

# Hack BI VII

## Circuits

## Engineering I -

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**Get Started :** (What software is required for participants of the workshop)

**We don't believe software is necessary for this workshop. If it is, we will use Multisim, a circuit simulator that is already installed on school lab computers.**

**Uses:** (How is the topic of your workshop used)

**Circuitry is used in our workshop as participants will learn about circuit design with a potential activity in the works, which will likely be a small soldering project that will help participants closely interact with our topic.**

**Purpose:** (Why would someone want to attend your workshop)

**Our workshop is designed so that participants can learn about circuits and how they power the tools we use in our everyday lives.**

**Goal:** (What are you teaching and what do you want attendees to know after your workshop)

**In our workshop, attendees will learn the basics of circuit design and apply these principles to a small project. Our goal is for participants to gain familiarity with important electronic components, such as resistors and capacitors. By the end of the workshop, attendees will have a good understanding of how these components work together in electronic circuits and how to apply this knowledge to other projects.**

**Topics:** (What are the main topics you will cover in your workshop)

**The primary topic covered in this workshop is circuitry. Particularly, we will cover how power flows through a circuit and is impacted by resistors, capacitors, and gates that help a circuit fulfill its purpose.**

**Resources Used:** (Resources that are helpful in learning about your workshop topic)

**We can use the curriculum from the Honors Digital Electronics class; we all have taken the class and can use past notes and class materials to enhance our knowledge and pass it on to workshop participants. Moreover, All About Circuits (<https://www.allaboutcircuits.com>) is a good resource to**

**learn more and/or provide participants with more references to learn further following the workshop.**