Statistics and Data Science (Graduate Certificate)

GCSTATCE

Data science is developing as an element for success in business and scientific discovery. Glassdoor recently selected data scientist as the second best job in the U.S. based on earning potential, number of job openings and job satisfaction. With this statistics certificate, you can apply data science knowledge in nearly any industry.

Program description

Degree awarded: Certificate Statistics and Data Science (Graduate Certificate) (Certificate)
The statistics certificate program provides statistical training for graduate students at ASU and working professionals in the Phoenix metropolitan area.

The program draws upon a variety of faculty research and teaching interests from various academic units, so programs of study can be tailored to reflect individual needs and goals.

This certificate program is part of the shift in the School of Mathematical and Statistical Sciences' statistics curriculum to include data science coursework. In particular, several new machine learning classes are available to certificate students.

At a glance

- **College/School:** The College of Liberal Arts and Sciences
- **Location:** Tempe

Degree requirements

15 credit hours

Required Core (6 credit hours)
STP 530 Applied Regression Analysis (3) (or ECN 525 or IEE 578)
STP 531 Applied Analysis of Variance (3) (or IEE 572)

Electives (9 credit hours)

Additional Curriculum Information
The nine elective credits are taken from a set of courses approved by the School of Mathematical and Statistical Sciences.

Students must have a GPA of at least 3.00 (scale is 4.00 = "A") in the courses that apply to the certificate.

Admission requirements

Applicants must fulfill the requirements of both the Graduate College and The College of Liberal Arts and Sciences.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program or a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. proof of English proficiency

Additional Application Information
An applicant whose native language is not English must provide proof of English proficiency regardless of their current residency.

International students who need an F-1 or J-1 visa need to apply to and be accepted into a graduate degree program prior to being considered for the certificate program. International students residing in the United States on other types of visas must adhere to all Graduate College policies and procedures regarding admission to be considered for admission to this certificate program.

Applicants should have completed the following courses (equivalents at ASU are given in parentheses):

1. introductory applied statistics (ECN 221, STP 226 or STP 420)
2. one semester of calculus (MAT 210, MAT 265 or MAT 270)

Applicants are also required to have some computer literacy, with knowledge of a programming language, a spreadsheet program or a statistical software program.

Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about [ASU tuition and financial aid](#) options to find out which will work best for them.

Application deadlines

Fall

Spring   [expand](#)

                    [expand](#)

Program learning outcomes

Program learning outcomes identify what a student will learn or be able to do upon completion of their program. This program has the following program outcomes:

- Apply regression analysis and analysis of variance to analyze and solve real world statistical problems.
- Apply regression analysis and analysis of variance concepts, and evaluate when these methods are appropriate.

Career opportunities

Statistical analysis and data mining have been identified as two of the most desirable skills in today's job market.

Graduates have knowledge that may be applied in a broad variety of career opportunities in fields as diverse as business, finance, engineering, technology, education, marketing, government and other areas of the economy. These are just a few of the top career opportunities supported by the statistics certificate program:

- business consultant or analyst
- data analyst
- financial analyst
- market research analyst
- statistician

Contact information

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