1

Bachelor of Science in Computer Engineering

Students in this degree program do not need to take courses in the General Education categories A3 Critical Thinking, B2 Life Science, and D3 Lower Division Social Science.

Students in this major can satisfy B5 Upper Division Scientific Inquiry by taking CSE 5408.

Requirements (92 units)

Total units required for graduation: 125

Requirements for the B.S. in Computer Engineering

(Program Code: COEN)

Lower-division requirements (39)

| CSE 2010 | Computer Science I | 4 |
|--|---|----|
| CSE 2020 | Computer Science II | 4 |
| MATH 2372 | Discrete Mathematics | 3 |
| CSE 2130 | Machine Organization | 3 |
| MATH 2210 | Calculus I | 4 |
| MATH 2220 | Calculus II | 4 |
| MATH 2265 | Statistics with Applications | 3 |
| MATH 2310 | Applied Linear Algebra | 4 |
| PHYS 2500 | General Physics I | 4 |
| PHYS 2500L | General Physics I Lab | 1 |
| PHYS 2510 | General Physics II | 4 |
| PHYS 2510L | General Physics II Lab | 1 |
| Upper-division req | uirements (44) | |
| CSE 3100 | Digital Logic | 4 |
| CSE 3350 | Signals and Systems | 3 |
| CSE 4010 | Contemporary Computer Architecture | 4 |
| CSE 4030 | Analog Circuit Design and Analysis | 4 |
| CSE 4100 | Computer Networking and Security | 3 |
| or CSE 5300 | Data Communications | |
| CSE 4560 | Embedded Systems | 4 |
| CSE 4600 | Operating Systems | 3 |
| CSE 5208 | Introduction to Computer Engineering Design | 4 |
| CSE 5210 | Digital System Design | 4 |
| CSE 5350 | Numerical Computation | 3 |
| or CSE 4310 | Algorithm Analysis | |
| CSE 5408 | Sustainable Engineering Design | 4 |
| CSE 5410 | Robotics and Control | 4 |
| Electives (9) | | |
| Nine units chosen frand not previously t | rom CSE 4000-level and above courses aken. | 9 |
| Total Units | | 92 |