

COMPUTER STUDIES (COMPST)

Computer Studies Courses

COMPST 701 Computing Fundamentals for IT Professionals

3 cr. Graduate.

A survey of computer science fundamentals. Topics include data storage and manipulation, operating systems and networks, algorithms and data structures, programming languages, artificial intelligence, parallel computing, and computability.

Prerequisites: graduate standing.

Last Taught: Fall 2024, Fall 2023, Fall 2022, Fall 2021.

Current Offerings: <https://catalog.uwm.edu/course-search/>

COMPST 702 Introductory Programming Using Python

3 cr. Graduate.

Programming in Python. Basic control structures including recursion. Basic and library data types. Problem solving with objects. Writing classes. Basic software development skills.

Prerequisites: graduate standing.

Last Taught: Spring 2025, Fall 2024, Fall 2023, Spring 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

COMPST 703 Software Development Life Cycle

3 cr. Graduate.

Introduction to core topics of the software development life cycle including requirements analysis, object-oriented design, testing, maintenance and project management. Overview of ethical and social issues in computing.

Prerequisites: COMPSCI 701(P) or equivalent.

Last Taught: Fall 2024, Fall 2023, Fall 2022, Fall 2021.

Current Offerings: <https://catalog.uwm.edu/course-search/>

COMPST 750 Problem Solving with Object-Oriented Programming

3 cr. Graduate.

Problem solving with object-oriented programming language. Topics include arrays, strings, classes, standard data structures, graphical user interfaces, exceptions, files, debugging, and configuration management.

Prerequisites: Previous programming experience such as COMPSCI 702(P), COMPSCI 240(P), or COMPSCI 250(P).

Last Taught: Fall 2024, Spring 2024, Fall 2023, Spring 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

COMPST 751 Data Structures and Algorithms

3 cr. Graduate.

Programming in a structured, high-level, object-oriented language. Implementation of data structures and algorithms and their application.

Prerequisites: COMPST 750(P); COMPSCI 251(R).

Last Taught: Spring 2025, Fall 2024, Spring 2024, Fall 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

COMPST 789 Software Internship

1 cr. Graduate.

Supervised work experience in software with a minimum of 150 hours.

Prerequisites: graduate standing and written consent of instructor.

Course Rules: Repeatable to 3 cr max. Satisfactory/Unsatisfactory only. Prior consent of graduate program director required.

Current Offerings: <https://catalog.uwm.edu/course-search/>

COMPST 790 Advanced Topics in Computer Studies:

3-9 cr. Graduate.

Discussion of special advanced topics in the study of computing. Retakable with change in topic to 9 cr max.

Prerequisites: grad st; add'l prereqs depending on topic.

Current Offerings: <https://catalog.uwm.edu/course-search/>