

# Get started with STEM projects

Engage students in real-world activities using the **TI-Innovator™ Hub and a TI-Nspire™ CXII Python** graphing calculator

## Step 1: Gather your equipment.

In addition to your TI-Nspire™ CX family graphing calculator, you'll also need a TI-Innovator™ Hub.

If you do not have one, you can borrow the equipment and supplies needed for the activities below. Go to [www.TIstemProjects.com](http://www.TIstemProjects.com), click on the **Get Started Now** button, then fill out the form to begin a conversation with the TI STEM Team.

Note: If you are using your own equipment, make sure your Texas Instruments technology is [up to date](#).

## Step 2: Never coded before? No problem!

You'll need a foundation in creating, storing, editing and running Python programs on the TI-Nspire™ CXII graphing calculator.

First, watch this [video overview](#) of the TI-Nspire CXII handheld. Second, follow along with a [video that guides you through writing your first Python program](#).

For more step-by-step practice, check out [10 Minutes of Code: Python and TI-Innovator™ Technology](#). Complete Unit 1 Skill Builders 1 and 2. You are ready to move on to Step 3 below.

## Step 3: You are now ready to do the projects

The [Digital Mood Ring Project](#) is a great activity to start with. This topic is engaging, and the setup is user-friendly. You will cover foundational concepts of programming and of feedback and control systems. After doing this project, both adults and students have stated that they are ready to do more advanced lessons.

Download the Digital Mood Ring [teacher documents and TI-Nspire files](#) as a reference. Use the Digital Mood Ring [YouTube videos](#) for step-by-step guidance.

Now that you're comfortable using the TI-Nspire™ CX family graphing calculator and Hub, you are ready for the lessons and activities at [www.TIstemProjects.com](http://www.TIstemProjects.com).