Statistics Graduate Certificate

The Statistics Graduate Certificate is awarded to those who have demonstrated specialized knowledge in a scientific field, but not to the level required by a postgraduate master's degree. The certificate program requires individuals to acquire focused knowledge in statistical theory, with an emphasis on application.

Upon completion of the Graduate Certificate in Statistics, the student should be prepared to apply many of the common statistical methods to compliment his or her every day job duties. Therefore the student must have a basic understanding of the statistical theory and practice and should be proficient in the application of common statistical methods to one or more areas application. At the completion of the Graduate Certificate in Statistics the student should be able to:

1. Demonstrate a basic knowledge and understanding of the statistical theory and practice as applicable to his or her field.
2. Function as a collaborator on a research team.
3. Critically evaluate the literature where statistical applications are used.
4. Take a leadership role in the design and implementation of a research project.
5. Assume responsibility for the design and implementation of analyses for a research project.
6. Prepare reports and publications resulting from research studies.
7. Serve as an advocate for proper statistical design and interpretation of results in his or her field.

The application for the Statistics Graduate Certificate is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website.

Admission requirements:

- A bachelor's degree from a regionally accredited institution documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (http://catalog.ku.edu/graduate-studies/kumc#admissiontext).
- A background check (http://catalog.ku.edu/graduate-studies/kumc#admissiontext) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional 6895.
- Letter grade of B or better in calculus I – III (or equivalent.)
- Successful completion of at least one of the following courses: linear algebra, differential equations, numerical analysis.
- Successful completion of a course in any computer programming language.
- Three letters of recommendation.
- Students currently enrolled in graduate programs at KUMC or KU must be in good standing (3.0 or higher GPA) and have a letter of approval from their current graduate program director and/or department chair indicating support to enroll in the certificate program.

Applicants will be assessed based on these requirements. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs ».

Certificate Program Information:

No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a certificate graduate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and enrollment.

Graduate credit from another institution may not be transferred to a graduate certificate program.

The Statistics Graduate Certificate program consists of a minimum of 15 credit hours of statistical coursework that is comprised of 9 credit hours of required coursework and 6 credit hours of elective coursework.

Certificate requirements:

- Certificate requirements are normally completed within one (1) year of admission to the program although a maximum of 4 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate certificate coursework.
- Enrollment in a minimum of (1) credit hour the semester program is completed. Graduate certificates may not be granted retroactively.
- Completion of a minimum of 15 credit hours.
- Successful completion of the following courses:
Statistics Graduate Certificate

BIOS 830  Experimental Design  3
BIOS 840  Linear Regression  3
BIOS 871  Mathematical Statistics  3

• Successful completion of two (2) elective courses from the following list:
  BIOS 820  Statistical Computing/SAS Base L1  3
  BIOS 821  Statistical Computing II  3
  BIOS 823  Introduction to Programming and Applied Statistics in R  3
  BIOS 825  Nonparametric Methods  3
  BIOS 833  Statistical Computing II  3
  BIOS 835  Categorical Data Analysis  3
  BIOS 845  Survival Analysis  3
  BIOS 850  Multivariate Statistics  3
  BIOS 855  Statistical Methods in Genomics Research  3
  BIOS 872  Mathematical Statistics II  3
  BIOS 880  Data Mining and Analytics  3

Graduate credit from another institution may not be transferred to a graduate certificate program.

Certificate requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

Typical Plan of Study

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Total Hours: 9

This Plan of Study shows which semester a specific elective is offered. Select two (2) elective courses to meet the minimum requirements for certificate completion.