VALENCIA

STEM Pathway
Computational Mathematics AAS

The Associate of Applied Science in Computational Mathematics can be excellent preparation for future study in mathematics, statistics, and computer science, as well as good training for students wishing to pursue professions that require a strong mathematical and coding/ programming background. There are two concentrations in this program:

- DS Concentration: Data Science and Applied Mathematics
- CS Concentration: Computer Science

			Concentration	
Fall	**Course**	**Credits**	**DS**	**CS**
	MATH 1215: Intermediate Algebra	3	x	x
	ENGL 1110: Composition I	3	x	x
	CS 105L: Introduction to Computer Programming	3	x	x
	PHIL 1120: Logic, Reasoning, and Critical Thinking	3	x	x
	Gen Ed Elective: Choose any Gen Ed course	3	x	x
Spring	**Course**	**Credits**	**DS**	**CS**
	MATH 1220: College Algebra	3	x	x
	ENGL 1120: Composition II	3	x	x
	Gen Ed Elective: Choose one Gen Ed course	3	x	x
	Gen Ed Physical & Natural Sciences: Choose one course with Lab	4	x	x
Summer	**Course**	**Credits**	**DS**	**CS**
	MATH 1240: Pre-Calculus	3	x	x
	MATH 1230: Trigonometry	3	x	x
Fall	**Course**	**Credits**	**DS**	**CS**
	MATH 1512: Calculus I	4	x	x
	Gen Ed Elective: Choose any Gen Ed course	3	x	x
	CS 152L: Computer Programming Fundamentals	3		x
	STAT 279: Data Science	3	x	
Spring	**Course**	**Credits**	**DS**	**CS**
	MATH 1522: Calculus II	4	x	x
	CS 261: Mathematical Foundations of Computer Science	3	x	x
	MATH 1350: Introduction to Statistics	3	x	x
	CS 251L: Intermediate Programming	3		x
Summer	**Course**	**Credits**	**DS**	**CS**
	BCIS 1110: Fundamental of Information Literacy	3	x	x
	Elective: Choose any elective course	3	x	
Fall	**Course**	**Credits**	**DS**	**CS**
	MATH 2531: Calculus III	4	x	
	CS 293: Social and Ethical Issues in Computing	1		x
	CS 241L: Data Organization	3		x

Total Program Credit Hours = 3 prerequisite hours + 61 program credit hours

STEM Pathway
Computational Mathematics AAS

Meet with your Academic Success Coach

Apply for FAFSA by October 1st

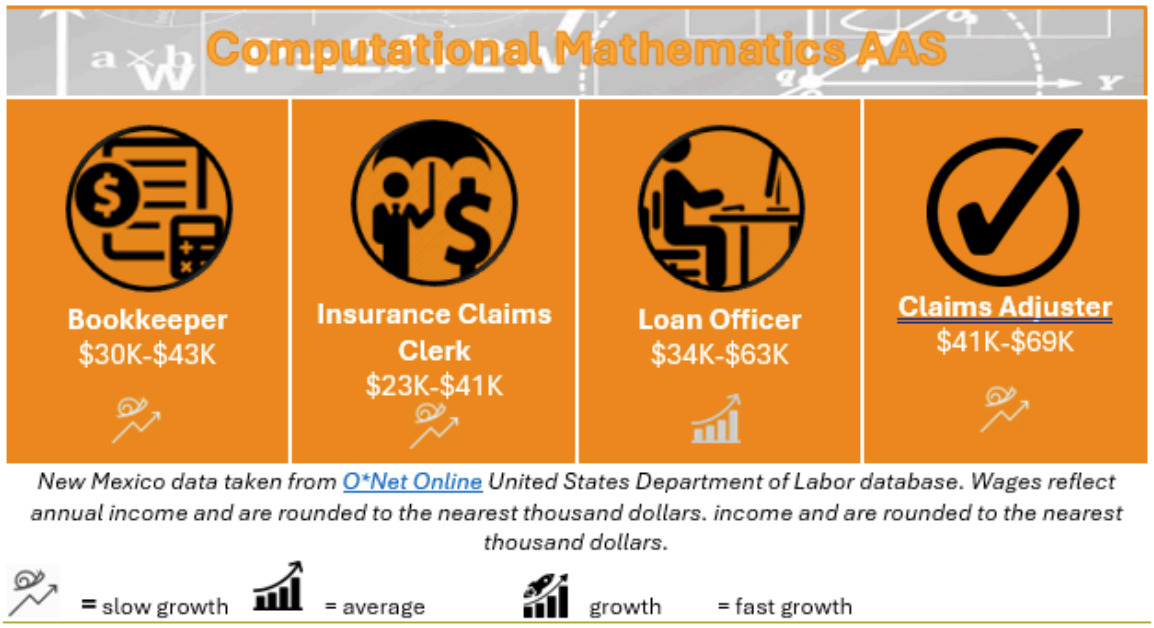
Meet with Financial Aid Apply for scholarships

Meet with your Faculty Mentor

Apply for graduation and/ or transfer

Career and Educational Advancement Opportunities

This degree provides students with the foundational coursework needed to transfer to a four-year institution and pursue a bachelor's degree in Applied Mathematics, Computer Science, Statistics, and/or Computational Mathematics. It also provides excellent preparation for future study in the areas of mathematics, statistics, and computer science, as well as being good training for students wishing to pursue professions that require a strong mathematical and coding/programming background. Students in this degree program will hone their mathematical skills, grapple with concepts in formal logic, and develop beginning to intermediate programming skills. Work-based learning experiences in computer science and statistics are available to interested students. Career Services can help students find these opportunities.



*New Mexico data taken from O*Net Online United States Department of Labor database. Wages reflect annual income and are rounded to the nearest thousand dollars. income and are rounded to the nearest thousand dollars.*

For questions or to schedule a time to meet with an Advisor/Academic Success Coach about this program contact: Advisement at 505.925-8907. Map Current as of the 2025-2026 Academic Year.