

Iowa State University
Electrical and Computer Engineering
E E 452. Electric Machines and Power Electronic Drives

Lab Safety

Summary

For your safety and others, please follow these general guidelines while in the lab. For further guidance, see ISU's safety page, <http://www.iastate.edu/safety/>.

General Precautions

- Keep your work area clean and organized; no food or drinks at the work station.
- Do not route wires or cables in a way that would cause a tripping or pulling hazard.
- Keep all unnecessary objects, i.e. backpacks, papers, tools, away from test platforms.
- Make sure all objects on the workbench are securely in place; tape wires to the table to prevent the weight of cables from moving equipment.
- Choose appropriately colored, or labeled, wires to avoid confusion on connectivity.
- Turn off power to the circuit before making topological changes.

Powered Circuits

- Verify circuit configuration before powering.
- Be aware of exposed test points.
- Verify test probe and equipment ratings before connecting.
- Use appropriate cables and/or cable ends; do not force anything.
- Where possible, slowly increase voltage/current levels to verify functionality.
- Be aware of rotating equipment; don't wear a tie or other loose clothing.

Personal Safety

- Wear safety glasses when working with high power circuits.
- Do not wear jewelry, including rings, bracelets, necklaces, etc., when working with electricity; they can cause unintentional shock.
- Communicate with your partners to verify everyone is ready to power on the circuit.
- If you see a problem, are unsure of what is happening, or do not know what to expect, stop work and resolve any issues. SAFETY FIRST.
- If an accident occurs, notify the instructor immediately, and call for help.