APPLIED AND COMPUTATIONAL MATHEMATICS GRADUATE CERTIFICATE

Admission Requirements

Complete the following admission requirements:

- Hold a baccalaureate degree from an accredited institution
- Complete Calculus I (MATH F251X), Calculus II (MATH F252X), Calculus III (MATH F253X), Differential Equations (MATH F302) and Computer Science I (CS F201)[1] or their equivalent;
- Complete Linear Algebra (MATH F314)[1] or its equivalent.

[1] Students must earn a C or better in each course.

Program Requirements

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Minimum Requirements for Applied and Computational Mathematics Graduate Certificate: 12 credits

Code	Title	Credits
General University Requirements		
Complete the general university requirements. (https://catalog.uaf.edu/graduate-certificates/#gurgraduatecertificatestext)		
Graduate Certificate Requirements		
Complete the graduate certificate requirements. (https://catalog.uaf.edu/graduate-certificates/)		
Applied and Computational Mathematics Program Requirements		
Complete two of the following:		6
MATH F614	Numerical Linear Algebra	
MATH F615	Numerical Analysis of Differential Equations	
MATH F660	Advanced Mathematical Modeling	
MATH F661	Optimization	
MATH F663	Graph Theory	
Select two or more from the following electives to total 12 credits for the certificate:		6-8
Any course listed above not already taken		
Any of MATH F617, MATH F632, MATH F658, MATH F665		
At most one of MATH F631, MATH F641, MATH F645, MATH F651		
At most one of MATH F401, MATH F404, MATH F405, MATH F408, MATH F410, MATH F412, MATH F426, MATH F430, MATH F432, MATH F460		
At most one 3- or 4-credit 600-level statistics course, excluding STAT F698		
Or other elective courses approved by a mathematics advisor.		
Total Credits		**12-14**