

Master of Science in Biostatistics

In-Person Only

Minimum Admissions Requirements

1. Online application: gograd.ku.edu/apply (Applicants will need to select "Medical Center Application" when prompted.)
2. Official transcript for all degree-granting institutions emailed to: stats_education@kumc.edu
3. Contact information for three recommenders.
4. Cumulative undergraduate GPA of 3.0 or better in statistics, biostatistics, mathematics or applied mathematics. International transcripts require a NACES.org member evaluation.
5. B average or higher in Calculus I - III courses (or equivalent), and at least one of the following: Linear Algebra, Differential Equations, or Numerical Analysis.
6. Completion of any computer programming language course or demonstration of mastery via credentials or work experience
7. English Proficiency Test scores unless exempt or a Native English Speaker
8. 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 Deadlines	Summer	Fall	Spring
	March 1	March 1	September 1

About

There is ever-increasing demand for biostatisticians to take leadership roles in careers as researchers and educators in academia, government, and industry. Our 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; informatics; data science 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; and serve as an advocate for good statistical design in health science investigations.

WHY STATISTICS & DATA SCIENCE?



STATISTICIAN

Median annual salary: \$98,920

DATA SCIENTIST

Median annual salary: \$103,500

Ranked in Top 100 Best Jobs

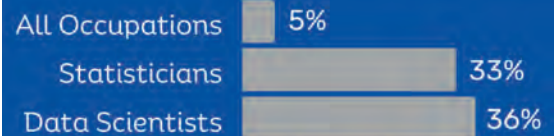
#6 Statistician
#8 Data Scientist

According to U.S. News and World Report

#1

Fastest Growing Tech Career is Data Scientist

According to Forbes Magazine



Projected Job Growth from 2021 to 2031

Bureau of Labor Statistics

KU
DEPARTMENT OF
BIostatISTICS & DATA SCIENCE
The University of Kansas Medical Center

<https://biostatistics.kumc.edu>

CURRICULUM

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

Successful completion of a minimum of 9 credit hours of elective coursework, including a minimum of 6 credit hours of elective coursework from courses offered by the department. Specific courses are determined in consultation with the student's advisor.

Students must pass the General Examination during their final semester of enrollment. The General Examination is given upon completion of the following courses: BIOS 830, BIOS 835, BIOS 840, BIOS 871, BIOS 872 and BIOS 900. The examination has three purposes: to assess the student's strengths and weaknesses; to determine whether the student should be awarded the M.S. degree; and, if it is a degree goal, to determine whether the student is prepared to continue into the Ph.D. program.

Tuition and Fees:

<https://www.kumc.edu/academic-and-student-affairs/departments/registrars-office/tuition-and-fees.html>

Financial Assistance:

https://www.kumc.edu/academic-and-student-affairs/Departments/student-financial_aid.html



Contact

Prabhakar Chalise, Ph.D.
Assistant Director of
Graduate Education
pchalise@kumc.edu 913-
945-7987

Mandy Rametta, M.S.
Senior Academic
Program Specialist
mrametta@kumc.edu
913-588-4785