Course Subject and Title	Credit Hours	Min. Grade	Prerequisites
Semester One(2021 Fall) 15 Credit Hours			
EMCH 201 Intro. to Applied Numerical Methods	3	A	MATH 142
EMCH 260 Solid Mechanics	3	A	MATH 241, EMCH 200
EMCH 290 Thermodynamics	3	A	PHYS 211, MATH 142
EMCH 310 Dynamics	3	C	MATH 242, EMCH 200
EMCH 380 Project Management for Engineers	3	A	MATH 241
Semester Two(2022 Spring) 18 Credit Hours			
EMCH 308(Introduction to FEA)	3		EMCH 260
EMCH 327(Machine Design)	3		EMCH 260
CSCE 211 (Digital Logic Design)	3	C	MATH 141
ELCT 221 (Circuits)	3	C	MATH 142, ELCT 102
ELCT 361(Electromagnetics)	3		PHYS 212, MATH 241
ELCT 363(Intro. To Microelectronics)	3		CHEM 111, PHYS 212 ,MATH 241
Semester Three(2022 Fall) 21 Credit Hours			
CSCE 212(Intro. To Computer Architecture)	3	C	CSCE 211, CSCE 145
ELCT 201(Introductory Elect. Engr. Lab)	3		CSCE 211, Coreq(ELCT 222)
ELCT 222(Signals & Systems)	3	C	ELCT 221, MATH 242
EMCH 360(Fluid Mechanics)	3		EMCH 200, EMCH 290, MATH 242
EMCH 361(Laboratory 1)	3		EMCH 290, 260, 201, ELCT 221
EMCH 368(Mechatronics)	4		CSCE 145, ELCT 221, EMCH 260
CSCE 190(Computing in the Modern World)	1	C	CSCE 145
CSCE 215(UNIX/Linux Fundamentals)	1	C	CSCE 145
Semester Four(2023 Spring) 21 Credit Hours			
ELCT 301(Electronics Laboratory)	3		ELCT 201, Coreq(ELCT 371)
ELCT 321(Digital Signal Processing)	3		ELCT 222
ELCT 371(Electronics)	3		ELCT 222
EMCH 332(Kinematics)	3		EMCH 310
EMCH 371(Materials)	3		EMCH 260
EMCH 362(Laboratory 2)	3		EMCH 361, EMCH 360, EMCH 310
PHIL 325	3		
Semester Five(2023 Fall) 21 Credit Hours			
ELCT 302(Real-Time Systems Laboratory)	3		ELCT 301, Coreq(ELCT 331)
ELCT 331(Control Systems)	3		ELCT 222
CSCE 240 Advanced Programming Techniques	3	C	CSCE 215, CSCE 146
EMCH 354(Heat Transfer)	3		EMCH 360
EMCH 377(Manufacturing)	3		EMCH 371
EMCH 367(Controls)	3		EMCH 368, EMCH 310
HIST 111	3		
Semester Six(2024 Spring) 21 Credit Hours			
ELCT 332(Fundamentals of Communication Systems)	3		ELCT 321, STAT 509
ELCT electives	3		
ELCT electives	3		
EMCH elective	3		

MUSC 110	3		
MATH 374 Discrete Structures	3	C	MATH 142, CSCE 146
CSCE 313 Embedded Systems	3	C	CSCE 212
Semester Seven(2024 Fall) 21 Credit Hours			
ELCT 403(Capstone Design Project 1)	3		ELCT 302
EMCH 427(Design 1)	3		EMCH 380, 332, 354, 362, 368, 371
CSCE 611 Advanced Digital Design	3	C	CSCE 212
CSCE 490 Capstone Computing Project I	3	C	CSCE 240, CSCE 350
CSCE 350 Data Structures & Algorithms	3	C	CSCE 212
CSCE 311 Operating Systems	3	C	CSCE 212, CSCE 240
CSCE 274 Robotic Applications & Design	3	C	CSCE 146
Semester Eight(2025 Spring) 21 Credit Hours			
ELCT 404(Capstone Design Project 2)	3		ELCT 403
EMCH 428(Design 2)	3		EMCH 427
ENGL 462 Technical Writing	3		ENGL 102
CSCE 492 Capstone Computing Project II	3	C	CSCE 490
CSCE 491 Capstone Computer Engr. Project	3	C	CSCE 240, CSCE 313, CSCE 611
CSCE 416 Introduction to Computer Networks	3	C	CSCE 146
CSCE 330(Programming Language Structures)Elective	3	C	CSCE 240, MATH 374
Semester Nine(2025 Fall) 5 Credit Hours			
MATH 344 Applied Linear Algebra	4		MATH 142
CSCE 390 Prof. Issues in Computer Science Engr.	1	C	

Notes

1/18/2022