

RealCareer™ Electrical Wiring Kit

Curriculum Overview

Designed for:

- High school students
- Post-secondary students
- Workforce development programs

Length:

This 13-hour curriculum is comprised of 3 lessons, 12 exercises and 4 enhancement exercises

Goal:

To give students general electrical wiring training and assessment on how to do proper household and commercial wiring.

Synopsis:

This kit and accompanying curriculum provide general electrical wiring training for common household and building wiring. This program will safely train students on electrical wiring, provide repetitive practice and assessment to increase wiring skills, introduce standard electrical symbols and electrical theory.

Curriculum Components:

- Teacher guide with 3 lessons
- Presentation slides
- Student exercises - set of 12 with 4 enhancement exercises

Learning Objectives:

Lesson	Title	Approximate Time
1	Electrical Safety – Personal safety, personal protective equipment, circuit safety, end user safety	60-70 minutes
2	Electrical Principles – Current, Voltage, Series and Parallel Circuits and Power	60-70 minutes
3	Basic Wiring Skills – The home electrical system, fixtures, wire, reading prints and troubleshooting	60-70 minutes

Exercises (with Electrical Wiring Kit accessories)	Title	Approximate Time
1	Wire a single outlet	10 minutes
2	Wire two outlets in different boxes	25 minutes
3	Wire a single-pole switch controlling a single light	20-25 minutes
4	Wire a single-pole switch controlling two lights	40-45 minutes
5	Wire two single-pole switches controlling two lights	45 minutes
6	Wire an outlet, light with pull chain – power through outlet	25-30 minutes
7	Wire a single-pole switch, light and outlet using 14-3	30-35 minutes
8	Wire an outlet and switch in double gang box with a light in another box, power from light	30-35 minutes

9	Wire 3-way switches with one light	30 minutes
10	Wire 3-way switches with one light, with power through light	30-35 minutes
11	Wire 3-way switches with one light, with power entry through both switches first	30-35 minutes
12	Wire 3-way switches with one light, with power entry through light first then switches in series	35 minutes

Enhancement Exercises (extra wiring accessories needed)	Title	Approximate Time
1	Wire two single-pole switches with two lights, with power entry through a light	60-65 minutes
2	Wire 3-way switches with two lights, with power entry through both switches	60-65 minutes
3	Wire single-pole switch with two lights and two outlets, power through switch	60-65 minutes
4	Wire a split-circuit outlet	60-65 minutes