

# CIS Is For Everyone

Students from all majors take Computing and Information Studies courses, not just CIS majors. This document can help you find the right CIS course for you – it describes our *introductory, no-prerequisite courses* and makes suggestions based on your intended major. They are also all good places to start if you're thinking of a major or minor in CIS.

## ***CIS 100: Information Technology and Society***

Study the history of computing and the effect technology has on society and ourselves. Students will learn to see a technology from multiple viewpoints and write clearly about the role of technology in society. Suitable for any student. (WRITE, HISTORICAL)

## ***CIS 105: Game Design and Development***

Survey the breadth of CIS through the lens of computer games. Students will review games, design games, build games, and consider the impact of games on our culture. Ideal as a gentle introduction to the processes of coding, testing and designing.

## ***CIS 112: Database Concepts***

A basic introduction to the process of collecting, organizing, storing and analyzing data electronically. Concepts such as relationships, normalization, data keys, and SQL are covered. Assumes no prior knowledge of computing.

## ***CIS 230: Artificial Intelligence***

An overview of the major techniques driving artificial intelligence, including machine learning methods, with a focus on understanding the capabilities of AI systems and considerations for their ethical usage. Suitable for students from any major interested in how AI technologies are being deployed for problem solving in a wide range of disciplines. (LOGICAL)

## ***CIS 241: Data Mining***

A project-based course where students apply modeling algorithms to data sets drawn from multiple disciplines including marketing, finance, and natural and social sciences to find and interpret patterns or messages in the data. Suitable for students wanting to learn how to take data, see if it tells a story, and if so, what that story is. (LOGICAL)

## ***CIS 245: Information Visualization***

An introduction to the analysis and visual presentation of complex information drawing on problems and data sets from a variety of subject areas including medical and business analytics, graphic art, environmental studies, etc. Suitable for any student who wants to learn to discover meaningful patterns in data and to present their findings effectively.

## ***CIS 265: Digital Video***

A project-based course in digital video production, including visual communication, digital storytelling, digital media production, and film analysis. Suitable for students who want to engage in digital video production as well as film analysis and creation. (LITERARY)

## ***CIS 271: Digital and Social Media***

An introduction to electronic and social media theory and practice, students will create electronic media and study the design issues regarding their implementation. Suitable for students interested in a theoretical exploration of digital media based in visual literacy and communication. (ARTISTIC)

## ***CIS 275: Web Design and Development***

A project-based course in web design and development, including a mastery of web coding languages. Suitable for students interested in a theoretical exploration of hypertext environments and the design issues behind the production and implementation of web-based materials. (WRITE, ARTISTIC)

## ***CIS 280: Scripting Languages***

An introduction to problem solving with scripting languages in various modern contexts including the web. Suitable for students looking for an introduction to coding and application development or as a complement to CIS 275.

<i>If you are majoring in...</i>	<i>...consider taking...</i>
Accounting, Business Administration, or International Business	CIS 100: Information Technology and Society CIS 112: Database Concepts CIS 241: Data Mining CIS 245: Information Visualization
Art or Art Education	CIS 265: Digital Video CIS 271: Digital and Social Media CIS 275: Web Design and Development
Biology or Biochemistry	CIS 112: Database Concepts CIS 245: Information Visualization CIS 271: Digital and Social Media
Chemistry	CIS 241: Data Mining CIS 220: Object-Oriented Programming (coding prerequisite)
Communication Arts	CIS 105: Game Design and Development CIS 265: Digital Video CIS 271: Digital and Social Media CIS 275: Web Design and Development
Economics or Financial Economics	CIS 112: Database Concepts CIS 241: Data Mining CIS 220: Object-Oriented Programming (coding prerequisite)
Child Development and Education	CIS 100: Information Technology and Society CIS 105: Game Design and Development
English	CIS 100: Information Technology and Society CIS 271: Digital and Social Media CIS 275: Web Design and Development
Environmental Studies or Environmental Science	CIS 112: Database Concepts CIS 245: Information Visualization CIS 271: Digital and Social Media
Gender and Women's Studies	CIS 100: Information Technology and Society CIS 105: Game Design and Development CIS 245: Information Visualization
History	CIS 100: Information Technology and Society CIS 105: Game Design and Development
International Studies	CIS 100: Information Technology and Society CIS 241: Data Mining CIS 245: Information Visualization
Mathematics	CIS 241: Data Mining CIS 220: Object-Oriented Programming (coding prerequisite)
Modern Languages (French, German, or Spanish)	CIS 100: Information Technology and Society CIS 105: Game Design and Development
Music	CIS 105: Game Design and Development CIS 265: Digital Video CIS 271: Digital and Social Media
Philosophy	CIS 100: Information Technology and Society CIS 105: Game Design and Development CIS 220: Object-Oriented Programming (coding prerequisite)
Physics or Biological Physics	CIS 241: Data Mining CIS 220: Object-Oriented Programming (coding prerequisite)
Political Science or Public Policy	CIS 100: Information Technology and Society CIS 241: Data Mining CIS 245: Information Visualization
Psychology or Neuroscience	CIS 112: Database Concepts CIS 230: Artificial Intelligence CIS 241: Data Mining
Sociology	CIS 100: Information Technology and Society CIS 245: Information Visualization CIS 271: Digital and Social Media