

## 4-YEAR CURRICULAR MAP

# Bachelor of Science in Chemistry – Materials Option

FALL	YEAR 1		SPRING
‡UK Core CC1	3	UK Core CC2	3
UK Core QFO (MA113: Calculus I <u>AND</u> MA 193: Supp. Workshop I <u>OR</u> MA 137: Calculus I for Life Sciences)	4-5	A&S NS (CHE 107: General Chemistry II)	3
UK Core NPM (CHE 105: General Chemistry I)	4	A&S Lab (CHE 113: General Chemistry II Lab)	2
UK Core NPM (CHE 111: General Chemistry I Lab)	1	MA 114: Calculus II <u>AND</u> MA 194: Supp. Workshop II	
UK CORE SIR (STA 210: Intro to Statistical Reasoning)	3	<u>OR</u> MA 138: Calculus II for Life Science	4-5
UK 101 (optional)	1	UK Core ACR	3
	<b>Total Credits: 16-17</b>		<b>Total Credits: 15-16</b>
FALL	YEAR 2		SPRING
MA 213: Calculus III	4	UK Core GDY	3
CHE 230: Organic Chemistry I	3	CHE 226: Analytical Chemistry	3
PHY 231: General Univ. Physics I	4	UK Core HUM	3
PHY 241: General Univ. Physics Lab I	1	CHE 232: Organic Chemistry II	3
CHE 231 Organic Chemistry Lab I	1	PHY 232: General Univ. Physics II	4
UK Core SSC	3	PHY 242: General Univ. Physics II Lab II	1
	<b>Total Credits: 16</b>		<b>Total Credits: 17</b>
FALL	YEAR 3		SPRING
‡Foreign language 101	4	‡Foreign language 102	4
MSE 201: Materials Science	3	CHE 410G: Inorganic Chemistry	2
A&S HUM	3	CHE 441G: Physical Chemistry Lab	2
CHE 532: Spec. Identification of Organic Compounds	2	CHE 533: Qualitative Organic Analysis Lab	2
CHE 547: Principles of Physical Chemistry I	3	CHE 516: Inorganic Materials Chemistry	3
WRD 310: Writing in the Natural Sciences	3	UK Core CCC	3
	<b>Total Credits: 17</b>		<b>Total Credits: 16</b>
FALL	YEAR 4		SPRING
‡Foreign language 201	3	‡Foreign language 202	3
A&S SS	3	CHE Major Field Option	3
Major Field Option	3	CHE 566: Characterization and Devices	3
CHE 412: Inorganic Chemistry Lab	2	CHE 567: Organic Materials Fab Lab	2
CHE 536: Electronic and Photonic Properties	4	A&S Free Elective	3
CHE 576: Polymer Chemistry	3	A&S Free Elective	3
	<b>Total Credits: 18</b>		<b>Total Credits: 17</b>

‡ Incoming students are strongly encouraged to take WRD 112 to fulfill the CC1 and CC2 requirements if they have any of the following: an ACT English score of 32 or Higher, an SAT Verbal score of 720 or Higher, or an AP English Composition score of 4 or 5. If the student has been accepted into the University Honors Program, the student is required to take WRD 112 to fulfill CC1 and CC2.

\* To be discussed with your academic advisor. Consider pursuing a 2<sup>nd</sup> major or minor.

◇ Students who have taken at least 2 years of a language in high school can complete the A&S Foreign Language Requirement with 3 college semesters of a different language. Students choosing this option should replace the 4<sup>th</sup> semester of language with electives. Also note that if you take a foreign language placement exam, you may be exempt from 1 or more of the beginning semesters of that language. In this case, replace the by-passed language courses with electives. Any language sequence may be used to satisfy the foreign language requirements,

◇ 6 hours of 'free' electives - that do not count toward any other requirement - must be taken. Additional electives may be required to reach the required minimum of 120 hours.

- **Race and Ethnicity Requirement:** The College requires its students to complete an approved race and ethnicity (R&E) course that will address the changing meanings of race and ethnicity across time and space. Students may double-dip courses to satisfy the R&E requirement with any other requirement

### UK Core Abbreviations

HUM =Intellectual Inquiry in the Humanities

NPM=Intellectual Inquiry in the Natural/Physical/Mathematical Science

SSC=Intellectual Inquiry in Social Sciences

ACR=Intellectual Inquiry in Arts & Creativity

GCCR = Graduation Composition and Communication Requirement

CC1= Composition and Communication I

CC2= Composition and Communication II

QFO= Quantitative Foundations

SIR= Statistical Inferential Reasoning

CCC= Community, Culture and Citizenship in U.S.

GDY= Global Dynamics

### College of Arts & Sciences Abbreviations

SS: Social Sciences NS: Natural Sciences

Lab: College Laboratory or Field Experience

HUM: Humanities