



B.S. in BIOCHEMISTRY AND MOLECULAR BIOLOGY

MOLECULAR & CELL BIOLOGY OPTION

MAJOR REQUIREMENTS

PRESCRIBED COURSES-C OR HIGHER¹

- CHEM 110, 3 units²
- CHEM 111, 3 units²
- CHEM 112, 3 units²
- MATH 140, 4 units²

A “C” or better is required in 2 of of the following 3 courses. **All 3 courses required:**

- BMB/MICRB 251, 3 units
- BMB/MICRB 252, 3 units
- MICRB 201, 3 units

PRESCRIBED COURSES

- BIOL 322 or 222, 3 units
- BMB 400, 2 units
- BMB 401, 3 units
- BMB 402, 3 units
- BMB 442, 3 units
- BMB 443W, 3 units
- BMB 445W or BMB 448, 2 units
- CHEM 113, 3 units
- CHEM 210, 3 units
- CHEM 212, 3 units
- CHEM 213, 2 units
- MATH 141, 4 units
- MICRB 202 or 203, 2 units

OPTION REQUIREMENTS (MCB)

- BMB 428, 3 units
- BMB/BIOL 430, 3 units
- BMB/MICRB 460, 3 units
- MICRB 410, 3 units
- PHYS 250, 4 units
- PHYS 251, 4 units

400-LEVEL SELECTIONS

Select 5-6 units from any 400-level BMB, MICRB, or LIST D (see BMB web site) courses with a total maximum of 4 units in BMB 488 and/or BMB 488.

- _____
- _____
- _____

MATHEMATICAL SCIENCE (DEPARTMENT LIST B)

Select 2-4 units from **CMPS** 101 (3), 102 (3), 121 (3), 200 (3), 201 (3); **MATH** 220 (2), 230 (4), 231 (2), 250 (3), 251 (4); **STAT** 200 (4), 240 (3), 250 (3), 301 (3), 401 (3).

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Earn a “C” or higher in 9 units of any 400-level MICRB/BMB courses except BMB 442, 443W, 445W, 448, 496, MICRB 421W, 422 and 447.

- _____
- _____
- _____



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OPTION REQUIREMENTS (MCB)

LIST C FREE ELECTIVES³

Select 4-13 units from department list:

- _____
- _____
- _____
- _____
- _____
- _____

GENERAL EDUCATION

FIRST YEAR SEMINAR

- PSU 16, 1 unit

U.S. & INTERNATIONAL CULTURES⁴

- _____ (US)
- _____ (IL)

WRITING AND SPEAKING

- ENGL 15 or 30, 3 units
- CAS 100, 3 units
- ENGL 202C, 3 units

GENERAL EDUCATION

Humanities, 6 units

- _____
- _____

Arts, 6 units

- _____
- _____

Social & Behavioral Sciences, 6 units

- _____
- _____

Health & Physical Activity, 3 units

- _____
- _____
- _____

1. A student enrolled in this major must receive a grade of "C" or better in the courses listed in this category specified by Senate Policy 82-44.
2. Course is ETM Requirement. Students must receive a C or better grade in all ETM courses prior to entering the major in addition to having a GPA of 2.0 or better.
3. With the EXCEPTION of the courses listed below, ALL courses appearing in the University Bulletin are acceptable as elective courses: 6 units of ROTC may be applied toward graduation requirements. **Students MAY NOT** fulfill this requirement with lower level or general education courses in math and science (including but not limited to examples such as: any BI SC course, any B M B course below the 100 level, MATH 110 and 111, and the like). **Students MAY NOT** fulfill this requirement with courses that significantly repeat material from courses required for the major, (including but not limited to examples such as: CHEM 202 or 203 after taking CHEM 210 or 212, or vice-versa; PHYS 250 or 251 after taking PHYS 211, 212, 213, and 214, or vice-versa; and so forth). **Students MAY NOT** fulfill this requirement with remedial courses (including but not limited to examples such as: LL ED 005 and 010; ENGL 004, 005, and 006; CHEM courses below CHEM 110; MATH courses below MATH 110; STAT 100; PHYS courses below PHYS 211; and the like).
4. Included in GENERAL EDUCATION course selection or MAJOR REQUIREMENTS.

Minimum overall GPA requirement for graduation must be ≥ 2.0 . Total units earned (less repeats and remedial) must equal 125 to graduate. They must also satisfy the University's First-Year Seminar, International and US Cultures, and Writing Across the Curriculum requirements. At least 36 of the last 60 units must be completed at the university, and the last 60 units within the past 5 calendar years.