

# Social Science Research Methods, Certificate

LASSRMCERT

Are you interested in analyzing human behavior through data? Learn data theories, examine theoretical research and develop your critical analysis skills. You'll leverage qualitative evidence in the world around you and gain the quantitative skills that create and confirm theories.

## Description

The certificate program in social science research methods prepares students to acquire, manage and analyze a broad range of human thought and behavior data. Data can be qualitative (e.g., text, images, sound) or quantitative (e.g., direct observation, surveys, geographic information systems).

Data acquisition skills may include downloading and managing information from online sources, collecting data in surveys or making direct observations. A key feature of this program is a focus on data analysis, so students can analyze any data they collect.

All students in this program demonstrate skills in statistical analysis and selecting methods related to their interests.

## At a glance

- College/School: [The College of Liberal Arts and Sciences](#)
- Location: [Tempe](#)

## Program requirements

[2024 - 2025 Certificate Map](#)  
[Certificate Map \(Archives\)](#)

The certificate requires 18 credit hours, 12 of which must be upper division. A minimum of a "C" grade (2.00 on a 4.00 scale) in each course is required.

## **Required Course -- 3 credit hours**

[GIS 469 / SOC 469: Multivariate Statistics for Social Sciences](#) or [STP 452: Multivariate Statistics](#) (3)

## **Electives (choose at least four) -- 12 credit hours**

Choose at least four courses for a minimum of 12 credit hours. At least six credit hours must be upper division.

[ACO 100: All About Data: Design, Query, and Visualization \(QTRS OR CS\)](#) (3)

[ACT 435: Statistics for Risk Modeling](#) (3)

[ACT 450: Actuarial Models](#) (3)

[ALA 235: Introduction to Computer Modeling \(CS\)](#) (3)

[AML 253: Introduction to Mathematical Tools and Modeling for the Life and Social Sciences \(MATH\)](#) (3)

[AML 441: Mathematical Concepts and Tools in Sustainability](#) (3)

[ASM 494: Models in Social Evolution](#) (3)

[BME 301: Numerical Methods in Biomedical Engineering](#) (2)

[BMI 211: Modeling Biomedical Decisions](#) (3)

[BMI 311: Modeling Biomedical Knowledge](#) (3)

[BMI 312: Modeling Biomedical Data](#) (3)

[BMI 461: Advanced Topics in Biomedical Informatics I](#) (3)

[BMI 462: Advanced Topics In Biomedical Informatics II](#) (3)

[COM 308: Advanced Research Methods in Communication \(L\)](#) (3)

[COM 407: Advanced Critical Methods in Communication](#) (3)

[CRJ 303: Statistical Analysis \(QTRS OR CS\)](#) (3)

[ECN 310: Applied Regression and Data Analytics](#) (3)

[ECN 416: Game Theory and Economic Behavior](#) (3)

[EDP 454: Statistical Data Analysis in Education](#) (3)

[FAS 361 / SOC 391: Applied Research Methods \(SOBE OR L or SB\)](#) (3)

[FAS 498: Advanced Statistics for Social Sciences](#) (3)

[GCU 351: Population Geography \(GCSI OR SB & G\)](#) (3)

[GCU 373: Introduction to Geographic Information Science \(SG\)](#) (4)

[GCU 442: Geographical Analysis of Transportation \(SB\)](#) (3)

[GCU 496: Geographic Research Methods \(L\)](#) (3)

[GIS 311: Geographic Information Science III \(QTRS OR CS\)](#) (4)

[GIS 322: Programming Principles in GIS II](#) (3)

[GIS 341: Cartography and Georepresentation \(QTRS OR CS\)](#) (3)

[GIS 431: Spatial Databases](#) (3)

[GIS 441: Geographics: Interactive and Animated Cartography and Geovisualization \(CS\)](#) (3)

[GIS 461 / PUP 481: Fundamentals of Spatial Optimization](#) (3)

[GIS 462: Location Analysis and Modeling](#) (3)

[GIS 470: Advanced Statistics for Geography and Planning \(QTRS OR CS\)](#) (3)

[GIS 471: Spatial Statistics for Geography and Planning](#) (3)

[GIS 472: Spatial Regression Analysis](#) (3)

[GPH 494: Advanced Digital Analysis](#) (3)

HSE 290: Experimental Methods for Human Systems Research (QTRS OR L) (3)

HSE 390: Qualitative Research Methods (L) (3)

IFT 200: Information Modeling, Storage and Retrieval (3)

IFT 410: Big Data Tools and Practices (3)

MKT 352: Marketing Research (L) (3)

POS 301 / SGS 305: Empirical Political Inquiry (SOBE OR SB) (3)

POS 401 / SGS 401: Political Statistics (QTRS OR CS) (3)

PSY 330: Statistical Methods (QTRS OR CS) (3)

PUP 424: Planning Methods (4)

SBS 302: Qualitative Methods (SOBE OR SB) (3)

SBS 404: Social Statistics II: Multivariate Analysis (CS) (3)

SOC 389 / SBS 389 / ASB 389: Ethnographic Field Lab (1-6)

SOS 211: Calculus and Probability for the Life and Social Sciences (MATH) (3)

STP 280: Probability and Statistics for Researchers (QTRS OR CS) (3)

STP 310: Design and Analysis of Experiments (3)

STP 311: Regression and Time Series Analyses (3)

STP 315: Statistical Computing (3)

STP 420: Introductory Applied Statistics (QTRS OR CS) (3)

STP 421: Probability (3)

STP 425: Stochastic Processes (3)

STP 429: Applied Regression (QTRS OR CS) (3)

STP 450: Nonparametric Statistics (3)

STP 460: Categorical Data Analysis (3)

TWC 301: Fundamentals of Writing for Digital Media (L) (3)

TWC 411: Principles of Visual Communication (L) (3)

### **Required Capstone Course -- 3 credit hours**

ASB 499: Individualized Instruction or an equivalent capstone course approved by academic advisor (3)

Prerequisite courses may be needed in order to complete the requirements of this certificate.

## **Enrollment requirements**

A student pursuing an undergraduate certificate must be enrolled as a degree-seeking student at ASU. Undergraduate certificates are not awarded prior to the award of an undergraduate degree. A student already holding an undergraduate degree may pursue an undergraduate certificate as a nondegree-seeking graduate student.

## **Career opportunities**

People with the skill set needed to solve complex problems are in demand in the job market. There is a growing need for researchers and analysts with keen thinking skills who can manage, evaluate and interpret large amounts of data to address these challenges.

Some career opportunities include:

- acting as legal advocates in international cases
- analyzing and proposing policies
- conducting postgraduate academic research
- consulting for private and public organizations
- directing nonprofit organizations
- directing programs in the private or public sector

## Contact information

[Schedule an advisor appointment](#)

[School of Human Evolution & Social Change](#) | SHESC 233

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