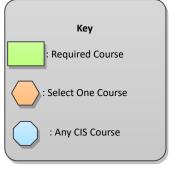# Visual Guide to the CIS Major

Catalog Text: 11 CIS courses, including CIS 100, 112, 220, 271, either CIS 301 or CIS 310, and CIS 400 (the capstone experience). In addition, students must take at least one additional course with each of the following designations: Coding and Production, Design and Interaction, and Analysis and Modeling. At least four of the eleven total courses must be at the 300-level or higher.

Introductory Core
All students take these, and upper level offerings draw on these as prerequisites.

CIS 100/115: IT & Society

CIS 112: Database Concepts

CIS 220: Object-Oriented Programming

CIS 271: Digital and Social Media

Specific offerings of the topics courses CIS 297 and CIS 397 may also count towards various CIS distribution requirements.

Electives
Students take a mix of constrained and free electives. A minimum of three of these must be at the 300-level or higher.

User Needs
CIS 301: Human Computer Interaction
CIS 310: Systems Analysis

CIS Elective
Any CIS course at any level may be used here.

Coding and Production
CIS 265: Digital Video
CIS 275: Web Design
CIS 280: Scripting Languages
CIS 320: Data Structures
CIS 343: Adv. Data Analysis: Simulations
CIS 345: Adv. Data Analysis: Networks
CIS 361: Digital Imaging
CIS 375: Advanced Web and Mobile Development

Analysis and Modeling
CIS 230: Artificial Intelligence
CIS 241: Data Mining
CIS 245: Information Visualization
CIS 310: Systems Analysis
CIS 320: Data Structures
CIS 335: Information Security
CIS 343: Adv. Data Analysis: Simulations
CIS 345: Adv. Data Analysis: Networks

Design and Interaction
CIS 245: Information Visualization
CIS 265: Digital Video
CIS 275: Web Design
CIS 301: Human Computer Interaction
CIS 361: Digital Imaging
CIS 375: Advanced Web and Mobile Development

CIS Elective
Any CIS course at any level may be used here.

Capstone Experience
Students should plan on taking this course in the spring of their senior year.

CIS 400: Service-Learning Project Management

Key
: Required Course

: Select One Course

: Any CIS Course