Course overview:
You will be working with electronic and semiconductor devices throughout your degree program and onward through your career. This lab will provide a complete foundation with hands-on experience in characterizing and understanding a wide variety of devices, including: resistors and transparent conductors, capacitors, inductors, diodes and light emitting diodes, photovoltaics (silicon and organic), bipolar junction and field effect transistors, and organic electrochemical transistors.

Course objectives and activities:
• Learn the basic operation of electronic and semiconductor devices relevant to the ECEE undergraduate curriculum
• Understand the connection between conducting/semiconducting materials properties and their device behaviors
• Gain familiarity with test equipment and techniques required to probe electronic and semiconductor devices
• Learn techniques of materials processing and device fabrication for organic electronic devices