

OFFICIAL ADVISORY FORM (Starting Fall 2021)



Program **B.S. in Computer Engineering**

Name of Student _____

Student ID # _____

Name of Advisor _____

Room # _____

First Semester				Second Semester			
Course #	Subject	Credits	Grade	Course #	Subject	Credits	Grade
IGED 110	Found. Writing I	3		IGED 111	Found. Writing II	3	
CHEM 111	General Chemistry I Lec.	3		MATH 152	Calculus II Lec.	3	
CHEM 113	General Chemistry I Lab	1		MATH 156	Calculus II Lab	1	
MATH 151	Calculus I Lec.	3		PHYS 201	University Physics I Lec.	3	
MATH 155	Calculus I Lab	1		PHYS 205	University Physics I Lab	1	
CCEN 101	Intro. to Engineering	2		APCT 231	Intro. to Comp. Sci. I Lec	3	
IGED 130	Found. Oral Comm.	3		APCT 233	Intro. to Comp. Sci. I Lab	1	
TOTAL CREDITS		16		TOTAL CREDITS		15	

Third Semester				Fourth Semester			
Course #	Subject	Credits	Grade	Course #	Subject	Credits	Grade
IGED 210	Discovery Writing	3		IGED 140	Foundation Ethics	3	
MATH 220	Discrete Mathematics	3		MATH 260	Diff. Eq. with Linear Alg.	4	
PHYS 202	University Physics II Lec.	3		CSCI 241	Data Structure	3	
PHYS 206	University Physics II Lab	1		ELEC 358	Dig. & Ana. Electr. Lec.	3	
APCT 232	Intro. to Comp. Sci. II Lec	3		ELEC 359	Dig. & Ana. Electr. Lab	1	
APCT 234	Intro. to Comp. Sci. II Lab	1		ELEC 318	Program Lang for Engineers	2	
ELEC 225	Electrical Circuits Lec.	3					
ELEC 226	Electrical Circuits Lab	1					
TOTAL CREDITS		18		TOTAL CREDITS		16	

Fifth Semester				Sixth Semester			
Course #	Subject	Credits	Grade	Course #	Subject	Credits	Grade
ELEC 301	Engineering Mathematics	3		ELEC 371	Signals and Systems Lec.	3	
CSCI 341	Software Engineering	3		ELEC 374	Signals and Systems Lab	1	
ELEC 315	Comp. Organization Lec.	3		ELEC 307	Prob. and Stat. for Eng.	3	
ELEC 316	Comp. Organization Lab	1		ELEC 480	Dig. Design & Synth. Lec.	3	
ELEC 360	Emb. Pro Sys Design	3		ELEC 483	Dig. Design & Synth. Lab	1	
IGED 270	Discovery Diversity	3		CSCI xxx	Computer Sci Elective***	3	
				IGED 280	Discovery Civics	3	
TOTAL CREDITS		16		TOTAL CREDITS		17	

Seventh Semester				Eighth Semester			
Course #	Subject	Credits	Grade	Course #	Subject	Credits	Grade
ELEC 478	Dig. Int. Cir. Des. Lec.	3		ELEC 459	Dig. Comp. Arch. & Design	3	
ELEC 479	Dig. Int. Cir. Des. Lab	1		CSCI 412	Operating System	3	
ELEC 431	Cyber Physical Sys. Lec.	3		ELEC 492	Senior Project II (Capst.)*	3	
ELEC 432	Cyber Physical Sys. Lab	1		ELEC xxx	Elec. Eng. Electives**	3	
ELEC 491	Senior Project I (Capst.)*	3		MECH 406	Engineering Economics	3	
ELEC xxx	Elec. Eng. Electives**	4					
TOTAL CREDITS		15		TOTAL CREDITS		15	

TOTAL CREDITS

128

*** Computer Engineering Electives

(3): 300-level (3), 400-LEVEL (3)

CSCI 315 Unix and System programming (3) (Prereq: APCT 232/234)

CSCI 325 Organization of Programming Lang (3) (Prereq: CSCI 241)

CSCI 414 Introduction to artificial Intelligence (3) (Prereq: CSCI 241)

CSCI 435 Digital Image processing (3) (Prereq: Junior standing)

** Electrical Engineering Electives

ELEC 410 Comms. and Security For Smart Grid (3)

ELEC 420 Power Electronics (3)

ELEC 458 Digital Signal Processing I (3)

ELEC 461/462 ELEC 461 Electrical Energy Conversion/Lab (3)/(1)

ELEC 463 Energy Systems (3)

ELEC 469/473, ELEC 469 Digital Communications I/Lab (3)/(1)

ELEC 470/477, Intro to Control Systems & Applicat (3)

ELEC 471 Digital Control Systems (3)

ELEC 474 Adv. Topics in Electrical Engineering I (3)

MECH 478 Mechatronics (3)

MECH 487 Photovoltaic Cells and Solar Thermal Energy Systems (3)

**Computer Engineering Program
(Required Courses Pre-Requisites and Co-requisites)**

Course #	Pre-Requisites	Co-requisites
CCEN 101	Engineering Freshman Status	None
ELEC 225	PHYS 201, PHYS 205	ELEC 226
ELEC 226	PHYS 201, PHYS 205	ELEC 225
ELEC 301	MATH 152, MATH 156, MATH 260	None
ELEC 307	MATH 152, MATH 156	None
ELEC 315	ELEC 225, ELEC 226	ELEC 316
ELEC 316	ELEC 225, ELEC 226	ELEC 315
ELEC 318	APCT 232 and APCT 234 with grade C or better	None
ELEC 356	PHYS 203, PHYS 207	None
ELEC 358	ELEC 225 and ELEC 226 with grade C or better	ELEC 359
ELEC 359	ELEC 225 and ELEC 226 with grade C or better	ELEC 358
ELEC 360	ELEC 318 with grade C or better	None
ELEC 371	ELEC 358, ELEC 359, ELEC 301	ELEC 374
ELEC 374	ELEC 358, ELEC 359, ELEC 301	ELEC 371
ELEC 431	ELEC 360 or by permission of instructor	ELEC 432
ELEC 432	ELEC 360 or by permission of instructor	ELEC 431
ELEC 459	ELEC480, ELEC 483	None
ELEC 467	ELEC 307, ELEC 371, ELEC 374	ELEC 476
ELEC 476	ELEC 307, ELEC 371, ELEC 374	ELEC 467
ELEC 478	ELEC 315, ELEC 316, ELEC 352, ELEC 354	ELEC 479
ELEC 479	ELEC 315, ELEC 316, ELEC 358, ELEC 359	ELEC 478
ELEC 480	ELEC 315, ELEC 316	ELEC 483
ELEC 483	ELEC 315, ELEC 316	ELEC 480
ELEC 491	ELEC 360, ELEC 480, ELEC 483	None
MECH 406	Senior Standing	None

**Approved Elective Courses
Pre-Requisites and Co-requisites**

Course #	Pre-Requisites	Co-requisites
ELEC 410	ELEC 467	None
ELEC 420	ELEC 358, ELEC 359	None
ELEC 430	Junior standing, or by permission of instructor	None
ELEC 458	ELEC 371, ELEC 374	None
ELEC 461	ELEC 358, ELEC 359	ELEC 462
ELEC 462	ELEC 358, ELEC 359	ELEC 461
ELEC 463	ELEC 358, ELEC 359, ELEC 360	None
ELEC 469	ELEC 467, ELEC 476, ELEC 307	ELEC 473
ELEC 470	ELEC 371, ELEC 374	ELEC 477
ELEC 471	ELEC 470, ELEC 473	None
ELEC 473	ELEC 467, ELEC 476, ELEC 307	ELEC 469
ELEC 477	ELEC 371, ELEC 374	ELEC 470
MECH 478	MECH 381 (or ELEC 352 and ELEC 312 for EE students), Senior Standing.	

Please check the UDC catalog for updates on the computer science and computer engineering programs