Statistics provides a logical framework for the collection, analysis, and interpretation of data. This data can be used to draw inferences in scientific studies and to make decisions in industrial, business, and governmental enterprises.

Students can earn a B.A. through the College of Liberal Arts or a B.S. through the Institute of Technology. The major differences between the degrees are the differing college requirements between CLA and IT. Within the major, CLA students must complete a senior paper that is not required in IT; and IT students must take an extra science course and three courses of technical electives that are not required in CLA. Both the B.A. and B.S. degrees are administered by the School of Statistics.

Students are advised to acquire a knowledge of a second academic area. Typical examples are industrial engineering, computer science, health science, business and economics, social science, or actuarial science. General information on employment will be found in the brochure "Careers in Statistics" which is available from the Undergraduate Advisor (inquire at 313 Ford Hall), or from the American Statistical Association, 806 - 15th Street, N.W., Washington, D.C. 20005.

**Degree Requirements**

Students must complete 120 credits to graduate, including at least 38 credits in the major.

Requirements include 38 credits with grade C- or better, in math (including multivariable calculus) and statistics (including one year of theory and three applied statistics courses) and one computer programming course.

**Required Courses**

- Stat 3011—Introduction to Statistical Analysis or 3021—Introduction to Probability and Statistics
- Stat 3022—Data Analysis
- Stat 4893—Senior Paper
- At least 10 credits of adviser-approved statistics electives chosen from the following: Stat 5031, 5041, 5201, 5302, 5303, 5401, 5421, 5601
- Math 1271-1272—Calculus
- Math 2263—Multivariable Calculus
- Math 4242—Applied Linear Algebra
- One course chosen from the following: CSci 1103, CSci 1107, CSci 1113

**Final Project**

Majors must complete a senior project through registration in Stat 4893—Senior Paper.

**Minor Requirements**

Students must complete at least 14 credits from 3xxx, 4xxx, and 5xxx School of Statistics courses, including at least two courses at the 5xxx level.
You have not declared a major until you have:

1. Talk with someone from the department: an adviser, a professor, or a teaching assistant, to learn more about the major and its requirements.
2. When you decide upon a statistics major, meet with the director of undergraduate studies to complete a Major Program form.
3. Bring a copy of the form to your CLA student community.
4. If you decide to change your major, contact your CLA student community for information on the new major’s declaration process.

**Skills**

Statistics majors develop skills that are applicable to a wide variety of careers. These skills include:

- Strong quantitative reasoning abilities
- Creative problem solving skills
- Analytical and logical reasoning skills
- Independent, self-motivated work ethic
- Ability to formulate clear and persuasive messages
- Listening, clarifying, questioning and responding skills

**Employment**

Common areas of employment for this major include but are not limited to:

- **Business**—insurance actuary, research analyst, financial analyst
- **Medicine**—information management, regression modeling
- **Government**—public information, campaign research
- **Sciences**—research and development, computation, experimentation
- **Public Relations and Advertising**—market research, corporate public affairs, lobbying
- **Education**—teaching, research, student affairs
- **Nonprofit**—fundraising, programming, account management

### How do I declare a statistics major?

You will be required to declare a major by the time you have completed 60 credits.

1. Talk with someone from the department: an adviser, a professor, or a teaching assistant, to learn more about the major and its requirements.
2. When you decide upon a statistics major, meet with the director of undergraduate studies to complete a Major Program form.
3. Bring a copy of the form to your CLA student community.
4. If you decide to change your major, contact your CLA student community for information on the new major’s declaration process.

### About the statistics major:

Undergraduate Advising
313 Ford Hall
(612) 625-8046
http://www.stat.umn.edu/
info@stat.umn.edu

### About CLA requirements, graduation, and other information about majors:

CLA Languages and Math Student Community
114 Johnston Hall
(612) 624-7540
http://langmath.cla.umn.edu
langmath@class.cla.umn.edu

### About careers, internships, and community learning opportunities in this major and others:

Career and Community Learning Center
135 Johnston Hall
(612) 624-7577
www.cclc.umn.edu
cclc@class.cla.umn.edu

### About graduation with honors:

Students interested in graduating with honors should contact:

CLA Honors Division
115 Johnston Hall
(612) 624-5522
www.cla.umn.edu/honors/
honors@class.cla.umn.edu

### Remember!

You have not declared a major until you have:

- completed a Major Program Form with your major adviser
- filed a copy with the major department
- filed a copy with your CLA student community
- be sure to keep a copy for yourself