

Advanced Lab CORE

\* Advanced Lab CORE consists of 2 of the 3 following courses: CH 301 (Chemical Synthesis and Analysis), CH 303 (Instrumental Analysis Lab), or CH 354 (Physical Chemistry Lab), CH 301 and 303 are offered only during the Fall and CH 354 is offered only during the Spring



**REQUIREMENTS:** Students majoring in Chemistry are required to complete a minimum of 128 credits as detailed on the Program planning sheet on the other side of this form.

**ADVANCED PLACEMENT:** Students who come in with AP/transfer credit may bypass some of the requirements listed above opening up slots for additional electives.

## CONCENTRATION IN CHEMISTRY:

**Option A (Intensive):** Core chemistry course, required related courses, plus two advanced four-credit courses in chemistry numbered CAS CH 401 or higher; only one of these two advanced courses may be a research course, i.e., CH 401, CH 402, CH 491 or CH 492. These two advanced courses may be satisfied by the completion of the requirements of a major or minor concentration in astronomy, biology, biomedical engineering, earth sciences, physics, mathematics, neuroscience or computer science. Students in MMEDIC program may substitute GMS BI 555 and CAS CH 527 for CH 421, and GMS BI 556 and CAS CH 528 for CH 422; one additional course in chemistry numbered CAS CH 401 or higher is required. Please note the Program Planning Sheet above outlines Option A.

Option B: Core chemistry courses, required related courses, plus one additional advanced four-credit course as described under Option A.

## **CONCENTRATION IN BIOCHEMISTRY:**

**Option A:** Core chemistry course, required related courses, plus:

CAS BI 108 CAS BI 203 CAS CH 422 And one additional course in biochemistry or molecular biology from the following: CAS BB 522, BI 552, or undergraduate research in biochemistry (CH 401, CH 402, CH 491, CH 492).

Option B: Core chemistry courses (GMS BI 555 plus CAS CH 527 is substituted for CH 421), required related courses, plus:

CAS BI 108

CAS BI 203 GMS BI 556

And one additional course in biochemistry from the following: CAS BB 522 or undergraduate research in biochemistry (CH 401, CH 402, CH 491, CH 492).

CONCENTRATION IN TEACHING OF CHEMISTRY: Core chemistry courses, required related courses, plus:

SED ED 100/101 SED DS 502 SED SE 251 SED ED 410/412 SED CT 575 SED SC 571/572 SED SC 509 or SED SC 510

**BA/MA in Chemistry:** This program of a minimum of 37 courses allows the student to receive the Bachelor of Arts (BA) and Masters of Arts (MA) degrees in five years. With the consent of the advisor, and with two summers of academic work, the program may be completed in four years.

**Minor in Chemistry:** CAS CH 111/112 (or CH 101/102/201 or CH 109/110), CH 211/212 (or CH 203/214 or CH 203/204/220) and one advanced fourcredit course in chemistry (CH 232 or a 300-level or higher non research course). Students in the MMEDIC program may substitute GMS BI 555/556 for this advanced course. Neither CH 201 nor CH 220 may be counted toward the five course requirements for the minor in chemistry. Note that according to CAS rules, "a student wishing to take a minor concentration may use no more than two course from a concentration to fulfill the requirements of a minor concentration."

For additional information on BA/MA, Teaching of Chemistry degree, and Chemistry minor please visit: <u>http://bu.edu/chemistry/undergrad/requirements/</u>

**College of Arts and Sciences Requirements:** For a list of specific courses that satisfy the Social Science and Humanities, please go to the College of Arts and Science Undergraduate Requirements website at: <u>http://www.bu.edu/academics/cas/programs/divisional-studies/</u>