

Biotechnology A.S. Degree Program(60 credits) at MCTC

Recommended Semester Sequence Planning

See the Full Curriculum Document for Further Details

Admission Requirements: Completion of CHEM 1020 or high school chemistry; completion of MATH 80 or placement into MATH 1110; Completion of READ 0200 or ESOL 0052 or equivalent or placement into READ 900; Completion of ENGL 0900 or ESOL 0051 or equivalent or placement into ENGL 1100.

The recommended semester-sequence shown in this document is based on admission to the program in Fall semester and with the assumption that you are ready for college level science and Math courses and that you are a full-time student. If not, you should be aware that you will need more than two years to complete the program and therefore, plan accordingly.

See the document “Can you graduate in Two Years”? We also recommend that you complete Self-evaluation forms A and B to plan your program path.

Please be aware that certain courses such as Analytical Chemistry, Biochemistry, Molecular Biology, are offered only once a year. Therefore, plan your course sequence accordingly. **You need to ensure you have met the pre-requisites, before registering for any course. Contact the designated Science Advisor Sandra.Castro-pearson@minneapolis.edu for more information.**

If necessary, you may also contact the faculty member Rekha Ganaganur (Rekha.Ganaganur@minneapolis.edu) for questions about specific courses or the program or transfer information.

Depending on your transfer needs and other career interests, special electives include Forensic Science (CHEM 1145), Undergraduate Research (BIOT/CHEM 2722 and 2723), and other biology, chemistry, physics and math electives.

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Year-1: Fall	Year-1 Summer	Year-1: Spring
Principles of Chemistry-1 (CHEM 1151) – 5 Cr	General Education Electives or Plan a science course, to reduce your load in regular semesters; Or take a course needed for transfer to a four-year program which might not be part of the 2-year program at MCTC	Principles of Chemistry 2 (CHEM 1152)- 5 Cr
Principles of Biology (BIOL 2200) – 4 Cr		Microbiology Lecture (BIOL 2230) – 2 Cr
Introduction to Bioscience (BIOT 1000) – 1 Cr		Microbiology Lab (BIOL 2231) – 2 Cr
		Regulatory Affairs and Quality Control (BIOT 2320 or CHEM 2320) (effective Fall 12 dual designation as CHEM 2320 also; students will register for one or the other) - 4 Cr
College Algebra (MATH 1110) or other MATH course higher than MATH 1110 depending on your placement - 4 Cr		College English (ENGL 1110) (if you have not already completed this) OR other General Education Electives – 3 Cr
Total 14 Cr		Total 16 Cr

Year-2: Fall	Year-2 Summer	Year-2: Spring
Organic Chemistry-1 (CHEM 2204 lecture); 4 Cr	Plan your General Education Elective or a course needed for transfer but which might not be part of the 2-year program at MCTC	Biochemistry (CHEM 2610 ; lecture) <i>offered only in Spring</i> ; 3Cr
Analytical Chemistry and Instrumentation Lecture (CHEM 2410) <i>offered only in Fall</i> ; 3 Cr		Biochemistry Lab (CHEM 2620) <i>offered only in Spring</i> ; 2 Cr
Analytical Chemistry and Instrumentation Lab (CHEM 2420) <i>offered only in Fall</i> ; 2 Cr		Molecular Biology (BIOL 2500) <i>offered only in Spring</i> ; 4 Cr
General Education Electives or other science electives** ; 6 Cr		Cell Culture Technologies BIOT 2642 (also formerly called Tissue Culture Technologies) – <i>offered only in Spring</i> ; 3 Cr
Total 15 Cr	3 Cr	Total 12 Cr

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