

Computer Science Principles
2019-2020 STEM Scale-Up Program

Grade Levels: 9-12, available in school

Website: <https://newbo.co/code-org-partnership/>

Video Link: <https://youtu.be/jQm0z894CG0>

Award Provides:

- Curriculum by Code.org, recognized by the College Board as an endorsed provider.
- Connections with other Iowa computer science teachers through in-state support network.
- Opportunity to earn licensure renewal or graduate credit through Keystone AEA.
- Ongoing support during implementation from NewBoCo staff, facilitators, and online forums.
- Travel stipend of \$50 per workshop day.
- Per diem stipend of \$60 per workshop day for teachers' time.
- \$100 to cover classroom supplies.

Additional Cost(s) to Awardee In 2019-2020:

- None

Approximate Sustainability Cost After Award Period:

- The curriculum is free forever. Estimated classroom supply costs are \$100 per class, with some supplies that can be reused year after year.

Program Summary:

Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. More than a traditional introduction to programming, it is a rigorous, engaging and approachable course that explores many of the foundational ideas of computing so all students understand how these concepts are transforming the world we live in.

Our year-long Professional Learning Program provides ongoing support for teachers, requiring no prior computer science experience to get started. The curriculum and workshops are also designed to foster equity and diversity in the classroom, breaking down barriers and stereotypes around computer science.

This year-long course can be taught as an AP or non-AP course—no prerequisites required for students or for teachers new to computer science! Students will explore topics like the Internet and how it works; how and why digital information is encoded, represented and manipulated; privacy; and programming. In addition, the curriculum is available online at no cost for anyone, anywhere to teach. For more information about Code.org's goals and approach to their courses, please visit their website for curriculum values and professional learning values.

Requirements to Implement the Program:

Educator(s) must participate in all nine workshop days throughout the year and submit a Code.org application at <https://newbo.co/code-org-partnership/#apply>.

A memorandum of understanding signed by the building administrator is required before training or materials can be delivered.

Professional Development:

A five-day summer workshop will be held July 15-19. Location is yet to be finalized. Four, one-day Saturday workshops will be held during the academic year.

Duration: 1 week, plus four 1-day Saturday workshops

Date(s): July 15-19, 2019

Location: Final location TBD, with an alternative academic year location available in Dubuque.

Information Session:

To learn more about this program and have questions answered, please join a virtual information session on Thursday, January 31st at 7:30am via Zoom. You may join via your computer at <https://zoom.us/j/367460226> or call in from your phone at +1 646 558 8656 with the meeting ID: 367 460 226. Contact your STEM Region manager for a link to the recording if you are unable to attend.