

BRING ELECTRICAL CONCEPTS TO LIFE FOR YOUR STUDENTS with IntelliSchematic™ Electrical PowerPoint™ presentations!

Schoolcraft Publishing now offers dynamic and animated PowerPoint presentations on Electrical concepts from IntelliSchematic. These PowerPoints are designed to enhance your presentation of electrical circuits, capacitors, electrical testers, and hundreds of other topics. Seeing the parts of a electrical system function separately and together will help your students visualize and better understand electrical principles.

This package consists of: 4 PowerPoint presentations. These presentations contain nearly 300 slides!

The animated PowerPoints are versatile and adaptable—they work well with any textbook, in a classroom or training environment, or as an excellent stand-alone visual resource.

Electrical Fundamentals

Electron Theory

Bohr's Atom
Electron Transfer

Units & Symbols

Constants
Variables
SI Prefixes
Electrical Charges

Voltage

Voltage Defined
Volts Applied

Current

Current Defined
Density
Electrical Energy
Current Applied

Resistance

Resistance

Conductance
Resistors

Inductance

Inductance
Inductors
Inductor Voltage
Energy Stored

Capacitance

Capacitance
Capacitors
Current
Voltage
Energy Stored

Electrical Laws

Ohms Law
Watts Law / Power

Basic Magnetism

Applications
Magnetism

Magnetic Fields
Polarity
Right Hand Rule

Electrical Circuits

Circuits Defined

Circuits
Node
Loop
Branch
Open-Closed
Short Circuit
Disconnection
Ground
Circuit Protection

Series Circuits

Defined
Batteries
Resistors
Inductors
Capacitors

Key Benefits for Teachers/Trainers:

- Flexible classroom options. Walk students through the explanation of concepts using the hundreds of provided slides, and then bring the concepts to life with the detailed and high quality animation that follows.
- Comprehensive coverage of electrical concepts.
- You can easily customize a presentation to your lectures and discussions by dropping them into your own PowerPoints for even more flexibility.
- Add your own text and information to our slides and animations to enhance and drive home your curriculum.
- With the Slide View option, students cannot just visualize the concepts but hear the explanations as well—great for quick review to help them prepare for exams and further enhance their understanding, freeing up our time.

Key Benefits for Students

- Helps you create “aha” moments as students can “see” electrical principles in action!
- Builds strong retention when student “see” how things work as opposed to just an explanation.

Series Law

Ohm’s Law
Watt’s Law

Parallel Circuits

Defined
Batteries
Resistors
Inductors
Capacitors

Combination Circuits

Combination Circuits
Reduction

Circuit Components

Switches
Diodes
Transistors
IC’s
Solenoids
Relays
Transformers
Resistors
Fuses
Circuit Breakers
Display Elements

Using Electrical Testers

Types of Meters

Analog Meters
Digital Meters

Meter Features

Display
Dial
Port Panel

Safety in Electrical Testing

Personal Safety
Equipment Safety

Multi-Meter Basics

Resolution
Digits / Counts
Range / Resolution
Accuracy
Verifying Your Tester

Testing Voltage

Testing DC Voltage
Testing AC Voltage

Testing Current

Clamp-On Meter

Testing Components

Testing Continuity
Testing Resistance
Testing Capacitance
Testing Diodes

Starting and Charging Circuits

Battery Systems

Battery Basics

Charging Systems

Charging System Basics

Starting System

Starting System Basics
Control Crank Circuits
Remote Start and Stop

