

# CMPSC 4000 Algorithms

3 hours

Majors, Minors & Degrees:

**Majors**

Data Analytics (B.A., B.S.)

**Minors**

Computer Science

Departments/Programs:

Mathematics and Computer Science

This course explores algorithms from a coding-focused perspective, using Python. Students will learn about the issues that arise in the design of algorithms for solving computational problems and will explore a number of standard algorithm design paradigms and their applicability. Students will also become familiar with concepts of runtime, recursion, implementation and evaluation. This course features a heavy emphasis on practical application of algorithms to common development and engineering challenges. This course is an online class offered through the Lower Cost Models Consortium. The class has optional live sessions.

*Prerequisite(s): CMPSC 3000 Data Structures and MATH 1600 Calculus I.*