COMPUTER ENGINEERING: SOFTWARE ENGINEERING, BSCP

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about University Academic Regulation 3.1 (http://catalog.okstate.edu/university-academic-regulations/#matriculation).

Minimum Overall Grade Point Average: 2.00
Total Hours: 128

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1111</td>
<td>Introduction to Engineering</td>
<td>1</td>
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<tr>
<td>ECEN 3213</td>
<td>Computer Based Systems in Engineering (With a grade of 'C' or better)</td>
<td>3</td>
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<tr>
<td>ENSC 2611</td>
<td>Electrical Fabrication Lab (With a grade of 'C' or better)</td>
<td>1</td>
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<tr>
<td>CS 1113</td>
<td>Computer Science I (A) (With a grade of 'C' or better)</td>
<td>3</td>
</tr>
<tr>
<td>CS 2351</td>
<td>Unix Programming</td>
<td>1</td>
</tr>
<tr>
<td>CS 2433</td>
<td>C/C++ Programming (With a grade of 'C' or better)</td>
<td>3</td>
</tr>
<tr>
<td>CS 3653</td>
<td>Discrete Mathematics for Computer Science (With a grade of 'C' or better)</td>
<td>3</td>
</tr>
<tr>
<td>ECEN 2714</td>
<td>Fundamentals of Electric Circuits (With a grade of 'C' or better)</td>
<td>4</td>
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<tr>
<td>ECEN 3233</td>
<td>Digital Logic Design (With a grade of 'C' or better)</td>
<td>3</td>
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Hours Subtotal: 25

Major Requirements

Mathematics
MATH 3013  Linear Algebra (A) (With a grade of 'C' or better) 3

Electrical & Computer Engineering
ECEN 3314  Electronic Devices and Applications 4
ECEN 3513  Signal Analysis 3
ECEN 3613  Applied Fields and Waves I 3
ECEN 3714  Network Analysis (With a grade of 'C' or better) 4
ECEN 3903  Introduction to Semiconductor Devices (With a grade of 'C' or better in ECEN 3903 or PHYS 3313) 3

Electrical & Computer Engineering
PHYS 3313  or Introduction to Semiconductor Device Physics

ECEN 4013  Design of Engineering Systems 3
ECEN 4024  Capstone Design 4
ECEN 4213  Embedded Computer Systems Design 3
ECEN 4243  Computer Architecture 3
ECEN 4303  Digital Integrated Circuit Design 3
ECEN 4503  Random Signals and Noise 3

Computer Science
CS 4323  or Design and Implementation of Operating Systems I 3
CS 4283  or Computer Networks
CS 3353  Data Structures and Algorithm Analysis I (With a grade of 'C' or better) 3

Industrial Engineering & Management
IEM 3503  Engineering Economic Analysis 3

Software Engineering Electives
12 credit hours designated as software engineering courses 12
Hours Subtotal: 60

Total Hours: 128
If a "B" or higher is not earned in ENGL 1113 Composition I or ENGL 1313 Critical Analysis and Writing I, then ENGL 1213 Composition II or ENGL 1413 Critical Analysis and Writing II is also required (per Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/)).

Graduation Requirements

1. A minimum GPA of 2.00 Technical GPA. The Technical GPA is calculated from all courses in the curriculum with a prefix belonging to the degree program, or substitutions for these courses.
2. A 'C' or better in courses listed above as requiring a 'C' or better.
3. The major engineering design experience, capstone course, is satisfied by ECEN 4013 Design of Engineering Systems and ECEN 4024 Capstone Design.

Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2027.