

First Semester

APMA 1110	Single Variable Calculus	4
CHEM 1410	Intro Chemistry I for Engineers	3
CHEM 1411	Intro Chemistry I Lab	1
ENGR 1624	Intro to Engineering	4
STS 1500	Sci, Tech and Contemp Issues	3
		15

Second Semester

APMA 2120	Multivariate Calculus	4
PHYS 1425	General Physics I	3
PHYS 1429	Physics I Workshop	1
CS 111x	Intro to Programming	3
	Math and Science Elective ⁽¹⁾	3
	HSS Elective ⁽²⁾	3
		17

Third Semester

APMA 2130	Ordinary Differential Equations	4
PHYS 2415	General Physics II	3
PHYS 2419	Physics II Workshop	1
	Primary Minor Elective ⁽³⁾	3
	Secondary Minor Elective ⁽⁴⁾	3
	Science Elective ⁽⁶⁾ or HSS Elective ⁽²⁾	4 (or 3)
		18

Fourth Semester

	Advanced Math/CS Elective ⁽⁵⁾	3
	HSS Elective ⁽²⁾ or Science Elective ⁽⁶⁾	3 (or 4)
	Primary Minor Elective ⁽³⁾	3
	Secondary Minor Elective ⁽⁴⁾	3
STS	STS 2XXX/3XXX Elective	3
		15

Fifth Semester

	Primary Minor Elective ⁽³⁾	3
	Secondary Minor Elective ⁽⁴⁾	3
	Area of Concentration ⁽⁷⁾	3
	Advanced Technical Elective ⁽⁹⁾	3
	HSS Elective ⁽²⁾	3
	Unrestricted Elective ⁽⁸⁾	3
		18

Sixth Semester

	Primary Minor Elective ⁽³⁾	3
	Secondary Minor Elective ⁽⁴⁾	3
	Area of Concentration ⁽⁷⁾	3
	Advanced Technical Elective ⁽⁹⁾	3
	Unrestricted Elective ⁽⁸⁾	3
		15

Seventh Semester

STS 4500	STS and Engineering Practice	3
	Advanced Project ⁽¹⁰⁾	3
	Primary Minor Elective ⁽³⁾	3
	Secondary Minor Elective ⁽⁴⁾	3
	Area of Concentration ⁽⁷⁾	3
		15

Eighth Semester

STS 4600	The Engineer, Ethics and Profession	3
	Advanced Project ⁽¹⁰⁾	3
	Primary Minor Elective ⁽³⁾	3
	Secondary Minor Elective ⁽⁴⁾	3
	Unrestricted Elective ⁽⁸⁾	3
		15

(1) Math and Science Elective - Chosen from the SEAS Undergraduate Dean's Office Approved List of Math and Science Electives, available online and in Thornton A-122. Recommended: CHEM 1420/21 or PHYS 2620.

(2) HSS electives are chosen from the approved list available in A122 Thornton Hall.

(3) **Primary minor** electives must be chosen so as to earn an approved SEAS technical minor. Once primary minor requirements are satisfied, any 2xxx or higher technical SEAS course is acceptable.

(4) **Secondary minor** electives must be chosen so as to earn an approved technical minor in SEAS, mathematics, or a natural science. Once secondary minor requirements are satisfied, any 2xxx or higher technical SEAS, math, or natural science course is acceptable.

(5) Advanced Math/CS elective: One 3xxx-level or higher mathematics courses in SEAS or CLAS; or one 2xxx-level or higher course in computer science.

(6) Science elective: Either CHEM 1420 with lab or PHYS 2620.

(7) The "Area of Concentration" is comprised of 3 technical courses (at the 2000 or 3000 level) which provide identity and add depth to the student's major field. Advisor approval is required.

(8) Unrestricted electives may be chosen from any graded course in the University except mathematics courses below MATH 1310, including STAT 1110 and STAT 1120, and courses that substantially duplicate others used for the student's degree.

(9) Advanced technical elective: 3xxx level or higher course in natural sciences or SEAS. Advisor approval is required.

(10) Advanced Projects is a graded research, independent study, or design course. Individual or group projects are possible.