Revision Of Undergraduate And Graduate Programs

Format For Review By University Curriculum Committee (UCC) and Graduate Council.

1. Proposing College / School: Samuel Ginn College of Engineering
   Department: Electrical and Computer Eng

2. Title of Affected Program: Bachelor of Electrical Engineering - Computer Engineering Option

   4. Proposed Implementation Date: Fall 2014

5. Justification:
   (Include a concise, yet adequate rationale for the revision of the program, citing accreditation, assessments (faculty, graduate, and/or external) where applicable.)

The Provost has requested that all undergraduate programs strive to limit curricula to less than 124 hours unless otherwise required by accreditation standards. The request from the Provost mandated an absolute maximum of 128 hours. In responding to this request, the College of Engineering worked with the Associate Provost for Undergraduate Studies. It was agreed that the best approach to balancing accreditation requirements and reduced credit hours was the core exception implemented by other Colleges of Engineering in the state. This exception permits a reduction in the number of core hours required in engineering programs. The proposed modification adopts this exception in order to achieve the desired credit hour reduction.

6. Current Degree Requirements (Including All Formal Options):
   (Provide the current curriculum model for the program, as well as for each formal option.)

   See attached.

7. Proposed Degree Requirements (Including All Formal Options):
   (Provide the proposed curriculum model for the program, as well as for each formal option.)

   See attached.

8. New Courses Required:
   (Indicate which courses -- if any -- are part of the curriculum that are not currently offered.)

   None

9. Relationship of Proposed Program to Other Auburn University Programs:
   (If the proposed program revision affects any other unit and/or covers material offered by another college/school, attach correspondence with relevant unit.)

   Will the program revision affect other program(s) and/or units at Auburn University? ☐ Yes ☑ No

   Will the program revision replace any existing program(s), or specializations / options / concentrations within existing program(s) at Auburn University? ☐ Yes ☑ No
10. New or Additional Resources / Resource Shifting Required:
(If "yes" for any item, please provide explanation in the space provided below.)

- Will additional faculty lines be required? ☐ Yes ☐ No
- Will new or additional space (e.g.: laboratory or classroom) be required? ☐ Yes ☐ No
- Will additional library resources be required? ☐ Yes ☐ No
- Will additional GTA support be required? ☐ Yes ☐ No

Explanation of or provision for new or additional resources / explanation of program's support or replacement of other programs:

11. Distance Education:
(If Distance Education will be incorporated in the delivery of the proposed program, provide details of implementation, scope, etc.)

N/A
Approvals

Department Chair / Head

College / School Curriculum Committee

College / School Dean

Dean of the Graduate School (for Graduate Programs)

Assoc. Provost for Undergraduate Studies (for Undergraduate Programs)

Contact Person: Stuart M. Wentworth
E-Mail Address: wentwsm

Telephone: 4-1878
Fax:
Computer Engineering (ECPE) Curriculum  
*Effective Fall Semester, 2011*

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
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<tbody>
<tr>
<td>MATH 1610 Calculus I</td>
<td>4 MATH 1620 Calculus II</td>
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<tr>
<td>PHYS 1600 Engineering Physics I</td>
<td>4 PHYS 1610 Engineering Physics II</td>
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<td>ENGR 1110 Intro. to Engineering</td>
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<tr>
<td>ENGL 1100 Composition I</td>
<td>3 ENGL 1120 Composition II</td>
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<td>Core History*</td>
<td>3 Core History or Core Social Science*</td>
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<tr>
<th>Sophomore Year</th>
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<tbody>
<tr>
<td>COMP 2210 Fund. of Computing II</td>
<td>4 COMP 2710 Software Construction</td>
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<tr>
<td>MATH 2630 Calculus III</td>
<td>4 MATH 2660 Linear Algebra</td>
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<td>MATH 2650 Linear Diff. Eq.</td>
<td>3 ELEC 2120 Linear Sig. &amp; Sys. Analysis</td>
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<td>ELEC 2110 Electric Circuit Analysis</td>
<td>3 ELEC 2210 Digital Electronics</td>
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<thead>
<tr>
<th>Junior Year</th>
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<tbody>
<tr>
<td>Core Literature*</td>
<td>3 Core Literature or Core Humanities*</td>
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<tr>
<td>COMP 3500 Intro. to Operating Systems</td>
<td>3 Core Fine Arts*</td>
</tr>
<tr>
<td>COMP 3240 Discrete Structures</td>
<td>3 CHEM 1030 Fund. of Chemistry I</td>
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<td>ELEC 3700 Analog Electronics</td>
<td>3 CHEM 1031 Fund. of Chemistry Lab</td>
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<td>ELEC 3800 Random Sig. &amp; Systems</td>
<td>3 COMP 3270 Intro. to Algorithms</td>
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<td>ELEC 3050 Embedded Sys. Design Lab</td>
<td>1 ELEC 4200 Digital System Design</td>
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<tr>
<td>Core Social Science*</td>
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<td>ELEC 5200 Computer Arch. &amp; Design</td>
<td>3 ELEC 4000 Senior Design Projects</td>
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<td>ELEC 5220 Info. Networks &amp; Technology</td>
<td>3 PHIL 1040 Business Ethics</td>
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<td>INSY 3600 Engineering Economics**</td>
<td>3 ECE Elective***</td>
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<tr>
<td>Free Elective**</td>
<td>3 UNIV 4AA0 Undergraduate Graduation</td>
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**Total - 128 Semester Hours**

* See Core Curriculum section in the AU Bulletin for learning outcomes and course listings. Students must complete a Core Literature sequence or a Core History Sequence, and must complete a Core course that addresses Auburn University General Education Student Learning Outcome 9.

** For students completing the ROTC program, the first ROTC course may be used as the 3-hour free elective, and the second ROTC course may be substituted for INSY 3600.

*** See departmental guidelines for ECE Electives (list included in Appendix H)

**BOLD** courses used to calculate in-major GPA
Computer Engineering (ECPE) Curriculum
Proposed for Fall Semester, 2014

Fall Semester

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<tr>
<th>Course</th>
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**Total - 122 Semester Hours**

* The AU Bulletin lists the University Core Curriculum requirements for student in the College of Engineering. Students must complete a sequence in either Literature or History. Because of the discipline specific requirements for the Humanities courses, it is recommended that a History sequence be completed in the Social Sciences courses.

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