

This guide aligns course articulations from a Montgomery College (MC) associate's degree to a UMGC bachelor's degree and additional bachelor's degree requirements for Academic Catalog year 2025-2026. See a community college advisor for associate degree course sequencing. UMGC degree requirements and course articulations may change based on your initial UMGC enrollment term. UMGC offers multi-term registrations in 8-week sessions. In your transfer year, meet with a UMGC advisor to plan your UMGC schedule.

CREDITS	MC AAS IN BIOTECHNOLOGY Requirements for Associate's Degree	UMGC BS IN BIOTECHNOLOGY Requirements for Bachelor's Degree
3	ENGL 101 <i>or</i> ENGL 101A recom'd elective <sup>1</sup>	WRTG elective (Gen Ed Communications)
3-4	MATH 117 or higher Mathematics Gen Ed req. (not 130, 131)	STAT 200, MATH 106, or higher Gen Ed Mathematics
3	BIOT 110 Program requirement	♦ BIOT elective (Major Required Biotechnology Techniques Lecture)
3	BIOT 120 and BIOT 121 Program requirement	BIOT elective
4	CHEM 131 Gen Ed requirement	+ CHEM 103 (Gen Ed Biological & Physical Science)
3	ENGL 102 <i>or</i> ENGL 103 recom'd English Found. Gen Ed req.	WRTG 112 (Gen Ed Communications; <i>must be completed with C- or better</i> )
4	BIOL 150 Gen Ed requirement	+ BIOL 105 (Gen Ed Biological & Physical Lab Science)
4	BIOT 200 and BIOT 201 Program requirement	+ Related science (elective)
4	BIOL 210 Program requirement	♦ BIOL 230 (required for the major)
3	Arts <i>or</i> Humanities Distribution Gen Ed requirement	Gen Ed Arts & Humanities
4	BIOL 222 Program requirement	♦ BIOL 222 and BIOL 224 (required for the major)
4	BIOT 230 and BIOT 231 Program requirement	+ Related science (elective)
4	CHEM 150 Program requirement <sup>†</sup>	CHEM 104 (elective; Major Related Science)
3	Behavioral and Social Sciences Distribution Gen Ed req.	Gen Ed Behavioral & Social Science
4	BIOT 240 and BIOT 241 Program requirement	♦ Biotechnology applications and techniques w/ lab (req. for the major)
3	COMM 108 <i>or</i> COMM 112 recom'd Program elective <sup>†</sup>	SPCH 100 or SPCH elective (Gen Ed Communications)
3	Arts or Humanities Distribution recom'd Program elective <sup>†</sup>	Gen Ed Arts & Humanities
1	Program elective <sup>†</sup>	Elective
<b>60-61</b>	<b>Estimated Credits Transferred</b>	<b>Estimated Credits Transferred</b>

REMAINING BACHELOR'S DEGREE REQUIREMENTS (recommended sequence)	CREDITS
LIBS 150 Introduction to Research or any Gen Ed credit (to be fulfilled with 1 Gen Ed credit from MC)	---
PACE 111S Program and Career Exploration in Health and Sciences or any PACE 111	3
IFSM 201 Concepts and Applications of Information Technology (Gen Ed Computing; prerequisite to BIOL 357)	3
BEHS 103 Technology in Contemporary Society or any Gen Ed Behavioral & Social Science	3
Elective <sup>~</sup>	3
WRTG 393 Advanced Technical Writing or any upper-level writing (Gen Ed Communications)	3UL
Elective <sup>~</sup>	3
Elective <sup>~</sup>	3
♦ BIOL 325 Inquiries in Biological Science (required for the major)	3UL
Elective <sup>~</sup>	3
♦ BIOL 350 Molecular and Cellular Biology (required for the major)	3UL
Elective <sup>~</sup>	3
♦ BIOL 357 Bioinformatics (required for the major)	3UL
Elective <sup>~</sup>	3
♦ NSCI 301 Laboratory Management and Safety (required for the major)	3UL
Elective <sup>~</sup>	3
♦ BIOL 486B Workplace in Learning in Biology or other related science workplace learning (required for the major)	6UL
Elective <sup>~</sup>	3
♦ BIOL 495 Life Sciences Capstone (required for the major)	3UL
Elective <sup>~</sup>	2-3
<b>ESTIMATED CREDITS REMAINING AT UMGC</b>	<b>59-60</b>

**NOTES:** Minimum of 120 credits, including 30 with University of Maryland Global Campus (UMGC) of which at least 15 must be upper-level, are required for the bachelor's degree with a UMGC grade point average (GPA) of 2.0 (C) or higher / UMGC does not accept grades below C (2.0) in transfer from schools outside the University System of Maryland and Maryland community colleges (except WRTG 112, which must be completed with a grade of C- (1.67) or better from all schools) / Maximum of 70 transfer credits to UMGC from two-year or community colleges and maximum of 90 transfer credits from all sources combined (actual number of transfer credits dependent on meeting all UMGC bachelor's degree requirements) / ♦<sup>1</sup> = Major core, major elective, or capstone: all courses within the major require a grade of C (2.0) or higher, and all majors (except APTC, GECU, and CJLE, which require only the capstone as UMGC graded coursework) must complete at least half of these as 1) traditional college courses earning a grade and 2) UMGC resident credit / +<sup>2</sup> = Major related science requirement / \*<sup>3</sup> = Lower-level course meets content requirement of upper-level course but does not transfer as upper-level / UL<sup>4</sup> = Upper-level course (numbered 300-499) / ~<sup>5</sup> = Avoid enrolling into duplicate courses (e.g., BIOL 101/102 & BIOL 103; BIOL 220 & BIOL 222; BIOL 230 & BIOL 302; CHEM 103 & CHEM 121) / Visit [UMGC Maryland Community College Alliances](https://www.umgc.edu/alliances) to learn more!

<sup>1</sup> ♦ Major core, major elective, or capstone

<sup>2</sup> + Major related science requirement

<sup>3</sup> \* Lower-level course meets content requirement of upper-level course but does not transfer as upper-level

<sup>4</sup> UL Upper-level course (numbered 300-499)

<sup>5</sup> ~ Avoid enrolling into duplicate courses

**MONTGOMERY COLLEGE NOTES:**

- <sup>6</sup> = ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103, or elective.
- <sup>7</sup> = Program electives: BIOT 250, BIOT 251, BIOT 260, BIOT 261, CMAP 120, CHEM 132, CHEM 204, PHYS 203, PHYS 233, SCIR 297, MATH elective, BIOL elective, COMM 108 or COMM 112, HUMD, BSSD, or ARTD.
- <sup>8</sup> = CHEM 203 (5 semester hours) may be taken instead of CHEM 150.
- For the Natural Sciences Distribution and Arts Distribution requirement, please see the full list of other acceptable General Education courses found under the General Education Program Requirements and Course Lists section of [MC Acceptable General Education Courses](#)

---

<sup>6</sup> <sup>AA</sup> ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103, or elective.

<sup>7</sup> <sup>†</sup> Program electives: BIOT 250, BIOT 251, BIOT 260, BIOT 261, CMAP 120, CHEM 132, CHEM 204, PHYS 203, PHYS 233, SCIR 297, MATH elective, BIOL elective, COMM 108 or COMM 112, HUMD, BSSD, or ARTD.

<sup>8</sup> <sup>‡</sup> CHEM 203 (5 semester hours) may be taken instead of CHEM 150.