

COURSE SEQUENCE GUIDE | FULL-TIME ENROLLMENT
Biotechnology - Chemical Technology
Associate in Science | Code: 22029 | 61 credits
Effective Term: Fall 2024 (2247)

Semester 1

Course ID	Course Title	Credits	Pre/Co-requisites
ENC 1101	English Composition I	3	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
MAT 1033	Intermediate Algebra	3	Prerequisites: MAT 0022C, or MAT 0028, or MAT 0057 or by placement score, or eligible exemption.
Social Science	AMH 2010, AMH 2020, POS 2041	3	
CGS 1060C	Introduction to Computer Technology & Applications		Departmental Recommendation: Computer Skills Placement (CSP)
Semester Credits		9	

Semester 2

Course ID	Course Title	Credits	Pre/Co-requisites
HUM 1020 --Or-- PHI 2010	Intro to Humanities --Or-- Intro to Philosophy	3	
MAC 1105	College Algebra	3	Prerequisite: MAT 1033♦ ♦Students must seek advisement for proper mathematics course from discipline chairperson.
STA 2023	Statistical Methods	3	Prerequisite: MAT 1033♦ or MGF 1131 ♦Students must seek advisement for proper mathematics course from discipline chairperson.
Semester Credits		9	

Semester 3

Course ID	Course Title	Credits	Pre/Co-requisites
CHM 1045	General Chemistry and Qualitative Analysis	3	Prerequisite: CHM 1025 or a passing score on the CART exam, MAC 1105 Corequisite: CHM 1045L
CHM 1045L	General Chemistry and Qualitative Analysis Lab	2	Prerequisite: CHM 1025 or a passing score on the CART exam, MAC 1105 Corequisite: CHM 1045
BSC 2426	Biotechnology Methods and Applications 1	3	Corequisite: BSC 2426L
BSC 2426L	Biotechnology Methods and Applications 1 Lab	2	Corequisite: BSC 2426
Semester Credits		10	

Semester 4

Course ID	Course Title	Credits	Pre/Co-requisites
BSC 2427	Biotechnology Methods and Applications 2	3	Prerequisite: BSC 2426, BSC 2426L Corequisite: BSC 2427L
BSC 2427L	Biotechnology Methods and Applications 2 Lab	2	Prerequisite: BSC 2426, BSC 2426L Corequisite: BSC 2427
CHM 1046	General Chemistry and Qualitative Analysis	3	Prerequisite: CHM 1045, CHM 1045L Corequisite: CHM 1046L
CHM 1046L	General Chemistry and Qualitative Analysis Laboratory	2	Prerequisite: CHM 1045, CHM 1045L Corequisite: CHM 1046
Semester Credits		10	

Semester 5

Course ID	Course Title	Credits	Pre/Co-requisites
BSC 2010	Principles of Biology 1	3	Prerequisite: CHM 1045 Corequisite: BSC 2010L
BSC 2010L	Principles of Biology 1 Lab	2	Corequisite: BSC 2010
CHM 2200	Survey of Organic Chemistry	3	Prerequisite: CHM 1046 Corequisite: CHM 2200L

CHM 2200L	Survey of Organic Chemistry Laboratory	1	Prerequisite: CHM 1046L Corequisite: CHM 2200
Semester Credits		9	

Semester 6

Course ID	Course Title	Credits	Pre/Co-requisites
BSC 2943L	Bioscience Internship	3	
CHM 2124C	Survey of Quantitative Analysis	4	Prerequisites: CHM 1046, CHM 1046L
CHS 2311C	Analytical Chemical Instrumentation	4	Pre/Corequisites: CHM 2200, CHM 2200L, CHM 2124C or CHM 2210, CHM 2210L, CHM 2211, CHM 2211L
ETI 1172	Introduction to Quality Assurance	3	
Semester Credits		14	
Program Total		61	

Academic Pathway at MDC: The AS in Biotechnology-Chemical Technology is a pathway to the [Biological Sciences - Biopharmaceutical Sciences Concentration](#). To learn more about the courses listed see [College Catalog](#).