BS – Microbiology with Biochemistry minor (SC-BS/MICR/CHEM)  
2016 Catalog year: College of Science and Engineering

This is not an official degree audit and it is subject to change. This chart is intended to be used by students who start out at Texas State. Please contact the College of Science Undergraduate Advising Center for advising.

Note: In addition to major courses, students must also complete all core and minor requirements (if applicable) and any other requirements for graduation.

**KEY:**
- Arrows indicate prerequisites.
- Arrows with dotted lines indicate co-requisites.
- Arrows with dash lines are recommended prerequisites.
- Courses taught specific semesters are indicated with the following codes: F-Fall, Su-Summer Session I or II, S-Spring

Required WI courses: BIO 4416, 4441 or 4447
Additional WI courses: BIO 3442, 4446

Core courses must be completed:
- US 1100
- COMM 1310
- PHIL 1305 or 1320
- ENG 1310
- ENG 1320
- ENGL 2310-2360
- HIST 1310
- HIST 1320
- ART/DAN/MU/TH 2313
- POSI 2310
- POSI 2320
- ANTH 1312/ECO 2301/ECO 2314/GE0 1310/PSY 1300/SOCI 1310

US 1100 & ENG 1310 recommended for first semester. HIST 1310/1320 not recommended for first semester.

11-12 hours from:
- BIO 3442 (F,S) - Virology
- BIO 4326/4416 (F,S) - Immunology
- BIO 4366/4466 (F,S) - Medical Microbiology
- BIO 4413 (F) - Parasitology (instructor approval req.)
- BIO 3430 (F) - Mycology
- BIO 4440 (F) - Cytology & Microtechnique
- BIO 4447 (F) - Microbial Phys & Genetics
- BIO 4446 (S) - Microbial Ecology
- BIO 4350L (S) - Bacterial Genetics

Note: BIO 4447 cannot count for both physiology and advanced microbiology. Only counts for one requirement. If taking BIO 4366, must also complete BIO 4416. If taking BIO 4326, must also complete 4126. Check course prerequisites.

DO NOT COUNT: BIO 3351, 4305, 4402, 4403, 4408

**NEW COURSE=OLD COURSE**
- BIO 4326/4416 = BIO 4413
- BIO 4366/4466 = BIO 4445 = BIO 4350G
- BIO 4311 = BIO 4350A
- BIO 4319 = BIO 4350F

3-4 hours advanced biology electives, chosen in consultation with an academic advisor.

BIO 4299 requires faculty and departmental approval to count towards advanced electives and must be taken twice. Check course prerequisites.

**Elective hours (as needed, see advisor)**

- BIO 4301 (F,S) - General Ecology
- BIO 4416 (F,S) - Genetics
- CHEM 4360 (F) - Adv. Biochem & Molecular Bio
- CHEM 4385 (S) - Metabolism
- CHEM 3375 or CHEM 4375
- CHEM 3276 (F,S) - Experimental Biochem
- 4 hours from:
  - BIO 4441 (S)
  - BIO 4447 (F)
  - BIO 3421 (F,S)

(Check chemistry prerequisites)

Additional courses:
- Microbial Ecology
- Microbial Physiology
- Cytology
- Immunology

See advisor for guidance.