

## CHEMICAL ENGINEERING DEPARTMENT BIOLOGY / LIFE SCIENCE REQUIREMENT

2021-2022

The courses listed below fulfill the Biology / Life Science elective requirement:

Course	Credits	Title	Prerequisites
BIOLOGY 172*	4	Introductory Biology – Molecular, Cellular and Developmental	Prior or concurrent enrollment in Chem 130
BIOLOGY 174*	4	Introduction to Cell and Molecular Biology	Prior or concurrent enrollment in Chem 130
BIOLOGY 195 (AP)	5	Introductory Biology	Not an actual class, placeholder for AP credit

**Only students who have Biology 100 AP credit can fulfill the biology / life science requirement using the courses listed below:**

BIOLCHEM 415 + BIO 100 AP CREDIT	3	Intro. Biochemistry	Two terms of organic chem. No credit granted to those who have completed or are enrolled in MCDB 310 or 311, CHEM 451, BIOLCHEM 451
CEE 482 + BIO 100 AP CREDIT	3	Environmental Microbiology	CHEM 130. No previous biology experience expected.
ChE 574 + BIO 100 AP CREDIT	3	Engineering Principles in Drug Delivery and Targeting	Senior or graduate standing.
ChE 584 (BioMedE 584) (BioMat 584) + BIO 100 AP CREDIT	3	Tissue Engineering	BIOLOGY 310 or 311, ChE 517, or equivalent biology course; senior standing
ChE 696-002 + BIO 100 AP CREDIT	3	Principles and Predictions of Drug Distribution: From Small Molecules to Biologics and Nanoparticles	Permission of instructor
MICROBIOL 440 + BIO 100 AP CREDIT	3	Human Immunology	

### **Fulfilling the biology / life science requirement at another school:**

To check whether a course at another school has already been approved as a transfer equivalent to a course listed above, check the college's transfer database at <https://transfercredit.ugadmiss.umich.edu/>. If you do not find an equivalent, check for a biology course for science majors that covers cell and genetics, typically the prerequisite for biochemistry, then contact the ChE Undergraduate Advisor for an approval at [cheugadvising@umich.edu](mailto:cheugadvising@umich.edu).

\*Note that courses that fulfill the ChE Biology / Life Science requirement are not automatically a match for Biology 172. If you seek a match for Biology 172 specifically, you must get your course evaluated by the biology department by following the process at <https://lsa.umich.edu/biology/undergraduates/transfer-credit.html>. A course that is approved as a match for Biology 172 by the biology department will automatically fulfill the ChE biology/life science requirement.

*Check web for updates at [che.engin.umich.edu/undergraduate/requirements](http://che.engin.umich.edu/undergraduate/requirements)*