**Major Courses (49 credits)**

(An overall 2.000 cumulative GPA or better in these courses is required)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 20000</td>
<td>ECE Sophomore Seminar</td>
</tr>
<tr>
<td>ECE 20100</td>
<td>Linear Circuit Analysis I</td>
</tr>
<tr>
<td>ECE 20200</td>
<td>Linear Circuit Analysis II</td>
</tr>
<tr>
<td>ECE 20700</td>
<td>Electronic Measurement Techniques</td>
</tr>
<tr>
<td>ECE 20800</td>
<td>Electronic Devices and Design Lab</td>
</tr>
<tr>
<td>ECE 25500</td>
<td>Electronic Circuit Analysis and Design</td>
</tr>
<tr>
<td>ECE 26400</td>
<td>Advanced C Programming</td>
</tr>
<tr>
<td>ECE 27000</td>
<td>Introduction to Digital System Design</td>
</tr>
<tr>
<td>ECE 46800</td>
<td>Intro to Compilers &amp; Trans. Engr. OR ECE 46900 Operating Systems Engineering</td>
</tr>
<tr>
<td>ECE 47700</td>
<td>Digital Systems Senior Project</td>
</tr>
</tbody>
</table>

**Computer Engineering Selective (2 cr.)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3)</td>
<td>ECE 30100 Signals and Systems</td>
</tr>
<tr>
<td>(3)</td>
<td>ECE 30200 Probabilistic Methods in ECE</td>
</tr>
<tr>
<td>(2)</td>
<td>ECE 33700 ASIC Design Laboratory</td>
</tr>
<tr>
<td>(4)</td>
<td>ECE 36200 Microprocessor Systems and Interfacing</td>
</tr>
<tr>
<td>(1)</td>
<td>ECE 36400 Microprocessor Systems and Interfacing</td>
</tr>
<tr>
<td>(3)</td>
<td>ECE 36800 Data Structures</td>
</tr>
<tr>
<td>(1)</td>
<td>ECE 40000 Pro. Development and Career Guidance</td>
</tr>
<tr>
<td>(4)</td>
<td>ECE 43700 Computer Design and Prototyping</td>
</tr>
</tbody>
</table>

**Other Department/Program Course Requirements (70 credits)**

**General Engineering Requirement (10 cr.)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2)</td>
<td>ENGR 13100 Transforming Ideas to Innovation I</td>
</tr>
<tr>
<td>(3)</td>
<td>CS 15900 C Programming for Engineers</td>
</tr>
<tr>
<td>(2)</td>
<td>ENGR 13200 Transforming Ideas to Innovation II</td>
</tr>
</tbody>
</table>

**Mathematics Requirement (21 cr.)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4)</td>
<td>MA 16500 Analytic Geometry and Calculus I (satisfies Quantitative Reasoning Selective for core)</td>
</tr>
<tr>
<td>(4)</td>
<td>MA 16600 Analytic Geometry and Calculus II</td>
</tr>
<tr>
<td>(3)</td>
<td>MA 26600 Ordinary Diff. Eqns</td>
</tr>
<tr>
<td>(3)</td>
<td>MA 26500 Linear Algebra</td>
</tr>
<tr>
<td>(3)</td>
<td>ECE 36900 Discrete Math</td>
</tr>
</tbody>
</table>

**Science Requirement (15 cr.)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4)</td>
<td>CHM 11500 General Chemistry (satisfies Science Selective for core)</td>
</tr>
<tr>
<td>(4)</td>
<td>PHYS 17200 Modern Mechanics (satisfies Science Selective for core)</td>
</tr>
<tr>
<td>(4)</td>
<td>PHYS 27200 Electric and Magnetic Interactions</td>
</tr>
<tr>
<td>(3)</td>
<td>ECE Science Selective</td>
</tr>
</tbody>
</table>

**ECE General Education Requirement (24 cr.)**

**Foundational Core**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>(3)</td>
<td>(satisfies Written Communication for core)</td>
</tr>
<tr>
<td>(3)</td>
<td>(satisfies Oral Communication for core)</td>
</tr>
<tr>
<td>(3)</td>
<td>(satisfies Human Cultures: Humanities for core)</td>
</tr>
<tr>
<td>(3)</td>
<td>(satisfies Human Cultures: Behavioral/Social Science for core)</td>
</tr>
<tr>
<td>(3)</td>
<td>(satisfies Science, Technology &amp; Society Selective for core)</td>
</tr>
</tbody>
</table>

**ECE General Education Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

**Complimentary Electives (6 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
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<tbody>
<tr>
<td></td>
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**University Core Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

---

Revised 4/2016 (effective Fall 2013)
## Suggested Arrangement of Courses:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Fall 1st Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 1st Year</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>ENGR 13100**</td>
<td>MA 16100/16500 (taken concurrently)</td>
<td>2</td>
<td>ENGR 13200**#</td>
<td>ENGR 13100</td>
</tr>
<tr>
<td>4</td>
<td>MA 16500**#</td>
<td></td>
<td>4</td>
<td>MA 16600**</td>
<td>MA 16100 or 16500 (Min grade of C-)</td>
</tr>
<tr>
<td>3</td>
<td>CS 15900**</td>
<td>ENGR 13100 (taken concurrently)</td>
<td>4</td>
<td>PHYS 17200*</td>
<td>MA 16100 or 16500 (taken concurrently)</td>
</tr>
<tr>
<td>4</td>
<td>CHM 11500*</td>
<td>MA 16100 or 16500 (taken concurrently)</td>
<td>3</td>
<td>Writ Com Fnd Outcome*</td>
<td>Depends on choice of course</td>
</tr>
<tr>
<td>3</td>
<td>Oral Com Fnd Outcome*</td>
<td>Depends on choice of course</td>
<td>3</td>
<td>Foundational Gen Ed*</td>
<td>Depends on choice of course</td>
</tr>
<tr>
<td>16</td>
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<table>
<thead>
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<th>Credits</th>
<th>Fall 2nd Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 2nd Year</th>
<th>Prerequisite</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>ECE 20000</td>
<td>Soph Standing</td>
<td>3</td>
<td>ECE 20200*</td>
<td>ECE 20100 (Min Grade of C), MA 26200/26600 (taken concurrently)</td>
</tr>
<tr>
<td>3</td>
<td>ECE 20100#</td>
<td>ENGR 13100, PHYS 17200, MA 16200/16600 (Min grade of C-)</td>
<td>4</td>
<td>ECE 27000*</td>
<td>ECE 20100 (taken concurrently)</td>
</tr>
<tr>
<td>1</td>
<td>ECE 20700</td>
<td>ECE 20100 (taken concurrently)</td>
<td>3</td>
<td>ECE 36800</td>
<td>ECE 26400 (Min grade of C)</td>
</tr>
<tr>
<td>3</td>
<td>ECE 26400#</td>
<td>CS 15900 (Min grade of C-)</td>
<td>3</td>
<td>MA 26600**</td>
<td>MA 26100 (Min grade of C-)</td>
</tr>
<tr>
<td>4</td>
<td>MA 26100**#</td>
<td>MA 16200 or 16600 (Min grade of C-)</td>
<td>3</td>
<td>ECE Sci. Selective **</td>
<td>Depends on choice of course</td>
</tr>
<tr>
<td>4</td>
<td>PHYS 27200**</td>
<td>PHYS 17200, MA 16200 or 16600 (taken concurrently)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
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<table>
<thead>
<tr>
<th>Credits</th>
<th>Fall 3rd Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 3rd Year</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ECE 20800</td>
<td>ECE 20007, ECE 25500 (taken concurrently)</td>
<td>3</td>
<td>ECE 30200</td>
<td>MA 26200 or 26600, ECE 30100 (taken concurrently)</td>
</tr>
<tr>
<td>3</td>
<td>ECE 25500</td>
<td>ECE 20100 (Min grade of C), MA 26100</td>
<td>2</td>
<td>ECE 33700</td>
<td>ECE 27000 (Min grade of C)</td>
</tr>
<tr>
<td>3</td>
<td>ECE 30100</td>
<td>ECE 20200 (Min grade of C), MA 26200 or 26800</td>
<td>1</td>
<td>ECE 36400</td>
<td>ECE 26400</td>
</tr>
<tr>
<td>4</td>
<td>ECE 36200</td>
<td>CS 15900, ECE 27000 (Min grade of C)</td>
<td>3</td>
<td>ECE 36900</td>
<td>ECE 27000</td>
</tr>
<tr>
<td>1</td>
<td>ECE 40000</td>
<td>ECE 20000, Class. Of 5 or higher</td>
<td>3</td>
<td>Foundational Gen Ed*</td>
<td>Depends on choice of course</td>
</tr>
<tr>
<td>3</td>
<td>Foundational Gen Ed*</td>
<td>Depends on choice of course</td>
<td>3</td>
<td>ECE Gen Ed Elective**</td>
<td>Depends on choice of course</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
<th>Fall 4th Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 4th Year</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Adv. CmpE 43700/46800</td>
<td>ECE 33700 &amp; 36200 or ECE 36200 &amp; 36800</td>
<td>2</td>
<td>Computer Engr. Elective</td>
<td>Depends on choice of course</td>
</tr>
<tr>
<td>4</td>
<td>ECE 47700</td>
<td>CmpE Core Curriculum</td>
<td>4</td>
<td>Adv. CmpE 43700/46900</td>
<td>ECE 33700 &amp; 36200 or ECE 36200 &amp; 43700</td>
</tr>
<tr>
<td>3</td>
<td>MA 26500**</td>
<td>MA 16200 or 16500, MA 26100 (taken concurrently) (Min grade of C-)</td>
<td>3</td>
<td>Engr. Breadth Ele.**</td>
<td>Depends on choice of course</td>
</tr>
<tr>
<td>3</td>
<td>ECE Gen Ed Elective**</td>
<td>Depends on choice of course</td>
<td>3</td>
<td>ECE Gen Ed Elective**</td>
<td>Depends on choice of course</td>
</tr>
<tr>
<td>3</td>
<td>Complementary Ele.**</td>
<td>Depends on choice of course</td>
<td>3</td>
<td>Complementary Ele.**</td>
<td>Depends on choice of course</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Satisfies a University Core Requirement  
** Satisfies a Non-departmental Major Course Requirement  
* Indicates Critical Course

---

125 semester credits required for Bachelor of Science degree.  
2.0 ECE and Graduation GPA required for Bachelor of Science degree.

**The student is ultimately responsible for knowing and completing all degree requirements.**  
Degree Works is knowledge source for specific requirements and completion

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Revised 4/2016 (effective Fall 2013)
BSCmpE Degree Minimum Requirements

Introduction

The Bachelor of Science in Computer Engineering degree requires a total of 125 credit hours and a minimum Graduation Index of 2.0. Students must qualify for admission into the School of Electrical and Computer Engineering by completion of the First-Year Engineering Program.

ECE Requirements (49 credit hours):

**CmpE Core Curriculum (34 credit hours):** ECE 20100, 20200, 20700, 20800, 25500, 26400, 27000, 30100, 30200, 33700, 36200, 36400, and 36800.

**ECE Seminars (1 credit hour):** ECE 20000 and 40000.

**Advanced CmpE Requirement (8 credit hours):** ECE 43700 and either 46800 or 46900.

**Senior Design Requirement (3-4 credit hours):** ECE 40200, 47700 (taken in one semester) or at least 3 credit hours of EPCS 41100/41200 (taken over 2 consecutive semesters). A prerequisite for all Senior Design courses is completion of the EE Core Curriculum. Some Senior Design Courses may have additional prerequisites.

**CmpE Electives (2-3 credit hours):** Additional approved CmpE Electives to bring total ECE credit hours to at least 49.

**Major-Area GPA:** A GPA of 2.0 or higher in the ECE courses taken to satisfy the ECE Requirements is required to qualify for graduation with the BSCmpE degree.

General Engineering (7-9 credit hours):

**Introduction to Engineering (4-6 credit hours):** ENGR 19500/13100 (Transforming Ideas to Innovation I) & ENGR 19500/13200 (Transforming Ideas to Innovation II) OR ENGR 19500 (Creativity & Innovation in Engineering I) & ENGR 19500 (Creativity & Innovation in Engineering II) OR ENGR 10000 (First-Year Engineering Lectures) & ENGR 12600 (Engineering Problem Solving and Computer Tools)

**Engineering Breadth Requirement (3 credit hours):** Choose one (1) course from the approved Engineering Breadth Requirement list.
Mathematics Requirement (21-22 credit hours):

Choose one of the Math options below. If MA 16100 and/or MA 16200 are taken in place of MA 16500 and/or MA 16600, only 4 of the 5 credit hours for each course can be applied to degree requirements.

Option 1 (21 credits hours): MA 16500, 16600, 26100, 26600, 26500 and ECE 36900.

Option 2 (22 credit hours): MA 16500, 16600, 26100, 26200, ECE 36900, and one of: MA 30300, 30400, 35100, 36200, 38500, 42500, 51000, or CS 31400.

Science Requirement (18-19 credit hours):

CS 15900, CHM 11500/12300, PHYS 17200, and PHYS 27200 and one of the Science Selectives: BIOL 11000, BIOL 11100, CHM 11600/12400, PHYS 31000, PHYS 32200, PHYS 34200.

Liberal Arts Requirement (24-25 credit hours):

Communication Skills (6-7 credit hours): ENGL 10600 or 10800 and COM 11400.

General Education Program Requirement (18 credit hours): Students must satisfy the requirements of the General Education Program.

Complementary Electives (4-6 credit hours):

Additional courses to bring the total to at least 125 credit hours. These courses should be selected to enhance the students academic program. These courses may include ECE courses beyond those required to complete the ECE Requirements or additional mathematics, science, engineering, and liberal arts courses. See Guidelines for Complementary Electives for more information about the types of courses that are acceptable as Complementary Electives.

Sample Plans-of-Study:

The Sample BSCmpE Plan-of-Study is meant to be used as a guideline for creating a personalized plan-of-study. A student’s personal plan-of-study may differ in the arrangement of courses, number of semesters, and other details depending upon the student’s specific needs and interests.
ECE Course Descriptions

- ECE Undergrad Course Descriptions (coursesUndergrad)
- ECE Experimental Courses (coursesExperimental)
- BSEE Core Courses (coursesBSEECore)
- ECE Lab Courses (coursesLab)
- Special Content Courses (coursesSpecial)
- BSCmpE Core Courses (coursesBSCmpECore)
- BSCmpE Elective Courses (coursesBSCmpEElectives)
- ECE Graduate Courses (coursesGrad)
- ECE Graduate Experimental Courses (coursesExperimentalGrad)
- EPICS (Engineering Projects in Community Service) (http://epics.ecn.purdue.edu)

For the BSEE degree, up to 6 credit hours of VIP and EPICS can be used as EE Electives. ECE 37900 for 2 credits, ECE 47900 for 2 credits, EPCS 30200 and EPCS 40200 can be used as upper-level labs for 2 of the 3 required upper-level labs provided the student has completed 2 of the 3 ECE 20000 level lab courses ECE 20700, 20800, and 27000 and is concurrently enrolled in the third ECE 20000 level lab courses. EPICS and VIP credits beyond this can be used as Complementary Electives.

For the BSCmpE degree, up to 3 credit hours of VIP and EPICS can be used as CmpE Electives. VIP and EPICS credits beyond this can be used as Complementary Electives.

In addition to the above limitations, EPCS 41100 and 41200 can be used to satisfy the ECE Senior Design Requirement for both the BSEE and BSCmpE degrees.
### Engineering Breadth Requirement

Both the BSEE and BSCmpE degrees require a 3 credit course in an engineering field other than electrical and computer engineering. The ECE Curriculum Committee has reviewed the course offerings in the various engineering schools and considers the following courses as appropriate for fulfilling this requirement.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAE 20300</td>
<td>Aeromechanics I</td>
<td>3 cr.</td>
<td>PHYS 17200, Concurrent Pre-requisite: MA 26100</td>
</tr>
<tr>
<td>CHE 20500</td>
<td>Chemical Engineering Calculations</td>
<td>3 cr.</td>
<td>ENGR 19500 Trans Ideas to Innov II, PHYS 17200, MA 16500 (or MA 16100), Concurrent Pre-requisite: CHM 11600 (or CHM 12400)</td>
</tr>
<tr>
<td>CE 29700</td>
<td>Basic Mechanics I (Statics)</td>
<td>3 cr.</td>
<td>PHYS 17200, Concurrent Pre-requisite: MA 26100</td>
</tr>
<tr>
<td>CE 35300</td>
<td>Physico-Chemical Principles of Environmental Eng.</td>
<td>3 cr.</td>
<td>Pre-requisite: completion of freshman engineering requirements</td>
</tr>
<tr>
<td>CE 35500</td>
<td>Engineering Environmental Sustainability</td>
<td></td>
<td>Pre-requisite: Sophomore Standing</td>
</tr>
<tr>
<td>EEE 35500</td>
<td>Engineering Environmental Sustainability</td>
<td></td>
<td>Pre-requisite: Sophomore Standing</td>
</tr>
<tr>
<td>IE 33500</td>
<td>Operations Research - Optimization</td>
<td>3 cr.</td>
<td>MA 26500, Concurrent Pre-requisite: IE 33200 (C programming skills and ECE 30200 will suffice)</td>
</tr>
<tr>
<td>IE 33600</td>
<td>Operations Research - Stochastic Models</td>
<td>3 cr.</td>
<td>MA 26500, IE 23000 (C programming skills and ECE 30200 will suffice), Concurrent Pre-requisite: MA 26600 (or MA 26200)</td>
</tr>
<tr>
<td>MSE 23000</td>
<td>Structure and Properties of Materials</td>
<td>3 cr.</td>
<td>MA 16500 (or MA 16100), CHM 11500</td>
</tr>
<tr>
<td>ME 20000</td>
<td>Thermodynamics</td>
<td>3 cr.</td>
<td>CHM 11500 (or CHM 12300), Concurrent Pre-requisite: MA 26100</td>
</tr>
<tr>
<td>ME 27000</td>
<td>Basic Mechanics I</td>
<td>3 cr.</td>
<td>PHYS 17200, Concurrent Pre-requisite: MA 26100</td>
</tr>
<tr>
<td>ME 41300</td>
<td>Noise Control</td>
<td>3 cr.</td>
<td>MA 26600, PHYS 17200</td>
</tr>
<tr>
<td>NUCL 20000</td>
<td>Introduction to Nuclear Engineering I</td>
<td>3 cr.</td>
<td>PHYS 17200, MA 16600 (or MA 16200)</td>
</tr>
</tbody>
</table>
Guidelines for ECE Complementary Electives

Both the BSEE and BScmpE degrees require students to choose additional coursework to bring their total credits to the minimum required for their chosen degree (124 credits for the BSEE and 125 credits for the BScmpE). Students should carefully choose these courses to complement their personal interests and their academic record. If in doubt as to whether or not a specific course qualifies as a Complementary Elective, please consult with an ECE Academic Advisor.

Applicable Complementary Electives

- Any course that would otherwise satisfy a specific degree requirement (i.e., ECE Requirements, General Engineering, Mathematics Requirement, Science Requirement, and General Education Requirement), but is in excess of the minimum credits for that requirement, can be used as a Complementary Elective.
- ECE 19000 taken prior to acceptance into ECE.
- Courses taken to satisfy a minor requirement (unless that course is excluded below).
- One (1) credit per semester of ROTC, up to a maximum of six (6) credit hours.
- One (1) credit per semester of BAND, up to a maximum of six (6) credit hours.
- 2 credits of CGT taken while enrolled in FYE.
- Exploratory FYE (ENGR) courses.
- Seminar courses, including FYE seminars (limited to 3 credit hours)
- Leadership FYE (ENGR) courses/seminars (only a single instance of the course is applicable).
- Up to 2 credits total in two different PES courses (no more than 1 credit per course is applicable)
- Courses explicitly approved by the ECE Curriculum Committee.

Exclusions

- pre-calculus Mathematics (MA) courses.
- Statistics (STAT) courses without a calculus prerequisite.
- CS courses not intended for engineering students - for example, CS 11000.
- General Studies (GS) courses.
- Courses from the College of Technology that have not been specifically approved by the ECE Curriculum Committee.
- Courses from the College of Health and Human Sciences that have not been specifically approved by the ECE Curriculum Committee.
• Courses from the College of Education that have not been specifically approved by the ECE Curriculum Committee.

[Note: UCC approves courses will still satisfy the Foundational Outcomes, but the credit hours are not applicable to BSEE/BSCmpE degree requirements]

Excluded Courses

Some courses specifically excluded as complementary electives (not a comprehensive list):

• CS 11000
• CS 17700
• ECE 19000 taken after admission int ECE
• MGMT 20010
• STAT 11300 (IL Foundational Outcome satisfied, but credit hours are not applied to degree requirements)
• STAT 30100 (IL Foundational Outcome satisfied, but credit hours are not applied to degree requirements)
Approved Computer Engineering Electives for the BSCmpE

CS 42200 - Computer Networks (courseInfo?courseid=276&show=true&type=undergrad)
ECE 27900 - Sophomore Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=526&show=true&type=undergrad)
ECE 30834 - Fundamentals of Computer Graphics (courseInfo?
courseid=584&show=true&type=undergrad)
ECE 30862 - Object-Oriented Programming in C++ and Java (courseInfo?
courseid=579&show=true&type=undergrad)
ECE 37900 - Junior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=535&show=true&type=undergrad)
ECE 40400 - Introduction to Computer Security (courseInfo?
courseid=515&show=true&type=undergrad)
ECE 46100 - Software Engineering (courseInfo?courseid=402&show=true&type=undergrad)
ECE 46300 - Introduction to Computer Communication Networks (courseInfo?
courseid=604&show=true&type=undergrad)
ECE 47300 - Introduction to Artificial Intelligence (courseInfo?
courseid=64&show=true&type=undergrad)
ECE 47700 - Digital Systems Senior Project (courseInfo?
courseid=397&show=true&type=undergrad)
ECE 47900 - Senior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=485&show=true&type=undergrad)
ECE 495B - Information Extraction, Retrieval and Security (courseInfo?
courseid=130&show=true&type=undergrad) - Fall 2000, Fall 2001, Fall 2002
ECE 495C - Digital Systems Senior Project (courseInfo?courseid=406&show=true&type=undergrad) - Fall 2007, Spring 2008
ECE 495E - Fundamentals of Computer Graphics (courseInfo?
courseid=262&show=true&type=undergrad) - Spring 2004, Fall 2004
ECE 495E - Fundamentals of Computer Graphics (courseInfo?
courseid=238&show=true&type=undergrad) - Fall 2003
ECE 495E - Fundamentals of Computer Graphics (courseInfo?
courseid=224&show=true&type=undergrad) - Spring 2003
ECE 495F - Introduction to Computer Security (courseInfo?
courseid=355&show=true&type=undergrad) - Spring 2006
ECE 495F - Introduction to Computer Security (courseInfo?
courseid=286&show=true&type=undergrad) - Spring 2005
ECE 495F - Introduction to Computer Security (courseInfo?
courseid=278&show=true&type=undergrad) - Fall 2004 (cancelled)
ECE 495F - Introduction to Computer Security (courseInfo?
courseid=232&show=true&type=undergrad) - Fall 2003
ECE 495G - ASIC Fabrication and Test II (courseInfo?courseid=445&show=true&type=undergrad) - Spring 2008
ECE 495G - ASIC Fabrication and Test I (courseInfo?courseid=427&show=true&type=undergrad) - Fall 2007
ECE 495G - ASIC Fabrication and Test I (courseInfo?courseid=365&show=true&type=undergrad) - Fall 2006
ECE 495K - Object-Oriented Scripting and Object-Oriented Design (courseInfo?
courseid=287&show=true&type=undergrad) - Spring 2005, Spring 2006
ECE 495K - Object-Oriented Scripting and Object-Oriented Design (courseInfo?
courseid=264&show=true&type=undergrad) - Spring 2004
ECE 495K - Object-Oriented Design Using C++ and Java (courseInfo?
ECE 495M - Mobile Communications Project (courseInfo?
courseid=289&show=true&type=undergrad) - Spring 2005
ECE 495M - Mobile Communications Project (courseInfo?
courseid=270&show=true&type=undergrad) - Spring 2004, Fall 2004
ECE 495M - Mobile Communications Project (courseInfo?
courseid=222&show=true&type=undergrad) - Fall 2002, Spring 2003, Fall 2003
ECE 495O - ASIC Fabrication and Test II (courseInfo?courseid=385&show=true&type=undergrad) - Spring 2007
ECE 495R - Introduction to Computer Communication Networks (courseInfo?
courseid=132&show=true&type=undergrad) - Fall 2001, Fall 2002, Fall 2003, Fall 2004
ECE 495S - Introduction to Compilers and Translation Engineering (courseInfo?
courseid=314&show=true&type=undergrad) - Fall 2006
ECE 495T - Sophomore Participation in Vertically Integrated Projects (VIP) in Electrical and
Computer Engineering (courseInfo?courseid=482&show=true&type=undergrad) - Fall 2008, Spring 2009
ECE 495U - Junior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer
Engineering (courseInfo?courseid=369&show=true&type=undergrad) - Fall 2006, Spring 2007, Spring 2008
ECE 495V - Senior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer
Engineering (courseInfo?courseid=370&show=true&type=undergrad) - Fall 2006, Spring 2007, Spring 2008
ECE 495V - Senior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer
Engineering (courseInfo?courseid=328&show=true&type=undergrad) - Fall 2005, Spring 2006

ECE 595E - Visualization Techniques (courseInfo?courseid=133&show=true&type=undergrad) - Fall 2006

ECE 595T - Psychophysics for Interface Engineering (courseInfo?courseid=68&show=true&type=undergrad) - Fall 2000, Fall 2001, Fall 2002

ECE 595Z - Digital Logic Synthesis (courseInfo?courseid=245&show=true&type=undergrad) - Fall 2003, Fall 2004

ECE 595Z - Digital Logic Synthesis (courseInfo?courseid=223&show=true&type=undergrad) - Fall 2002

EPCS 30100 - Junior Participation in EPICS (courseInfo?courseid=596&show=true&type=undergrad)

EPCS 30200 - Junior Participation in EPICS (courseInfo?courseid=412&show=true&type=undergrad)

EPCS 40100 - Senior Participation in EPICS (courseInfo?courseid=415&show=true&type=undergrad)

EPCS 40200 - Senior Participation in EPICS (courseInfo?courseid=597&show=true&type=undergrad)
Current ECE Laboratory Course Descriptions

ECE 20700 - Electronic Measurement Techniques (courseInfo?courseid=29&show=true&type=undergrad)
ECE 20800 - Electronic Devices and Design Laboratory (courseInfo?courseid=30&show=true&type=undergrad)
ECE 27000 - Introduction to Digital System Design (courseInfo?courseid=607&show=true&type=undergrad)
ECE 27900 - Sophomore Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=526&show=true&type=undergrad)
EPSC 30200 - Junior Participation in EPICS (courseInfo?courseid=412&show=true&type=undergrad)
ECE 30600 - Electronic Circuits and Systems Laboratory (courseInfo?courseid=84&show=true&type=undergrad)
ECE 30700 - Electromagnetic Fields and Waves Laboratory (courseInfo?courseid=85&show=true&type=undergrad)
ECE 30800 - Systems Simulation and Control Laboratory (courseInfo?courseid=86&show=true&type=undergrad)
ECE 32300 - Electromechanical Motion Devices and Systems Laboratory (courseInfo?courseid=45&show=true&type=undergrad)
ECE 33700 - ASIC Design Laboratory (courseInfo?courseid=613&show=true&type=undergrad)
ECE 36200 - Microprocessor Systems and Interfacing (courseInfo?courseid=612&show=true&type=undergrad)
ECE 36400 - Software Engineering Tools Laboratory (courseInfo?courseid=624&show=true&type=undergrad)
ECE 37900 - Junior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=535&show=true&type=undergrad)
ECE 39800 - Industrial Practice Seminar (courseInfo?courseid=311&show=true&type=undergrad)
EPSC 40200 - Senior Participation in EPICS (courseInfo?courseid=597&show=true&type=undergrad)
ECE 41300 - Introduction to Optics Laboratory (courseInfo?courseid=88&show=true&type=undergrad)
ECE 41500 - Electro- And Fiber Optics Laboratory (courseInfo?courseid=89&show=true&type=undergrad)
ECE 43700 - Computer Design and Prototyping (courseInfo?courseid=143&show=true&type=undergrad)
ECE 43800 - Digital Signal Processing with Applications (courseInfo?courseid=62&show=true&type=undergrad)
ECE 44000 - Transmission of Information (courseInfo?courseid=75&show=true&type=undergrad)
ECE 45700 - Electronic Design Laboratory (courseInfo?courseid=98&show=true&type=undergrad)
ECE 46800 - Introduction to Compilers and Translation Engineering (courseInfo?courseid=530&show=true&type=undergrad)
ECE 46900 - Operating Systems Engineering (courseInfo?courseid=56&show=true&type=undergrad)
ECE 47700 - Digital Systems Senior Project (courseInfo?courseid=397&show=true&type=undergrad)
ECE 47900 - Senior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=485&show=true&type=undergrad)
ECE 49595 - Electrical Engineering Senior Design Projects (courseInfo?courseid=641&show=true&type=undergrad)
ECE 55700 - Integrated Circuit/MEMS Fabrication Laboratory (courseInfo?courseid=375&show=true&type=undergrad)
Special Content Courses for the BSEE

Students are limited to no more than 6 credit hours of Special Content Courses towards the 47 credit hours of ECE courses required for the BSEE. Credits in excess of this may be used as Complementary Electives. In general, seminars (excluding ECE 20000 and ECE 40000), survey courses, project courses, and informal laboratory courses are considered to be Special Content Courses. A complete list of these courses, as approved by the ECE Curriculum Committee, is given below.

ECE 27900 - Sophomore Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=526&show=true&type=undergrad)

ECE 29800 - Electrical and Computer Engineering Projects (courseInfo?courseid=633&show=true&type=undergrad)

ECE 30010 - Introduction to Machine Learning and Pattern Recognition (courseInfo?courseid=583&show=true&type=undergrad)

ECE 37900 - Junior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=535&show=true&type=undergrad)

ECE 39595 - Introduction to Machine Learning and Pattern Recognition (courseInfo?courseid=544&show=true&type=undergrad) - Maymester 2011

ECE 47900 - Senior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=485&show=true&type=undergrad)

ECE 495M - Sound Reinforcement System Design (courseInfo?courseid=407&show=true&type=undergrad) - Fall 2007

ECE 495M - Mobile Communications Project (courseInfo?courseid=289&show=true&type=undergrad) - Spring 2005

ECE 495M - Mobile Communications Project (courseInfo?courseid=270&show=true&type=undergrad) - Spring 2004, Fall 2004

ECE 495M - Mobile Communications Project (courseInfo?courseid=222&show=true&type=undergrad) - Fall 2002, Spring 2003, Fall 2003

ECE 495T - Sophomore Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=482&show=true&type=undergrad) - Fall 2008, Spring 2009

ECE 495T - Sophomore Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=326&show=true&type=undergrad) - Fall 2005, Spring 2006


https://engineering.purdue.edu/ECE/Academics/Undergraduates/UGO/CourseInfo/courses... 5/18/2016
ECE 495U - Junior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=327&show=true&type=undergrad) - Fall 2005, Spring 2006

ECE 495V - Senior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=370&show=true&type=undergrad) - Fall 2006, Spring 2007, Spring 2008

ECE 495V - Senior Participation in Vertically Integrated Projects (VIP) in Electrical and Computer Engineering (courseInfo?courseid=328&show=true&type=undergrad) - Fall 2005, Spring 2006

ECE 495W - The Wireless Revolution (courseInfo?courseid=272&show=true&type=undergrad) - Spring 2004, Fall 2004

ECE 49600 - Electrical and Computer Engineering Projects (courseInfo?
courseid=632&show=true&type=undergrad)

ECE 51100 - Psychophysics (courseInfo?courseid=337&show=true&type=undergrad)

ECE 595C - Biologically Inspired Engineering (courseInfo?
courseid=277&show=true&type=undergrad) - Fall 2004

ECE 595M - Modeling and Simulation of Multidisciplinary Systems (courseInfo?
courseid=386&show=true&type=undergrad) - Spring 2007

ECE 595T - Engineering in Medicine: Neural Systems (courseInfo?
courseid=137&show=true&type=undergrad) - Spring 2002, Spring 2003

ECE 595T - Psychophysics for Interface Engineering (courseInfo?
courseid=68&show=true&type=undergrad) - Fall 2000, Fall 2001, Fall 2002

EPCS 20100 - Sophomore Participation in EPICS (courseInfo?
courseid=595&show=true&type=undergrad)

EPCS 20200 - Sophomore Participation in EPICS (courseInfo?
courseid=410&show=true&type=undergrad)

EPCS 30100 - Junior Participation in EPICS (courseInfo?
courseid=596&show=true&type=undergrad)

EPCS 30200 - Junior Participation in EPICS (courseInfo?
courseid=412&show=true&type=undergrad)

EPCS 40100 - Senior Participation in EPICS (courseInfo?
courseid=415&show=true&type=undergrad)

EPCS 40200 - Senior Participation in EPICS (courseInfo?
courseid=597&show=true&type=undergrad)

The following restrictions apply to all Special Content courses:

- No more than a combined total of 6 credit hours of these special content courses may be used to satisfy the ECE course requirement of 47 credit hours for the BSEE degree. Excess hours can be used as Complementary Electives.

- Three (3) credits of EE490 used to satisfy the BSEE Senior Design requirement are excluded from the above limit.

- No more than two (2) credit hours of "Informal Laboratories" may be used to satisfy the ECE Laboratory Requirement for the BSEE degree. By definition, the courses with laboratory credit listed above are "Informal Laboratories".