

NAME: \_\_\_\_\_

# COMPUTER ENGINEERING

UID: \_\_\_\_\_ A.A. \_\_\_ A.S.E. \_\_\_ Post-Bac

GENERAL EDUCATION REQUIREMENTS			
<b>Fundamental Studies</b>			
Academic Writing (AW)	ENGL 101		3
Professional Writing (PW)	ENGL 39X		3
Oral Communication (OC)			3
Mathmatics (MA)	MATH 140		4
Analytic Reasoning (AR)	MATH 140		0
<b>Distributive Studies</b>			
History/Social Sciences (HS*)			3
History/Social Sciences (HS*)			3
Humanities (HU*)	ENEE 200		3
Humanities (HU*)			3
Natural Sciences No Lab (NS)	PHYS 161		3
Natural Sciences w/Lab (NL)	PHYS 260/261		4
Scholarship in Practice (SP*) in major	ENES 100		3
Scholarship in Practice (SP*) out of major			3
<b>Big Question Courses</b>			
Big Question (SCIS*)	ENEE 200		0
Big Question (SCIS*)			0/3
<b>Diversity</b>			
Understanding Plural Societies (UP*)			0/3
Understanding Plural Societies (UP*) OR Cultural Competency (CC*)			0/3
MAJOR REQUIREMENTS			
<b>Basic Sciences</b>			
CHEM 135-Chem Engr or 131 & 134 -Fund & Prin			3/3&1
PHYS 161 - General Physics I (NS)			0
PHYS 260 and 261 - Gen Physics II & Lab (NL)			0
MATH 140 - Calculus I (MA/AR)			0
MATH 141 - Calculus II			4
ENEE 290 - Intro Diff Equations & Linear Algebra Engrs			4
<b>Engineering Sciences</b>			
ENES 100 - Intro to Eng Design (SP)			0

MAJOR REQUIREMENTS		
CMSC 131 – Object Oriented Programming I**		0
CMSC 132 – Object Oriented Programming II		4
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 or ENEE447– Operating Systems		4
ENEE 101 - Intro to Electrical & Comp Engr		3
ENEE 200 - Engineering Ethics (HU/IS)		0
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 304 or ENEE 322		3
ENEE 324 or STAT400		3
ENEE 350 – Computer Organization		3
ENEE 446 – Digital Computer Design		3
<b>Computer Engineering Electives*** (26) credits required</b>		
Category A (min 6 crs; 3 crs at 300/400 lvl):		3
Category A:		3
Category B:		3
Category C:		3
Category C:		3
Category D:		2
Category E:		3
Category F:		3
Elective (Category A-F or Free Elective):		3

Requirements for Graduation:	
<input type="checkbox"/>	Final 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 of the final 30 credits must be upper level major coursework
<input type="checkbox"/>	A minimum 2.00 cumulative UM GPA and satisfactory completion of all degree requirements are required for graduation
<input type="checkbox"/>	Students matriculating after Fall 2012 must have a 2.0 minimum GPA for all degree requirements, minor requirements, and undergraduate certificate requirements
<i>(Major courses are defined as: departmental courses, basic sciences, engineering sciences, specified degree tracks, technical requirements/ technical electives and Professional Writing (PW))</i>	
<input type="checkbox"/>	A minimum of 120 credits are required to earn the degree

\* May satisfy more than one requirement. See [www.gened.umd.edu](http://www.gened.umd.edu)

\*\* Students are required to complete CMSC131 prior to taking CMSC132 unless they have AP credit for CMSC131 (5 on the JAVA A exam, 4 or 5 on the JAVA AB) or have satisfactorily passed the Computer Science exemption exam.

\*\*\* For a complete list of approved electives, please see: [www.ece.umd.edu/home](http://www.ece.umd.edu/home)

# Computer Engineering Graduation Plan

Name: \_\_\_\_\_

UID: \_\_\_\_\_

Year 1	Fall		
Current Engineering Students: <a href="https://eng.umd.edu/services/academic-policies">https://eng.umd.edu/services/academic-policies</a> Prospective Engineering Students: <a href="https://lep.umd.edu/">https://lep.umd.edu/</a>	Course	Credit	Grade
	CHEM 135	3	
	CMSC 131 ***	4	
	ENEE 101*	3	
	MATH 140 (AR/MA)	4	
	ENGL 101 (AW)	3	
	<b>Total</b>	<b>17</b>	

Spring		
Course	Credit	Grade
ENES 100 (SP)*	3	
CMSC 132	4	
PHYS161 (NS)	3	
MATH 141	4	
ORAL COMM (OC)	3	
<b>Total</b>	<b>17</b>	

Year 2	Fall		
	Course	Credit	Grade
	ENEE 244	3	
	ENEE 290	4	
	PHYS 260 and PHYS 261 (NL)	3 & 1	
	CMSC 250	4	
	Humanities (HU)**	3	
	<b>Total</b>	<b>18</b>	

Spring		
Course	Credit	Grade
ENEE 222	4	
ENEE 205	4	
CMSC 216	4	
ENEE 245	2	
HIST & SOC SCIENCE (HS)**	3	
<b>Total</b>	<b>17</b>	

Year 3	Fall		
	Course	Credit	Grade
	ENEE 200 (HU/SCIS)	3	
	ENEE 304 or ENEE 322	3	
	ENEE 350	3	
	CMSC 330	3	
	CpE Tech EI: CAT A	3	
	<b>Total</b>	<b>15</b>	

Spring		
Course	Credit	Grade
ENEE 324 or STAT400	3	
ENEE 446	3	
CMSC 351	3	
CpE Tech EI: CAT A	3	
Hist & Social Sciences (HS)**	3	
<b>Total</b>	<b>15</b>	

Year 4	Fall		
	Course	Credit	Grade
	CMSC4xx: CAT B	3	
	ENEE 4xx: CAT C	3	
	ENEE 4xx: CAT C	3	
	CpE Tech EI: CAT F	3	
	Scholarship in Prac (SP)**	3	
	<b>Total</b>	<b>15</b>	

Spring		
Course	Credit	Grade
ENEE 4xx: CAT D	2	
CpE Tech EI: CAT E	3	
CMSC 412 or ENEE 447	4	
CpE Tech Elective	3	
Professional Writing (PW)	3	
<b>Total</b>	<b>15</b>	

\*ENEE101 and ENES100 cannot be taken in the same semester. Students may take these courses consecutively within their first year in the order of choice.

\*\* All students must complete two distributive studies courses that are approved Big Question courses. The Understanding Plural Societies & Cultural Competence courses may also fulfill Distributive Studies categories.

\*\*\* Students are required to complete CMSC131 prior to taking CMSC132 unless they have AP credit for CMSC131 (5 on the JAVA A exam, 4 or 5 on the JAVA AB) or have satisfactorily passed the Computer Science exemption exam.