

Summer 2023 Louisiana Computer Science Training for K-12 Teachers

You don't have to be a software developer to teach computer science! The Department has partnered with Code.org to offer professional learning opportunities designed to support Louisiana educators to teach, engage, and empower students to explore computer science (CS). No prerequisites are required for teachers new to computer science. Free content is accessible for both students and teachers. Resources include the student scaffolds needed to build an in-depth understanding of CS and digital literacy. Participating teachers will be connected with a STEM education community that includes people from many different fields and backgrounds, with opportunities to connect and learn from other Louisiana educators. Interested teachers should consult the options below to determine which professional learning will best suit their needs and complete registration to secure a seat.

CS Fundamentals for grades K-5

Designed to be fun and engaging, Code.org's progression of Computer Science Fundamentals courses blend online and "unplugged" non-computer activities to teach young students computational thinking, problem solving, programming concepts and digital citizenship. This professional learning is a 1 day in person workshop.

CS Discoveries for grades 6-8

Computer Science Discoveries supports teachers with strategies and resources to empower middle school students to engage with computer science as a medium for creativity, communication, problem solving, and fun! This professional learning is a 1 week (5 consecutive days) in person workshop.

AP[®] CS Principles for grades 9-12

This professional learning will prepare teachers to implement Computer Science Principles, which covers many topics including the Internet, Big Data and Privacy, and Programming and Algorithms. The curriculum is flexible and can be taught as an AP or non-AP course. This professional learning is a yearlong program, which includes a 1-week summer workshop, 24 hours' worth of follow up workshops during the academic year, and online support through the Code.org teacher forum.

AP[®] CSA 9-12

Teachers will be prepared to implement the free resources available from Code.org that support implementation of AP[®] Computer Science A, students learn programming using Java. This course is for students who have completed an introductory course such as Computer Science Principles or Computer Science Discoveries. This professional learning is for teachers who are able to independently write and debug an error-free function (or procedure) with 1 or more parameters and that uses conditional logic, loops, and an array (or a list). Teachers who are proficient with these skills will be best positioned to complete this training and use the Code.org AP[®] Computer Science A resources with students. This professional learning is a 1 week (5 consecutive days) in person workshop. Additional teacher support options will be offered throughout the school year from Code.org.

For additional information about these offerings, contact Louisiana's Code.org regional professional learning partners at the Capital Area Regional STEM Center at <u>code-org@lsu.edu</u>. Reach out to <u>STEM@la.gov</u> with any questions for the Louisiana Department of Education.

