

2017-2018 Assessment Cycle COS_Computer Engineering PhD

Mission (due 12/4/17)

University Mission

The University of Louisiana at Lafayette offers an exceptional education informed by diverse worldviews grounded in tradition, heritage, and culture. We develop leaders and innovators who advance knowledge, cultivate aesthetic sensibility, and improve the human condition.

University Values

We strive to create a community of leaders and innovators in an environment that fosters a desire to advance and disseminate knowledge. We support the mission of the university by actualizing our core values of equity, integrity, intellectual curiosity, creativity, tradition, transparency, respect, collaboration, pluralism, and sustainability.

University Vision

We strive to be included in the top 25% of our peer institutions by 2020, improving our national and international status and recognition.

College / VP and Program / Department Mission

Mission of College or VP-area

Provide the mission for the College or VP-area in the space provided. If none is available, write "None Available in 2017-2018."

Our mission is to serve our students, the citizens of Louisiana, the nation, and the world, through innovative and stimulating educational experiences and compelling research initiatives that create knowledge, deepen our basic understanding of the world around us, further economic development, and enhance quality of life. In support of our mission, The College of Sciences seeks to:

Develop broad-thinking students into mature, ethical professionals, scientists, and researchers with the necessary creativity, critical thinking, and problem solving skills required to make significant contributions to industry, government, and the academic sector.

Recruit and support top-notch teaching and research faculty engaged in scientific endeavors that are recognized nationally for their relevance and impact.

Enrich scientific research and education through on-campus collaborations, multidisciplinary programs, large-scale multi-institution initiatives, as well as partnerships with government and industry.

Foster scientific literacy within the University, the citizens of Louisiana, and the nation by providing stimulating courses for our students and by partnering with educators at the K-12 and community college level.

Provide leadership in the translation and application of research into practical solutions that will benefit our local community, the state of Louisiana, our natural environment, industries of the Gulf Coast region, and society as a whole.

The Ray P. Authement College of Sciences will emerge as a preeminent college of sciences in the Southeast and Gulf Coast region of the United States. The College will be recognized nationally for its innovative education, scholarly research activities addressing our nation's grand challenges, and for its diverse student body with exemplary academic achievements, leadership abilities, and global perspectives.

Mission of Program / Department

Provide the program / department mission in the space provided. The mission statement should concisely define the purpose, functions, and key constituents. If none is available, write "None Available in 2017-2018."

The mission/purpose of Ph.D. in Computer Engineering is to prepare students to conduct research in industry and academia.

Attachment (optional)

Upload any documents which support the program / department assessment process.

Assessment Plan (due 12/4/17)**Assessment Plan (Goals / Objectives, Assessment Measures and Criteria for Success)****Assessment List**

Goal/Objective	Students' breadth of knowledge is assessed by a written comprehensive examination in the areas of computer algorithm analysis and theory of computation, software development, and applications. A student is examined in two areas of his or her own choice. Each area examination is a three-hour session and is prepared and graded by at least two graduate faculty members who are experts in that area. All CACS faculty members as a body meet every semester to review the examination and vote on whether a student has passed or failed an examination. Each student must receive a passing grade in both areas to pass an examination.(Imported)		
Legends	SLO - Student Learning Outcome/Objective (academic units);		
Standards/Outcomes			
Assessment Measures			
	Assessment Measure	Criterion	Attachments
	Direct - Comprehensive Exam (graduate level)	Students' breadth of knowledge is assessed by a written comprehensive examination in the areas of computer algorithm analysis and theory of computation, software development, and applications. A student is examined in two areas of his or her own choice. Each area examination is a three-hour session and is prepared and graded by at least two graduate faculty members who are experts in that area. All CACS faculty members as a body meet every semester to review the examination and vote on whether a student has passed or failed an examination. Each student must receive a passing grade in both areas to pass an examination. At least 70% of the students who attempt the comprehensive examination will pass it.	

Goal/Objective	All doctoral students are required to pass Ph.D. prospectus exam which is examined by student's advisor as well as committee members. The percentage of students who pass their prospectus indicates the degree of success of this outcome.(Imported)
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Goal/Objective	All doctoral must be able to present their research in a formal setting. Doctoral defenses are used to measure this outcome. The percentage of students who successfully defend their dissertation indicates the degree of success of this outcome.(Imported)		
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Goal/Objective	Doctoral students must be able to publish their research in a peer reviewed medium.(Imported)		
Legends	SLO - Student Learning Outcome/Objective (academic units);		
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	Direct - Academic Direct Measure (Other)	At least 70% of doctoral students will graduate with at least one accepted or published research paper	

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Program / Department Assessment Narrative

The primary purpose of assessment is to use data to inform decisions and improve programs (student learning) and departments (operations); this is an on-going process of defining goals and expectations, collecting results, analyzing data, comparing current and past results and initiatives, and making decisions based on these reflections. In the space below, describe the program's or department's overall plan for improving student learning and/or operations (the "assessment plan"). Consider the following:

- 1) What strategies exist to assess the outcomes?
- 2) What does the program/department expect to achieve with the goals and objectives identified above?
- 3) How might prior or current initiatives (improvements) influence the anticipated outcomes this year?
- 4) What is the plan for using data to improve student learning and/or operations?
- 5) How will data be shared within the Program/Department (and, where appropriate, the College/VP-area)?

Assessment Process

The assessment considers the whole life cycle of the PhD study, including a comprehensive exam, a prospectus exam, and a final defense. In addition, the publication metric is also considered. Since all the assessment goals have been met in the recent years for this program, no improvements have implemented this year. The main goal of the assessment is to monitor the overall quality of graduated students and implement initiatives when necessary, for example, when certain metric is failed. The assessment result is shared with the whole faculty in the School once a year.

Results & Improvements (due 9/15/18)

Results and Improvement Narratives

Assessment List Findings for the Assessment Measure level for Students' breadth of knowledge is assessed by a written comprehensive examination in the areas of computer algorithm analysis and theory of computation, software development, and applications. A student is examined in two areas of his or her own choice. Each area examination is a three-hour session and is prepared and graded by at least two graduate faculty members who are experts in that area. All CACS faculty members as a body meet every semester to review the examination and vote on whether a student has passed or failed an examination. Each student must receive a passing grade in both areas to pass an examination.(Imported)

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Assessment List Findings for the Assessment Measure level for All doctoral students are required to pass Ph.D. prospectus exam which is examined by student's advisor as well as committee members. The percentage of students who pass their prospectus indicates the degree of success of this outcome.(Imported)

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Assessment List Findings for the Assessment Measure level for All doctoral must be able to present their research in a formal setting. Doctoral defenses are used to measure this outcome. The percentage of students who successfully defend their dissertation indicates the degree of success of this outcome.(Imported)

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	Measure (Other)	setting. Doctoral defenses are used to measure this outcome. The percentage of students who successfully defend their dissertation indicates the degree of success of this outcome. At least 70% of the students will pass their doctoral defense exam. Doctoral defense demonstrates ability to present one's own research. been met yet? Met	their final defense exam and 4 students passed, leading to a success rate of 4/4=100%. The criterion is thus met.		will monitor the presentation aspect of oral defenses.
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Assessment List Findings for the Assessment Measure level for Doctoral students must be able to publish their research in a peer reviewed medium.(Imported)

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		paper been met yet? Met	students published at least 1 paper. This criterion is thus met.		publications.

Reflection (Due 9/15/18)

Reflection

The primary purpose of assessment is to use data to inform decisions and improve programs and operations; this is an on-going process of defining goals and expectations, collecting results, analyzing data, comparing current and past results and initiatives, and making decisions based on these reflections. Recalling this purpose, respond to the questions below.

1) How were assessment results shared in the program / department?

Please select all that apply. If "other", please use the text box to elaborate.

Distributed via email (selected)

Presented formally at staff / department / committee meetings

Discussed informally

Other (explain in text box below)

2) How frequently were assessment results shared?

Frequently (>4 times per cycle)

Periodically (2-4 times per cycle)

Once per cycle (selected)

Results were not shared this cycle

3) With whom were assessment results shared?

Please select all that apply.

Department Head (selected)

Dean / Asst. or Assoc. Dean

Departmental assessment committee (selected)

Other faculty / staff (selected)

4) Consider the impact of prior applied changes. Specifically, compare current results to previous results to evaluate the impact of a previously reported change. Demonstrate how the use of results improved student learning and/or operations.

Since all the targets were met in the last assessment cycle, no new changes were introduced. Nevertheless, we followed the best practices we established in earlier assessment cycles and all targets are met in this cycle.

5) Over the past three assessment cycles, what has been the overall impact of "closing the loop"? Provide examples of improvements in student learning, program quality, or department operations that are directly linked

to assessment data and follow-up analysis.

All the faculty members are aware of the assessment and work hard to met the evaluation criterion. For example, while the assessment requires that at least 70% of the graduated PhD students to publish at least 1 paper, the School has achieved a goal of 100% graduated PhD students published at least 1 paper. Moreover, in average, students graduated in the last three years published 2.8 papers.

Attachments (optional)

Upload any documents which support the program / department assessment process.