### Section 1. Course Title and Description

<table>
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<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>EE 345</td>
<td>Computer Organization</td>
<td>3</td>
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Course Description: An introductory course in computer organization, with an emphasis on hardware and implementation. Shows how basic digital circuits are combined and augmented to build all of the parts of a modern computer. Performance enhancements and their hardware implementations are investigated. Topics include instruction set architecture, I/O organization, pipelining, memory systems and cache memory, parallel processing, and embedded systems. Multiple examples are drawn from case studies of several modern processors.

Prerequisite: “C” or better in EE 245-245L Digital Systems and Lab.

### Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

- X This course will be a unique course. (Go to Section 3.)

### Section 3. Other Course Information

1. Are there instructional staffing impacts?
   - X No, schedule management. Explain: EE 345 will replace CSC 317 in the EE curriculum. The EE program piloted CSC 317 for the last two years and determined that there is sufficient emphasis placed on materials requisite for electrical engineering majors, e.g., more on Computer Organization as opposed to Computer Architecture, that a separate course and course description was required. EE 345 and CSC 317 will be offered in separate semesters to offset workload.

2. Existing program in which course will be offered: Electrical Engineering

3. Proposed instructional method: R - Lecture
   
   Provide a brief justification: While the class will require hands-on experience for students, a majority of the content will be delivered in a recitation format.

4. Proposed primary delivery: 001- Face to Face

5. Term in which change will be effective: Fall 2015

6. Can this course be repeated for additional credit? No

7. Will the grade for this course be limited to S/U (pass/fail)?
   - Yes
   - X No

8. Will section enrollments be capped? Yes, 40 maximum per section

9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database?
   - Yes
   - X No

10. Is this prefix already approved for your university? Yes

### Section 4. To be completed by Academic Affairs

1. University department code: SEECS

2. Proposed CIP code: 14.1001
   
   Is this a new CIP code for this university? Yes
   - X No