University of Louisiana at Lafayette

Detailed Assessment Report
2015-2016 Computer Engineering PhD

As of: 11/17/2016 10:29 AM CENTRAL

(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request*.)

Mission / Purpose

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

Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

SLO 1: Breadth of knowledge

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.

Related Measures

M 1: Breadth of knowledge

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.

Source of Evidence: Writing exam to assure certain proficiency level

Target:
At least 70% of the students who attempt the comprehensive examination will pass it.

Finding (2015-2016) - Target: Met
There were 2 PhD students participated in 3 different comprehensive exams in Fall 2015 and 1 PhD student participated in 2 different comprehensive exams in Spring 2016, totaling 3 students took 5 comprehensive exams in the year 2015-2016. All students passed all exams, so the exam passing ratio is 100%, higher than the target percentage of 70%. Thus, the target is met.

Related Action Plans (by Established cycle, then alpha):

Continued implementation

Continue the best practices of pedagogy, assessment, and evaluation as the outcome met was successfully.

Established in Cycle: 2014-2015
Implementation Status: In-Progress

Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Breadth of knowledge | **Outcome/Objective:** Breadth of knowledge

Continued Implementation of Assessment

Continued Implementation of Assessment

Established in Cycle: 2015-2016
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Breadth of knowledge | **Outcome/Objective:** Breadth of knowledge
Measure: Original research | **Outcome/Objective:** Original research
Measure: Presentation of research | **Outcome/Objective:** Presentation of research

SLO 2: Original research

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.

Related Measures

M 2: Original research

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.

Source of Evidence: Academic direct measure of learning - other

Target:
At least 70% of the students must pass their prospectus (i.e., the success rate at prospectus exam must not be less than 70%).

Finding (2015-2016) - Target: Met
The number of students in Ph.D. in Computer Engineering who took prospectus exam in Fall 2015 and Spring 2016 and number of students in Ph.D. in Computer Engineering who passed the prospectus exam (i.e., count of students and success ratio) is presented in the table below. PhDCE prospectus Taken Passed % success Fall 2015 1 1 100.00% Summer 2014 0 0 N/A Spring 2016 5 5 100.00% Total 6 6 100.00% The success rate in 2015-2016 was 100%, which is above the target. Target is met.

Related Action Plans (by Established cycle, then alpha):

Continued implementation

Continue the best practices of pedagogy, assessment, and evaluation as the outcome met was successfully.

Established in Cycle: 2014-2015
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Original research | **Outcome/Objective:** Original research

Continued Implementation of Assessment

Continued Implementation of Assessment

Established in Cycle: 2015-2016
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Breadth of knowledge | **Outcome/Objective:** Breadth of knowledge
Measure: Original research | **Outcome/Objective:** Original research
Measure: Presentation of research | **Outcome/Objective:** Presentation of research

SLO 3: Presentation of research

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.

Related Measures

M 3: Presentation of research

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.

Source of Evidence: Presentation, either individual or group

Target:
At least 70% of the students will pass their doctoral defense exam. Doctoral defense demonstrates ability to present one's own research.

Finding (2015-2016) - Target: Met
The number of students in Ph.D. in Computer Engineering who took final defense in Fall 2015 and Spring 2016 and number of students in Ph.D. in Computer Engineering who passed the final defense(i.e., count of students and success ratio) is presented in the table below. PhDCE final Taken Passed % success Fall 2015 2 2 100.00% Summer 2014 0 0 N/A Spring 2016 4 4 100.00% Total 6 6 100.00% The success rate in 2015-2016 was 100%, which is above the target. Target is met.

Related Action Plans (by Established cycle, then alpha):

Continued implementation

Continue the best practices of pedagogy, assessment, and evaluation as the outcome met was successfully.

Established in Cycle: 2014-2015
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Presentation of research | **Outcome/Objective:** Presentation of research

Continued Implementation of Assessment
Continued Implementation of Assessment

Established in Cycle: 2015-2016
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Breadth of knowledge | **Outcome/Objective:** Breadth of knowledge
Measure: Original research | **Outcome/Objective:** Original research
Measure: Presentation of research | **Outcome/Objective:** Presentation of research

SLO 4: Publication of research

Doctoral students must be able to publish their research in a peer reviewed medium.

SLO 5: ..to be deleted.

..to be deleted.

Related Measures

M 5: to be deleted
to be deleted

Source of Evidence: Senior thesis or culminating major project

Target:
At least 70% of doctoral students will graduate with at least one accepted or published research paper.

Connected Document
Rubric

Finding (2015-2016) - Target: Met
The number of students in Ph.D. in Computer Engineering who passed final defense in Fall 2015 and Spring 2016 and number of students in Ph.D. in Computer Engineering who had at least one publication according to DBLP, a computer science bibliography website, is presented in the table below. PhDCE final Taken Passed % success Fall 2015 2 2 100.00% Summer 2014 0 0 N/A Spring 2016 4 4 100.00% Total 6 6 100.00% The success rate in 2015-2016 was 100%, which is above the target. Target is met.

Related Action Plans (by Established cycle, then alpha):

Action Plan
Do a detailed review of goals as well as their assessment and evaluation strategy in Fall 2014.

Established in Cycle: 2013-2014
Implementation Status: Planned
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: to be deleted | **Outcome/Objective:** ..to be deleted.

Continued implementation
Continue the best practices of pedagogy, assessment, and evaluation as all goals were met successfully.

Established in Cycle: 2014-2015
Implementation Status: In-Progress
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: to be deleted | **Outcome/Objective:** ..to be deleted.

SLO 6: ..to be deleted.

to be deleted

Related Measures

M 6: to be deleted
to be deleted

Source of Evidence: Senior thesis or culminating major project

M 9: to be deleted
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.

Source of Evidence: Writing exam to assure certain proficiency level

SLO 7: ..to be deleted.

..to be deleted.

SLO 8: ..to be deleted.

..to be deleted.

Related Measures

M 7: ..to be deleted...
..to be deleted...

Source of Evidence: Comprehensive/end-of-program subject matter exam

Target:
At least 70% of the students who are examined orally for the breadth of knowledge will pass it.

Connected Document
Rubric

Related Action Plans (by Established cycle, then alpha):

Action Plan
Do a detailed review of goals as well as their assessment and evaluation strategy in Fall 2014.

Established in Cycle: 2013-2014
Implementation Status: Planned
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: ..to be deleted... | **Outcome/Objective:** ..to be deleted.

M 8: to be deleted
to be deleted

Source of Evidence: Presentation, either individual or group

SLO 9: ..to be deleted.
..to be deleted.

Analysis Questions and Analysis Answers

How were assessment results shared and evaluated within the unit?

All faculty and staffs in CACS were emailed a copy of the detailed assessment report.

Identify which action plans [created in prior cycle(s)] were implemented in this current cycle. For each of these implemented plans, were there any measurable or perceivable effects? How, if at all, did the findings appear to be affected by the implemented action plan?

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

What has the unit learned from the current assessment cycle? What is working well, and what is working less well in achieving desired outcomes?

The outcomes are mapped to the required courses that are offered reguarly, and the data collected is more robust.