## Course Description

This is a three-credit course designed to provide undergraduate students with a foundational knowledge of computational thinking, a set of problem-solving skills, through project-based learning that incorporates making activities. **The course is intended for students who are able to work independently, think creatively, persist in the face of failure, and create solutions for complex problems.**

This course also provides opportunities to build your portfolio of professional skills, in particular: oral presentations; writing and argumentation; problem analysis and problem solving; and teamwork/collaboration.

**The course includes two forms of assignments: 1) brief self-guided homework assignments that teach making skills, and 2) a final digital exhibit that highlights the making skills you have gained via the homework assignments.** You have a choice of completing 5 out of the 7 brief self-guided homework assignments.

## Learning Goals

Upon completion of this course, students should be able to:

- Apply computational thinking skills when analyzing a complex information issue
- Create prototypes using a variety of maker tools (open-source hardware and software)
- Engage in constructive peer critique and collaboration
- Communicate a complex information issue and proposed solution persuasively via written and oral presentations
Additional Course Information

- Zoom Course Link (Links to an external site.)
- Course Organization
- Course Schedule and Readings
- Lecture Slides
- Evaluation
- Expectations
- Materials
- Office Hours
- Academic Integrity
- Students With Disabilities
- Classroom Etiquette
- Additional Resources