

# University of Louisiana at Lafayette

## Detailed Assessment Report 2015-2016 Computer Engineering MS

As of: 11/17/2016 10:25 AM CENTRAL

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

### Mission / Purpose

The primary purpose of the MS program in computer engineering is to prepare students for positions in industry and to prepare them for doctoral programs in computer engineering.

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

#### **SLO 1: Understand and use computer hardware design concepts**

Understand and use computer hardware design concepts.

#### Related Measures

##### **M 1: Understand and use computer hardware design concepts**

Students should be able to learn and apply fundamental concepts of computer design or very large scale integration.

These concepts are taught in courses such as CSCE 581 and CSCE 585 / CSCE 586.

The percentage of students who achieve Developing or Developed state on the rubric will indicate the degree of success of this outcome.

Source of Evidence: Project, either individual or group

#### **Target:**

At least 70% of the students must achieve Developed or Exemplary state on the evaluation rubric.

#### **Finding (2015-2016) - Target: Met**

This outcome was measured on CSCE 585 and CSCE 586 in 2015-2016.

In CSCE 585 (Fall 2015), more than 85% students achieved Developing or Developed state on the evaluation rubric. The target is met.

In CSCE 586 (Spring 2016) more than 90% students achieved Developing or Developed state on the evaluation rubric. The target is met.

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

##### **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:** Understand and use computer hardware design concepts | **Outcome/Objective:** Understand and use computer hardware design concepts

##### **Continued Implementation of Assessment**

Continued Implementation of Assessment

**Established in Cycle:** 2015-2016

**Implementation Status:** In-Progress

**Priority:** High

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

**Measure:** Demonstrate communication Skills |

**Outcome/Objective:** Demonstrate communication Skills

**Measure:** Understand and use computer hardware design concepts | **Outcome/Objective:** Understand and use computer hardware design concepts

**Measure:** Understand and use core concepts of computer architecture | **Outcome/Objective:** Understand and use core concepts of computer architecture

**Measure:** Understand and use core concepts of operating system | **Outcome/Objective:** Understand and use core concepts of operating system

## **SLO 2: Understand and use core concepts of computer architecture**

Understand and use core concepts of computer architecture

### Related Measures

#### **M 2: Understand and use core concepts of computer architecture**

Concepts of computer architecture are taught in courses such as CMPS 430 and CSCE 530. This outcome will be assessed on the data from one of these courses at a time.

At least 75% of the students must achieve Developed or Exemplary state on the rubric

Source of Evidence: Project, either individual or group

#### **Target:**

At least 75% of the students must achieve Developed or Exemplary state on the rubric.

#### **Finding (2015-2016) - Target: Met**

This outcome was measured on CMPS 430 and CSCE 530 in 2015-2016.

In CMPS 430 (Fall 2015), more than 73% of the students achieved Developed or Exemplary state on the evaluation rubric. Target for this course is met.

In CSCE 530 (Spring 2016), more than 80% of the students achieved Developed or Exemplary state on the evaluation rubric. Target for this course 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:** Understand and use core concepts of computer architecture | **Outcome/Objective:** Understand and use core concepts of computer architecture

#### **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:** Understand and use core concepts of computer architecture | **Outcome/Objective:** Understand and use core concepts of computer architecture

**Continued Implementation of Assessment**

Continued Implementation of Assessment

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

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

**Measure:** Demonstrate communication Skills |

**Outcome/Objective:** Demonstrate communication Skills

**Measure:** Understand and use computer hardware design concepts | **Outcome/Objective:** Understand and use computer hardware design concepts

**Measure:** Understand and use core concepts of computer architecture | **Outcome/Objective:** Understand and use core concepts of computer architecture

**Measure:** Understand and use core concepts of operating system | **Outcome/Objective:** Understand and use core concepts of operating system

**SLO 3: Understand and use core concepts of operating system**

Understand and use core concepts of operating system

**Related Measures**

**M 3: Understand and use core concepts of operating system**

Operating system concepts are taught in CMPS 455 and CSCE 555. This outcome will be assessed on the data from one of these courses a time.

At least 75% of the students must achieve Developed or Exemplary state on the rubric.

Source of Evidence: Project, either individual or group

**Target:**

At least 70% of the students must achieve Developed or Exemplary state on the rubric.

**Finding (2015-2016) - Target: Met**

This outcome was measured on presentation of research report in CSCE 555 in 2015. In CSCE 555 (Fall 2015), 83% of the students achieved Developed or Exemplary state on the evaluation rubric. Target for this course 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:** Understand and use core concepts of operating system | **Outcome/Objective:** Understand and use core concepts of operating system

### **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:** Understand and use core concepts of operating system | **Outcome/Objective:** Understand and use core concepts of operating system

### **Continued Implementation of Assessment**

Continued Implementation of Assessment

**Established in Cycle:** 2015-2016

**Implementation Status:** In-Progress

**Priority:** High

#### **Relationships (Measure | Outcome/Objective):**

**Measure:** Demonstrate communication Skills |

**Outcome/Objective:** Demonstrate communication Skills

**Measure:** Understand and use computer hardware design concepts | **Outcome/Objective:** Understand and use computer hardware design concepts

**Measure:** Understand and use core concepts of computer architecture | **Outcome/Objective:** Understand and use core concepts of computer architecture

**Measure:** Understand and use core concepts of operating system | **Outcome/Objective:** Understand and use core concepts of operating system

## **SLO 4: Demonstrate communication Skills**

Demonstrate communication Skills

### Related Measures

#### **M 4: Demonstrate communication Skills**

Communication skills will be measured by assessing students written reports and oral presentations made in a core subject such as CMPS 455 or CSCE 555.

At least 75% of the students must achieve Developed or Exemplary state on the rubric.

Source of Evidence: Project, either individual or group

#### **Target:**

At least 70% of the students must achieve Developed or Exemplary state on evaluation rubric.

#### Finding (2015-2016) - Target: Met

This outcome was measured on presentation of research report in CSCE 555 in 2015. In CSCE 555 (Fall 2015), 83% of the students achieved Developed or Exemplary state on the evaluation rubric. Target for this course 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:** Demonstrate communication Skills |

**Outcome/Objective:** Demonstrate communication Skills

**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:** Demonstrate communication Skills |

**Outcome/Objective:** Demonstrate communication Skills

**Continued Implementation of Assessment**

Continued Implementation of Assessment

**Established in Cycle:** 2015-2016

**Implementation Status:** In-Progress

**Priority:** High

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

**Measure:** Demonstrate communication Skills |

**Outcome/Objective:** Demonstrate communication Skills

**Measure:** Understand and use computer hardware design concepts | **Outcome/Objective:** Understand and use computer hardware design concepts

**Measure:** Understand and use core concepts of computer architecture | **Outcome/Objective:** Understand and use core concepts of computer architecture

**Measure:** Understand and use core concepts of operating system | **Outcome/Objective:** Understand and use core concepts of operating system

## **Analysis Questions and Analysis Answers**

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**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 regularly, and the data collected is more robust.