

Studying Computing at W&J

The Computing and Information Studies Department offers or contributes to many courses of study focused on computing. Through our range of emphases, students can select a **Computing and Information Studies** major focused on their particular interests and career goals, including **Big Data**, **Computer Science**, **Digital Media**, **Interaction Design**, and **Web and Mobile Technologies**. Students majoring in other disciplines can learn relevant computing skills through the CIS minor or a concentration in **Computational Science**, **Graphic Design**, or **Professional Writing**.

Computing & Information Studies Major

A broad computing major that ensures students master a breadth of computing skills, equipping them for a range of career tracks. Students will gain strong skills in coding, design, analysis, modeling, user needs assessment, and project management.

Computing & Information Studies Majors with an Emphasis

For students with an interest in a particular subfield within computing, the following tracks provide students with a more specialized major.

CIS Major – Big Data

An analog to the Computational Science concentration for CIS majors, this program focuses on the use of computer modeling, visualization, and analysis over large data sets to solve complex problem solving tasks.

CIS Major – Computer Science

This program is designed for students intending to pursue graduate work focused on the foundational and theoretical underpinnings of the computing sciences.

CIS Major – Digital Media

Focusing on how people communicate meaning through innovative contexts capitalizing on various digital media, this program stresses visual literacy and creative problem solving.

CIS Major – Interaction Design

This program highlights the issues involved in designing computing systems in a human-centric manner and focuses on the theories and techniques involved in developing effective interfaces for information systems.

CIS Major – Web and Mobile Technologies

Designed for students with an intended career path in web and mobile application development, this program focuses on both design issues and production and implementation issues central to delivering content through these media.

Computing & Information Studies Minor

Similar in focus to the Computing & Information Studies major, this six-course minor gives students a broad exposure to coding, design, analysis, and modeling.

Computational Science Concentration

Ideal for students studying the sciences, economics, finance or digital humanities, this four-course program provides students the opportunity to develop technical skills required for computational research or data-driven professional work.

Graphic Design Concentration

An interdisciplinary program with the Art Department, this five-course program prepares students to participate in the fields of art, graphic design, illustration, multimedia production, and web development, learning to develop sophisticated imagery that is reflective of their personal style.

Professional Writing Concentration

An interdisciplinary program drawing on many fields, this four course program has a primary focus on writing in professional settings and prepares students to write accurate, clear, non-academic prose for a variety of audiences, as well as research and analyze a wide range of topics.