

This program roadmap represents one possible pathway to complete the program. **Please see a counselor** to create an education plan that is customized to meet your needs. This roadmap is not a guarantee of course availability or financial aid applicability. For counseling appointments call 916.608.6510.

FIRST YEAR

Semester 1:

16 units

CAT.	COURSE	TITLE	UNITS	GE AREA
Req	CHEM 400*	General Chemistry I	5	IV
Req	MATH 400*	Calculus I	5	II(b)
GE	ENGWR 300	College Composition	3	II(a)
GE		Humanities	3	I

Semester 2:

17-18 units

Req	CHEM 401*	General Chemistry II	5	
Req	MATH 401*	Calculus II	5	
Elec	Major Elective	See List Page 2	5	
GE		Life Development Skills	2-3	III(b)

SECOND YEAR

Semester 3:

17 units

Req	MATH 402*	Calculus III	5	
Elec	MATH 410*	Introduction to Linear Algebra	3	
Elec	Major Elective	See List Page 2	5	
GE		See Multicultural Social Science List below	3	V(b)/VI
GE		Physical Education Activity	1	III(a)

* This course has a prerequisite or corequisite course.

Multicultural Social Science List:

ADMJ 302, ANTH 310, ANTH 330, ANTH 341, BUS 330, COMM 325, GEOG 322, HIST 308, HIST 344, HUM 325, NUTRI 310, PSYC 356, PSYC 368, SOC 301, SOC 321, SOC 341, SWHS 331

Notes:

- See FLC [AA/AS](#) General Education requirements.
- Some English and math courses have support courses (co-requisites). See your placement results for more details.
- *This degree outlines the general requirements for students wishing to transfer to a four-year college or university in a STEM (Science, Technology, Engineering or Mathematics) major. Students should work closely with their counselor to determine the specific coursework required at their chosen transfer institution.*

EXPLANATION OF CATEGORIES

Req	Required Core	A course that is required for this degree
GE	General Education	A course that fulfills a specific general education requirement for this degree, which can be replaced with another course that meets the same requirement
Elec	Elective	A degree-applicable course that is part of a degree roadmap to ensure that there is a total of at least 60 units, which is a requirement for an associate degree



SECOND YEAR

Semester 4:

17 units

CAT.	COURSE	TITLE	GE AREA
Req	MATH 420	Differential Equations	4
Elec	Major Elective	See List Below	5
Elec	Major Elective	See List Below	5
GE		American Institutions	3 V(a)

THIRD YEAR

Semester 5:

17 units

Req	Major Elective	See List Below	4
Elec	Major Elective	See List Below	5
Elec	Major Elective	See List Below	3
Elec	Major Elective	See List Below	5

* This course has a prerequisite or corequisite course.

Major Elective List:

A minimum of 12 units from the following:

- PHYS 350: General Physics (4 units)
- PHYS 360: General Physics (4 units)
- PHYS 411: Mechanics of Solids and Fluids (4 units)
- PHYS 421: Electricity and Magnetism (4 units)
- PHYS 431: Heat, Waves, Light and Modern Physics (4 units)
- STAT 300: Introduction to Probability and Statistics (4 units)

Major Elective List:

A minimum of 25 units from the following:

- BIOL 350: Environmental Biology (3 units)
- BIOL 400: Principles of Biology (5 units)
- BIOL410: Principles of Botany (5 units)
- BIOL420: Principles of Zoology (5 units)
- CHEM 410: Quantitative Analysis (5 units)
- CHEM 420: Organic Chemistry I (5 units)
- CHEM 421: Organic Chemistry II (5 units)
- CISP 310: Assembly Language Programming for Microcomputers (4 units)
- CISP 360: Introduction to Structured Programming (4 units)
- CISP 400: Object Oriented Programming with C++ (4 units)
- CISP 401: Object Oriented Programming with Java (4 units)
- CISP 430: Data Structures (4 units)
- CISP 440: Discrete Structures for Computer Science (3 units)
- ENGR 312: Engineering Graphics (3 units)
- ENGR 400: Introduction to Electrical Circuits and Devices (3 units)
- ENGR 420: Statics (3 units)
- STAT 300: Introduction to Probability and Statistics (4 units)

Notes:

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