Section 1. Course Title and Description

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE 734</td>
<td>Power System Dynamics and Stability</td>
<td>3</td>
</tr>
<tr>
<td>EE 734L</td>
<td>Power System Dynamics and Stability Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

EE 734 Course Description: This course will cover modeling, analysis and mitigation of power system stability and control problems. Planning and operations of a modern interconnected power grid under disturbances to ensure system performance and reliability will also be covered. Students will learn both analytical and numerical methods to solve realistic power system stability and control problems.

EE 734L Course Description: This course presents computer (PSS/E) modeling and simulation of power system stability and control, including, synchronous machine modeling, automatic generation control, transient stability, voltage stability, small signal stability, etc. The course is project based and will provide the experience for students to practice in the lab the knowledge obtained in the lecture section.

EE 734-734L Co-requisite: EE 734L-734.

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 734 will replace EE 792 Topics – Power System Dynamics & Lab.

2. Existing program in which course will be offered: M.S. and Ph.D. in Electrical Engineering

   Provide a brief justification: Faculty members give oral presentations of facts, principles, context, or interpretation. Instruction takes place in a traditional classroom setting.

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, 20 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? X Yes No

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