TI STEM and Coding Resources: Getting Started and Beyond

TI-84 Plus CE Python using TI-Innovator Hub, TI-Rover, microbit, Tello Drone and more

See link

Getting Started with TI-84 Plus CE Python

- Write your first Python program on TI-84 Plus CE (video) link
- 10 Minutes of Code for Python link
    - Unit 1: Getting Started with Python
- **Meet the TI-Innovator Hub** link
- **Meet the Rover** link
- 10 Minutes of Code for Python with TI-Innovator Hub and Rover link
    - Unit 1: Getting Started with Python and TI-Innovator Hub
    - Unit 4: Rover's Driving Features

TI-Rover Projects and Activities

- **Meet the Rover** link
- **Rover, Watch Out for Rover** link
- **Math in Motion Lessons** link
    - Move the Cone
    - Navigate "Math-hattan" Challenge
    - Drive the Line Challenge
    - Driving Inequalities Challenge
- **10 Minutes of Code for Python with TI-Innovator Hub and Rover** link
    - Unit 4: Rover's Driving Features
    - Unit 5: Rover's Sensors
    - Unit 6: Rover's Coordinates
- **On-Ramp to Robotics: Unit 1 Motion Mars Challenge** link

Note: See the project pages to download teacher background PDF's, student handouts, Teacher files with example programs and student files with scaffolding of the project.

Turtle Python Module (no additional equipment required)

- Overview of the Python Turtle module link
    - Includes Python module installation information
- 10 Minutes of Code for Python Modules: Turtle Graphics link

Connectivity to handhelds

Transfer files to and from the calculator. Screen Snapshots. Update Handheld OS.

- **TI Connect CE Software for Mac and Windows** link
- **TI Connect CE App for Chromebooks** link

Microbit Resources

- Overview of the Microbit with TI Python link
  - Includes Python module installation information
  - Includes TI microbit Hex file information
- 10 Minutes of Code Python link
  - Micro:bit unit
- Microbit.org Python activities* link
  - *The TI-84 Plus CE microbit Python module supports these activities.

Tello Drone

- Overview of the Tello Drone module and equipment link
  - Includes Python module installation information
  - Includes equipment set up information
- 10 Minutes of Code for Python Modules: Tello Drone Coming Summer 2023

Wonder Workshop Dash Robotic Vehicle

- Overview of the Dash with TI Python link
- Meet the Dash with TI-Nspire CXII Python link
- Rover, Watch out for Dash link

Other Resources

- **TI Codes Lessons and Resources** link
  - 10 Minutes of Code for Python link
  - 10 Minutes of Code for Python TI-Innovator and Rover link
    - RGB Array Unit 7
  - 10 Minutes of Code for Python Modules link
  - 10 Minutes of Code Teacher's Lounge link
    - Download student handouts
    - See curriculum alignments

- **Adventures in Coding and STEM in the Mathematics Classroom (On Demand Webinar)** link