

## 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 |                             |        | 4-5 |
| UK CORE SIR (STA 210: Intro to Statistical Reasoning)  | 3   | <u>OR</u> MA 138: Calculus II for Life Science           |                             |        | 3   |
| 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.

- **Many People, One Community:** The college of Arts & Sciences requires its students to complete an approved course related to Many People, One Community. Students may double-dip courses to satisfy the MPOC requirement with any other requirement, e.g. UK Core, college requirements (except the A&S Electives), or major requirements.

### 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