

GRADUATE CERTIFICATE, STATISTICS

Admission Requirements

Complete the following admission requirements:

- Hold a baccalaureate degree from an accredited institution
- Complete Calculus I (MATH F251X), Calculus II (MATH F252X) and Calculus III (MATH F253X)¹
- Complete Regression and Analysis of Variance (STAT F401) or equivalent¹. Students without this requirement may be admitted into the program with a deficiency but will be required to complete STAT F401 as part of the requirements of the certificate.

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

Program Requirements

Minimum Requirements for Statistics Graduate Certificate Degree: 12 credits

Code	Title	Credits
General University Requirements		
Complete the general university requirements. (https://catalog.uaf.edu/archives/2020-2021/graduate/mastrsdegrees/#generaluniversityrequirementstext)		
Graduate Certificate Requirements		
Complete the graduate certificate requirements. (https://catalog.uaf.edu/archives/2020-2021/graduate/#certificateslicensencurestext)		
Statistics Program Requirements		
STAT F651	Statistical Theory I ²	3
or MATH F408	Mathematical Statistics	
Complete two from the following: ¹		6-8
STAT F461	Applied Multivariate Statistics	
STAT F602	Experimental Design	
STAT F605	Spatial Statistics	
STAT F611	Time Series	
STAT F621	Nonparametric Statistics	
STAT F631	Categorical Data Analysis	
STAT F641	Bayesian Statistics	
STAT F642	Bayesian Decision Theory for Resource Management	
STAT F651	Statistical Theory I ²	
STAT F652	Statistical Theory II ²	
STAT F653	Statistical Theory III: Linear Models	
STAT F661	Sampling Theory	
Complete one or more from the following electives to total 12 credits for the certificate:		3-6
ECON F626	Econometrics	
ECON F627	Advanced Econometrics	
FISH F604	Modern Applied Statistics for Fisheries	
FISH/WLF F625	Population Dynamics of Vertebrates	
FISH F627	Statistical Computing with R	
FISH F631	Data Analysis in Community Ecology	

MATH F614 Numerical Linear Algebra
or MATH F641 Real Analysis
or MATH F660 Advanced Mathematical Modeling
or MATH F661 Optimization

MIN/GE F635 Advanced Geostatistical Applications

PETE F687 Experimental and Data Analytics
Methods in Petroleum Engineering

PHYS F628 Digital Time Series Analysis

Or other elective courses approved by a Statistics faculty member.

¹ Excluding STAT F654 (<https://catalog.uaf.edu/archives/2020-2021/search/?P=STAT%20F654>), STAT F692 (<https://catalog.uaf.edu/archives/2020-2021/search/?P=STAT%20F692>), STAT F692A (<https://catalog.uaf.edu/archives/2020-2021/search/?P=STAT%20F692A>), STAT F692P (<https://catalog.uaf.edu/archives/2020-2021/search/?P=STAT%20F692P>) and STAT F698 (<https://catalog.uaf.edu/archives/2020-2021/search/?P=STAT%20F698>).

² No more than two of the following courses can be used towards the certificate: MATH F408, STAT F651 or STAT F652.