Partner4CS @ University of Delaware Summer 2018 Professional Development

For Teaching Computer Science in K-12

You should apply if you are Delaware Valley K-12 teacher and plan to:

- Teach the CSP AP course
- Infuse computational thinking into an 8-12 math, science, or other course
- Or, add computational thinking into K-8 curriculum

Summer 2018 Partner4CS professional development will:

- Model practical classroom activities to teach computational thinking in algorithms, data, abstraction, programming, and internet
- Provide training sessions in specific technologies, including beginning and advanced Scratch,
 Python, and HTML, CSS, and Javascript
- Model proven good pedagogy for teaching computer science concepts so students improve their thinking and problem solving skills
- Build a community of learners who teach computational thinking in K-12

How it works:

June 18-22, 2018, Mon-Thurs, 9-4; Fri 9-noon on UD Newark campus

Once accepted, participate in parallel sessions of choice (except CSP AP teachers)

\$25 per hour of participation; free parking and meals

Full participation earns 32 Professional Development hours and \$800

Apply before March 1, 2018 for priority at: sites.udel.edu/partner4cs/

QUESTIONS: email partner4cs@udel.edu or call 302 831-1953

Computer Science Principles Teacher Preparation:

Partner4CS will provide teachers the training they need to use the code.org curriculum. Each CSP participant is expected to participate in June 18-22 face-to-face PD at Newark campus, and 4 sessions throughout the next academic year. Successful completion of CSP AP PD will enable you to teach the CSP AP course in Delaware.

Integrating Computer Science Into your Existing Curriculum Training:

Institute participants will design and practice educational activities for introducing computational thinking in their curriculum both with and without computers. Participants will also have the choice of receiving curriculum materials and follow-up classroom support in the upcoming academic year (2018-2019). This training is for teachers in grades K-12.

Model Teaching of CS Concepts and Skills:

Algorithms, Programming, CS Impact, Creativity, Data representation and manipulation, Abstraction, Internet

Model proven successful CS Pedagogy:

Inquiry learning, CS Unplugged activities, directed Scratch lessons that work in a diverse classroom, Pair programming model, open-ended Scratch projects, interactive Scratch projects, board games to teach CS, Python, HTML/CSS/Javascript web projects.

Share, Reflect and Discuss:

The Computer Science Teacher's Association (CSTA) Standards, mapping to the Common CORE standards, assessing student programming projects, recruiting for diversity in computing, making CS accessible to broad audiences

Partner4CS is a National Science Foundation project that is part of the national CS10K initiative.