OVERVIEW

The Biostatistics M.S. program was created to help meet the ever-increasing demand for biostatisticians to take leadership roles in careers as researchers and educators in academia, government, and industry. Faculty members are active researchers collaborating and consulting in research projects and initiatives at the Medical Center, in addition to pursuing their own research agendas and participating in curricular instruction. Expertise in the department includes linear, nonlinear, and longitudinal modeling; clinical trial and experimental design; survival analysis; categorical data analysis; robust statistics; psychometric methods; bayesian methodology; and statistical genomics.

The master’s program in Biostatistics produces graduates that are prepared to function as biostatisticians or biostatistical consultants. Therefore, graduates gain an extensive understanding of biostatistical theory and practice and should be proficient in the application of statistical methods to one or more areas in the health sciences.

Upon completion of the MS in Biostatistics Program, graduates will be able to:

- Demonstrate a broad knowledge and understanding of statistical theory and practice as applicable in the health sciences.
- Function as a collaborator on a research team.
- Take a leadership role in the design and implementation of a health science project.
- Assume responsibility for the design and implementation of analyses for health science investigations.
- Assist with the design and implementation of data management systems for large health science studies.
- Prepare reports and publications resulting from health science studies.
- Serve as an advocate for good statistical design in health science investigations.

MINIMUM REQUIREMENTS FOR MS in BIOSTATISTICS PROGRAM ADMISSION

1. A bachelor’s degree, with cumulative GPA of 3.0 or better, in statistics, biostatistics, mathematics or a related field from a regionally accredited institution documented by submission of an official transcript.
2. B average (or higher) in Calculus I – III (or the equivalent), and at least one of the following: linear algebra, differential equations, numerical analysis.
3. Successful completion of a course in any computer programming language.
4. Graduate Record Examination (GRE) scores from Educational Testing Service (ETS)

An applicant meeting the minimum requirements for admission is referred to the Admissions Committee for approval or disapproval. Approval for admission is good for up to 12 months from the approved date for admission.

APPLICATION DEADLINE

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<th>Summer</th>
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CONTACT INFORMATION:

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catalog.ku.edu/medicine/biostatistics/ms/
The M.S. in Biostatistics degree program consists of 36 credit hours including collaborative research experience, annual evaluations, and the successful completion of the master’s general examination. This 36 credit hour program is normally completed within 2 years of admission, although a max of 7 years is allowed. A minimum GPA of 3.0 on a 4.0 scale is required.

REQUIRED COURSES (27 CREDIT HOURS)

BIOS 805: Professionalism, Ethics and Leadership in the Statistical Sciences
BIOS 820: SAS Programming I
BIOS 830: Experimental Design
BIOS 835: Categorical Data Analysis
BIOS 840: Linear Regression
BIOS 871: Mathematical Statistics
BIOS 872: Mathematical Statistics II
BIOS 898: Collaborative Research Experience
BIOS 900: Linear Models

ELECTIVE COURSES (9 CREDIT HOURS)

BIOS 806: Special Topics in Biostatistics
BIOS 810: Clinical Trials
BIOS 815: Introduction to Bioinformatics
BIOS 821: SAS Programming II
BIOS 823: Introduction to Programming and Applied Statistics in R
BIOS 825: Nonparametric Methods
BIOS 833: Measurement for Statisticians
BIOS 845: Survival Analysis
BIOS 850: Multivariate Statistics
BIOS 855: Statistical Methods in Genomics Research
BIOS 860: Clinical Trial Design and Analysis
BIOS 880: Data Mining and Analytics

Specific elective coursework is determined in consultation with the student’s advisor. A minimum of 3 and a maximum of 6 credit hours of coursework outside the department is required.

Students must pass the General Examination during their final semester of enrollment. The General Examination is given upon completion of the following courses: BIOS 820, BIOS 830, BIOS 835, BIOS 840, BIOS 871 and BIOS 872.

REQUIRED MATERIALS FOR ADMISSION

1. A completed online application form at: gograd.ku.edu/apply.
2. Official transcript(s) bearing the official seal from each college or university in which course work had been taken
3. Contact information for three references for letters of recommendation
4. Graduate Record Examination (GRE) scores
5. Evidence of a bachelor’s degree from an accredited college or university

Official transcripts can be sent directly to: Department of Biostatistics & Data Science University of Kansas Medical Center 3901 Rainbow Blvd., Mail Stop 1026 Kansas City, KS 66160 or Email to: stats_education@kumc.edu

For admission into the MS program in Biostatistics, the applicant must meet the general requirements for admission to the Office of Graduate Studies.

Please request updated information after June 30, 2023