B.S. in Chemistry – Polymers & Materials Track AY 2021-2022

	First Semester		Second Semester	
1st Year	CHEM 1211K (4) MATH 1551 (2) ENGL 1101 (3) GT 1000 (1) CS 1301* (3) APPH 10XX* (2) *Sub-Total (15)*	Chemical Principles I Differential Calculus English Comp. I Freshman Seminar CS Requirement Wellness Requirement	CHEM 1212K (4) CHEM 2601 (1) MATH 1552 (4) ENGL 1102 (3) BIOS 1107 (3) BIOS 1107L (1) *Sub-Total (16)*	Chemical Principles II Prof. Skills for Chemists Integral Calculus English Comp. II Biological Principles Biological Principles Lab
2nd Year	CHEM 2214 (4) CHEM 2311 (3) MATH 1553 (2) PHYS 2211 (4) Free Elective (3) *Sub-Total (16)*	Quantitative Analysis Organic Chemistry I Intro. Linear Algebra Intro. to Physics I	CHEM 2312** (3) CHEM 2380 (2) MATH 2551 (4) PHYS 2212 (4) Core Elective* (3) *Sub-Total (16)*	Organic Chemistry II Synthesis Lab I Multivariable Calculus Intro. to Physics II
3rd Year	CHEM 3411 (3) CHEM 3380 (3) CHEM 3111 (3) MSE 2001 (3) Core Elective* (3) *Sub-Total (15)*	Physical Chemistry I Inorganic Chemistry Synthesis II Lab Prin&Appl-Engr Material	CHEM 3412 (3) CHEM 3481 (2) CHEM/MSE 4775 (3) Core Elective* (3) Free Elective (3) Sub-Total (14)	Physical Chemistry II Physical Chem. Lab Polymer Science & Engr. I
4th Year	CHEM 3216 (3) CHEM 3216L (2) CHEM 4699*** (2) MSE Elective**** (3) Core Elective* (3) Free Elective (2) *Sub-Total (15)*	Analytical Chemistry Analytical Chemistry Lab Undergrad Research	MSE Elective**** (3) BCHM Elective***** (3) Core Elective* (3) Core Elective* (3) Free Elective (3) *Sub-total (15)*	

Note: 39 credit hours of 3XXX/4XXX level coursework is required to graduate.
Only Free Electives can be taken as Pass/Fail.
Maximum 6 hours of CHEM 2699 and 12 hours of CHEM 4699.
The last 36 hours must be taken in residence and may not be transferred in.

* Core Electives:	APPH 1040 or 1050 or 1060 (2) CS 1301 (3) Humanities electives (6 hours required) Social Sciences electives (9 hours required) History/constitution requirement: HIST 2111 (3), HIST 2112 (3), PUBP 3000 (3), INTA 1200 (3), or POL 1101 (3) (Credit not allowed for both INTA 1200 and POL 1101)
** CHEM 2312:	CHEM 2313, Bioorganic Chemistry II, can be substituted for CHEM 2312, Organic Chemistry II.
*** CHEM 4699:	CHEM 4695, Undergraduate Internship, can be substituted for CHEM 4699, Undergraduate Research.
****MSE Elective:	A minimum of 6 credit hours of MSE electives are required. Required to choose an emphasis in either polymers or inorganic materials. If a 4 credit hour MSE elective is chosen, 1 less credit hour in free electives is required for graduation. Polymers: 6 credit hours from: MSE 4025, 4335, 4751, 4793, and CHEM/MSE 6750, 6751 and 6752. All courses are 3 credit hours with the exception of CHEM/MSE 6752 (4). Inorganic materials: MSE 2021 (4) is required with one of the following: MSE 3015, 4010, 4325 and 4330.
***** BCHM Elective:	CHEM 3411, Survey of Biochemistry, or CHEM 4511, Biochemistry I