Standard Option
• B.S.Cp.E. in Computer Engineering
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B.S.Cp.E. in Computer Engineering

Description
The Bachelor of Science in Computer Engineering program prepares students to have an understanding of computer hardware, software, and electrical engineering fundamentals, thereby acquiring knowledge to develop and/or apply many kinds of computing systems, such as microprocessors, computers, smart phones, and Internet of Things (IoT) devices. Students in the program will have knowledge of computer programming languages, hardware description languages, digital logic design, computer organization, electrical and electronics circuit design, and processing of electrical signals. They will have the ability to apply mathematical and statistical methods for understanding, development, and applications of computing devices.

The graduates of the program will be able to pursue (i) employment in electronic chip design/production companies, hardware/software services companies, and all industries requiring electrical and computer engineers, such as automotive, aerospace, defense, utilities and heavy-machinery; and (ii) advanced study in computer engineering or a related field.

Minimum Total Credit Hours: 126

General Education Requirements
The following courses are required: Math 261-264 and Math 353; laboratory sciences to be fulfilled by Chem 105, 115 and Phys 211, 212, 221, 222; Writ 100/101 and Writ 102/Liba 102. Students must also complete at least 18 semester hours of 3 hours in humanities chosen from classics, English, history, modern languages, philosophy, religion, African American studies, gender studies, and Southern studies; 3 hours in fine arts chosen from art history, dance, music, and theatre arts (courses emphasizing the enhancement of skills and performance are not acceptable); 3 hours in social science chosen from anthropology, economics, political science, psychology, and sociology; Econ 310; 3 additional hours of humanities or fine arts; and 3 additional hours of humanities, fine arts, or general education.

Course Requirements

Major Coursework Requirements:
Specific requirements for the B.S.Cp.E. program include Math 301; Csci 256, 356, 423, 433; Engr 310, 360, 361; 235, 236, 237, 331, 351, 352, 353, 367, 385, 386, 391, 425, 485, 486; Cp E 431, 461, 462.

Coursework for Standard Emphasis:
Specific requirements for the Standard Emphasis include El E 100; 3 hours selected from Technical Elective I (El E 391, El E 431, or El E 586); 12 hours selected from Technical Elective II (El E 482, CpE 421, CpE 432 and no more than 3 hours of 300 level or above CSCI course); 3 hours of Technical Elective III (El E 391, 431, 447, 534, 535, 586, or any other course from Technical Elective I not already completed) for a total of 19 credit hours.

Coursework for Manufacturing Emphasis:
Specific requirements for the Manufacturing Emphasis include Manf 150, 152, 251, 252, 253, 255, 351, 353, 355, 455 and 9 hours of technical elective courses to be chosen from El E 482, CpE 421, or CpE 432 for a total of 27 credit hours.

Degree Requirements
The academic regulations for this degree program, as entered in the University of Mississippi Catalog, are in effect for the current or selected academic year and semester. The University of Mississippi reserves the right to 1) change or withdraw courses; 2) change rules for registration, instruction, and graduation; and 3) change other regulations affecting the student body at any time.

B.S.Cp.E. in Computer Engineering

General Education

<table>
<thead>
<tr>
<th>REQUIREMENT</th>
<th>HOURS</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>First Year Writing I</td>
<td>3</td>
<td>Complete Hon 101, Writ 100 or Writ 101 with a passing grade.</td>
</tr>
<tr>
<td>First Year Writing II</td>
<td>3</td>
<td>Complete Writ 102, Liba 102, or Hon 102 with a passing grade:</td>
</tr>
<tr>
<td>3 hrs Fine Arts</td>
<td>3</td>
<td>Successfully complete 3 hours in fine arts chosen from art history, dance, music, and theatre arts (courses emphasizing the enhancement of skills and performance are not acceptable)</td>
</tr>
<tr>
<td>3 hrs Fine Arts/Humanities</td>
<td>3</td>
<td>Complete 3 additional hours with a passing grade in any of the humanities or fine arts categories defined by the School of Engineering general education requirements.</td>
</tr>
<tr>
<td>3 hrs Humanities</td>
<td>3</td>
<td>Complete 3 hrs of humanities choosing from course work in classics, literature, history, modern language, philosophy, religion, Southern studies, African American Studies, and Gender Studies.</td>
</tr>
<tr>
<td>3 hrs Social Sciences</td>
<td>3</td>
<td>Complete 3 hours in social science chosen from anthropology, economics, political science, psychology, and sociology.</td>
</tr>
<tr>
<td>3 hrs general education work</td>
<td>3</td>
<td>Complete 3 hrs General Education work chosen from the following: additional fine art, additional social science, additional humanities, As 301, As 302, Bus 250, Bus 271, Edld 110, Edld 111, Edld 120, Edld 220, Engr 400, Mgmt 371, Msi 102, Nsc 211, Spch 102, or Spch 105.</td>
</tr>
<tr>
<td>Econ 310</td>
<td>3</td>
<td>Complete Econ 310 with a passing grade.</td>
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</tbody>
</table>
## REQUIREMENT | HOURS | DESCRIPTION
--- | --- | ---
Math 261 | 3 | Complete Math 261 with a passing grade.
Math 262 | 3 | Complete Math 262 with a passing grade.
Math 263 | 3 | Complete Math 263 with a passing grade.
Math 264 | 3 | Complete Math 264 with a passing grade.
Math 353 | 3 | Complete Math 353 with a passing grade.
Chem 105 | 3 | Complete Chem 105 with a passing grade.
Chem 115 | 1 | Complete Chem 115 with a passing grade.
Phys 211 | 3 | Complete Phys 211 with a passing grade.
Phys 212 | 3 | Complete Phys 212 with a passing grade.
Phys 221 | 1 | Complete Phys 221 with a passing grade.
Phys 222 | 1 | Complete Phys 222 with a passing grade.

### Major Requirements

| REQUIREMENT | HOURS | DESCRIPTION |
--- | --- | ---
Cp E 431 | | Complete Cp E 431 with a passing grade.
Cp E 461 | | Complete Cp E 461 with a passing grade.
Cp E 462 | | Complete Cp E 462 with a passing grade.
CSci 256 | 3 | Complete CSci 256 with a passing grade.
CSci 356 | 3 | Complete CSci 356 with a passing grade.
CSci 423 | 3 | Complete CSci 423 with a passing grade.
CSci 433 | 3 | Complete CSci 433 with a passing grade.
El E 235 | 3 | Complete El E 235 with a passing grade.
El E 236 | 1 | Complete El E 236 with a passing grade.
El E 237 | 1 | Complete El E 237 with a passing grade.
El E 331 | 3 | Complete El E 331 with a passing grade.
El E 351 | 3 | Complete El E 351 with a passing grade.
El E 352 | 3 | Complete El E 352 with a passing grade.
El E 353 | 1 | Complete El E 353 with a passing grade.
El E 367 | 3 | Complete El E 367 with a passing grade.
El E 385 | 3 | Complete El E 385 with a passing grade.
El E 386 | 1 | Complete El E 386 with a passing grade.
El E 425 | 3 | Complete El E 425 with a passing grade.
El E 485 | 2 | Complete El E 485 with a passing grade.
El E 496 | 1 | Complete El E 496 with a passing grade.
Engr 310 | 3 | Complete Engr 310 with a passing grade.
Engr 360 | 3 | Complete Engr 360 with a passing grade.
Engr 361 | 1 | Complete Engr 361 with a passing grade.
Math 301 | 3 | Complete Math 301 with a passing grade.

### Standard Option

| REQUIREMENT | HOURS | DESCRIPTION |
--- | --- | ---
El E 100 | 1 | Complete El E 100 with a passing grade.

The University of Mississippi is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award certificates and baccalaureate, master’s, specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, call 404-679-4500, or visit online at www.sacscoc.org for questions about the accreditation.

https://catalog.olemiss.edu/2021/fall/undergraduate/engineering/electrical-engineering/bs-cpe/bs-cpe-std
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<tr>
<td>El E 391, 431, or 586</td>
<td>3</td>
<td>Complete El E 391, 431, or 586 with a passing grade.</td>
</tr>
<tr>
<td>12 hrs tech elect</td>
<td>12</td>
<td>Complete 12 hours of electives chosen from: El E 482, CpE 421, 432, and one course from CSci 300+ level with a passing grade.</td>
</tr>
<tr>
<td>3 add'l tech electives</td>
<td>3</td>
<td>Complete 1 add'l tech elective chosen from: El E 447, 534, 535, or one of El E 391, 431, 586, if not already taken as apart of line item two above.</td>
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