



C-STEM 2-Day Workshop on Integrated Computing and STEM Education with Arduino and Robotics

Date:

Monday - Tuesday
August 6 - 7
8:30am – 4:30pm

Location:

American Canyon High School
Room C201/202
3000 Newell Dr.
American Canyon, CA
94503

Registration:

Cost: \$300/ teacher
includes a take-home
Arduino starter kit

Due: July 30, 2018

<http://c-stem.ucdavis.edu/pdregister>

For more information, please contact
info@c-stem.ucdavis.edu
and visit c-stem.ucdavis.edu

UCDAVIS
C-STEM CENTER



California Department of
EDUCATION



This C-STEM 2-Day Workshop will provide K-14 teachers with hands-on experience on how to use freely available C-STEM Studio and RoboBlockly, as well as C-STEM Math-ICT curriculum with interactive coding, making, and robotics that aligns with the Common Core Math, NGSS, and ICT Sector standards to develop students' 21st century problem-solving skills and better prepare students for college and careers. Whether or not you have previous coding and robotics experience, you will enjoy the workshop enormously. This workshop focuses on:

Providing computing education utilizing user-friendly RoboBlockly, computer programming in C/C++ interpreter Ch, and Barobo Linkbot or popular Lego Mindstorms NXT/EV3

Implementing new teaching strategies and opportunities for personalized and collaborative learning through hands-on activities

Adopting Common Core Math compliant curricula with computing and robotics

A range of ideas for interfacing various hardware and software in the classroom

ChDuino for tinkering with the General Purpose Input/Output (GPIO) pins on Arduino board

Using GPIO pins on Arduino to interface electronic components like LEDs, buttons, photo-resistors, and sensor-based control of Linkbots, and Mindstorms NXT/EV3

"OMG!!! Like that Blockly thing was DOPE! For sure could use that! The robots weren't too bad either...kinda fun in a super nerdy way:] "

— **Brian Newmark, William Jefferson Clinton Middle School, Los Angeles USD**

"Great content, very relevant, easy to understand, and I see real potential for my classes, school, and district. Currently we use the Arduino, but the interface was much better with the C-STEM Studio."

— **Paul Werner, Rocklin High School, Rocklin USD**

"I was over the moon with all of the free curriculum and programs. Very well designed! I absolutely loved all the activities! They were helpful in that I get to experience what students will be doing."

— **Sara DeCuir, Hanford Elementary School District**