Seniors: as you put together your portfolio and choose work to demonstrate your accomplishments, please use these Computer Science and College-wide learning goals. Try to show your skills and knowledge relative to each of these.

Computer Science Learning Goals

The following highlights student learning goals of the computer science program. Following each goal are brief examples of how you may gather artifacts that reflect your understanding and competency of that goal. We also include a suggested list of classes where you may gather material, although the list is not inclusive. The list largely excludes coursework in computer science electives, but we encourage you to consider work in any electives you have taken that may satisfy any of the following learning outcomes.

To attain a system level understanding of the computer

Demonstrate that you understand the relationship between the various levels in a computer system (CPU, cache, RAM, persistent storage, network.) [251, 328, 351, 352]

Demonstrate how computer hardware executes a program. [251, 328, 351]

Demonstrate how a computer program interacts with the operating system software as well as a network. [251, 351, 352]

To understand the concepts and techniques of ~~object-oriented~~ software design

Demonstrate that you understand how to design, write, and test object-oriented programs. [201, 202, 306, 322]

Demonstrate proficiency in developing software in more than one programming language and programming paradigm. [251, 301, 306, 307, 315, 351]

To acquire significant project experience working both individually and in a group setting

Demonstrate project-based work including individual assignments, working in pairs, as well as larger group settings. [202, 307, 322, 352, 375, 390]

To develop effective problem solving skills

Demonstrate the ability to select the appropriate data structures necessary to support the solution to a problem. [202, 306, 307, 322, 390]

Demonstrate evidence of examining a problem, designing an algorithm that solves it, implementing the algorithm, and testing and debugging your solution. [201, 202, 306]

College Wide Learning Goals