Georgia Institute of Technology

Linear Circuits

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An introduction to electric circuit elements and a study of circuits containing such devices.

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Module 1 Background Wrap Up

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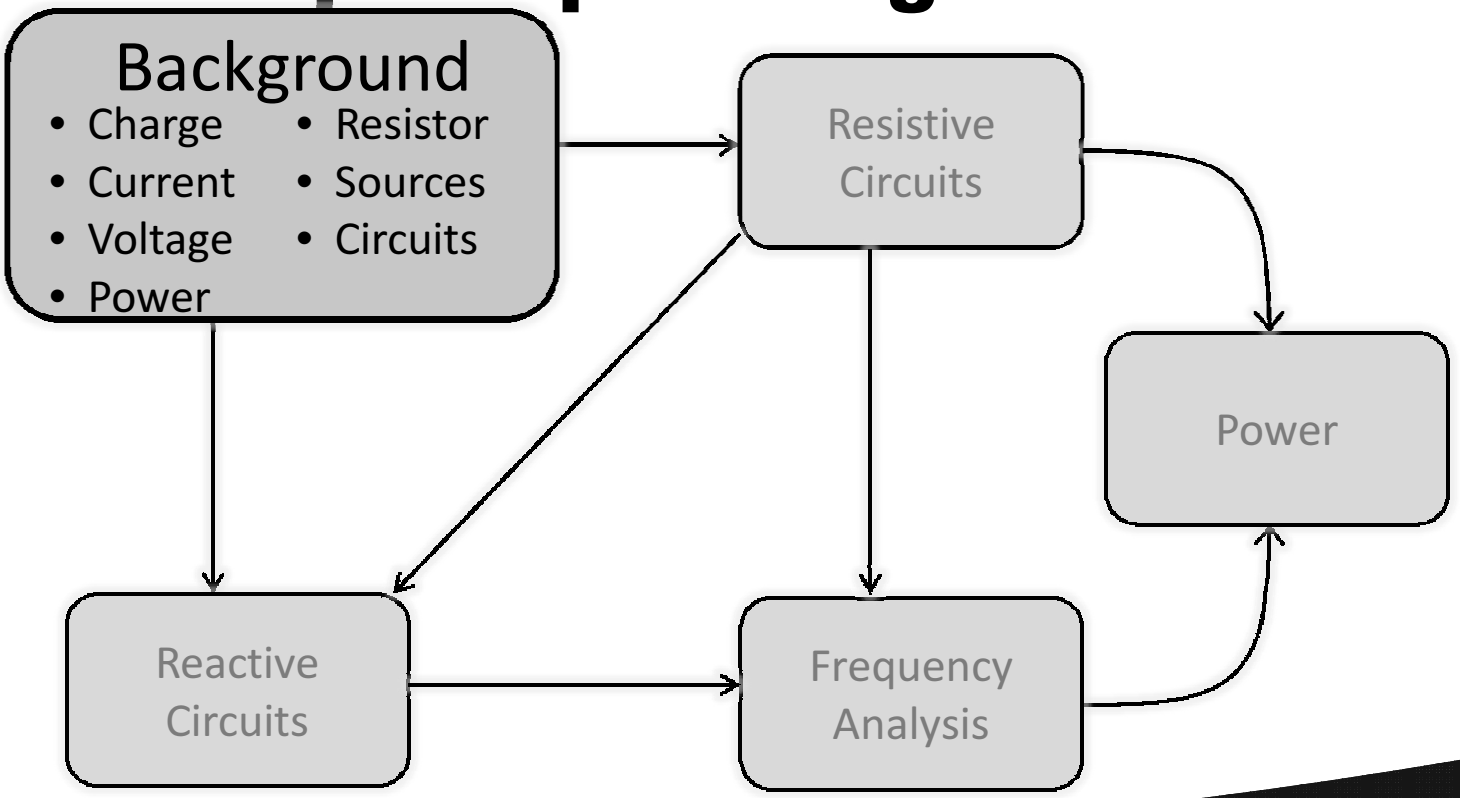
Summary of Background Module

Concept Map: Background Module 1



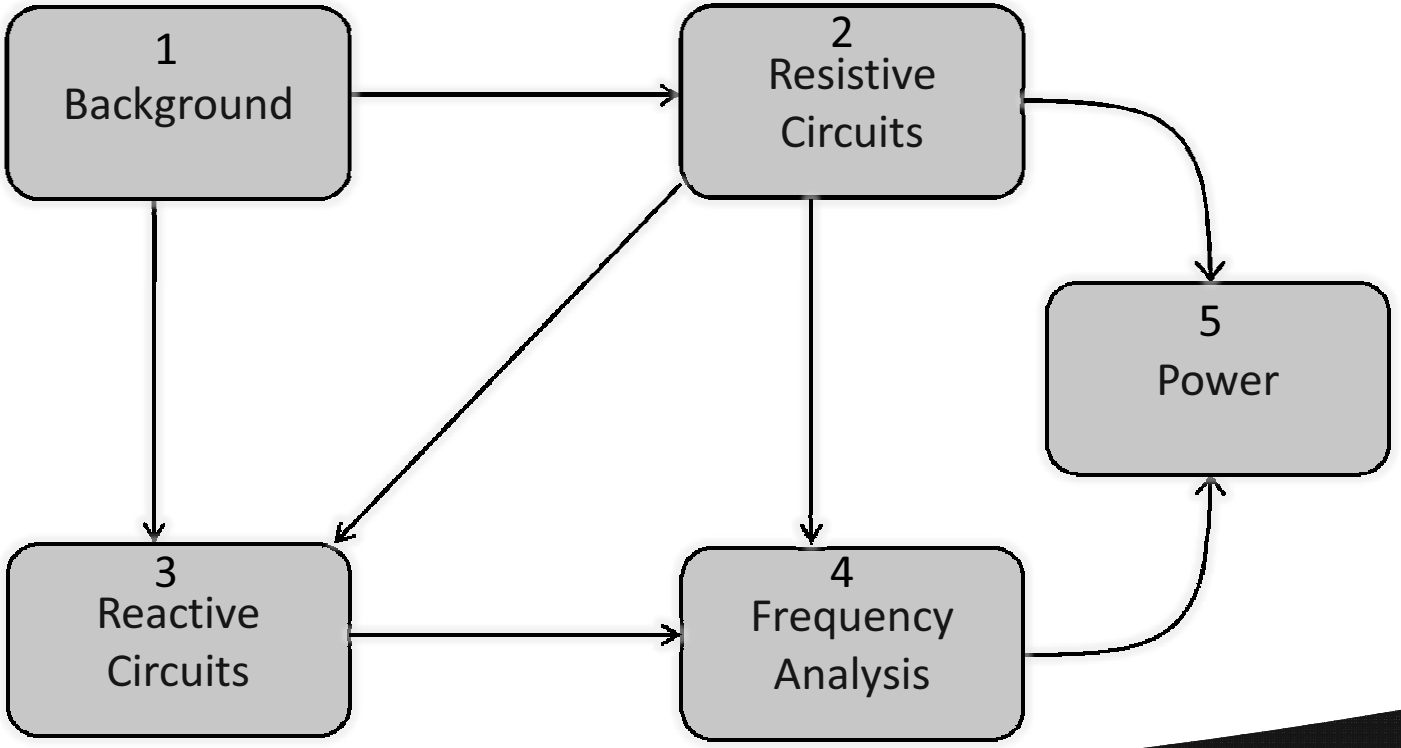
Important Concepts and Skills

- **CHARGE AND CURRENT**
  - Understand charge and current
  - Be able to calculate the effect of one charge on other charges
  - Be able to calculate current from charge flow in time
- **VOLTAGE**
  - Understand how voltage is created by differences in charge density
  - Understand how chemical reactions can cause a voltage
  - Be able to use voltage references

Important Concepts and Skills

- **POWER AND ENERGY**
  - Be able to calculate power from energy
  - Be able to analyze circuit using conservation of power
  - Be able to analyze circuit using power, voltage, and current
- **CIRCUIT DIAGRAMS**
  - Be able to identify some basic circuit elements
  - Be able to identify nodes of a circuit diagram
  - Be able to identify open/short circuits
  - Be able to move elements of a diagram

Concept Map


1
Background
2
Resistive
Circuits
5
Power
3
Reactive
Circuits
4
Frequency
Analysis