

INTEGRATIVE GENOMICS

MASTER OF SCIENCE IN INTEGRATIVE GENOMICS (MSIG)

The Master of Science in Integrative Genomics (MSIG) is an interdisciplinary program that combines genomics with biochemistry, ecophysiology, conservation biology, and molecular biology to address fundamental biological questions.

WHY MSIG: Master both classical and next-generation genomics to probe intricate biological and environmental systems. Dive deep into essential bioinformatics and biostatistics tools pivotal to genetics, genomics, and transcriptomics.

Work with your faculty mentor to tailor your academic program and research to align with your interests and career goals.

Elevate your scientific communication skills by publishing your research and presenting at professional conferences.

Former graduates have gone on to careers as consultants and research associates in the biotech industry, research managers in personalized medicine, and wildlife biologists and botanists in state and federal agencies. Other graduates have gone on to doctoral programs, medical school, and veterinary school.

FACULTY SPECIALTIES: Transcription Profiling, Evolutionary Genomics, Behavior Genetic Analysis, Plant Evolutionary Biology, Reptile and Amphibian Biology, Fungal Genetics, Signal Transduction, Cancer and Stem Cell Biology, Microbial Ecology, Biosensors, and Avian Biology.

RESEARCH AND TEACHING ASSISTANTSHIPS AVAILABLE.

CURRICULUM OVERVIEW:

Required Courses:

» Introductory Genomics
» Genomics Techniques
» Introduction of Bioinformatics
» Biometry
» Thesis Research in Biology

Electives to Explore:

» Dendrology
» Herpetology
» Microbial Genomics
» Natural Resources Management
» Ornithology
» Health Psychology
» Entomology
» Mycology
» Neurobiology
» Immunology
» Biochemistry
» Agrostology

FIND OUT MORE:

BLACK HILLS STATE UNIVERSITY

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