# FEDERAL STATISTICAL SYSTEMS GRADUATE CERTIFICATE

Banner Code: EC-CERG-FSSY

Phone: 703-993-4835 Email: statistics@gmu.edu Website: statistics.gmu.edu

This graduate certificate is targeted at upgrading the skills of current practitioners. The federal statistical system is a complex data collection and analysis system that requires a wide variety of multidisciplinary skills for its maintenance. The Federal Statistics Systems Certificate is intended to respond to the need for broad training in statistics, survey methods, and data analysis, including graphics and data visualization. The program is extremely flexible and can be tailored to the needs of students within the federal statistical sector. It is also intended to be responsive to the needs of those in state and local governments, and those in the private sector involved in the collection, interpretation, or statistical analysis of federal data.

### Admissions & Policies

## **Admissions**

Applicants should have an undergraduate degree from an accredited institution, with a minimum overall GPA of at least 3.00 (on a 4.00 scale) and have taken at least one course in calculus and one course in linear algebra. These minimal course requirements are normally satisfied by students who have successfully completed courses equivalent to the following Mason courses: MATH 113 Analytic Geometry and Calculus I (Mason Core) (https://catalog.gmu.edu/mason-core/) and MATH 203 Linear Algebra, or MATH 321 Abstract Algebra. Candidates must also be computer literate.

# Policies

For policies governing all graduate certificates, see AP.6.8 Requirements for Graduate Certificates (https://catalog.gmu.edu/policies/academic/ graduate-policies/#ap-6-8).

### Requirements

Formerly: EC-CERG-ASTA

# **Certificate Requirements**

Total credits: 12

This certificate may be pursued on a part-time basis only.

Some courses may have prerequisites beyond minimal admission requirements for which students must gualify or seek a waiver from the course instructor.

### Coursework

Code	Title	Credits
Select 9 credits from the following: <sup>1</sup>		
STAT 544	Applied Probability	
STAT 554	Applied Statistics I	

Тс	Total Credits		
	STAT 674	Survey Sampling II	
	STAT 665	Categorical Data Analysis	
	STAT 663	Statistical Graphics and Data Visualization	
	STAT 662	Multivariate Analysis and Statistical Learning	
	STAT 658	Time Series Analysis and Forecasting	
	STAT 657	Nonparametric Statistics	
	STAT 654	Applied Statistics II	
	STAT 574	Survey Sampling I	
	STAT 560	Biostatistical Methods	

#### **Total Credits**

1

Certificate courses are eligible for credit toward the Statistical Science, MS (https://catalog.gmu.edu/colleges-schools/engineeringcomputing/school-computing/statistics/statistical-science-ms/) in alignment with graduate academic polices under A.P.6 (https:// catalog.gmu.edu/policies/academic/graduate-policies/).

#### Electives

Code	Title	Credits	
Select 3 credits fro	om the following:	3	
STAT 500	Special Topics		
STAT 515	Applied Statistics and Visualization for Analytics		
STAT 517	Experimental Design		
STAT 522 - 778	(https://catalog.gmu.edu/courses/stat/)		
Total Credits			