Nebraska Wesleyan University

CMPSC 4000 Algorithms

Catalog

2026-2027

Course Description

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. The class has optional live sessions.

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

This course is offered online through a consortium of accredited colleges and universities. Instruction is provided by faculty employed by partner institutions within the consortium, with technology and administrative support provided by Rize Education. Oversight of courses offered through the consortium are reviewed and approved by Nebraska Wesleyan University. Students register through Nebraska Wesleyan University and receive academic credit from Nebraska Wesleyan University.

Course Hours

3 hours

Departments

1. Mathematics and Computer Science