

Minor in Applied Mathematics

Estimated Cost of Attendance: California Student Information (<https://catalog.erau.edu/student-life/student-affairs/california-student/>)

The Applied Mathematics minor develops strong analytical and problem-solving skills through a focused study of mathematical modeling and quantitative methods. Students learn to interpret complex systems, analyze data and apply mathematical concepts to real-world challenges across science and engineering contexts. This minor enhances a wide range of majors by providing a rigorous foundation in critical thinking and technical analysis valued in data-driven fields.

Some majors may not be eligible to pair with this minor. See the Minor Restrictions (<https://catalog.erau.edu/programs/undergraduate/minors/restrictions/>) list for details.

Daytona Beach Minor Requirements

MATH 241	Calculus and Analytical Geometry I	4
MATH 242	Calculus and Analytical Geometry II	4
MATH 243	Calculus and Analytical Geometry III	4
MATH 245	Applied Differential Equations	3-4
	or MATH 345 Differential Equations and Matrix Methods	
MATH Elective 300 Level or Above Approved by Dept. Chair *		3
MATH Elective 300 Level or Above Approved by Dept. Chair *		3
Total Credits		21-22

* Any 300-400 level course in the catalog except for MATH 399, MATH 490, or MATH 499.

Prescott Minor Requirements

MATH 241	Calculus and Analytical Geometry I	4
MATH 242	Calculus and Analytical Geometry II	4
MATH 243	Calculus and Analytical Geometry III	4
MATH 245	Applied Differential Equations	3-4
	or MATH 345 Differential Equations and Matrix Methods	
Choose Two of the Following:		6
MATH 335	Introduction to Linear and Abstract Algebra	
MATH 399	Special Topics in Mathematics	
MATH 412	Probability and Statistics	
MATH 433	Review of Optimization Techniques	
MATH 435	Linear and Abstract Algebra II	
MATH 441	Mathematical Methods for Engineering and Physics I	
Total Credits		21-22

At least six (6) credit hours must fall outside (cannot be shared with) the student's primary degree program and selected concentration. The six (6) credit hours cannot count for the degree program technical electives.

Directed Study may be approved by the Department Chair.

Worldwide Minor Requirements

Students majoring in the B.S. in Data Science may not declare this minor.

MATH 241	Calculus and Analytical Geometry I	4
MATH 242	Calculus and Analytical Geometry II	4
MATH 243	Calculus and Analytical Geometry III	4
MATH 345	Differential Equations and Matrix Methods	4
MATH Elective 300 Level or Above Approved by Dept. Chair		3
MATH Elective 300 Level or Above Approved by Dept. Chair		3
Total Credits		22