MSU DENVER COLLEGE OF AEROSPACE, COMPUTING, ENGINEERING, AND DESIGN

Computer Engineering, B.S. (126 Credits)
Minor (not required)
Fall 2025 Catalog Year

First Year		
Fall: 16 Credits	CPE 1040 Introduction to Computer Engineering	3
	CEE 2350 (3) C Programming for Engineering	3
	MTH 1410 Calculus I	4
	Oral Communication	3
	Written Communication	3
	Total Credits	**16**
Spring: 17 Credits	CEE 1140/1145 DC Circuits Fundamentals and Lab, Pre-req of Calc I	4
	MTH 3130 (4) Applied Methods in Linear ALgebra (F, S, Su)	4
	MTH 2410 (4) Calculus II (F, S, Su)	5
	CS 1050 Computer Science I	4
	Total Credits	**17**

Second Year		
Fall: 16 Credits	CEE 1150 (4) Circuits II and CEE 1155 Lab (F, S)	4
	CS 2050 (3) Computer Science II (F, S)	4
	PHY 2200 & PHY 2341 (F, S)	4
	MTH 3210 (4) Probability and Statistics (F, S, Su)	4
	Total Credits	**16**
Spring: 18 Credits	CEE 2145 (3) Electronics and CEE2165 Lab (F, S)	4
	CEE 2330 (3) Digital Systems I (F, S)	3
	Arts and Humanities	3
	Written Communication (3)	3
	CHE 1100 and CHE 1150 (5)	5
	Total Credits	**18**

Third Year		
Fall: 16 Credits	CEE 3110 (3) Digital Systems II (F, S)	3
	Arts & Humanities	3
	CS 2400 (4) Computer Organization II	4
	CEE 4370 (3) Embedded System Design I (F, S)	3
	Social & Behavioral Sciences (3)	3
	Total Credits	**16**
Spring: 17 Credits	CEE 4390 (3) Embedded System Design II (F, S)	3
	CPE 4020 (3) Digital Systems III - HW Description Language	3
	CPE 3500 (3) Semiconductor Device Fundamentals	3
	Historical (3) MC or GD recommended	3
	Social & Behavioral Sciences (3) MC or GD recommended	3
	Total Credits	**15**

Fourth Year		
Fall: 15 Credits	CEE 4700 (1) Senior Design I (F, S) (Sr. Exp.)	1
	CPE 4600 (3) VLSI Circuits and Systems	3
	CPE 3400 (3) Signals & Systems	3
	CPE 3620 (3) A&D Communications	3
	CPE approved elective (3)	3
	MTH 3170 (4) Discrete Math for Computer Science	4
	Total Credits	**17**
Spring: 15 Credits	CEE 4800 (2) Senior Design II (F, S) (Sr. Exp.)	2
	CPE 4320 (3) Digital Filter Design (F)	3
	CPE approved elective (3)	3
	EET approved elective (3)	3
	Total Credits	**11**

Approved EE Electives:

CEE 3980 – Internship in Computer and Electrical Engineering; ELE 3120 – Advanced Analog Electronics;
ELE 3410 – Electric Machines; ELE 3420 – Electric Power Distribution; ELE 3430 – Power Electronics; ELE 3630 – Electromagnetic Fields; ELE 4620 – RF and Microwave Design; CS 3013 – Mobile App Development; CS 3120 – Machine Learning; CS 3250 – Software Development Methods and Tools;CPE 4330 – Data Communications;