

# 2022-23 STEM Scale-Up Program Information

## Computational Thinking in Action with Micro:bit

**Description:** Helps students understand the power of computer science and how things work by seeing their projects come to life with a micro:bit controller.

**Grade Level:** 3-12 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Kelsey Derringer, CodeJoy LLC, [kelsey@codejoyedu.com](mailto:kelsey@codejoyedu.com)

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## Daily Math Fluency

**Description:** Help develop efficiency, flexibility, and accuracy in your students' grasp of basic math facts.

**Grade Level:** K-8 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Rashonda Carroll, hand2mind, Inc., [rcarroll@hand2mind.com](mailto:rcarroll@hand2mind.com)

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## Ioponics

**Description:** Students engage with living organisms for agricultural and scientific purposes, independent of an outdoor environment.

**Grade Level:** PreK-12 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Michael Bechtel, Ioponics, [michael.becht@wartburg.edu](mailto:michael.becht@wartburg.edu)

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## Iowa Leadership in Engineering Design

**Description:** Prepare students for STEM careers through engineering design activities that are unique to each classroom, curriculum, school and community.

**Grade Level:** K-12 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Ken Turner, ILED, University of Dubuque, [kturner@dbq.edu](mailto:kturner@dbq.edu)

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## Nepris: Real World Connections to STEM Career Professionals

**Description:** Connect with industry professionals from various STEM pathways to virtually interact with students to bring abstract lessons to life.

**Grade Level:** K-12 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Amanda Holsclaw, Nepris, Inc., [amanda@nepris.com](mailto:amanda@nepris.com)

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## Project GUTS

**Description:** Prepare students for future endeavors in STEM by creating opportunities to build scientific inquiry skills and use technology to explore real-world problems.

**Grade Level:** 6-9 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Samantha Dahlby, NewBoCo, [samantha@newbo.co](mailto:samantha@newbo.co)

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## Project Lead The Way: Energy and Environment

**Description:** Encourage students to explore computer science, engineering, and biomedical science.

**Grade Level:** 6-8 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Amanda Gentry, Project Lead The Way Inc., [agentry@pltw.org](mailto:agentry@pltw.org)

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## Ready, Set, Drone!

**Description:** Explore STEM learning and drone careers through this multi-subject curriculum that introduces learners to tomorrow's drone-filled future.

**Grade Level:** 4-8 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Suzy Haislip, PCS Edventures!, [suzy@edventures.com](mailto:suzy@edventures.com)

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## Robot Investigations with Finch Robot

**Description:** Introduce learners of all ages and skill levels to physical computing with a Finch Robot.

**Grade Level:** 4-12 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Kelsey Derringer, CodeJoy LLC, [kelsey@codejoyedu.com](mailto:kelsey@codejoyedu.com)

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## SoapyCilantro: Introduction to Precision Health and Agriculture

**Description:** Engage students in Precision Medicine by isolating and analyzing their own DNA and connecting genomics to human health and agriculture.

**Grade Level:** 6-12 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Pramod Mahajan, Drake University, [pramod.mahajan@drake.edu](mailto:pramod.mahajan@drake.edu)

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### Storytime STEM-packs: STEM + Computer Science

**Description:** Educational innovation designed to connect children’s literature with STEM and computer science.

**Grade Level:** PreK-2 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Gabriela Rose, Allegheny Intermediate Unit Math & Science Collaborative, [gabriela.rose@aiu3.net](mailto:gabriela.rose@aiu3.net)

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### Tiny Techies

**Description:** Prepare students to be creators and learn about computer science cross-curricularly, and without the use of a computer.

**Grade Level:** PreK-2 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Samantha Dahlby, NewBoCo, [samantha@newbo.co](mailto:samantha@newbo.co)

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### Waterworks

**Description:** Develop a framework that capitalizes on the reciprocal relationship of STEM and literacy learning through moving liquids.

**Grade Level:** PreK-2 ([view standards](#))

**For Settings:** In school and out of school

**Contact:** Beth VanMeeteren, University of Northern Iowa, Iowa Regents' Center for Early Developmental Education, [beth.vanmeeteren@uni.edu](mailto:beth.vanmeeteren@uni.edu)

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