



[Register for the workshop\(s\) here](#)

Questions? Or need more information? Email: info@computersciencealliance.org

	June 1-4	June 7-11	June 14-18	June 21-25	June 28- July2
ES	Deep Dive for CSF June 1st, 1 day only, free, info & to register	Scratch & Microbits Basics Grades 3-8	Ciencia de la Computación e integración 101 (en español) 3º-8º grados (<i>no longer accepting new reg'ns</i>)	CS Fundamentals workshop, single day, date TBD	
		CS Medley PreK-2	CS Medley Grades 3-5		
MS		Digital Fabrication Grades 4-8 (<i>no longer accepting new reg'ns</i>)	CS in Science- Project GUTS Grades 5-9	Elevated Thinking- Arduino, Grades 6-12	Code.org's CS Discoveries Grades 6-10
HS	Bootstrap: Data Science Grades 7-12 (<i>no longer accepting new reg'ns</i>)	Intro to Art & CS Grades 8-12	CybersecurityFundamentals /Cyberliteracy 1* Grades 8-12 (<i>no longer accepting new reg'ns</i>)	Python 1* Grades 8-12	Python 2* Grades 9-12
		Data Science, AI & Machine Learning Grades 9-12		Java- prep for AP CSA* Grades 10-12 (<i>cancelled</i>)	AP CSP with Code.org* Grades 10-12
		eTextiles* Grades 8-12			

Descriptions of the workshops:

Scratch & Microbits Basics-

Get started with computer science basics using the extremely popular and versatile Scratch programming language that easily integrates into existing curriculum. Then up the engagement with Micro:Bits that also can be integrated into classes like science and STEAM projects.

Target audience: educators working with students in grades 3-8th

Pre-requisites: none

Cost: \$550, includes a book for Scratch projects and a microbit

CS Medley, preK-2nd-

An overview of computer science at the K-2 level. A mix of standards, computer use basics for kids, educational robots, ScratchJr, Scratch plus other curriculum like [code.org](#)'s CS Fundamentals will be covered. Learn how to use robots and equipment and practice classroom lessons. You will leave with lesson plans created during the week and with lessons created by Open Source Kids.

Target Audience: educators working with young learners, preK to 2nd

Prerequisites: none

Cost: \$550, includes loaner robots and equipment mailed to you (NM educators only)

Ciencia de la Computación e integración 101 - un taller en español

¿Quieres aprender qué es la ciencia de la computación (CC) o como se dice en inglés Computer Science (CS)? En este taller podrás aprender qué es CC(CS), como integrarlo, y que materiales podrán usar GRATUITAMENTE! Cualquier maestro puede empezar integrando Ciencia de Computación con currículo Code.org y Scratch, Una vez ya expuestos a Scratch podemos incorporar Microbit otra plataforma que complementa nuestros conocimientos en Scratch. Podremos conectar con proyectos STEAM (Siglas en inglés de Science, Technology, Engineering, Art, y Mathematics). Una vez que adquirimos estas herramientas podrán utilizarlas en su currículum diario o empezar un club después del horario escolar.

Posible Audiencia : educadores bilingües quien tiene interés en recursos computacionales para integrar en actividades y currículo para estudiantes español hablantes.

Prerrequisitos: ninguno

Costo: \$550, scholarships available, [apply here](#)

CS Medley 3rd-5th

An overview of computer science at the 3-5 level. A mix of standards, computer use basics for kids, educational robots, ScratchJr, Scratch plus other curriculum like [code.org](#)'s CS Fundamentals will be covered. Learn how to use robots and equipment and practice classroom lessons.

Target Audience: educators working with students in the middle grades of Elementary

Prerequisites: none

Cost: \$550, includes access to the robots used for the activities via mail (NM educators only)

CS in Science-

Project GUTS is a free computational modeling curriculum aligned to NGSS & CSTA standards. It has 4 modules- Intro (ends with an epidemic model), Earth, Life & Physical Science. This free curriculum engages students to Use, Decode, Modify and Create their own computational models.

Target Audience: educators that are science teachers, those developing an afterschool program or CS pathway or wanting to support young Supercomputing Challenge students.

Prerequisites: none

Cost: \$550 includes access to all Project GUTS resources and the Teachers with GUTS community

CS Discoveries with Code.org curriculum-

This popular curriculum has 6 units that add up to a full year of engaging curriculum to introduce the depth and breadth of CS to middle school students. Includes access to the educator community and follow up session during the academic year.

Target Audience: educators working with MS students either for a CS class, technology class or developing out-of-school programs.

Prerequisites: none

Cost: \$550, some scholarships available for qualifying schools

Elevated Thinking- Arduino

Participants will wire and code an interactive Arduino Elevator in a four story building. Great for CS, Math, Science and technology teachers!

Target Audience: Educators working with MS and HS students

Prerequisites: none

Cost: \$550, includes materials needed for building the elevator

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Bootstrap:Data Science MS and HS

In Bootstrap:Data Science curriculum, students form their own questions about the world around them, analyze data using multiple methods, and engage in research projects. The module covers functions, looping and iteration, data visualization, linear regression, and more. Social studies, science, and business teachers can utilize this module to help students make inferences from data. Math and CS teachers can use this module to introduce foundational concepts in statistics, and it is aligned to the Data standards in CS Principles.

Target Audience: math, science or CS teachers, those developing an afterschool program or CS pathway or wanting to support young Supercomputing Challenge students.

Prerequisites: none

Cost: \$750 for non-NM educators, ~~\$500 for NM educators~~, now free for NM educators! And includes a \$400 stipend for eligible participants.

Digital Fabrication, ES and MS

Help students understand and enjoy mathematics with TurtleArt. Participants in this session will learn to craft their own computational designs while exploring geometry and programming. Participants will then take that art from their computer to become a physical artifact. Learn how you can help students make computational designs tangible using a variety of tools like a printer, laser cutter, 3D printing, cricut and more...

Target Audience: Educators working with upper ES and MS students, STEAM Labs and out-of-school time

Prerequisites: none

Cost:\$550, includes materials for a printer, after the workshop, your work will be printed and sent to you

Art with CS, level 1, MS and HS

Learn how to use Processing, a free programming tool for graphic arts, to bring computer science into the art class. Processing was created as an educational tool for designers, artists, and architects at the MIT Media Lab in 2001. Since then, colleges and k-12 schools all over the world have used the Processing language and IDE as an introduction to computer programming. Processing is perfect for both beginners and advanced students because of the language's extensive tools for creative tasks such as animation, graphics, data visualizations, video, sound, and interactive programming.

Target Audience: art teachers, technology and CS teachers wanting additional resource, out-of-school educators working with students grades 8-12th

Prerequisites: none

Cost: \$550

E-Textiles*, MS and HS

Learn from an amazing CS instructor, Melody Hagaman-Burns, who created an Intro to CS course focused on equity and inclusion and projects that engage a range of students, including girls, to continue in CS. Learn to use Turtle Stitch, LilyPads and interactive elements for a fashion and textiles approach.

Target Audience: MS & HS teachers wanting to expand their repertoire of CS activities and approaches

Prerequisites: none

Cost: \$550

Java for AP CS A*

Java continues as an industry standard and is the basis for AP CS A. Participants will gain skills in Java through a variety of resources that will help them develop their AP CS A class, add content to an existing CS class or help prepare themselves and students for Java Foundations Certification. This offering includes regular meetings into September to support teachers as they implement.

Target Audience: HS CS teachers wanting to develop a CS pathway or get more resources for existing AP CS A class..

Prerequisites: prior CS experience-experience with AP CSP preferred

Cost: \$1000

Cybersecurity Fundamentals/Cyberliteracy 1, MS and HS*

Cyber Security Fundamentals introduces participants to the basics of security, coding, and robotics, mainly through project-based learning. Educators will learn how to engage students in projects and events related to cybersecurity and coding. This content would be appropriate as part of a sequence for a CS/IT pathway, perhaps as part of the introductory course or after AP CSP. This offering includes regular meetings into September to support teachers as they implement.

Target Audience: MS or HS teachers

Prerequisites: none

Cost: \$1000, includes a robot kit valued at \$250, *must register by May 17th in order to receive the kit*

AP CSP with Code.org*

This curriculum is one of the easiest Computer Science curriculums to implement yet has one of the best track records for supporting teachers and students. Great activities and units that align with the Advanced Placement course and prepare everyone to be successful. Can be a good HS introductory course and part of a sequence for a CS/IT pathway. This offering includes regular meetings into September to support teachers as they implement.

Target Audience: HS teachers starting or expanding a CS program

Prerequisites: none

Cost: \$1000, some scholarships available for qualifying schools

Data Science, AI and Machine Learning

Data Science & Machine Learning introduces participants to fundamental concepts and practices in these important topics, in a way that can be implemented in CS, math, or science classes. In Data Science, students are able to use, inspect and modify relevant datasets using a scaffolded coding platform and tools like CoLab notebooks. In Machine Learning, students will train and test AI models, and consider ethics and bias in AI - some prior coding knowledge is helpful but not required for this workshop. Basics of R and Python will be used. This curriculum is through a partnership with EDC.

Target Audience: HS math, science, or CS teachers

Prerequisites: none

Cost: ~~\$550~~ now free for NM educators! And includes a \$400 stipend for eligible participants.

Python 1, MS and HS*

This workshop introduces Python, and is geared towards developing the knowledge and skills for teachers that want to learn Python and the resources needed to teach it to their HS students. Can be a good HS introductory course and part of a sequence for a CS/IT pathway. This offering includes regular meetings into September to support teachers as they implement.

Target Audience: HS teachers, upper MS teachers developing a CS pathway

Prerequisites: none

Cost: \$1000

Python 2*

This workshop goes deeper into Python knowledge including applications for data science, game development, web scripting and scraping, and sorting algorithms. Participants will be good candidates to continue towards a certification in Python. This intermediate content would be appropriate as part of a sequence for a CS/IT pathway, perhaps as part of the 2nd or 3rd year course. This offering includes regular meetings into September to support teachers as they implement.

Target Audience: HS teachers with prior CS experience

Prerequisites: prior Python experience

Cost: \$1000

* these workshops are part of the NMPED's Career and College Readiness Bureau's *CTE Professional Learning and Related Materials RfA* but are also open to any NM educator

We are no longer accepting registrations for our workshops

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Need a scholarship to cover the registration fee? [Apply here](#)