**Faculty:** Three tenure-track faculty serve the computer engineering program. In the current quarter, two of them are on leave of absence.

**Staff:** 

**Resources:** As part of the College of Science renovation plan a large lab space (SSC 125) has been dedicated as research facility for electronics and computer engineering.

Assessment: Computer engineering is an accredited program. As part of the accreditation process, a systematic assessment and evaluation plan has been in place for four years. The details of assessment activities are given below.

**Other:** (e.g., major program modifications)

# II. <u>SUMMARY OF ASSESSMENT</u> (suggested length of 1-2 pages)

### A. Program Learning Outcomes (PLO)

List all your PLO in this box. Indicate for each PLO its alignment with one or more institutional learning outcomes (ILO). For example: "PLO 1. Apply advanced computer science theory to computation problems (ILO 2 & 6)."

	Program Objectives				
PLOs	Successfully apply learned skills	Pursue continuous learning	Work well as an individua I and on teams	Recognize d as qualified engineerin g with high ethics	
a) Ability to apply knowledge of mathematics, science, and engineering.	l				

b)

g) Ability to communicate effectively.			İ	
h) Broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	!			!
<ul> <li>i) Recognition of the need for, and an ability to engage in, life-long learning.</li> </ul>		ļ		

i)

PLO (j): A knowledge of contemporary issues

C. Summary o

Quarter: Winter, 2014 Course: CS 2430

Item: Multiple-choice assessment problems Average score (out of 4): 2.29 (35 submissions)

Score of 1: 3 Score of 2: 20 Score of 3: 9 Score of 4: 2

Score of 3 or higher: 31.4%

#### **Assessment 2:**

Quarter: Spring, 2014 Course: CS 2430

Item: Multiple-choice assessment problems Average score (out of 4): 2.79 (19 submissions)

Score of 1: 1 Score of 2: 5 Score of 3: 10 Score of 4: 3

Score of 3 or higher: 68.4%

#### **Assessment 3:**

Quarter: Spring, 2015 Course: CS 2430

Item: Multiple-choice assessment problems Average score (out of 4): 2.39 (23 submissions)

Score of 1: 0 Score of 2: 14 Score of 3: 9 Score of 4: 0

Score of 3 or higher: 39.1%

#### **Assessment 4:**

Quarter: Winter, 2016 Course: CS 2430

Item: Final Exam, Problem 1

Average score (out of 4): 2.85 (39 submissions)

Score of 1: 4 Score of 2: 11 Score of 3: 11 Score of 4: 13

Score of 3 or higher: 61.5%

### **Assessment 5:**

Quarter: Fall, 2016 Course: CS 2430

Item: Multiple-choice assessment problems Average score (out of 4): 2.63 (24 submissions)

Score of 1: 0 Score of 2: 12 Score of 3: 9 Score of 4: 3

Score of 3 or higher: 50.0%

\*Note: assessment problems administered online immediately after final exam; students given a period of 12 hours to complete the assessment.

## Rubric for Assessment 6 (more difficult rubric):

- (1) Identified correct assembly instructions for less than 20% of algorithms
- (2) Identified correct instructions for greater or equal to 20% and less than or equal to 50% of algorithms
- (3) Identified correct instructions for greater than 50% but less than 80% of algorithms
- (4) Identified correct instructions for 80% or more of the algorithr s2 (d)2 (t) 1 (h) -3 (e) -2 ( ) 2 24 (9Tj )0 0 0.02 cm

Quarter: Fall, 2016 Course: CS 2430

Item: Final Exam, Problem 1

Average score (out of 4): (31 submissions)

Score of 1: 0 Score of 2: 11 Score of 3: 13 Score of 4: 7

Score of 3 or higher: 64.5%

\*Note: problems more in-line with the material taught during the quarter

### PLO (j): A knowledge of contemporary issues

**Performance Indicator:** Research the components needed to implement a system design. Also explain how the system design addresses the clients' needs.

**Rubric:** 

assessment results through placing greater emphasis on teaching the assembly-level instructions in the CS 2430.

**Next Step(s) for Closing the Loop:** Since the assessment process for the Computer Engineering program has been implemented only in recent years, more assessment data is needed for the faculty to better discern trends in the data. For the time being, the plan is to have faculty continue