



A. JAMES CLARK
SCHOOL OF ENGINEERING



DEPARTMENT OF
ELECTRICAL & COMPUTER
ENGINEERING



The Universities
AT SHADY GROVE

CYBER-PHYSICAL SYSTEMS ENGINEERING

Prerequisite Equivalencies

Course Title	University of Maryland	Montgomery College	Frederick Community College	Howard Community College	Prince George's Community College	Anne Arundel Community College
Introduction to Engineering Design	ENES100	ENES100	ENGR100	ENES100	EGR1010	EGR120
Calculus I	MATH140	MATH181	MATH185	MATH181	MAT2410	MAT191
Calculus II	MATH141 (Minimum of B-)	MATH182	MATH195	MATH182	MAT2420	MAT192
MATH2xx (select one):						
Linear Algebra	MATH240	MATH284	MATH265	MATH250	MAT2450	MAT202
Calculus III	MATH241	MATH280	MATH285	MATH240	MAT2430	MAT201
Differential Equations	MATH246	MATH282	MATH275	MATH260	MAT2460	MAT212
General Physics: Mechanics & Particles Dynamics	PHYS161 (Minimum of B-)	PHYS161	PHYS151 or PY203	PHYS110	PHY1030	PHY211
General Physics: Vibration, Waves, Heat, Electricity and Magnetism	PHYS260/261	PHYS262	PHYS252 or PY204	PHYS111	PHY2030	PHY212
General Chemistry for Engineers	CHEM135 (Minimum of C-)	CHEM135 or CHEM132	CHEM102	CHEM135 or CHEM102	CHM2000 or CHM1020	CHE112 or 134*
Programming**	N/A	CMSC140 or CMSC203	CMIS 105 or CMIS 140	CMSY155, 166, 180, or 181	INT2200	CIS110

Questions? Contact es-sg@umd.edu

NOTE: All major requirements must be completed with a C- or better.

* Students who take an equivalent to CHEM134 must also have completed an equivalent to CHEM131 with a minimum grade of a C-

**An introductory programming course (in C, C++, Java, or Python) is required. Other courses may be reviewed as needed.