I. **SELF-STUDY** (suggested length of 1-3 pages)

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<th>College</th>
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<td>Department Chair</td>
<td>Dr. Matt Johnson</td>
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II. **SUMMARY OF ASSESSMENT** (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).”

Students graduating with an M.S. in Computer Networks from CSU East Bay will be able to:

1. Exhibit mastery of advanced computer science theory as applied to the field of computer networks (ILO 2 & 6)
2. Employ current techniques, skills, tools, and coding practices necessary for application and system development (ILO 1 & 6)
3. Apply critical thinking and problem solving skills by analyzing problems, designing solutions, and evaluating results (ILO 1)
4. Demonstrate communication skills in both written and oral form, and work in a team environment (ILO 4)
5. Independently acquire new computer related skills through analysis of current computer science literature and industrial practices (ILO 6)

B. **Program Learning Outcome(S) Assessed**

List the PLO(s) assessed. Provide a brief background on your program’s history of assessing the PLO(s) (e.g., annually, first time, part of other assessments, etc.)

We have evaluated PLO’s 1, 2, and 3 in the past three years. This year we evaluated PLO 4.
C. **Summary of Assessment Process**

*Summarize your assessment process briefly using the following sub-headings.*

**Instrument(s):** (include if new or old instrument, how developed, description of content)

Blackboard Assessment Quizzes – questions with multiple choice answers

**Sampling Procedure:**

All students in the assessed course complete an assessment quiz at the end of the quarter or write a project paper.

**Sample Characteristics:**

Percentage of correct/incorrect answers for each assessment question.

**Data Collection:** (include when, who, and how collected)

Instructor gathers results from their Blackboard course shell and sends them to the coordinator for the program, Leann Christianson

**Data Analysis:**

Assessment coordinator compiles the results in tabular form.

D. **Summary of Assessment Results**

*Summarize your assessment results briefly using the following sub-headings.*

This year we are assessing PLO 4: Demonstrate communication skills in both written and oral form, and work in a team environment (ILO 4)

This PLO was assessed in CS 6525 Network Security, CS 6596 Wireless and Mobile Networks, CS 6899 Capstone Project

**Main Findings:**

CS 6525  - Network Security  
78%

CS 6596  Wireless and Mobile Network Architecture  
Q4 81%

CS 6899 Capstone project
**Recommendations for Program Improvement:** (changes in course content, course sequence, student advising)

In general, we are happy with the results, but realize there is a need for more courses to be assessed.

**Next Step(s) for Closing the Loop:** (recommendations to address findings, how & when)

For changes made to close the loop, new PLO’s and a completely new program (MS CS with Network options) were created for semester conversion. At this time we are creating standardized assessment quizzes for all required courses in the new M.S. Computer Science Master’s degree. Each quiz will address a single PLO.

**Other Reflections:**

Currently, we do not have standardized assessments so consistency and validation is an issue. In addition, lecturers are not always aware of the assessments and do not give them. We have created a standard repository for the assessment quizzes for easier deployment in the future.

**E. Assessment Plans for Next Year**

*Summarize your assessment plans for the next year, including the PLO(s) you plan to assess, any revisions to the program assessment plan presented in your last five-year plan self-study, and any other relevant information.*

Next year we will assess PLO 5. No changes will be made as the entire process is being revamped for Fall 2018-19.