ONLINE MASTER'S IN APPLIED STATISTICS

MEET THE CHALLENGES OF A DATA-DRIVEN ECONOMY.

DELIVERY FORMAT 100% Online	**TIME TO COMPLETE** 21+ Months	**CREDIT HOURS** 30
TIME COMMITMENT 10 to 20 Hours Weekly	**START DATES** Fall, Spring, Summer	**COST** The master's degree in applied statistics delivers a strong return on investment, equipping students with in-demand skills that lead to higher salaries and advanced leadership opportunities in data-driven industries. The total cost of the program is $25,350, with tuition set at $845 per credit hour. Costs for books and additional materials are not included.

AT A GLANCE

The online Master of Science in Applied Statistics from OU Online equips students with a powerful foundation in statistical theory and hands-on data analysis across a wide range of industries.

Designed for professionals who want to lead with data, this program empowers students to apply advanced mathematical and technical skills to solve real-world problems. Graduates become key decision-makers who use data-driven insights and emerging technologies to drive innovation, efficiency, and strategic growth within their organizations.

MS IN APPLIED STATISTICS: WHAT CAN YOU DO AND WHERE CAN IT TAKE YOU?

Earning an online applied statistics master's from the University of Oklahoma positions you for career growth in a wide range of industries where data drives innovation, strategy, and results. This degree prepares you to lead data-informed decision-making and deliver impactful solutions across sectors.

Accelerate your career in roles such as:

- Data Scientist
- Statistician
- Financial Analyst
- Risk Analyst
- Machine Learning Researcher
- Biostatistician
- Marketing Analyst
- Business Analyst
- Statistical Programmer
- Data Architect

INDUSTRY INSIGHTS

Professionals with an MS in Applied Statistics are in high demand across industries that rely on data to drive strategy and innovation. The field offers strong earning potential and long-term career stability.

- Median Pay: $104,350
- Job Outlook: Employment for mathematicians and statisticians is projected to grow 11 percent by 2033
- Job Openings: An estimated 2,500 job openings are projected each year, on average, over the next decade

Source: U.S. Bureau of Labor Statistics

PROGRAM OUTCOMES: FROM STATISTICAL THEORY TO REAL-WORLD RESULTS

OU's online MS in Applied Statistics meets the growing demand for professionals who can turn complex data into actionable insights. This program equips you with the advanced skills and real-world experience needed to solve today's most pressing challenges across industries.

- Apply advanced statistical methods to research, development, and data-driven decision-making
- Gain confidence using essential tools such as R, SAS, SQL, Linux, Bash Shell, Stan, and JAGS
- Build hands-on experience through a project-based capstone focused on consulting and communication
- Develop practical, cross-disciplinary expertise in applying statistical techniques to real-world problems

TO APPLY: HTTPS://ONLINE.OU.EDU/ADMISSIONS/GRADUATE/

FOR MORE INFO: HTTPS://ONLINE.OU.EDU/PROGRAM/MS-IN-APPLIED-STATISTICS/

COURSE DETAILS

You will earn 30 credit hours across 10 courses, taking two 16-week courses in Spring and Fall and two courses in Summer. Each course includes a required live lecture from 7 to 8:30 p.m. every other week. Expect a weekly time commitment of 10 to 20 hours for two courses.

ETHICS IN STATISTICAL PRACTICE

Credit Hours: 3

The course will teach students how to ethically conduct statistical analysis in a world where data collection and privacy concerns are becoming ubiquitous. The course will provide a broad overview of ethical considerations for conducting statistical analysis. Students will gain perspective through analyzing case studies tied to each of the main topics.

STATISTICAL CONSULTING AND COMMUNICATION

Credit Hours: 3

This course will provide a culminating practical experience for master's students in the online Applied Statistics program. Through a semester-long written statistical analysis project, the course will emphasize the synthesis of skills taught in all prior courses in the program: technical skills, creative thinking, effective writing, and scientific communication.

APPLIED STATISTICAL METHODS (MUST BE TAKEN FOR GRADUATE CREDIT)

Credit Hours: 3

Estimation, hypothesis testing, analysis of variance, regression and correlation, goodness-of-fit, and other topics as time permits. Emphasis on applications of statistical methods.

INTRODUCTION TO MATHEMATICAL STATISTICS

Credit Hours: 3

Mathematical development of basic concepts in statistics: estimation, hypothesis testing, sampling from normal and other populations; regression, goodness of fit.

APPLIED REGRESSION ANALYSIS

Credit Hours: 3

The general regression problem of fitting an equation involving a single dependent variable and several independent variables, estimation and tests of regression parameters, residual analysis, and selecting the "best" regression equation.

ADVANCED APPLIED STATISTICS

Credit Hours: 3

Survey of advanced applied statistical methods other than applied regression, including exploratory data analysis, analysis of multivariate data (principal components: analysis, multiple analysis of variance, cluster analysis, etc.), and introduction to non-parametric methods.

BAYESIAN STATISTICS

Credit Hours: 3

Course topics are models, probability, Bayes' Rule and R; inference to a binomial probability; and the generalized linear model.

INTRODUCTION TO SCIENTIFIC COMPUTING

Credit Hours: 3

This course will introduce students to fundamental computational tools used in statistics. Topics include how to write computer programs and scientific reports for collaboration, automation, and reproducibility. The course will introduce several tools including SAS programming, relational databases R, SQL, the Linux command line, and scientific communication using LaTeX, Markdown, and similar tools.

ADVANCED DATA ANALYTICS

Credit Hours: 3

Application of data analytic theories and models to solve real world problems using various unsupervised and supervised models. Topics include cluster analysis, association rule mining, random forest classifier, neural networks, and naive Bayesian classifiers.

DATABASE DESIGN FOR INFORMATION ORGANIZATIONS

Credit Hours: 3

This course has two major components: (1) conceptual foundations of database design and theory and (2) practical applications of design and theory to real-world database designs. For the conceptual and theoretical design component, this class covers data definition and type, entity relationship diagram (ERD), and data normalization. The practical application uses emerging database tools to cover industry critical functions.

WHY CHOOSE OU ONLINE FOR A MASTER'S DEGREE IN APPLIED STATISTICS

OU Online offers high-quality, affordable, professional undergraduate and graduate programs in a flexible, online format from a top-tier public institution. Learn what it takes to operate in the dynamic world of applied statistics.

FACULTY EXPERTISE

The MS in Applied Statistics is powered by world-class faculty from the University of Oklahoma and seasoned professors of practice who bring real-world experience into the virtual classroom. By connecting academic excellence with industry expertise, the program delivers a cutting-edge curriculum that prepares students to lead with confidence and drive meaningful impact in their careers.

ROBUST STUDENT SUPPORT

OU Online offers robust student support services, including academic support, online tutoring, mental health counseling, and an online career development center. The program accommodates the needs of working professionals, allowing you to expand your technical skills while maintaining full-time employment.

GLOBAL ALUMNI NETWORK

With more than 250,000 alumni across the world, becoming a Sooner means you'll have access to a strong network of statistics and data analytics professionals to accelerate your career. As a Sooner, you'll be part of a powerful network of leaders working in organizations across the world, helping you expand your career as an applied statistics professional.

COST & FINANCIAL AID

Earning your Applied Statistics degree is an investment in your future—and OU Online is committed to making that investment as accessible and transparent as possible.

Students pay $845 per credit hour, totaling $25,350 for the program. Costs for books and additional materials are not included.

Financial aid, scholarships, and employer tuition assistance may be available to help offset the cost. Our dedicated financial services team is here to guide you through every step of the funding process—so you can stay focused on your education and career goals.

If you have questions about financial aid for your online program, contact the Online Aid office at onlineaid@ou.edu or call 405-325-2929.

A nonrefundable deposit of $350 is required upon admission to secure your place in the program. This deposit guarantees your spot in your first semester of courses and will be applied

toward your first semester's tuition.

** Please be aware that tuition and fees may change, as determined by the Oklahoma State Regents for Higher Education.*

TRANSFER CREDIT

You can transfer up to 12 credit hours of graduate-level coursework per Graduate College policy and with approval of the department.

LEARN MORE ABOUT FINANCIAL AID: HTTPS://ONLINE.OU.EDU/COST-AND-AID/GRADUATE/

TAKE THE NEXT STEP

To apply to the online Master of Science in Applied Statistics program, you must hold a bachelor's degree from a regionally accredited college or university—or the international equivalent—with a minimum cumulative GPA of 3.0.

APPLICATION PROCESS

To apply, complete the online application at https://gograd.ou.edu/apply/ and submit official transcripts from all undergraduate and graduate institutions, a written personal statement addressing your career goals, relevant experience, and background in math and statistics, and a professional resume.

Optional GRE scores may be required by faculty sponsors for consideration for a Qualifying Graduate Assistantship. International students must submit a TOEFL score. Applicants are strongly advised to have a background in Calculus 1 and the programming language R due to the program's initial learning curve.

APPLICATION TIMELINE

The admissions committee reviews applications on a rolling basis, with decisions typically made within two weeks of receiving a completed application. While admissions may remain open until two weeks before classes begin, some programs may have earlier deadlines. Applying early is encouraged to ensure full consideration and allow time for financial aid and enrollment planning.

A nonrefundable deposit of $350 is required upon admission to secure your place in the program. This deposit guarantees your spot in your first semester of courses and will be applied toward your first semester's tuition.

STEP 1	STEP 2	STEP 3
Contact an Enrollment Coach to discuss your qualifications and interest in the program.	Complete the online application at https://gograd.ou.edu/apply/	Provide supplemental materials, including a resume, personal statement, and undergraduate transcripts.

TO APPLY: HTTPS://GOGRAD.OU.EDU/APPLY/