

FEDERAL STATISTICS GRADUATE CERTIFICATE

Banner Code: VS-CERG-FSS

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This professional program is targeted at upgrading the skills of 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 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.

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

Admissions & Policies

Admissions

Potential candidates must hold a bachelor's degree and have taken at least two courses in calculus and one course in calculus-based probability and statistics. 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), MATH 114 Analytic Geometry and Calculus II, and STAT 344 Probability and Statistics for Engineers and Scientists I. Candidates must also be computer literate. Applicants typically have degrees in such fields as sociology, economics, engineering, mathematics, statistics, and business. Candidates should inquire with the department's graduate coordinator for information on program planning. Courses are offered in late afternoon and evening and are particularly suitable for part-time students.

Requirements

Certificate Requirements

Total credits: 12

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

Coursework

The certificate courses build the foundations of statistical analysis and survey methods.

Select 9 credits from the following list: ¹ 9

STAT 535 Analysis of Experimental Data ²

STAT 544 Applied Probability

STAT 554 Applied Statistics I ²

STAT 560 Biostatistical Methods

STAT 574	Survey Sampling I	
STAT 654	Applied Statistics II	
STAT 655	Analysis of Variance	
STAT 656	Regression Analysis	
STAT 657	Nonparametric Statistics	
STAT 662	Multivariate Statistical Methods	
STAT 663	Statistical Graphics and Data Exploration I	
STAT 665	Categorical Data Analysis	
STAT 674	Survey Sampling II	
Total Credits		9

¹ All of these certificate courses, except for STAT 535 Analysis of Experimental Data, may be used for credit toward the Statistical Science, MS.

² Credit is granted for only one of STAT 535 Analysis of Experimental Data and STAT 554 Applied Statistics I.

Electives

Select 3 credits of electives from STAT courses numbered 500-775 3

Total Credits 3