K-12 STEM Computer Science

June 5th, 2019

Studio Code

Code.org® is a nonprofit. Our vision is that every student in every school has the opportunity to learn computer science, just like biology, chemistry or algebra.

Full course catalog

Browse our catalog of courses from Code Studio and 3rd party partners.

Elementary School

Teachers say our elementary courses are "totally awesome sauce" and fun for all students, even pre-readers.

Learn more

Middle School

Our new middle school course can be offered as a semester or year-long introduction to computer science for all students.

Learn more

High School

We offer two year-long courses for high school: an intro course and an AP course. Both are designed to broaden participation in computer science.

Learn more

Studio Code

		Elementary school				Middle school			High school			
K	1	2	3	4	5	6	7	8	9	10	11	12

CS Principles ▼

CS Discoveries ▼

CS Fundamentals ▼

Pre-reader Express ▼ **CS Fundamentals: Express** ▼

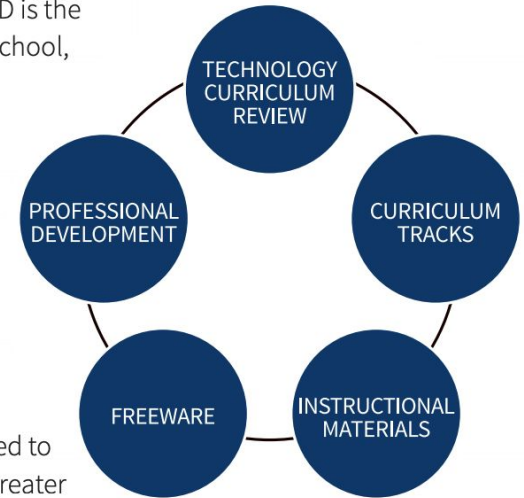**Professional Learning for all grade levels** `Learn more`

Code Red

- **Complete Curriculum**
    - Computer Science Fundamentals
    - Software Development
    - Web Design
    - Mobile Applications
    - Game Design
- **Daily Lesson Plans**
    - No Specific Trained Staff
- **Stands Include**
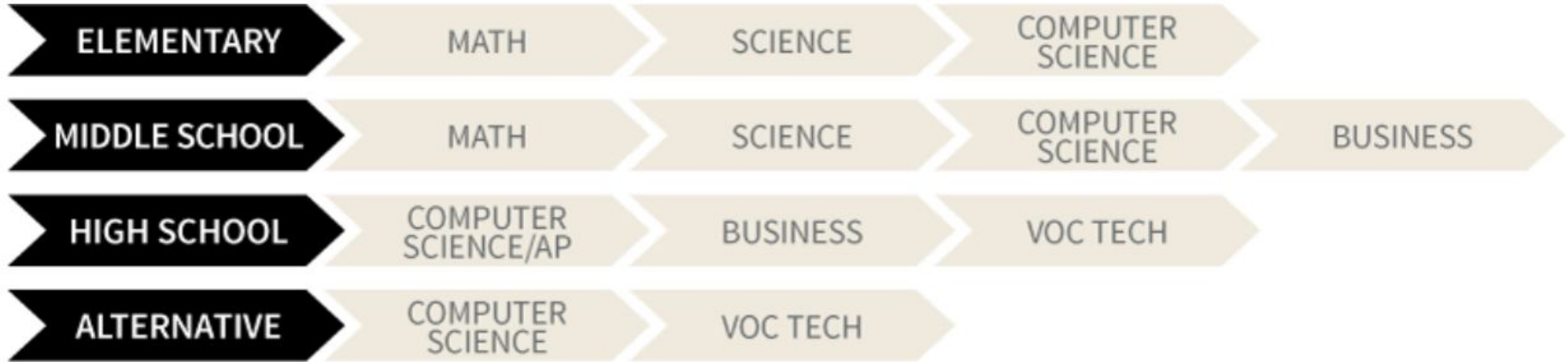   - Elementary
    - Middle
    - High

Created by teachers for teachers, Code RED is the complete K-12 STEM curriculum for your school, allowing educators and districts to be innovative and forward thinking at an affordable cost.

The process starts with a review of your current STEM initiatives as we assist you with effectively implementing our modules into your curriculum. Our standards-aligned modules, instructional materials, pacing guides and professional development allow teachers to be prepared to deliver cutting-edge STEM education for greater student achievement.

TECHNOLOGY CURRICULUM REVIEW

CURRICULUM TRACKS

INSTRUCTIONAL MATERIALS

FREEWARE

PROFESSIONAL DEVELOPMENT

Code Red

ELEMENTARY	MATH	SCIENCE	COMPUTER SCIENCE	
MIDDLE SCHOOL	MATH	SCIENCE	COMPUTER SCIENCE	BUSINESS
HIGH SCHOOL	COMPUTER SCIENCE/AP	BUSINESS	VOC TECH	
ALTERNATIVE	COMPUTER SCIENCE	VOC TECH		

K12 Virtual

Full-time students' days include a combination of:

- Online lessons, interactive activities, and virtual classroom sessions in the Online School (OLS)
- Independent activities not on the computer using K12-provided materials, including textbooks and workbooks*
- Interaction with teachers and classmates online or by phone
- Guidance from their Learning Coach to ensure they are making progress during the day
- Planned student activities and parent support as needed

K12

STEM in the K12 Curriculum

All K12 courses in science, and math courses in grades 6–12, contain activities that include elements of STEM. In addition many courses include exercises, labs, and activities that involve the various STEM disciplines, such as:

- Forensic Science
- Environmental Science
- Introduction to Computer Science
- Programming and Logic
- Engineering Fundamentals 1
- Engineering Drawing and Design 1

Project Lead the Way: Computer Science

PLTW Computer Science empowers students in grades 9-12 to become creators, instead of merely consumers, of the technology all around them.

The program's interdisciplinary courses engage students in compelling, real-world challenges. As students work together to design solutions, they learn computational thinking – not just how to code – and become better thinkers and communicators. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take.

| Computer Science | K. Animals and Algorithms
1. Animated Storytelling
2. Grids and Games
3. Programming Patterns
4. Input/Output: Computer Systems
5. Infection: Modeling and Simulation | Computer Science for Innovators and Makers
App Creators | Computer Science Essentials
Computer Science Principles
Computer Science A
Cybersecurity *(Beta release 2018-19)* |