

Math and Engineering Meta-Major
ENGINEERING: ELECTRICAL & COMPUTER ENGINEERING
ASSOCIATE IN SCIENCE DEGREE
SAMPLE SEQUENCE MAP

This form is designed to be used in partnership with academic counselors. Modifications may be necessary to meet your goals. Seek assistance from an academic counselor each semester to stay on track to completion of major/certificate. There are 3 General Education patterns available. Not all courses on the map are offered every term. Consult the Catalog and the Schedule of Classes for more details.

0 – 15 UNITS		Pre/Co-req	Units	GE
Semester 1	Area II: Natural Sciences: CHEM 120 –General College Chemistry I	Yes, See Catalog	5	II
	ENGIN 110 – Introduction to Engineering		3	
	Area IA: English Composition: ENGL 122 – <i>First-Year College Composition and Reading</i>	Placement	3	IA
	Area IC: Mathematics Comprehension: MATH 192 – Analytic Geometry & Calculus I	Yes, See Catalog	5	IC
	Total		16	
16 – 30 UNITS		Pre/Co-req	Units	GE
Semester 2	COMSC 165 – Programming with C and C++	ENGIN 135 or COMSC 110	4	
	Major Applicable Elective: <i>Recommended ENGIN 121, 135, 136, or ENGTC 126 or MATH 194 or 195</i>	See Catalog	3-5	
	MATH 193 – Analytic Geometry and Calculus II	MATH 192	5	
	PHYS 130 – Mechanics and Wave Motion	Yes, See Catalog	4	
	Area III: Arts and Humanities		3	III
Total		19		
31 – 45 UNITS		Pre/Co-req	Units	GE
Semester 3	COMSC 210 – Program Design and Data Surfaces	COMSC 165	4	
	ENGIN 130– Energy, Society, Environ <u>or</u> ENGIN 131 - Tech and Society		3	IV
	MATH 292 – Analytic Geometry and Calculus III	MATH 193	5	
	PHYS 230 – Heat and Electro-Magnetism	PHYS 130, MATH 292	4	
	Area IB: Communications and Analytical Thinking		3	IB
Total		16		
46 – 60+ UNITS		Pre/Co-req	Units	GE
Semester 4	ENGIN 230 – Introduction to Circuits and Devices	MATH 193, PHYS 230	4	
	PHYS 231 – Optics and Modern Physics	PHYS 230	4	
	MATH 294 – Differential Equations	MATH 292	5	
	Major Applicable Elective: <i>Recommended ENGIN 121, 135, 136, or ENGTC 126 or MATH 194 or 195</i>	MATH 292	3-5	
	Program Total: 60	Total	16-18	

Tentative Planned Course Offering:

<u>FALL 2019</u>		<u>SPRING 2020</u>		<u>SUMMER 2020</u>	<u>FALL 2020</u>		<u>SPRING 2021</u>	
ENGIN 110	ENGIN 136	ENGIN 110	ENGIN 135	ENGIN110	ENGIN 110	ENGIN 140	ENGIN 110	ENGIN 136
ENGIN 120	ENGIN 240	ENGIN 120	ENGIN 136		ENGIN 120	ENGIN 240	ENGIN 120	ENGIN 210
ENGIN 130	ENGIN 255	ENGIN 121	ENGIN 210		ENGIN 130	ENGIN 255	ENGIN 121	ENGIN 230
ENGIN 131		ENGIN 130	ENGIN 230		ENGIN 131		ENGIN 130	ENGIN 240
ENGIN 135		ENGIN 131	ENGIN 240		ENGIN 135		ENGIN 131	ENGIN 257
			ENGIN 257		ENGIN 136		ENGIN 135	

July 10, 2019

