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 and computing 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 and RoboBlockly. Teachers will learn specific teaching pedagogy and classroom implementation strategies for integrating computing and robotics 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 curriculum with interactive computing, programming, and robotics. Teachers also learn how to teach and reinforce mathematical concepts through practical applications with hands-on computing and robotics activities. These activities reinforce logical reasoning and critical thinking skills through computing activities in which students write functions, visualize, process, save and plot experimental and hypothetical data. Teachers will get the first-hand experience of C-STEM RoboPlay Competition and learn to advise their students to participate in this level-playing field robot competition.

Registration: CEU credits available!

Registration deadline: June 1st
$750 for course

Teachers can take one or both courses to get started on integrating computing and robotics into their teaching. For teachers who have no prior computer programming experience, we recommend that you attend the entire two-week summer institute.