

EEE 202 Circuits I Online Class

Required Lab Equipment and Components

To successfully finish the labs and project in this class, you need to have the following components:

A. Analog Discovery 2 Student Bundle:

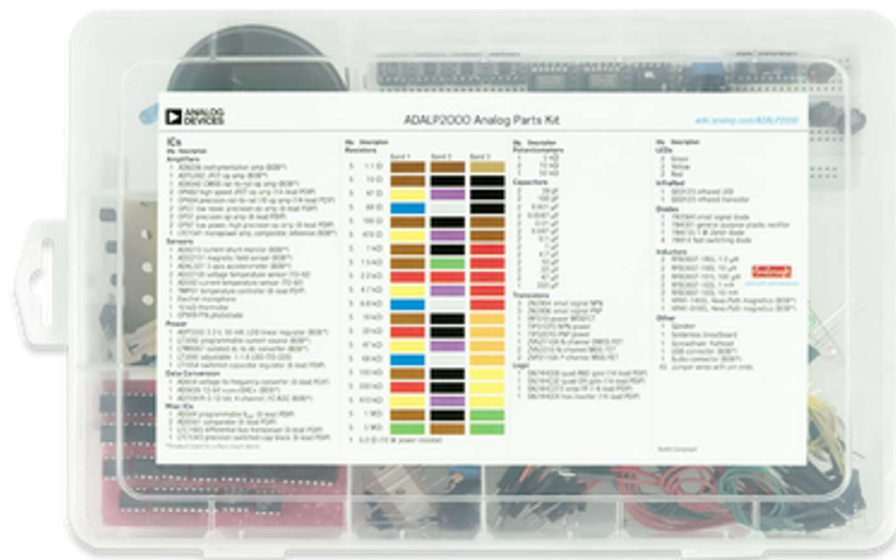
- **Supplier 1 (Digilent Company):** <https://digilent.com/shop/analog-discovery-2-student-bundle/>
NOTE: To be honored the student price, register with your ASU email address here before you order: <https://digilent.com/shop/academic/get-verified/>
- **Supplier 2 (ASU Bookstore):** <https://www.bkstr.com/arizonastatestore/product/analog-discovery-2-student-bundle-872687-1>

This bundle includes:

1. Analog Discovery 2 (AD2) kit:



2. Analog Parts kit:



These two items can be purchased as a bundle, as provided in the two options above, or separately in case you found a better price.

B. Multi-meter (MS8217, DT-830B, DT838, or similar) – Purchase options:

- Bookstore link:
<https://www.bkstr.com/arizonastatestore/product/digital-multimeter--fse-100--sun-devil-custom--732372-1>
- Amazon link:
https://www.amazon.com/AstroAI-Digital-Multimeter-Voltage-Tester/dp/B011SAMUA6/ref=pd_bxgy_img_2/131-6481697-2313317?encoding=UTF8&pd_rd_i=B011SAMUA6&pd_rd_r=ab7b0f84-5795-48e4-aafc-6ba1c5856af0&pd_rd_w=64NgB&pd_rd_wg=4KJwu&pf_rd_p=ce6c479b-ef53-49a6-845b-bbbf35c28dd3&pf_rd_r=Y31QSXJE3W8ZMNTNXE9K&psc=1&refRID=Y31QSXJE3W8ZMNTNXE9K
- If you already have a general multi-meter, make sure it measures DC current/AC-DC voltage/resistance and can handle the following measurement ranges. It will be best to handle these ranges for the remainder of your EE classes in the degree program. Otherwise you may have to buy a higher rated multi-meter later on.
 - DC voltage: up to 500V
 - AC voltage: up to 500V
 - DC current: ranges of 2000uA to 10A
 - Resistance: up to 40MOhm

C. Additional Items (one of each of the following – needed starting week 4):

- 1) **UNO Controller Board:**
<https://www.jameco.com/z/A000066-Arduino-Arduino-Uno-R3-DIP-Edition-Revision-3-2151486.html>
- 2) **USB Cable (A-Male-to-B-Male):**
https://www.jameco.com/z/10U2-02206-BK-Jameco-Valuepro-Cable-USB2-0-A-B-6-Foot-Black-USB-A-Male-To-USB-B-Male_222010.html
- 3) **LCD Display:**
https://www.jameco.com/z/1602A-BLUE-Jameco-Valuepro-16-x-2-Character-LCD-White-Text-with-Blue-Backlight-and-Pre-Soldered-Headers_2333231.html?CID=GOOG&gclid=CjwKCAjwrfCRBhAXEiwAnkmKmV78gxG7bqzu2t3STP-r66XYKKEoMJoNEXjGc4CCvssiJGidtbzfz-hoC7KoQAvD_BwE
- 4) **Photoresistor:**
https://www.jameco.com/z/CDS001-8001-Jameco-Valuepro-Photocell-CdS-3-11K-Ohm-at-10lux-200K-at-0lux-100mW-150V_202403.html
- 5) **3-Pin SPDT Slide Switch:**
https://www.jameco.com/z/SS-12E17-Jameco-Valuepro-3-Pin-SPDT-Slide-Switch_2258831.html
- 6) **9V Battery Snap-On Connector Clip:**
https://www.jameco.com/z/G-S-A-102-R-Jameco-Reliapro-9V-Battery-Snap-Holder-with-10-Inch-Wires_101470.html?CID=MERCH
- 7) **9V Alkaline Battery – Purchase Options:**
 - https://www.jameco.com/z/L6F22-VINNIC-Evergreen-Battery-Super-Alkaline-9-Volt_2112461.html
 - Any local store (make sure it reads “Alkaline”, any manufacturer works)
- 8) **9V Carbon Zinc Battery – Purchase Options:**
 - Amazon: https://www.amazon.com/Panasonic-Batteries-Super-Heavy-Carbon/dp/B081D8V67K/ref=sr_1_4_mod_primary_new?crd=2Qo6YQ9IKTooK&keywords=carbon+zinc+battery+9V&qid=1647533887&sbo=RZvfv%2F%2FHxDF%2BO5021pAnSA%3D%3D&srefix=carbon+zinc+battery+9v%2Caps%2C119&sr=8-4
 - Any local store (make sure it reads “Carbon Zinc”, any manufacturer works, any non-Alkaline battery works as well if Carbon Zinc is not available)