

# NM Computer Science Professional Development Week!



A 5-day PD workshop, June 3-7<sup>th</sup>, 2019 for a statewide Computer Science (CS) Professional Development (PD) week. There are offerings for teachers that are new to CS as well as for experienced educators to learn advanced topics such as Java and database structure. Participants will receive a modest stipend; travel support is available. Registration fee applies to some strands, others are free.



For more information or to register to be a part of the NM CS PD Week at [nmcspdweek.com](http://nmcspdweek.com)

What you could learn: (teachers will sign up for **one strand for the entire 5-days**, no prior experience needed)

CS PD strand	Description	Target Audience
 <p>CS Medley</p>	Use Scratch, a free platform for creative coding, to integrate into existing lessons and learn how Micro:bits (a microcontroller) can be used to extend the creativity and integrate into science class or clubs.	Any ES or MS teacher, technology teacher, digital learning coach or librarian
 <p>CS with Robots</p>	Junior Botball Challenge curriculum engages students in a team-oriented robotics competition, and serves as a perfect way to meet today's new common core and NGSS standards.	Upper ES & MS teachers
 <p>Math with CS</p>	Bootstrap curriculum has lessons that fully integrate CS into math classes and target pre-Algebra and Algebra. In addition, part of the Data Science course will be covered.	MS and HS math teachers
 <p>Science with CS*</p>	Project GUTS is a free computational modeling curriculum aligned to NGSS. It has 4 modules- Intro, Earth, Life & Physical Science. *Registration fee covered for qualifying participants.	MS Science & Technology teachers
 <p>Middle School CS *</p>	Code.org's CS Discoveries is a free curriculum and can be taught as a year-long or semester class. *Registration fee covered for qualifying participants.	Middle school elective and/or technology teacher
 <p>Art with CS</p>	Learn how to use Processing, a free programming tool for graphic arts, to bring computer science into the art class.	MS & HS art teachers and technology teachers
 <p>High School CS</p>	NM CS of All is a dual-credit class with a focus on computational modeling in a flipped-classroom method using NetLogo. A great complement to Supercomputing Challenge.	HS teachers, possibly for a HS science class
 <p>CS Principles *</p>	Code.org's AP CS Principles is a free curriculum that aligns to the new College Board AP CS Principles course. *Registration fee covered for qualifying participants.	HS teachers
 <p>Database*</p>	Database Design and Programming with SQL is the 2nd in a series of pathway courses leading to an industry certification from Oracle in Database. Data Base Foundations, the 1 <sup>st</sup> course, can be accessed online.	HS teachers/Higher Ed Faculty
 <p>CS with microcontrollers</p>	Using Arduino, participants will learn about microcontrollers and how to use sensor inputs to make it respond and give output. Lots of CS and engineering concepts are part of this approach.	MESA advisors, MS & HS science & engineering teachers
 <p>Internet of Things</p>	Use Raspberry Pis to understand how the Internet of Things and smart devices can be programmed using Python and be interactive with sensors & connections to wifi.	MS & HS teachers

\*these strands are free, covered by other funding

**When & Where:** June 3-7, 2019 at UNM's School of Engineering, 8:30-4pm

**Costs:**

- Registration & meals (breakfast & lunch) during the 5-day PD workshops:
  - **\$300 for CSTA+ members, \$350 for non-members** (*\*some strands are free, supported by other funds, Supercomputing Challenge has scholarships for certain strands as well.*)
- Teacher travel & expenses (hotel, etc.)
  - Teachers from beyond 50 miles will be eligible to apply for travel expense scholarships if their district cannot fully cover this expense.
- Teachers will receive a participant stipend of a minimum of \$400 paid by CS Alliance.

**Why it's needed:**

Most New Mexico schools are unable to offer CS classes because they do not have anyone on staff that feels comfortable to offer a club let alone teach a CS class. There is a critical need for professional development for teachers in CS and there are too few opportunities for this type of learning in NM. **We want to offer high-quality PD that showcases the best practices and best curriculum examples out there!** After a week of CS PD, teachers will be able to bring computer science to their students with authentic activities and curriculum.

**Other partners for this event include:**

Research Labs	 
Higher Education	   
Industry	   
Education organizations	         

Register to be a part of the NM CS PD Week at [nmcspdweek.com](http://nmcspdweek.com)  
 Or register directly from this [link](#)

For more information, contact Paige Prescott or Yolanda Lozano of Computer Science Alliance  
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in collaboration with 

Computer Science Alliance *Expanding Computer Science one student, one teacher, one school, one partner at a time.*