# Assessment Plan for the Ph.D. degrees in Engineering with

# **Concentrations in Computer Science and Computer Engineering**

## 17 September 2015

# The faculty of the Computer Science and Computer Engineering Department has adopted the following mission statement:

The Computer Engineering and Computer Science programs at the University of Arkansas strive for excellence among all its students and faculty. Faculty challenge students academically both in and out of the classroom, demonstrate standards of high quality scholarship and professional ethics, and mentor students so that they achieve academic and professional success. Students aim to work diligently to meet and exceed the expectations of the faculty, to become active, independent learners, and to engage in the intellectual and academic life of the program. By fulfilling this mission, the Computer Engineering and Computer Science program graduates will positively impact our community, the State of Arkansas, our nation, and the world.

## **Program Goals**

- 1.Prepare students for significant applications of and contributions to Computer Science and Computer Engineering beyond graduation.
- 2.Produce dissertations that meet high academic standards and constitute significant applications of and contributions to Computer Science and Computer Engineering.
- 3. Prepare students for lifelong learning.

# Student Learning Outcomes (SLO)

- 1. Students will make satisfactory progress toward the completion of the coursework required for the degree. Upon receiving a grade of C or below the student will be placed on probation. A second grade of C or below will result in dismissal from the program. A student may not graduate with a GPA less than 3.0.
- 2. Students will pass the qualifying examinations thereby indicating a mastery of fundamental material in computer science and/or computer engineering.

- 3. Students will identify a research project, complete a literature search, develop and defend a proposal for a dissertation.
- 4. Students will write a dissertation that meets high academic standards and constitutes a significant contribution to Computer Science and/or Computer Engineering.
- 5. Students will be prepared for independent research in computer science and/or computer engineering.
- 6. Students will be prepared to add to the body of knowledge in computer science and/or computer engineering.
- 7. Students will be able to communicate effectively.

## **Assessment Process**

1. Timeline

a) Annual Graduate Student Academic Reviews submitted to the Graduate School by June 30 each year

b) Qualifying Examinations must be taken according to CSCE Graduate Student handbook.

c) Completion of coursework generally in less than four years

d) Proposal Defense at least one year before defending the dissertation

e) Dissertation Defense generally within six years of entering the program

f) Assessment results and analysis will be presented at a faculty meeting to stimulate discussion about program (or assessment process) changes.

g) Student evaluation of the Ph.D. program after dissertation defense

2. Means of assessment

a) SLO1 is assessed annually through the departmental graduate

student review.

b) SLO2 is assessed through the qualifying examination.

c) SLO3, SLO5, SLO6, and SLO7 are assessed by members of the dissertation committee through a form completed after the proposal defense.

d) SLO4, SLO5, SLO6, and SLO7 are assessed by the dissertation committee members after the dissertation defense.

e) Each Ph.D. student will complete a self-assessment after a successful dissertation defense.