

**BS Chemistry (ACS Approved Environmental Chemistry Option): 78 credits in Major****Suggested Plan of Study**Department of Chemistry: Phone 320-308-3031 E-mail [chemistry@stcloudstate.edu](mailto:chemistry@stcloudstate.edu)**Chemistry Major Advisors (Transfer advisors are underlined):**

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First Semester	Second Semester
<sup>1</sup> Chemistry 210 (4 cr.) <sup>2</sup> Math 221 (5 cr.) <sup>3</sup> ENGL 191 (4 cr.) or other Core Gen. Ed. <sup>3</sup> Distribution Area A or C Racial Issues course (3 cr.) <b>Total semester credits = 16</b>	Chemistry 211 (4 cr.) Math 222 (4 cr.) Earth & Atmospheric Science 220 (4 cr.) <sup>3</sup> Core Gen. Ed. (3 cr.) <b>Total semester credits = 15</b>
Third Semester	Fourth Semester
<sup>4</sup> Chemistry 310 (5 cr.) <sup>5</sup> Chemistry 350 (4 cr.) Physics 234 (5 cr.) <sup>3</sup> PESS 122 (1 cr.) <b>Total semester credits = 15</b>	Chemistry 311 (4 cr.) Earth & Atmospheric Science 300 (2 cr.) Physics 235 (5 cr.) <sup>3</sup> Core Gen. Ed. (3 cr.) <b>Total semester credits = 14</b>
Fifth Semester	Sixth Semester
Chemistry 420 (4 cr.) Chemistry 422 (1 cr.) Chemistry 440 (3 cr.) Chemistry 480 (4 cr.) <sup>3</sup> Core Gen. Ed. (3 cr.) <b>Total semester credits = 15</b>	Chemistry 421 (4 cr.) Chemistry 423 (1 cr.) Chemistry 450 (4 cr.) Chemistry 391 (1 cr.) <sup>3</sup> Distribution Area A or C Diversity course (3 cr.) <sup>3</sup> Distribution Area A or C Diversity course (3 cr.) <b>Total semester credits = 16</b>
Seventh Semester	Eighth Semester
Chemistry 430 (4 cr.) <sup>6</sup> Chemistry 489 or 444 (1 cr.) <sup>3</sup> Distribution Area A or C (3 cr.) <sup>3</sup> Distribution Area A or C (3 cr.) <sup>7</sup> <b>Total semester credits = 11 ++</b>	Chemistry 431 (2 cr.) <sup>6</sup> Chemistry 489 or 444 (1 cr.) Chemistry 491 (2 cr.) <sup>7</sup> <b>Total semester credits = 5 ++</b>

**Notes:**

<sup>1</sup>The prerequisites for Chemistry 210 are high school advanced algebra (or MATH 072), high school chemistry, and one of the following: passing score on the Chemistry Placement Exam OR grade of C or better in CHEM 160 (prior to Fall 2008 in was Chem 140). Contact the Chemistry Department at 320-308-3031 or refer to the department's web page ([www.stcloudstate.edu/chemistry](http://www.stcloudstate.edu/chemistry)) for information and scheduling of the Chemistry Placement Exam. Students scoring 35 or greater may enroll in CHEM 210. Students scoring between 30-34 may enroll in CHEM 210 concurrently with CHEM 110, a one-credit booster course that runs the first five weeks of the semester. Students scoring below 30 must register for CHEM 160 and obtain a grade of C or better before enrolling in CHEM 210.

<sup>2</sup>Contact the Math Department at 320-308-3001 regarding placement into MATH 221. Note that MATH 221 is an acceptable substitute for MATH 193 in the General Education Core requirements. MATH 221 and 222 also allow for a waiver of 3 credits in Area B of the General Education Distribution requirements.

<sup>3</sup>The general education program must be satisfied by completion of ENGL 191, CMST 192, PHIL 194, Democratic Citizenship 195, three courses in Area A and two in Area C (or vice-versa). The Area A and C courses must include 3 approved Diversity courses, one of which must be an approved Racial Issues course. All students must complete PESS 122.

<sup>4</sup>Upper level chemistry courses (except CHEM 350) are not offered every semester. Odd semesters above correspond to fall offerings, and even semesters correspond to spring offerings.

<sup>5</sup>CHEM 350 is normally offered fall and spring semester.

<sup>6</sup>A minimum of 2 credits of undergraduate research (CHEM 489) or pre-approved internship (CHEM 444) are required.

<sup>7</sup>A minimum of 120 credits must be earned to graduate. The 45 upper level credit requirement is completely met by completion of this major.

NOTE: The following courses are normally offered in the summer: CHEM 160, 210, 211. Consult departments after February 1 to determine expected summer course offerings.