Statistics

Statistical Practice
Statistics, roughly speaking, is the science of learning from data, measuring, controlling, and communicating uncertainty.

Compared to the BS degree, our BA program has fewer required mathematics courses and more applied statistics courses, or courses in a supporting quantitative area. The BA in statistical practice is an excellent choice for those students who are most interested in joining the workforce after completing their degree, or for those who would like to learn about statistics, but don’t enjoy the higher level math required in the BS degree. The BA is comprised of a series of required STAT courses, Calculus I and II, an intro CSCI course, and electives.

The BA in statistical practice is intended for students who want to use their education as certification for work requiring statistical skills or as a basis for further education in another area like medicine, psychology, law, or others. Students who complete this program using statistics electives will have applied statistics training equivalent to most master's programs in statistics.
**Statistical Science**

Our BS in statistical science is intended for students who are interested in careers as statisticians or who would like to go on to graduate education in statistics or a related area. It shares a core sequence of applied statistics courses with the BA program, but requires more mathematics.

This program allows students the flexibility to take additional advanced mathematics courses that are expected for admission to many graduate programs. The BS is comprised of a series of required STAT courses, Calculus I, II, III, and Linear Algebra, an intro CSCI course, and electives. To allow for the extra mathematics, students in the BS program do not have to complete the College of Liberal Arts' second language requirement.

Many of our BS students pursue University of Minnesota graduate programs like statistics, biostatistics, data science, epidemiology, quantitative methods in education, psychometrics, and others.

**The College of Liberal Arts Advantage: More Than a Major**

When you study Statistical Science at the University of Minnesota, you gain the added advantage of a College of Liberal Arts education. At CLA, the liberal arts mean you get more than just a degree in one major or another; it means you will be exposed to different areas of study, to different ways of thinking and learning. In fact, the liberal arts teach you how to learn—how to ask the right questions, how to problem solve, and how to innovate. The liberal arts prepare students for the complexities of our world, because here at CLA you will study not just, say, politics or art but also where politics and art intersect, where science and ethics intersect, where economics and the environment intersect.

**Meet Our Students**
Seniors Sabrina Li and Ryan Lerch participated on an analytics team for the College of Liberal Arts’ First-Year Experience, looking at how a first-year student’s demographic background affects their sense of belonging.

Read more about Sabrina and Ryan's story, and learn more about our undergraduate program.

**Student Experiences**

**Internships: Gain Valuable Experience in the Twin Cities and Beyond**

Did you know? CLA Career Services has its very own internship reflection course! Students taking an internship can use this course to reflect on ways that their work experience is preparing them for successful careers - and receive credit for the work.

**Learning Abroad: Prepare to Lead in a Global Economy**

Learn more about study abroad for Statistics majors.

**Undergraduate Research: Turn Curiosity into New Knowledge**

Statistics is the science of learning from data. Statisticians collect, organize, analyze, interpret, and present data. We are constantly seeking better ways to do that in more and more challenging situations, using mathematics, computing, and insight. People use statistics in business, industry, medicine, government, and scientific research.

The Institute for Research on Statistics and its Applications (IRSA) serves to advance the use of statistics in the 21st century.
Student Organizations: Find Friends and Grow as a Leader

- Undergraduate Statistics Club

Meet Our Faculty

After earning a PhD in engineering sciences at Harvard University, Assistant Professor Jie Ding has finally returned to his roots in fundamental mathematics. This field brought him to the University of Minnesota-Twin Cities.

Read more about Jie's story.

“It’s like playing tennis without a net. You always win,” says statistics professor Charles Geyer about conducting unethical research. Discover how Geyer and other professors at the University of Minnesota mobilize the open science movement to inspire appropriate research practices.
Meet Our Alumni

“My CLA degree taught me how to learn quickly and think critically,” says TheanCheat Lim, a recent statistics alum. His double major in statistics and psychology made him an attractive job candidate to a Twin Cities insurance company.

Read more about TheanCheat's story.

CLA Graduates: Successful Careers and Purposeful Lives

CLA graduates succeed in many different careers — law, health care, medicine, business, government, teaching, advertising, arts and entertainment, international relations, and more — precisely because they understand how to navigate a complex and interconnected world. As our alumni explain below, “Being a good employee means being curious, and continuing to evolve, and learn, and educate yourself, and I can think of no stronger foundation for doing that than a liberal arts education.
“An education in the liberal arts is a springboard to lifelong career success”
-- Dean John Coleman

You might also explore

Computer Engineering
Applied Economics
Computer Science
Economics
Mathematics

Associated Careers

Actuaries, Computer Programmers, Market and Survey Researchers, Mathematicians, Medical Scientists, Postsecondary Teachers, Research Psychologists, Statisticians

Admission Information

FRESHMAN: Admission information
TRANSFER STUDENTS: Requirements for the College of Liberal Arts

Beyond admission, if you have questions about transferring, the College of Liberal Arts (CLA) has transfer advisors to help. Please feel free to contact them about any of the topics below:

• Course plans before transferring
• Estimated time to graduation
• Career preparation in CLA
• Getting ready for orientation, if admitted
• Connecting with major/minor departments