

COMPUTER ENGINEERING: SEMICONDUCTOR ENGINEERING, BS

REQUIREMENTS

REQUIREMENTS

Code	Title	Credits
Required Courses		
E C E/PHYSICS 235	Introduction to Solid State Electronics ¹	3
E C E 271	Circuits Laboratory II ²	1
E C E 305	Semiconductor Properties Laboratory ²	1
E C E 335	Microelectronic Devices ¹	3
E C E 555	Digital Circuits and Components ³	3
E C E 556	Design Automation of Digital Systems ⁴	3
Electives		
Choose two as Advanced or Professional Electives:		6-7
E C E 445	Semiconductor Physics and Devices ^{1, 5}	
E C E 453	Embedded Microprocessor System Design ⁶	
E C E 535	Introduction to Quantum Sensing ^{1, 5}	
E C E 541	Analog MOS Integrated Circuit Design ^{1, 3}	
E C E 548	Integrated Circuit Design ^{1, 3}	
E C E 549	Integrated Circuit Fabrication Laboratory ^{1, 5}	
E C E 553	Testing and Testable Design of Digital Systems ⁴	
Total Credits		20-21

¹ This course can be taken as a Professional Elective.

² This course replaces a free elective.

³ This course can be taken as a CMPE Advanced Elective in Electronic Circuits.

⁴ This course can be taken as a CMPE Elective I.

⁵ This course can be taken as a CMPE Elective II.

⁶ This course can be taken as Capstone Design.