



# Computing & Information Studies

The CIS curriculum combines aspects of history, sociology, psychology, communication, art, design, science, and mathematics. The program stresses problem solving and effective communication skills while addressing issues in computational thinking, visual culture, interaction design, data science, systems development, and security. Students select from a range of electives while continuing a course of study that provides a solid grounding in effective coding and production, as well as user-focused design and interaction, and formal modeling and analysis.

## Major Requirements

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CIS 100 Information Technology & Society

CIS 112 Database Concepts

CIS 220 Object-Oriented Programming

CIS 271 Digital Media

CIS 301 Human-Computer Interaction OR CIS 310 Systems Analysis

CIS 400 Service Learning  
Project Management

Students take five additional classes from electives (like CIS 105 Game Design or CIS 335 Information Security), and from courses designated as Coding and Production (like CIS 275 Web Design); Analysis and Modeling (like CIS 241 Data Mining); and Design and Interaction (like CIS 245 Information Visualization)

## Major Emphasis

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Students who major in CIS can choose to complete an Emphasis in Computer Science, Data Science, Digital Media, Interaction Design, or Web and Mobile Technologies.

## Minor Requirements

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CIS 100 Information Technology & Society

### Choose two from:

CIS 112 Database Concepts

CIS 220 Object-Oriented Programming

CIS 275 Web Design and Development

CIS 280 Scripting Languages

And then select one course each from those designated as Design and Interaction, and Analysis and Modeling.

A full list of courses and descriptions can be found online in the College catalog.



WASHINGTON  
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COLLEGE

## Program Website

washjeff.edu/cis

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# Beyond the Classroom

Students have many opportunities for research, internships, conferences, and networking beyond the classroom that give them an advantage to prepare for life after W&J.

## Research and Internships

- All CIS majors complete a supervised internship experience through our capstone course, CIS 400.
- Many CIS students find summer internships in areas like data analysis, front-end development, user research, and web design.
- CIS students participate in summer research opportunities such as NSF funded REUs or the CMU Heinz College Summer Security Intensive.
- CIS faculty have active research programs and work with students on their projects or on student-designed independent studies and honors projects.

## Careers

CIS graduates have developed careers in a variety of fields including the following:

- Software Developer
- Business Analytics
- I.T. Project Management
- Social Media and Marketing
- I.T. Consulting
- Game Design
- Web Design
- UI/UX Research
- Database Management
- Information Security



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