

BIOTECHNOLOGY

Associate in Science

Transfer Preparation * (Major Code: 01512)

The associate in science degree augments student transfer preparation and qualifies students for entry-level positions in biotechnology research laboratories.

Program Student Learning Outcome

- Demonstrate skills, based on biotechnology industry requirements, necessary to successfully apply, interview and perform in biotechnology research internships and/or professional jobs.

First Semester		Units
MATH 62	INTERMEDIATE ALGEBRA II (STEM/BUS) **	2-6
or	or INTERMEDIATE ALGEBRA I AND II	
MATH 72	(STEM/BUS)	
Units		2-6
Second Semester		Units
BIOL 100	PRINCIPLES OF BIOLOGY **	3
BIOL 101	PRINCIPLES OF BIOLOGY LABORATORY **	1
BIOL 205	DNA SCIENCE I	2
BIOL 229	INTRODUCTION TO BIOLOGICAL RESEARCH I	3
CHEM 170	PREPARATION FOR GENERAL CHEMISTRY **	4-5
or	or GENERAL CHEMISTRY I	
CHEM 200		
Units		13-14
Third Semester		Units
BIOL 206	DNA SCIENCE II	2
BIOL 211	INTRODUCTION TO CELL AND MOLECULAR BIOLOGY	4
BIOL 230	INTRODUCTION TO BIOLOGICAL RESEARCH II	3
BIOL 265	GENERAL MICROBIOLOGY	4
Units		13
Total Units		28-33

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Career and Transfer Connections. See catalog Transfer Courses Information (<http://catalog.swccd.edu/student-success-support-program/student-services-and-college-services/other-services/transfer-courses/>) section for further information.

** Transfer students should substitute higher-level courses required for their major (e.g.: BIOL 210 can replace BIOL 100/BIOL 101; CHEM 170 or CHEM 200 can be replaced by higher-numbered chemistry courses; and MATH 72 can be replaced by MATH 62 or higher-numbered math courses except MATH 100, MATH 110, MATH 111, MATH 112, or MATH 115.)

To earn an associate degree, additional general education and graduation requirements (<http://catalog.swccd.edu/certificates-certifications-degrees-csuuc-requirements/>) must be completed.

Some courses within this program may require additional coursework that must be completed prior to enrollment in these courses. Please consult the individual course listings for prerequisites and any other limitations on enrollment.