Statistical Applications Graduate Certificate

The Statistical Applications 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 Graduate Certificate in Statistical Applications requires individuals to acquire sufficient knowledge and expertise to permit them to work at the frontier of their field through:

1. Becoming familiar with statistical methods in research, business, and industry.
2. Becoming excellent consumers of the literature where statistical applications are utilized.
3. Applying many of the common statistical methods to compliment his or her every day job duties. Course work in this proposal is designed with this purpose in mind.

Upon completion of the Graduate Certificate in Statistical Applications, 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 statistical practice and should be proficient in the application of common statistical methods to one or more areas application. Upon completion of the Graduate Certificate in Statistical Applications program the student should be able to:

1. Demonstrate a basic knowledge and understanding of the applications of some of the more common statistical methods.
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 implementation of a research project.
5. Prepare reports and publications resulting from research studies.
6. Serve as an advocate for proper statistical application and interpretation of results in his or her field.

The application for the Statistical Applications 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.

- A letter grade of B or better in calculus I (or equivalent), or a quantitative GRE score in the 70th percentile or higher.

- A letter grade B or better in a graduate-level introductory statistics course (e.g., BIOS 717 Fundamentals of Biostatistics II or equivalent.)

  Note: Students not meeting this requirement may fulfill the requirement with completion of BIOS 717.

- 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 graduate certificate 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 conferral.

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

The Statistical Applications Graduate Certificate requirements vary depending on whether the certificate student is currently seeking a post-graduate degree at any of the KU campuses or not. The certificate program consists of a minimum of 12 credit hours of coursework in statistical applications.

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 one (1) credit hour the semester program is completed. Graduate certificates may not be granted retroactively.
• Completion of a minimum of 12 credit hours. Note: A prolonged plan of study will occur for students without the prerequisite graduate-level introductory statistics course prior to enrolling in the certificate program (see Admissions (http://catalog.ku.edu/medicine/biostatistics/statappgradcert/#admissionstext).)

• Current KU post-graduate students must complete four (4) courses from the following list:
  - BIOS 715 Introduction to Data Management using RedCap and SAS 3
  - BIOS 720 Analysis of Variance 3
  - BIOS 725 Applied Nonparametric Statistics 3
  - BIOS 730 Applied Linear Regression 3
  - BIOS 735 Categorical Data and Survival Analysis 3
  - BIOS 740 Applied Multivariate Methods 3
  - BIOS 799 Introduction to Statistical Genomics 3

• Certificate students not currently seeking a KU post-graduate degree must complete the following two (2) courses:
  - BIOS 720 Analysis of Variance 3
  - BIOS 730 Applied Linear Regression 3

• Certificate students not currently seeking a KU post-graduate degree must complete two (2) elective courses from the following list:
  - BIOS 715 Introduction to Data Management using RedCap and SAS 3
  - BIOS 725 Applied Nonparametric Statistics 3
  - BIOS 735 Categorical Data and Survival Analysis 3
  - BIOS 740 Applied Multivariate Methods 3
  - BIOS 799 Introduction to Statistical Genomics 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 - for current KU post-graduate student**

**Year 1**

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**Typical Plan of Study - for students not currently seeking a KU post-graduate degree**

**Year 1**

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