

Chemistry Major Option Comparison

B.A. in Chemistry (86-99 units)

1. Lower-division requirements (48-51 units)

- a) CHEM 001A and CHEM 01LA (5)
CHEM 001B and CHEM 01LB (5)
CHEM 001C and CHEM 01LC (5)

(or CHEM 01HA and CHEM 1HLA) (5)
(or CHEM 01HB and CHEM 1HLB) (5)
(or CHEM 01HC and CHEM 1HLC) (5)

CHEM 005 (5)

- b) MATH 009A (4)
MATH 009B (4)
MATH 009C (4)
MATH 010A (4)

- c) PHYS 002A and PHYS 02LA (4)
PHYS 002B and PHYS 02LB (4)
PHYS 002C and PHYS 02LC (4)

(or PHYS 040A) (5)
(or PHYS 040B) (5)
(or PHYS 040C) (5)

2. Upper-division requirements (38-48 units)

- a) CHEM 110A (4)
CHEM 110B (4)
CHEM 112A (4)
CHEM 112B (4)
CHEM 112C (4)
CHEM 113 (4)
CHEM 125 (5)
CHEM 150A (4)
CHEM 191 (1)

- b) CHEM 111 or CHEM 166 (4)

- c) Ten (10) additional upper-division units in Chemistry if the year of organic chemistry is taken at a community college

B.S. in Chemistry (114 Units)

1. Lower-division requirements (64 units)

- a) CHEM 001A and CHEM 01LA (5)
CHEM 001B and CHEM 01LB (5)
CHEM 001C and CHEM 01LC (5)

(or CHEM 01HA and CHEM 1HLA) (5)
(or CHEM 01HB and CHEM 1HLB) (5)
(or CHEM 01HC and CHEM 1HLC) (5)

CHEM 005 (5)

- b) MATH 009A (4)
MATH 009B (4)
MATH 009C (4)
MATH 010A (4)
MATH 10B (4)
MATH 46 (4)

- c) PHYS 040A (5)
PHYS 040B (5)
PHYS 040C (5)
PHYS 040D (5)

2. Upper-division requirements (50 units)

- a) CHEM 110A (4)
CHEM 110B (4)
CHEM 111 (4)
CHEM 112A (4)
CHEM 112B (4)
CHEM 112C (4)
CHEM 113 (4)
CHEM 125 (5)
CHEM 150A (4)
CHEM 191 (1)

- b) Two laboratory courses from the group:

CHEM 114 (4)
CHEM 140 (4)
CHEM 166 (4)
BCH 102 (4)

- c) One course from the group:

CHEM 150B (4)
CHEM 135 (4)
CHEM 136 (4)
BCH 110A (4)

B.S. in Chemistry/Chemical Physics Option (138 Units)

1. Lower-division requirements (64 units)

- a) CHEM 001A and CHEM 01LA (5)
CHEM 001B and CHEM 01LB (5)
CHEM 001C and CHEM 01LC (5)

(or CHEM 01HA and CHEM 1HLA) (5)
(or CHEM 01HB and CHEM 1HLB) (5)
(or CHEM 01HC and CHEM 1HLC) (5)

CHEM 005 (5)

- b) MATH 009A (4)
MATH 009B (4)
MATH 009C (4)
MATH 010A (4)
MATH 10B (4)
MATH 46 (4)

- c) PHYS 040A (5)
PHYS 040B (5)
PHYS 040C (5)
PHYS 040D (5)

2. Upper-division requirements (74 units)

- a) CHEM 110A (4)
CHEM 110B (4)
CHEM 111 (4)
CHEM 112A (4)
CHEM 112B (4)
CHEM 112C (4)
CHEM 113 (4)
CHEM 140 or CHEM 114 (4)
CHEM 150A (4)
CHEM 150B (4)
CHEM 191 (1)

- b) Twenty-four (24) units of upper-division course work (110 or above) in Mathematics or Physics (excluding 190 series).

- c) Nine (9) additional units in Physical Chemistry chosen from CHEM 197, CHEM 199 or graduate courses.

B.S. in Chemistry/Environmental Science Option (141 Units)

1. Lower-division requirements (77 units)

- a) BIOL 005A and BIOL 05LA (5)
BIOL 005B (4)
BIOL 005C (4)

- b) CHEM 001A and CHEM 01LA (5)
CHEM 001B and CHEM 01LB (5)
CHEM 001C and CHEM 01LC (5)

(or CHEM 01HA and CHEM 1HLA) (5)
(or CHEM 01HB and CHEM 1HLB) (5)
(or CHEM 01HC and CHEM 1HLC) (5)

CHEM 005 (5)

- c) MATH 009A (4)
MATH 009B (4)
MATH 009C (4)
MATH 010A (4)
MATH 10B (4)
MATH 46 (4)

- d) PHYS 040A (5)
PHYS 040B (5)
PHYS 040C (5)
PHYS 040D (5)

2. Upper-division requirements (66 units)

- a) CHEM 110A (4)
CHEM 110B (4)
CHEM 111 (4)
CHEM 112A (4)
CHEM 112B (4)
CHEM 112C (4)
CHEM 113 (4)
CHEM 125 (5)
CHEM 135 (4)
CHEM 136 (4)
CHEM 140 or CHEM 114 (4)
CHEM 150A (4)
CHEM 166 (4)
CHEM 191 (1)

- b) One course from the group:

ENSC 104 (4)
GEO 137 (4)

- c) Two 4-unit courses from the group:

CHEM 150B, CHEM 197, CHEM 199, ENSC 100, ENSC 101, ENSC 102, ENSC 104, ENSC 140, ENSC 142, ENSC 155, ENSC 163, ENTX 101, GEO 132, GEO 137, GEO 157 (4 units total from CHEM 197 and/or CHEM 199)