

Mathematics AS (Associates GE Track)

+If you have completed coursework at another college and/or are starting in a semester other than a Fall term, please follow up with the Counseling Department to determine if this sequence is appropriate for your academic and career goals.

Program Description: The Mathematics program provides curriculum from algebra to statistics, liberal arts math, linear algebra, calculus, and differential equations. These courses fulfill breadth requirements, associate degree requirements and transfer major requirements for degrees in mathematics, physics, chemistry and engineering. Many B.A./B.S. level careers require extensive background in mathematics. Virtually all two-year career programs in the business or technology fields require a solid foundation in mathematics. Examples of these career options include computer programmer, financial analyst, statistician, systems analyst, urban planner, and teacher.

Program SLO: Students will be prepared for the mathematical reasoning required in upper division work in their major, including the ability to generalize concepts and comprehend increasing levels of abstraction; Demonstrate mathematical literacy, problem solving ability, and modeling ability.

Important Transfer Information: The sequence listed below, may not meet all your transfer admissions requirements. Connect with a counselor to develop an individual student education plan through the Counseling Department @ <https://www.canyons.edu/counseling> or (661) 362-3288/(661) 362-3811.

Major courses are sequenced and **BOLDED** based on recommendations by the Mathematics Department.

Fall Semester		(3-15 units minimum)		FA = Fall; WI = Winter; SP = Spring; SU = Summer
Course	Title	Units	Major and GE Courses	
Math 211	Calculus 1 (FA, SP, SU)	5	Major, Area DII, and Area 3	
English 101/101H	English Composition (FA, WI, SP, SU)	4	Area DI	
Social Sciences	Choose one course from the Associates GE Area B (FA, WI, SP, SU) <i>Dept recommends Econ 201</i>	3	Area B	
Associate Elective	Choose any 3-unit course that is 100-level or above (FA, WI, SP, SU)	3	Elective	
		Total Units:	15	

Check the Honors website for most recent course offerings. Must be enrolled in the Honors program to take courses, see below

Spring Semester		(16-29 units minimum)		
Course	Title	Units	Major and GE Courses	
Math 212	Calculus II (FA, SP, SU)	5	Major	
*Humanities and FineArt Course	Choose one course from Associate GE Area C (FA, WI, SP, SU)	3	Area C and Diversity Area 4	
Natural Sciences	Choose one course from the Associates GE Area A (FA, WI, SP, SU)	3-4	Area A	
**American Institutions Choose Option 1 or 2	Complete first course in chosen option – (note: must take both classes within one option) (FA, WI, SP, SU) <i>see American Institutions Table below</i>	3	American Institutions	
		Term Totals:	14-15	

Consider taking a Humanities & Fine Arts general education course GE Area C with an () indication on the [Associate Degree Requirements Checklist](#) to also satisfy the Diversity GE Area 4. Courses with an (*) will also meet the GE Diversity Requirement. Refer to the Associate Degree Checklist for details.

Fall Semester		(30-45 units minimum)		
Course	Title	Units	Major and GE Courses	
Math 213	Calculus III (FA, SP, SU)	5	Major Course	
**American Institutions	Complete second course in chosen option – (note: must take both classes within one option) (FA, WI, SP, SU) <i>see American Institutions Table below</i>	3	American Institutions	
PE/Wellness	Take two of any KPEA or Dance activity classes (except Dance 100) (FA, WI, SP, SU) or Health Science 100, 149, 150, or 243 (FA, WI, SP, SU)	2-3	Area F	
Associate Elective	Choose any 3-unit course that is 100-level or above (FA, WI, SP, SU)	3	Elective- <i>complete Diversity GE if not yet taken</i>	
Associate Elective	Choose any 3-unit course that is 100-level or above (FA, WI, SP, SU)	3	Elective	
		Term Totals:	16-17	

Spring Semester		(46-60 units minimum)		
Course	Title	Units	Major and GE Courses	
Group 1 Course	Choose one course from Group 1, listed below (FA, WI, SP, SU)	3-4	Major Elective	
Associate Elective	Choose any 3-unit course that is 100-level or above (FA, WI, SP, SU)	3	Elective	
Associate Elective	Choose any 3-unit course that is 100-level or above (FA, WI, SP, SU)	3	Elective	
Associate Elective	Choose any 3-unit course that is 100-level or above (FA, WI, SP, SU)	3	Elective	
Associate Elective	Choose any 3-unit course that is 100-level or above (FA, WI, SP, SU)	3	Elective	
		Term Totals:	15-16	

Total Units: 60 +

Group 1 – Choose at least 1 course from the following (3-4 units)

MATH 140/140H	Introductory Statistics (FA, WI, SP, SU)
MATH 214	Linear Algebra (FA, SP)
MATH 215	Differential Equations (FA, SP)
CMPSCI 111	Introduction to Algorithms & Programming/Java (FA, SP)
PHYSICS 220	Physics for Scientists and Engineers: Mechanics of Solids and Fluids (FA, SP, SU)

Students are encouraged to take additional courses in Group 1 to fulfill elective units.

****American Institutions Requirement** – Select one of the options below and complete a total of 6 units

Option 1	One course from the following: Economics 170/170H, History 111/111H, History 112/112H, History 120/120H, or History 130 AND Political Science 150/150H (FA, WI, SP, SU)
Option 2	History 111/111H AND History 112/112H (FA, WI, SP, SU)

Counseling Resources

Associates General Education Guide:

https://www.canyons.edu/_resources/documents/student-services/counseling/top10/AssociateDegreeRequirements20192020.pdf

Honors Program: <https://www.canyons.edu/academics/honors/index.php>

MESA Program: www.canyons.edu/mesa

Career Resources

What Can I Do With a Major In... <https://whatcanidowiththismajor.com/major/mathematics/>

California Career Zone: www.californiacareerzone.com

O*Net Online: www.onetonline.com

Bureau of Labor and Statistics: www.bls.gov

What Can I do with this major: <http://career.uark.edu/majors/>

Updated 10/28/2020

Professional Associations:

Mathematical Association of America Career page: <https://mathcareers.maa.org/>

American Mathematical Association Career page: <https://www.ams.org/profession/data/emp-survey>

SIAM (Society for Industrial and Applied Mathematics) Career page: <https://www.siam.org/students-education/programs-initiatives/thinking-of-a-career-in-applied-mathematics>