

WHAT MATH COURSE SEQUENCE DO I FOLLOW?

Note: Some programs (e.g., premedical studies, honors college) may require additional courses.

Consult with your faculty or staff advisor to select a starting course that is both aligned with your ALEKS math placement result and will also provide optimal foundational knowledge. Please see the [CSM Success Math Placement page](#) for additional guidance. You are encouraged to speak with your advisor or the department your program is housed in before making any decisions that may impact you financially or with respect to your degree progress.

Major/Program	Mathematics Course Sequence	Information
Biochemistry, BS	MATH115 → MATH130 → MATH140 or MATH145 → MATH141	Link
Biology, BS	MATH115 → MATH130 → MATH135 or MATH140 or MATH145	Link
Chemistry, BS and BA	MATH115 → MATH130 → MATH140 or MATH145 → MATH141	Link (BS), Link (BA)
Computer Engineering, BS ^λ	MATH115 → MATH130 → MATH140 → MATH141 → MATH242 → MATH260 → CS220 [†] → ENGIN211L*	Link
Computer Science, BA ^σ	MATH115 → MATH130 → MATH140 → MATH141 → MATH260	Link
Computer Science, BS ^σ	MATH115 → MATH130 → MATH140 → MATH141 → MATH345 → MATH260	Link
Electrical Engineering, BS ^λ	MATH115 → MATH130 → MATH140 → MATH141 → MATH242 → MATH270 → MATH260 → ENGIN211L*	Link
Engineering Physics, BS	MATH115 → MATH130 → MATH140 → MATH141 → MATH242 → MATH270	Link
Information Technology, BS	All students: MATH125 [‡] (or MSIS111L or ECON205 or PSYCH370 or SOCIOL350) CSM students: MATH115 → MATH130 → MATH135 or MATH140 CM students: MATH115 → MATH129 or MATH130 → MATH134	Link
Mathematics, BA and BS	Varies by concentration, contact math@umb.edu	Link (BA), Link (BS)
Physics, BS and BA	MATH115 → MATH130 → MATH140 → MATH141 → MATH242 → MATH270	Link (BA) Link (BS)

* ENGIN211L (Engineering Mathematics) is cross-listed with MATH211L and is offered by the Engineering Department

† CS220 (Applied Discrete Mathematics) is offered by the Computer Science Department

λ Those starting below MATH140 may require more than 4 years to complete the program due to prerequisites, sequencing, and course availability.

‡ MATH125 may require prerequisite courses to access, but the ALEKS placement test is also an option to gain access.

σ For more information on offerings from the Computer Science Department, see www.cs.umb.edu

Course Reference

<u>Course</u>	<u>Name</u>	<u>Prerequisite Course(s)</u>	<u>Minimum ALEKS Score</u>	<u>Minimum SAT/ACT Score</u>
MATH115	College Algebra	MATH114QR or 2.7 Converted High School GPA	44	520/20
MATH125	Introductory Statistics	MATH115 or MATH129 or MATH130 or MATH134 or MATH140 or MATH141 or MATH145	51	550/23
MATH129	Managerial Precalculus	MATH115 (B or better)	59	590/25
MATH130	Precalculus	MATH115 (B or better)	59	590/25
MATH134 ^φ	Managerial Calculus	MATH130	66	620/26
MATH135 ^φ	Survey of Calculus	MATH130	66	620/26
MATH140 ^φ	Calculus I	MATH130 (B or better)	74	640/27
MATH145 ^φ	Calculus I for Environmental and Health Sciences	MATH130 (B or better)	74	640/27
MATH141	Calculus II	MATH140 or MATH145 (C- or better)	N/A	N/A
MATH240 ^φ	Multivariable Calculus	MATH141	N/A	N/A
MATH242	Multivariable and Vector Calculus	MATH141	N/A	N/A
MATH260	Linear Algebra	MATH140	N/A	N/A
MATH270	Applied Ordinary Differential Equations	MATH240/242/242R and MATH260 or PHYSIC114	N/A	N/A
MATH345	Probability & Statistics	MATH141	N/A	N/A

φ - Students may only receive credit for one (1) calculus course. If a student has completed MATH134, they will only be able to take MATH135 for reduced credit (MATH135R). If a student has completed MATH134 or MATH135, they will only be able to take MATH140 for reduced credit (MATH140R). Any reduced credit courses require permission from the Mathematics Department. A student may not be enrolled in MATH134, MATH135, and/or MATH140 at the same time.

φ - Students who complete MATH240 may only take MATH242 for reduced credit (MATH242R)