

# TI STEM and Coding Resources: Getting Started and Beyond

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

See link [https://resources.tistemprojects.com/tistemprojects-home?resource\\_id=3555](https://resources.tistemprojects.com/tistemprojects-home?resource_id=3555)

### Getting Started with TI-84 Plus CE Python

- **10 Minutes of Code for Python Unit 1: Getting Started with Python** <https://education.ti.com/en/activities/ti-codes/python/ti-84p-ce-python/10-minutes-ti-84>
- **Meet the Rover** [https://resources.tistemprojects.com/tistemprojects-home?resource\\_id=3485](https://resources.tistemprojects.com/tistemprojects-home?resource_id=3485)
- **10 Minutes of Code for Python with Hub and Rover do units 1 (Hub) and 4 (Rover)** <https://education.ti.com/en/activities/ti-codes/python/ti-84p-ce-python/10-minutes-innovator>
- **Overview of TI-84 Plus CE (video)** coming Summer 2022
- **Write your first Python program on TI-84 Plus CE (video)** coming Summer 2022

### TI-Innovator Hub Projects and Activities

#### Smart System Projects

- **Digital Mood Ring** coming Summer 2022
- **Four-Chambered Heart** coming Summer 2022
  - **Download Heart Build Sheet PDF** [https://education.ti.com/en/~media/5c8e40a17dab454bb039f4cd563bed71\\_ashx?h=16&thn=1&w=16&rev=e526f9bc-e985-4454-9ce6-ed2a52a838d3](https://education.ti.com/en/~media/5c8e40a17dab454bb039f4cd563bed71_ashx?h=16&thn=1&w=16&rev=e526f9bc-e985-4454-9ce6-ed2a52a838d3)
- **Smart Irrigation Project** coming Summer 2022
  - **Blog Post from US Teacher** <https://education.ti.com/en/bulletinboard/2022/smartwater>
  - **Demonstration Video by TI STEM Team** [https://www.youtube.com/watch?v=U3Nf\\_9xWWEs](https://www.youtube.com/watch?v=U3Nf_9xWWEs)
  - **Video from High School in Portugal** <https://www.youtube.com/watch?v=afvYR8WNTbl>
- **Pet Car Alarm Project** coming Summer 2022
  - **Demonstration video by TI STEM Team** <https://youtu.be/0EguJwSzcDQ>
- **Some Like it Tepid** coming Summer 2022
- **Coding the Sounds of Music** coming Summer 2022
- **STEM Event TI-Innovator Hub and Rover activities** coming Summer 2022

### TI-Rover Projects and Activities

- **Meet the Rover** [https://resources.tistemprojects.com/tistemprojects-home?resource\\_id=3485](https://resources.tistemprojects.com/tistemprojects-home?resource_id=3485)
- **Rover, Watch Out for Rover** [https://resources.tistemprojects.com/tistemprojects-home?resource\\_id=3558](https://resources.tistemprojects.com/tistemprojects-home?resource_id=3558)
- **On-Ramp to Robotics: Unit 1 Motion Mars Challenge** coming Summer 2022
- **Math in Motion Lessons**
  - **Move the Cone** [https://resources.tistemprojects.com/tistemprojects-home/?resource\\_id=2317](https://resources.tistemprojects.com/tistemprojects-home/?resource_id=2317)
  - **Navigate Math-Hattan** [https://resources.tistemprojects.com/tistemprojects-home/?resource\\_id=2595](https://resources.tistemprojects.com/tistemprojects-home/?resource_id=2595)
  - **Drive the Line** [https://resources.tistemprojects.com/tistemprojects-home?resource\\_id=3575](https://resources.tistemprojects.com/tistemprojects-home?resource_id=3575)
  - **Driving Inequalities** [https://resources.tistemprojects.com/tistemprojects-home?resource\\_id=3578](https://resources.tistemprojects.com/tistemprojects-home?resource_id=3578)
- **STEM Event TI-Innovator Hub and Rover activities** coming Summer 2022

### Microbit Resources

- **Learn about the Microbit with TI Python** <https://education.ti.com/en/teachers/microbit>
  - Includes Python module installation information
  - Includes TI microbit Hex file information
- **10 Minutes of Code Python Unit 6: microbit** <https://education.ti.com/en/activities/ti-codes/python/ti-84p-ce-python/10-minutes-ti-84>
- **Microbit.org Python activities\*** <https://microbit.org/projects/make-it-code-it/?filters=python>
  - \*The TI-84 Plus CE microbit Python module supports these activities.

### Turtle Python Module

- **Learn about the Python Turtle module** <https://education.ti.com/en/product-resources/turtle-module/nspire-python>
  - Includes Python module installation information

See TI-Innovator and Rover STEM Projects at [www.TIstemProjects.com](http://www.TIstemProjects.com)  
Contact the TI STEM Team at [stem-team@ti.com](mailto:stem-team@ti.com)

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- **10 Minutes of Code for Python Modules: Turtle Graphics** <https://education.ti.com/en/activities/ti-codes/python/ti-84p-ce-python/python-modules>

## Tello Drone Python Module (Beta)

- **Meet the Tello Drone with TI-84 Plus CE Python and microbit** [https://resources.tistemprojects.com/tistemprojects-home?resource\\_id=3553](https://resources.tistemprojects.com/tistemprojects-home?resource_id=3553)

## Connectivity to handhelds

- **TI Connect CE Software for Mac and Windows.** Transfer files to and from the calculator. Screen Snapshots. Update Handheld OS. <https://education.ti.com/en/products/computer-software/ti-connect-ce-sw>
- **TI Connect CE App for Chromebooks** <https://chrome.google.com/webstore/detail/ti-connect-ce-app-for-chr/aokihcpcmdjikebakdannncddpdnkfla?hl=en-US>

## Other Resources

- **TI Codes Lessons and Resources** <https://education.ti.com/en/activities/ti-codes/python/ti-84p-ce-python>
  - **10 Minutes of Code for Python** <https://education.ti.com/en/activities/ti-codes/python/ti-84p-ce-python/10-minutes-ti-84>
  - **10 Minutes of Code for Python TI-Innovator and Rover** <https://education.ti.com/en/activities/ti-codes/python/ti-84p-ce-python/10-minutes-innovator>
    - RGB Array Unit 7
  - **10 Minutes of Code for Python Modules** <https://education.ti.com/en/activities/ti-codes/python/ti-84p-ce-python/python-modules>
  - **10 Minutes of Code Teacher's Lounge** <https://education.ti.com/en/activities/ti-codes/python/ti-84p-ce-python/teacher-lounge>
    - Download student handouts
    - See curriculum alignments
- **Path to STEM Projects**, TI-Innovator Hub and breadboard engineering and coding activities that explore analog and digital inputs and outputs, calibration and a feedback and control system. [coming Summer 2022](#)
- **Adventures in Coding and STEM in the Mathematics Classroom (On Demand Webinar)** <https://education.ti.com/en/t3-professional-development/for-teachers-and-teams/online-learning/on-demand-webinars/2018/adventures-in-coding-and-stem-in-the-math-classroom>