

CYBER-PHYSICAL ENGINEERING

NAME:

UID:

GENERAL EDUCATION REQUIREMENTS			
Fundamental Studies			
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
Distributive Studies			
History/Social Sciences (HS*)			3
History/Social Sciences (HS*)			3
Humanities (HU*)			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 major			3
Big Question Courses			
Big Question (SCIS*)			3
Big Question (SCIS*)			3
Diversity			
Understanding Plural Societies (UP*)			3
Understanding Plural Societies (UP*) OR Cultural Competency (CC*)			3
MAJOR REQUIREMENTS			
Basic Sciences			
CHEM 135-Chem Engr or 131 & 134 -Fund & Prin			3/3&1
PHYS 161 - General Physics I (NS)			0
PHYS 260 and PHYS 261 - Gen Physics II & Lab (NL)			0
MATH 140- Calculus I (MA/AR)			0
MATH 141 - Calculus II			4
MATH 241/246/240			3 or 4
Programming Course			3
Engineering Sciences			
ENES 100 - Intro to Eng Design (SP)			0

Major Requirements		
ENEB 302- Analog Circuits		4
ENEB 340- Inter Prgrmming /Embedded Systems		3
ENEB 341 - Intro Internet of Things		3
ENEB 344 - Digital Logic Design Embedded Systems		4
ENEB 345 - Probability & Statistical Inference		3
ENEB 346 - Linear Algebra for Machine Learning		3
ENEB 354 - Discrete math for Info Technology		3
ENEB 304 - Microelectronics & Sensors		3
ENEB 353 - Computer Orgganization Embedded Sys		3
ENEB 355 - Algorithms in Python		3
ENEB 408A - Capstone Design Lab I		3
ENEB 408B - Capstone Design Lab II		3
ENEB 444 - Operating Systems Embedded Systems		3
ENEB 454 - Embedded Systems		3
Hardware, Computational, Security, or General Track		15

Requirements for Graduation:		
- Final 30 credits must be earned at UMD 15 of the final 30 credits must be earned at the 300-400 level 12 upper level major credits must be earned at UMD - A minimum 2.00 cumulative UM GPA, and satisfactory completion of all degree requirements, is required for graduation - Students matriculating in Fall 2012 or after must have a 2.0 minimum GPA for all degree requirements, minor requirements, and undergraduate certificate requirements (Major courses are defined as: departmental courses, basic sciences, engineering sciences, specified degree tracks, technical requirements/ technical electives and Professional Writing (PW)) - A minimum of 120 credits is required to earn the degree		

* May satisfy more than one requirement. See www.gened.umd.edu

**For a complete list of approved electives, please see:

www.ece.umd.edu/home

Cyber-Physical Systems Engineering Graduation Plan

Name:

UID:

Current Engineering Students: <https://eng.umd.edu/services/academic-policies>

Prospective Engineering Students: <https://lep.umd.edu/>

Year 1*	Fall		
	Course	Credit	Grade
	Total	0	

Spring		
Course	Credit	Grade
Total	0	

Year 2*	Fall		
	Course	Credit	Grade
	Total	0	

Spring		
Course	Credit	Grade
Total	0	

Year 3	Fall		
	Course	Credit	Grade
	ENEB 302	4	
	ENEB 340	3	
	ENEB 341	3	
	ENEB 344	4	
	ENEB 354	3	
	Total	17	

Spring		
Course	Credit	Grade
ENEB 304	3	
ENEB 352	3	
ENEB 353	3	
ENEB 355	3	
ENEB 345	3	
Total	15	

Year 4	Fall		
	Course	Credit	Grade
	ENEB 408A	3	
	ENEB 454	3	
	ENEB 444	3	
	ENEB 346	3	
	ENGL 3** (PW)	3	
	Total	15	

Spring		
Course	Credit	Grade
ENEB 408B	3	
ENEB 4XX	3	
ENEB 4XX	3	
ENEB 4XX	3	
ENEB 4XX	3	
Total	15	

*Students are expected to satisfy all general education requirements including fundamental studies, distributive studies, big question, and diversity courses, before entry into the CPSE major.

Updated Fall 2026