

TI STEM and Coding Resources: Getting Started and Beyond

TI-Nspire TI-Basic using TI-Innovator Hub, TI-Rover and more

See [link](#)

Getting Started with TI-Nspire TI-Basic

- Overview of TI-Nspire (video from Digital Mood Ring project) [link](#)
- Write your first TI-Basic program with TI-Innovator Hub (video from Digital Mood Ring project) [link](#)
- 10 Minutes of Code for TI-Basic [link](#)
 - Unit 1: Program Basics
- **Meet the Rover** [link](#)
- 10 Minutes of Code for TI-Basic with TI-Innovator Hub and Rover [link](#)
 - Unit 1: Getting Started with the TI-Innovator Hub
 - Unit 4: Make Rover Move!
- **Introduction to TI-Nspire Teacher Software (video)** [link](#)

TI-Rover Projects and Activities

- **Meet the Rover** [link](#)
- **Rover, Watch Out for Rover** [link](#)
- **On-Ramp to Robotics: Unit 1 Motion Mars Challenge** [link](#)
- **On-Ramp to Robotics: Unit 2 Sensing Mars Mineral Challenge** [link](#)
- **10 Minutes of Code for TI-Basic with TI-Innovator Hub and Rover** [link](#)
 - Unit 4: Make Rover Move!
 - Unit 5: Rover's Sensors
 - Unit 6: Coordinates with Rover
- **Math in Motion Lessons** [link](#)
 - Move the Cone
 - Navigate "Math-hattan" Challenge
 - Drive the Line Challenge
 - Driving Inequalities Challenge
- **STEM Event TI-Innovator Hub and Rover activities** [link](#)

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

TI-Innovator Hub Projects and Activities

Smart System Projects

- **Digital Mood Ring** [link](#)
 - includes step-by-step videos [link](#)
 - download teacher document [link](#)
 - download teacher project background document [link](#)
 - download student handout [link](#)
 - download TI-Nspire file with example programs [link](#)
 - download Explore the science of color TI-Nspire file [link](#)
- **Four-Chambered Heart** [link](#)
 - Download Heart Build Sheet PDF [link](#)
 - Quick demonstration video [link](#)
- **Smart Irrigation Project** [link](#)
 - Blog Post from US Teacher [link](#)
 - Demonstration Video by TI STEM Team [link](#)
 - Video from High School in Portugal [link](#)
- **Pet Car Alarm Project** [link](#)
 - Demonstration video by TI STEM Team [link](#)
- **Some Like it Tepid** [link](#)
- **Making Music with Code** [link](#)
 - download teacher document [link](#)
 - download student handout [link](#)
 - download piano keyboard reference guide [link](#)
- **Running the Bases (with TI-RGB Array)** [link](#)
- **STEM Event TI-Innovator Hub and Rover activities** [link](#)

Other Resources

- **TI Codes Lessons and Resources** [link](#)
 - 10 Minutes of Code for TI-Basic [link](#)
 - 10 Minutes of Code for TI-Basic TI-Innovator and Rover [link](#)
 - RGB Array Unit 7
 - 10 Minutes of Code Teacher's Lounge [link](#)
 - Download student handouts
 - See curriculum alignments
- **Path to STEM Projects** [link](#)
 - TI-Innovator Hub and breadboard engineering and coding activities that explore analog and digital inputs and outputs, calibration and a feedback and control system.
- **Science through Engineering Design** [link](#)
 - No coding required Middle School projects using the TI-Innovator Hub, motors and sensors
 - Exploring the depths with uniform motion [link](#)
 - One small bite for man [link](#)
 - One small leaf for mankind [link](#)
- **Learning to Code with Python Using TI-Nspire CXII Technology (On Demand Webinars)** [link](#)
 - Adventures in Coding and STEM in the Mathematics Classroom