Master of Science in Applied Statistics, Analytics & Data Science

Career Outlook

With the rising emphasis on all-things-data in businesses and other organizations, so rises the need for statisticians and data scientists. The U.S. Bureau of Labor Statistics estimates a 34 percent growth in jobs for statisticians by 2024 and reports a current median salary of $75,600 for statisticians and $124,100 for data scientists. Organizations need them to harvest data and turn it into information and insights that drive actions and shape strategies.

The lucrative Master of Science in Applied Statistics, Analytics & Data Science degree typically compliments prior education and careers in:

- Business
- Finance
- Accounting
- Marketing
- Education
- Mathematics
- Health care

Fortune magazine ranked statistics and biostatistics among the top graduate degrees in 2015 and 2016 based on salary, growth and job satisfaction. Graduating with this degree will open new doors to a more rewarding career.

Admissions

Requirements for consideration by the Admissions Committee (These are in addition to the KUMC Office of Graduate Studies’ general requirements):

1. Online application: edwardscampus.ku.edu/apply (Applicants will need to designate three recommenders.)
2. Official transcript(s) mailed to: University of Kansas – Department of Biostatistics & Data Science; 12600 Quivira Rd., Overland Park, KS 66213
   or
   Email to: stats_education@kumc.edu
3. Cumulative undergraduate GPA of 3.0 or better in a completed bachelor’s degree. For applicants who do not meet this threshold, a petition may be submitted requesting an exception at the discretion of the department.
4. B average or higher in Calculus I and II courses (i.e., single variable differentiation and integration or equivalent) or STAT 655
5. Completion of any computer programming language course or demonstration of mastery via credentials or work experience
6. GRE preferred but not required

Application deadlines:
Spring: Jan. 1 | Summer: May 1 | Fall: Aug. 1

edwardscampus.ku.edu/stats
## Curriculum

This 30-credit-hour program is organized into three sections: required foundation, area of emphasis and electives. There are twelve credit hours each of foundation coursework and emphasis area coursework and six credit hours of electives.

### Required Foundation | 12 credit hours
- STAT 805: Professionalism, Ethics and Leadership in Statistical Sciences
- STAT 835: Categorical Data Analysis
- STAT 840: Linear Regression
- STAT 850: Multivariate Statistics

### Statistics Emphasis | 12 credit hours
- STAT 820: SAS Programming I
- STAT 825: Nonparametric Methods
- STAT 830: Experimental Design
- STAT 871: Mathematical Statistics

### Analytics Emphasis | 12 credit hours
- STAT 820: SAS Programming I
- STAT 823: Introduction to Programming and Applied Statistics in R
- STAT 830: Experimental Design
- STAT 880: Data Mining and Analytics

### Data Science Emphasis | 12 credit hours
- STAT 823: Introduction to Programming and Applied Statistics in R
- DATA 824: Data Visualization and Acquisition
- DATA 881: Statistical Learning I
- DATA 880: Data Mining and Analytics
  or DATA 882: Statistical Learning II

### Elective courses | 6 credit hours
- DATA 817: Introduction to Tableau
- STAT 818: Introduction to R
- STAT 820: SAS Programming I
- STAT 821: SAS Programming II
- STAT 823: Introduction to Programming and Applied Statistics in R
- STAT 825: Nonparametric Methods
- STAT 830: Experimental Design
- STAT 833: Measurement for Statisticians
- STAT 845: Survival Analysis
- STAT 871: Mathematical Statistics
- STAT 880: Data Mining and Analytics
- DATA 819: Introduction to Python
- DATA 822: Introduction to SQL
- DATA 824: Data Visualization and Acquisition
- DATA 881: Statistical Learning I
- DATA 882: Statistical Learning II

### Tuition & Financial Assistance

$700 per credit hour (includes tuition and fees)

Tuition and fees: [edwards campus.ku.edu/tuition-fees](edwards campus.ku.edu/tuition-fees)

To maximize your financial aid options, apply for admissions by November 1 (Spring) or May 1 (Fall/Summer) and complete your FAFSA by December 1 (Spring) or June 1 (Fall/Summer).

Financial assistance: [edwards campus.ku.edu/financial-aid-scholarships](edwards campus.ku.edu/financial-aid-scholarships)

### Contact

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