

What is C-STEM?

C-STEM is an acronym for Computers, Science, Technology, Engineering and Mathematics. The term C-STEM is used to express the immensely important educational goal of integrating specific academic curriculums behind the skills most vital to the success of students in the 21st Century.



Why is C-STEM important for our students?

Every job within the 21st Century is likely to require skills in computers, science, technology, engineering and math. The integration of computers, engineering and technology in the mathematics and science C-STEM curriculum supports meaningful and engaging instruction as well as providing students with the skills that are critical to success in the 21st Century. C-STEM also supports the ability to think critically, solve complex problems, and drive advancements in science and technology. The research-based C-STEM program at Granite Oaks prepares our students to become creative and innovative problem solvers, researchers, engineers, and designers.

Granite Oaks Middle School



Granite Oaks Middle School MISSION STATEMENT

Our mission at Granite Oaks Middle School, a leader in collaborative and dynamic learning, is to inspire all students to develop their unique abilities with a well-balanced, quality educational experience through high academic standards and diverse extra curricular opportunities strengthened by engagement with our families and community.

C-STEM

computers
science • technology • engineering • math



Granite Oaks Middle School

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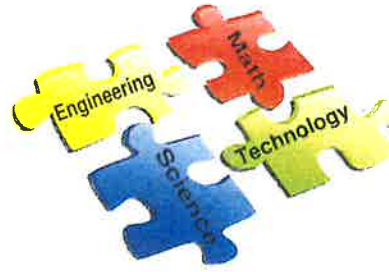
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STATEMENT OF PURPOSE

The C-STEM program at Granite Oaks Middle School allows students to participate in an academic environment focused on integrating science, technology, engineering and math to explore real world challenges. Through the implementation of inquiry-based learning, students will experience the integration of computing.

C-STEM program students will learn to program in C++, a superset of the language C, as part of core classes. Students will be able to create computer programs to model real world situations **using a supplementary curriculum from the UC Davis Department of Engineering.**

Additional technologies will be featured including other coding activities, Google Apps For Ed (GAFE), and the creation of websites. We believe that digital natives must be content creators and not simply users of technology.



WHICH STUDENTS WOULD BENEFIT FROM THE STEM PROGRAM?

- a. Students interested in C-STEM careers.
- b. Students with a parent, older sibling, family friend, etc who works in a C-STEM field.
- c. Students interested in technology.
- d. Students with experiences in math, engineering or science including camps, clubs and courses.
- e. Students interested in construction kits like Legos or K'nex.

C-STEM PROJECTS

- Computer Programming
- Robotics
- Website Development (HTML, CSS, JavaScript)
- Tech Kits (Legos, K'nex)
- GAFE
- Scratch
- Enrichment Projects

ADMISSION REQUIREMENTS

1. The C-STEM program is a two year program which begins in 7th grade.
2. Interested students must sign up through the GOMS Elective Course Request Form.
3. Seats are limited. Students wishing to apply must sign up and submit their Elective Course Request Form by the deadline to be considered.
4. Students are randomly selected. Students not admitted in the program in 7th grade, but who would like to enter the program in 8th grade, should complete the Elective Course Request Form to be put on the waitlist.