

Computer Engineering Four Year Academic Plan

Name: _____

UID: _____

Year 1	Fall		
Gateway requirements include: ENGL 101, CHEM 135, MATH 141, PHYS 161 and an approved Distributive Studies course. (Directly admitted freshman must successfully complete these courses and ENES 100 by 45 UM credits.)	Course	Credit	Grade
	CHEM 135	3	
	ENES 100 (SP)	3	
	MATH 140 (AR)	4	
	CMSC 131	4	
	ENGL 101 (AW)	3	
	Total	17	

Spring		
Course	Credit	Grade
CMSC 132	4	
MATH 141	4	
ENEE 244	3	
PHYS 161 (NS)	3	
ORAL COMM (OC)	3	
Total	17	

Year 2	Fall		
	Course	Credit	Grade
	CMSC 216	4	
	CMSC 250	4	
	ENEE 200	3	
	ENEE 245	2	
	PHYS 260 and PHYS 261 (NL)	3 & 1	
	Total	17	

Spring		
Course	Credit	Grade
CMSC 330	3	
ENEE 205	4	
ENEE 222	4	
MATH 246	3	
Humanities (HU)*	3	
Total	17	

Year 3	Fall		
Second benchmark requirements must be completed one year after students are reviewed for the gateway requirements and include: All 100 and 200 level MATH and PHYS courses, ENES 100, CMSC 216 and CMSC 250, ENEE 200, 205, 222 and 244.	Course	Credit	Grade
	CMSC 351	3	
	ENEE 303	2	
	ENEE 322	3	
	ENEE 350	3	
	Hist & Social Sciences (HS)*	3	
	Total	14	

Spring		
Course	Credit	Grade
ENEE 307	3	
ENEE 324	3	
ENEE 446	3	
Comp Eng. Tech Elec.	3	
Hist & Social Sciences (HS)*	3	
Total	15	

Year 4	Fall		
Third benchmark requirements must be completed one year after students are reviewed for the second benchmark and include: ENEE 303, 307, 322 and 350, CMSC 330 and CMSC 351 and at least one of: ENEE 324, 446 or one from the list of computer engineering electives.	Course	Credit	Grade
	CMSC 412	4	
	Comp Eng. Tech Elec.	3	
	Comp Eng. Tech Elec.	3	
	Scholarship in Practice (SP)*	3	
	Humanities (HU)*	3	
	Total	16	

Spring		
Course	Credit	Grade
Comp Eng. Tech Elec.	3	
Comp Eng. Tech Elec.	3	
Comp Eng. Tech Elec.	3	
Comp Eng. Tech Elec.	4	
ENGL 393 (PW)	3	
Total	16	

*All students must complete two Distributive Studies courses that are approved for I-series courses. The Understanding Plural Societies and Cultural Competence courses may also fulfill Distributive Studies categories.

COMPUTER ENGINEERING

NAME: _____

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General Education Requirements Fundamental Studies			
Requirements	Course	Credits	Grade
Academic Writing (AW)	ENGL 101	3	
Professional Writing (PW)	ENGL 393	3	
Oral Communication (OC)		3	
Math (MA)	-----	0	
Analytic Reasoning (AR)	MATH 140	0	

Distributive Studies			
Requirements	Course	Credits	Grade
Natural Science Lab (NL)	PHYS 260&261	0	
Natural Sciences (NS)	PHYS 161	0	
History/Social Sciences (HS)		3	
History/Social Sciences (HS)		3	
Humanities (HU)		3	
Humanities (HU)		3	
Scholarship in Practice (SP)	ENES100	0	
Scholarship in Practice (SP) non major		3	

I-Series Normally double counted with Distributive Studies			
Requirements	Course	Credits	Grade
I-Series (IS)			
I-Series (IS)			

Diversity (overlap permitted with Distributive Studies and/or I-series)			
Requirements	Course	Credits	Grade
Understanding Plural Societies (UP)			
Understanding Plural Societies (UP) or Cultural Competency (CC)			

Basic Sciences			
Requirements- The cumulative average of these courses must be a 2.0		Credits	Grade
CHEM 135 - Chem for Eng		3	
PHYS 161 - General Physics I		3	
PHYS 260 and 261 - Gen Physics II & Lab		3 & 1	
MATH 140 - Calculus I		4	
MATH 141 - Calculus II		4	
MATH 246 - Differential Equations		3	

Engineering Sciences			
Requirements- The cumulative average of these courses must be a 2.0		Credits	Grade
ENES 100 - Intro to Eng Design		3	

Requirements for Graduation:	
<input type="checkbox"/>	At least 30 credits must be earned at UMD
<input type="checkbox"/>	15 of the final 30 credits must be earned at the 300-400 level
<input type="checkbox"/>	12 upper level major credits must be earned at UMD

Students must earn a minimum of 120 credits to complete a degree.

Major Requirements			
Requirements-The cumulative average of these courses must be a 2.0		Credits	Grade
CMSC 132 – Object Oriented Programming II*		4	
*Students must successfully complete CMSC 131 or the CMSC 131 Exemption Exam prior to enrolling in CMSC 132.			
CMSC 216 – Intro to Computer Systems		4	
CMSC 250 – Intro to Discrete Structures		4	
CMSC 330 – Organization of Progr Languages		3	
CMSC 351 – Algorithms		3	
CMSC 412 – Operating Systems		4	
ENEE 200 – Social/Ethical Issues of Eng. Tech.		3	
ENEE 205 – Electric Circuits		4	
ENEE 222 – Elements of Discrete Signals		4	
ENEE 244 – Digital Logic Design		3	
ENEE 245 – Digital Circuits & Systems Lab		2	
ENEE 303 – Analog & Digital Electronics		3	
ENEE 307 – Electronic Circuit Design Lab		2	
ENEE 322 – Signal & System Theory		3	
ENEE 324 – Eng Probability		3	
ENEE 350 – Computer Organization		3	
ENEE 446 – Digital Computer Design		3	
Computer Engineering Electives** (24) credits required			
Category A (min 6 crs; 3 crs at 300/400 lvl):		3	
Category A:		3	
Category B (min 3 credits):		3	
Category C (min 3 credits):		3	
Category D (min 2 credits):		2	
Category E (min 3 credits):		3	
Category F (min 3 credits):		3	
Elective (Category A-F or Free Elective):		4	
ENGL 393 - Technical Writing		3	

**For a complete list of approved electives please visit:
www.enee.umd.edu/Academic/Under/advising/CP_tech_electives.html

Gateway requirements		
Requirements	Credits	Grade
ENGL 101	3	
CHEM 135, 271 or 113	3	
MATH 141	4	
PHYS 161	3	
An approved Distributive Studies course	3	
ENES 100 (required for Freshmen Direct Admits)	3	

Benchmark 2 requirements		
MATH 140, 141 and 241	12	
PHYS 161, 260 and 261	7	
ENES 100, CMSC 216 and CMSC 250	11	
ENEE 200, 205, 222 and 244	14	

Benchmark 3 requirements		
ENEE 303, 307, 322 and 350	11	
CMSC 330 and 351	6	
One of: ENEE 324, ENEE 446 OR one course from the list of Comp Eng electives	3	