



INFORMATICS

The Informatics minor is an interdisciplinary program that prepares you with core computational skill sets and competencies that allow you to solve problems within a chosen discipline or field. The program also builds interdisciplinary problem solving skills that are applicable and advantageous across academia and within industry. The minor's objectives are anchored around a set of core outcomes, such that students completing the minor will be able to:

Apply computational thinking to solve problems effectively and implement it using a programming language; apply statistical techniques to assess outcomes of empirical studies or experiments, and set up research designs to evaluate tools, techniques or hypotheses effectively; interact, use and manage data or databases and solve data-centric problems; organize, visualize, and communicate digital data effectively and efficiently; use creative competencies to generate creative solutions; and contribute one's expertise to the solution of interdisciplinary problems by effectively collaborating and communicating with those from other disciplines.

Academics

CORE COURSES

- **CSCE 100** Introduction to Informatics
- **CSCE 311** Data Structures and Algorithms for Informatics
- **CSCE 493A** Interdisciplinary Capstone

Area 1: Computational Thinking and Programming

Select one course:

- **CSCE 155A** Computer Science I
- **CSCE 155E** Computer Science I: Systems Engineering Focus
- **CSCE 155N** Computer Science I: Engineering and Science Focus
- **CSCE 155T** Computer Science I: Informatics Focus

Area 2: Statistical and Research Design

Select one course:

- **STAT 218** Introduction to Statistics
- **ECON 215** Statistics
- **STAT / MATH 380** Statistics and Applications
- **EDPS 459** Statistical Methods
- **PSYC 350** Research Methods and Data Analysis
- **SOCI 206** Introduction to Social Statistics

Select one course from either Area 3 or Area 4.

Area 3: Data Analysis and Database Techniques

- **CSCE 413** Database Systems
- **CSCE 471** Introduction to Bioinformatics
- **CSCE 474** Introduction to Data Mining
- **CSCE 478** Digital Archives and Editions
- **ENGL 279** Digital Literary Analysis
- **GEOG 412** Introduction to Geographic Information Systems
- **JOUR 307** Data Journalism
- **NRES 218** Introduction to Geospatial Technologies
- **NRES 418** Introduction to Remote Sensing
- **STAT 318** Introduction to Statistics II

Area 4: Visualization and Creative Thinking

- **CSCE 470** Computer Graphics
- **TMFD 121** Visual Communication and Presentation
- **AHIS / ANTH / CLAS 406** Visualizing the Ancient City
- **ANTH 389** GIS in Archaeology
- **ARTP 189H** University Honors Seminar
- **ARTS 398** Special Topics in Studio Art III
- **JOUR 407** Data Visualization
- **MUSC 483** Music Technology: Advanced Techniques and Applications

For a complete list of applicable courses see minor advisor.