

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

Getting Started with TI-84 Plus CE Python

- Write your first Python program on TI-84 Plus CE (video) <https://www.youtube.com/watch?v=tN2WUAQRn0M>
- 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 TI-Innovator Hub https://resources.tistemprojects.com/tistemprojects-home?resource_id=3605
- Meet the Rover 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

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
- 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_9xvWEs
 - 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
- Rover, Watch Out for Rover https://resources.tistemprojects.com/tistemprojects-home?resource_id=3558
- Math in Motion Lessons
 - Move the Cone https://resources.tistemprojects.com/tistemprojects-home/?resource_id=2317
 - Navigate Math-Hattan https://resources.tistemprojects.com/tistemprojects-home/?resource_id=2595
 - Drive the Line https://resources.tistemprojects.com/tistemprojects-home?resource_id=3575
 - Driving Inequalities https://resources.tistemprojects.com/tistemprojects-home?resource_id=3578
- On-Ramp to Robotics: Unit 1 Motion Mars Challenge https://resources.tistemprojects.com/tistemprojects-home?resource_id=3582
- 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

See TI-Innovator and Rover STEM Projects at www.TIstemProjects.com
Contact the TI STEM Team at stem-team@ti.com

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

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/aokihcpcmdjikebakdanncdpdnkfla?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>