

Python for the BBC micro:bit

GRADE LEVELS:

6-12

EDUCATIONAL SETTING:

in school and/or out of school

Award Provides:

- Two 3-hour online workshops, flexible scheduling
- Class set of 30 micro:bits, plus USB cords, AAA battery pack and AAA batteries
- Project write-ups for physical computing and creative robotics
- Access to online asynchronous teacher materials
- Ongoing tech support

Additional Cost(s) to Awardee in 2023-2024:

- Optional: Teacher Relicensure Credit available for a fee

Approximate Sustainability Cost After Award Period:

- All materials are reusable
- AAA batteries for replacement
- Curriculum and online asynchronous teacher materials are free

2023-2024 STEM Scale-Up Program Summary:

OVERVIEW: Are you interested in bringing physical computing into your classroom? Make code come off the screen with the BBC micro:bit! Using the BRAND NEW Python editor developed by the micro:bit Team, educators can bring text-based coding into their classrooms! Check it out [HERE!](#)

AUDIENCE: Whether you are an experienced Python coder, or are interested to try it out, this session will be a fun way to expand your hardware or coding knowledge! Educators should have some experience with coding, even if only block-based.

MATERIALS: Educators will receive 30 micro:bits to serve 30 students at once. All robotics materials are reusable, and include necessary support tools like USB cords, battery packs, and batteries. Materials will be sent in two rounds - Round 1 will be sent to teachers' homes prior to their virtual workshops in order to complete the hands-on learning portions. Round 2 will be sent to the school upon completion of the workshops. If teachers do not complete their sessions, they will return all materials to their STEM Hub.

TRAINING: Teacher participants will receive 6 hours of live, virtual professional development with CodeJoy, covering the set up and use of various micro:bit-Python interactions, as well as multiple classroom projects. These online workshops will happen in the summer, requiring neither travel, sub pay, nor stipends. Teachers can complete these from convenient locations, and at convenient times.

Requirements to Implement the Program:

- 1.) Educator(s) must participate in two online workshops, each lasting three hours. Scheduling of these is flexible. Teachers should join online workshops from a computer or Chromebook.
- 2.) Educator(s) must participate in the STEM Council Scale-Up Educator Survey.

Website:
codejoy.org

Videos:
[micro:bit Python Editor](#)

Social Media:
Twitter:
[@CodeJoyEdu](#)

Facebook:
[CodeJoyEdu](#)

YouTube:
[CodeJoy](#)

Iowa Standards Alignment:

Iowa Computer Science Standards (from the national Computer Science Teachers of America standards) addressed by this program:

See the [CodeJoy + Iowa Computer Science Standards Document](#)

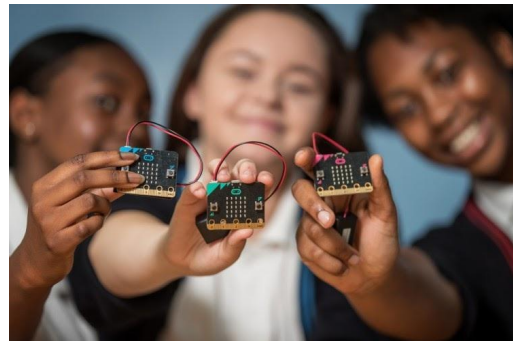
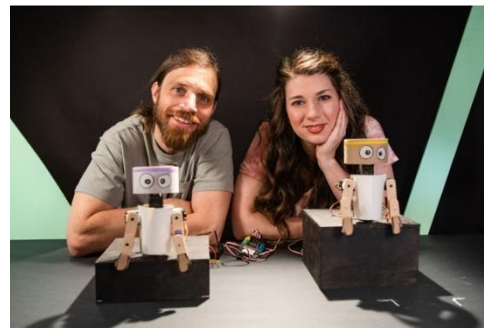
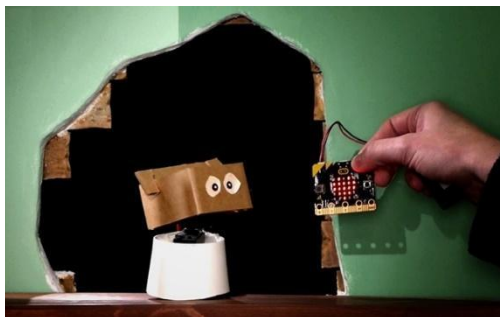
Professional Development:

Duration: Two three-hour online workshops scheduled July-October

Date(s): Workshops will occur between July 15 and October 31.

Location: Online

Photos:



STEM Scale-Up Program Application Link: www.iowaSTEM.org/Scale-Up-Application