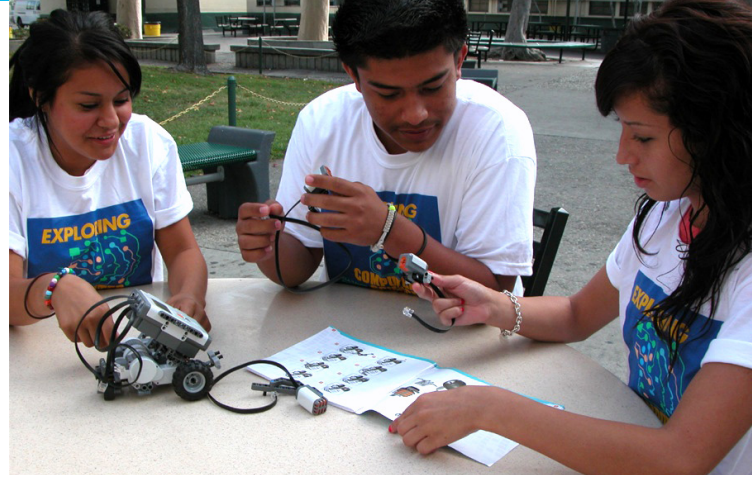


# What is Exploring Computer Science?

Computing is involved in nearly every field of study, career and industry today. Exploring Computer Science (ECS) is a high school course that provides students with an introduction to the world of computer science. ECS is a college prep (A-G) and Career Technical Education approved course.

The course consists of 6 units which are approximately 6 weeks each. Assignments and instruction are inquiry and equity based and designed to be socially relevant and meaningful for diverse students. Units utilize a variety of tools/platforms, and culminate with creative final projects around the following topics:



## Unit 1 Human Computer Interaction

Students are introduced to the concepts of computer and computing while investigating the major components of computers and the suitability of these components for particular applications.

## Unit 2 Problem Solving

Students become “computational thinkers” by applying a variety of problem-solving techniques as they create solutions to problems in a variety of contexts.

## Unit 3 Web Design

Students are prepared to take the role of a developer by expanding their knowledge of programming and Web page design and applying it to the creation of Web pages, programs, and documentation for users and equipment.

## Unit 4 Introduction to Programming

Students are introduced to some basic issues associated with program design and development. Students design programming solutions to a variety of computational problems including animated stories, video games and community based projects.

## Unit 5 Computing and Data Analysis


Students explore how computing facilitates new methods of managing and interpreting data. Students use computers to translate, process and visualize data in order to find patterns and test hypotheses.

## Unit 6 Robotics

Students apply previous concepts to the study of robotics and work in small groups to build and program a robot to perform a required task.

For more information, please see Mr. Tan in room 102 or visit the course website at [csinquiry.org](http://csinquiry.org)

**COMPUTER SCIENCE IS IMPORTANT & FUN!** **EXPLORINGCS.ORG** **HUMAN / COMPUTER INTERACTION** **REPRESENT & ANALYZE DATA** **LEARN WEB 2.0** **BUILD & PROGRAM A ROBOT** **CREATE ANIMATED STORIES & GAMES** **BINARY NUMBERS** **SOLVE PROBLEMS BETTER** **DESIGN YOUR OWN WEBSITE** **OWN YOUR DESIGN**



Exploring Computer Science

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