

Electronics Merit Badge Prerequisite 2024

[Electronics Merit Badge | Boy Scouts of America \(scouting.org\)](https://www.scouting.org)

2. Do the following:

- a. Draw a simple schematic diagram. It must show resistors, capacitors, and transistors or integrated circuits, Use the correct symbols. Label all parts.
- b. Tell the purpose of each part.

4. Do the following:

- a) Discuss each of the following with your merit badge counselor:
 - (i) How to use electronics for a control purpose
 - (ii) The basic principles of digital techniques
 - (iii) How to use electronics for three different audio applications
- c. Choose ONE of the following three projects. For your project, find or create a schematic diagram. To the best of your ability, explain to your counselor how the circuit you built operates.
 - A control device
 - A digital circuit
 - An audio circuit

5. Do the following: a. Show how to solve a simple problem involving current, voltage, and resistance using Ohm's law

6. Find out about three career opportunities in electronics that interest you. Discuss with and explain to your counselor what training and education are needed for each position