



UNIVERSITY OF MINNESOTA

STEM-RELATED Majors

If you enjoy working with numbers, math, and analyzing complex data...

- Applied Economics
- Astrophysics
- Bioproducts and Biosystems Engineering
- Chemical Engineering
- Computer Engineering
- Computer Science
- Economics
- Electrical Engineering
- Finance
- Materials Science and Engineering
- Mathematics
- Mechanical Engineering
- Statistics



...working with numbers, math, and data

If you enjoy communicating, teaching, and human interactions...

- Agricultural Communication and Marketing
- Agricultural and Food Business Management
- Kinesiology
- Nutrition
- Supply Chain and Operations Management
- Biology
- Chemistry
- Speech-Language-Hearing Sciences
- Psychology
- Nursing

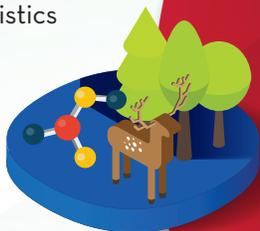


...communicating, teaching and human interactions

IF YOU ENJOY...

If you enjoy interacting with the environment, animals, and the molecules of life...

- Animal Science
- Biochemistry
- Biology
- Cellular and Organismal Physiology
- Chemistry
- Ecology, Evolution and Behavior
- Fisheries, Wildlife and Conservation Biology
- Forest and Natural Resource Management
- Genetics, Cell Biology and Development
- Microbiology
- Neuroscience
- Physics
- Physiology
- Plant and Microbial Biology
- Plant Science
- Environmental Engineering
- Environmental Geosciences



...interacting with the environment, and animals

...being creative and outside-the-box thinking

If you enjoy being creative and outside-the-box thinking...

- Architecture
- Industrial and Systems Engineering
- Product Design
- Aerospace Engineering and Mechanics
- Civil Engineering
- Landscape Design and Planning
- Biomedical Engineering



...the idea of working in a global environment

If you enjoy the idea of working in a global environment

- Biology, Society, & Environment
- Earth Sciences
- Food Science
- Food Systems
- Geoengineering
- Geography
- Management Information Systems
- Sustainable Systems Management



The **MAJOR KEY** (majors.umn.edu) is a great tool to help you explore these options!

The University of Minnesota Twin Cities has lots of programs available for students who are interested in a stem-related major. For more information about these majors, please visit the Major Key at majors.umn.edu

Aerospace Engineering and Mechanics (CSE) - Ever-evolving field where graduates develop new technologies in biomedical and computer industries.

Agricultural Communication and Marketing (CFANS) - Combination of agricultural studies, business management and marketing, focusing on food science and industry, or crop and soil industries.

Agricultural Education (CFANS) - Prepare to teach agriscience, agribusiness, animal science, horticulture, food science, agricultural mechanics, and natural resource science.

Agriculture and Food Business Management (CFANS & CSOM) - Learn to solve management issues for food, agricultural, financial, and other industries. Balance between economics and business management, as well as applied science.

Animal Science (CFANS) - Learn about the care and management of farm animals, zoo animals, horses, pets or business within the animal industry.

Applied Economics (CFANS) - Gain a solid foundation in economics and learn how it is applied in the real world to improve people's lives.

Architecture (Design) - Learn the art of design practice, drawing, digital design, and fabrication techniques in studios and workshops, and also the history and theory of architecture.

Astrophysics (CLA, CSE) - Study the physics of the universe along with interactions between objects in outer space; interpret data with mathematics and physical laws.

Biochemistry (CBS) - Focus studies on biosynthesis, metabolism, function, and regulation of molecules of life in order to understand disease.

Biology (CBS) - Understand the fundamental nature of living things, and cover the full range of life sciences, from cancer genes to marine mammals.

Biology, Science, & Environment (CLA) - Comprehensive biology training which also applies biology knowledge to topics like philosophy, sociology, geography, history and more.

Biomedical Engineering (CSE) - Study the fundamentals of biology, chemistry, physics, and mathematics to solve problems in the medical field.

Bioproducts and Biosystems Engineering (CFANS) - Design products and systems to meet the world's growing needs for materials, energy, and food to address environmental sustainability.

Cellular and Organismal Physiology (CBS) - Study underlying physiological mechanisms in organisms ranging from microorganisms to large animals.

Chemical Engineering (CSE) - Chemically and physically transform matter to tackle some of the planet's greatest challenges, such as energy resources, pollution control, and new medical therapies.

Chemistry (CLA, CSE) - Interact with nature on a fundamental, level, studying molecular structure, and the reactions that convert one material into another.

Civil Engineering (CSE) - Build the infrastructure of the world, including roads, bridges, buildings, water supply networks, sewage systems, pollution control facilities, and transportation hubs.

Computer Engineering (CSE) - Design, build, test, and install high-tech computing devices for everything from supercomputers to toys.

Computer Science (CLA, CSE) - Design computer software and hardware, apply computational techniques to other sciences, investigate social uses of computing, determine what programming language to use for a given problem, and advance new technologies such as artificial intelligence and robotics.

Earth Sciences (CLA, CSE) - An evolution of the field known as geology, studies fossils, volcanoes, tectonics, water flows, lakes, minerals and rocks of our planet from its origin to today.

Ecology, Evolution and Behavior (CBS) - Three related areas of biology build a foundation for success in various paths including graduate study, teaching, and entry-level scientist positions in wide range of sectors.

Economics (CLA) - Emphasizes critical thinking and the understanding of basic economic principles, prepping students for careers or graduate school.

Electrical Engineering (CSE) - Learn to generate technological advances that impact virtually every aspect of modern life.

Environmental Engineering (CSE) - Learn to design systems that resolve issues of environmental concern from wastewater treatment to protecting public health.

Environmental Geosciences (CSE) - Understand natural geologic processes and complete fieldwork to ensure the sustainability of our environment.

Environmental Sciences, Policy and Management (CFANS) - Interdisciplinary, major preps students to address complex environment and renewable resource issues.

Finance (CSOM) - Develop effective financial decision-making, and gain skills to assist in answering how to improve value, evaluate projects, measure risk, and understand markets.

Fisheries, Wildlife and Conservation Biology (CFANS) - Learn to research, plan and implement care and management plans for wildlife, fish, or aquatic resources.

Food Science (CFANS) - Apply chemistry, microbiology, and engineering to the science of making foods.

Food Systems (CFANS) - Learn the systems that feed the human population, encompassing biological, technological, economic, and social activities.

Forest and Natural Resource Management (CFANS) - Learn from a curriculum that covers the managerial, behavioral, and ecological sciences of our natural resources.

Genetics, Cell Biology and Development (CBS) - Focus on the mechanisms by which genetic information is used by cells to develop into complete organizations.

Geoengineering (CSE) - Plan, analyze, and design water and waste systems, tunnels, dams, and other facilities on or under the Earth's surface.

Geography (CLA) - Explore the ways both human and non-human forces shape the world, through social, political, economic, and ecological processes.

Industrial and Systems Engineering (CSE) - Design, plan, and manage large-scale and complex systems including global supply chains, healthcare delivery systems, business and financial services, infrastructures.

Kinesiology (CEHD) - Study physical activity and human movement to prepare for careers in health science, fitness, sport, and wellness.

Landscape Design and Planning (Design) - Learn to respond to multiple environmental challenges using sustainable models of landscape design practice.

Management Information Systems (CSOM) - Learn to plan for, design, use, and manage the digital assets of an organization.

Materials Science and Engineering (CSE) - Understand the properties and origins of metals, ceramics, semiconductors, polymers, and composites, used in a wide range of industries.

Mathematics (CLA, CSE) - More than just numbers and formulas, understand how and why, and learn to solve complex real-world problems in diverse fields.

Mechanical Engineering (CSE) - Versatile degree encompasses energy, transportation, bioengineering, environmental engineering, medical device design, heating and cooling, fluid power, manufacturing and nanofabrication.

Microbiology (CBS) - Study the role of microbes such as bacteria, fungi, and viruses in our world and understand the impact on human health.

Neuroscience (CBS) - Study the building blocks of brain function in both animals and humans, as well as disease causing abnormalities.

Nursing (Nurs) - Learn the practices and procedures that ensure the health and safety of patients to prepare for a career in nursing.

Nutrition (CFANS) - Nutrition studies, dietetics, or nutritional science tracks explore how nutrients and foods aid the body in health, growth, and development.

Physics (CLA, CSE) - From the smallest subatomic particles to galaxies, explore the fundamental properties, laws, and structure of all forms of matter, living and non-living.

Physiology (CLA) - Based on chemistry, physics, mathematics, and biological science, focus on the functions of the human body from cells to organ systems.

Plant and Microbial Biology (CBS) - Work to enhance the nutritional value of crops and their resistance to disease, pests, and drought while working to reduce the need for pesticides, fertilizer, and irrigation.

Plant Science (CFANS) - Prepare for diverse careers in areas such as plant breeding/genetics, sustainable food and plant production, and landscape management.

Product Design (Design) - Hands-on and team-based, learn to use engineering elements, human needs, and the market to design and innovate in today's society.

Psychology (CLA) - Apply the scientific method and quantitative reasoning to examine human behavior through environmental and physiological determinants.

Speech-Language-Hearing Sciences (CLA) - Study the production and comprehension of human communication through speech and language.

Statistics (CLA) - Gain a B.A. or B.S. in statistical practice or statistical science to measure and communicate societal advancements.

Sustainable Systems Management (CFANS) - Advance sustainability through systems solutions that integrate the goals of economic growth, public health, and environmental protection.

Design College of Design

CEHD College of Education and Human Development

CFANS College of Food, Agricultural and Natural Resource Sciences

CBS College of Biological Sciences

CSE College of Science and Engineering

CSOM Carlson School of Management

CLA College of Liberal Arts

NURS School of Nursing