

Common Core Mathematics with Computing and Robotics

This intensive 1-week institute is designed to provide professional development for K-14 teachers on the principles of robotics, coding, and physical computing with Arduino and robotics, and how to integrate them into STEM classes. Teachers learn computer programming, computational thinking, and problem-solving with coding using freely available C-STEM Studio, RoboBlockly, and Ch Arduino. Teachers will learn specific teaching pedagogy and strategies for integrating coding, robotics, and physical computing activities into math, science and engineering curricula, as well as how to support the Common Core State Standards (CCSS) and Next Generation Science Standards (NGSS) using the C-STEM Integrated Math-ICT Curriculum with interactive computing, programming, and robotics, and physical computing. Teachers also learn how to reinforce mathematical concepts with practical applications via hands-on computing and robotics activities. These computing activities reinforce logical reasoning and critical thinking skills, as students learn how to write functions, and visualize, process, save, and plot experimental and hypothetical data. Teachers will get first-hand experience of C-STEM RoboPlay Competition and advise their students during this level-playing field robot competition.

Registration deadline: June 8, 2018

\$780 for course

Each participant will receive 3 C-STEM textbooks, Arduino Starter Kit, software license for a laptop, and lunch.

For more information, contact Email: info@c-stem.ucdavis.edu Phone: (530) 752-9082 or visit:

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

