentration?

No

Are you adding a track?

No

Are you adding a focused study?

No

Effective Catalog Year Fall 2019

College/School Code

College of Engineering(ENGR)

In Workflow

1. ENGR Dean Initial
2. GRAD Dean Initial
3. Director of Program Assessment and Review
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. University Course and Program Committee
13. Graduate Committee
14. Faculty Senate
15. Provost Final
16. ADE Licensure Approval
17. Provost's Office-- Notification of Approval
18. Registrar Final
19. Catalog Editor Final

Approval Path

1. 11/27/18 4:42 pm
Norman Dennis
(ndennis): Approved
for ENGR Dean
Initial

Department Code

Department of Electrical Engineering(ELEG)

Program Code

ELEGPH

Degree

Doctor of Philosophy

CIP Code

2. 11/27/18 5:13 pm
Pat Koski (pkoski):
Approved for GRAD
Dean Initial
3. 11/29/18 11:04 am
Alice Griffin
(agriffin): Approved
for Director of
Program
Assessment and
Review
4. 11/30/18 9:36 am
Lisa Kulczak
(lkulcza): Approved
for Registrar Initial
5. 11/30/18 10:31 am
Gary Gunderman
(ggunderm):
Approved for
Institutional
Research
6. 11/30/18 8:07 pm
Juan Balda (jbalda):
Approved for ELEG
Chair
7. 02/22/19 1:09 pm
Manuel Rossetti
(rossetti): Approved
for ENGR
Curriculum
Committee
8. 02/24/19 10:22 pm
Norman Dennis
(ndennis): Approved
for ENGR Faculty
9. 02/24/19 10:26 pm
Norman Dennis
(ndennis): Approved
for ENGR Dean

10. 02/25/19 11:41 am
Leigh Ann Marshall
(lamarsh): Approved
for Global Campus
11. 02/27/19 6:11 pm
Terry Martin
(tmartin): Approved
for Provost Review

History

1. Mar 13, 2015 by
Norman Dennis
(ndennis)

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 ~~The program~~ of the graduate school, the program of study for the ~~the~~ Ph.D. degree must satisfy the following:

The PhD degree requires 36 hours of coursework, as follows:

~~If the student does not have an M.S. A student entering degree, a minimum of 42 hours of course work (excluding dissertation hours) beyond the PhD program with a BSEE will bachelor's degree must be required to complete a minimum of 36 hours of graded coursework. presented in the Ph.D. program.~~
A student entering the PhD program with degree, a MS degree will be required to complete a minimum of an additional 12 42-hours of graded coursework on the University of Arkansas Fayetteville campus. course work (excluding thesis and dissertation hours) must be presented in the combined M.S.

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

~~and Ph.D. programs.~~ The course work specified in item (a) 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 (a) must include [GRSD 5003](#) or [MEPH 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.

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.

~~Other conditions as stipulated in departmental guidelines for doctoral degrees.~~

Are Similar Programs available in the area?

No

Estimated Student Demand for Program N/A

Scheduled Program **2023-2024 UNK**

Review Date

Program Goals and

Objectives

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. ~~N/A~~

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. ~~N/A~~

Description and justification of the request

Description of specific change	Justification for this change
<p>These changes to the program was voted on at Electrical Engineering faculty meetings and was approved by the full faculty of Electrical Engineering. One change replaces the qualifier exam which was previously given to students. The other change reduces the number of coursework hours required for PhD students.</p>	<p>The first change allows the major professor for the student to determine the number of deficiency courses, if any, that need to be taken. The reduction in coursework hours is to allow the doctoral committee to balance the challenges of the doctoral research to the student's coursework.</p>

Upload attachments

Reviewer Comments

Alice Griffin (agriffin) (04/03/15 12:26 pm): Rollback: Returned to submitter per their request.

Alice Griffin (agriffin) (11/29/18 10:57 am): Inserted scheduled program review date, program goals, and student learning outcomes.

Norman Dennis (ndennis) (02/24/19 10:17 pm): Revised wording in requirements to include requirements of the graduate school. Revised wording of program objectives and learning outcomes.

Alice Griffin (agriffin) (03/01/19 8:43 am): Effective fall 2019 pending the successful completion of the campus approval process.

Key: 244