Basic Electricity – Unit 14: Inductance

Study Guide

In order to successfully complete this unit, complete the following tasks:

1. Review the course structure.

2. Watch https://www.youtube.com/watch?v=VFPwgjGHqFQ
   Title: How Inductors Work Within a Circuit – Inductance
   Author: Engineering Technology

3. Watch https://www.youtube.com/watch?v=84kl_WheNtQ
   Title: Understanding Inductance
   Author: Dorian McIntire

4. Watch https://www.youtube.com/watch?v=-GLidgxMr4s
   Title: Capacitors and Inductors - Mirror Twins
   Author: Dorian McIntire

5. Complete the LR Time Constraint Calculations Homework and submit to the lab instructor/course instructor.

6. Watch https://www.youtube.com/watch?v=NgwXkUt3XxQ
   Title: Inductor basics - What is an inductor?
   Author: Afrotechmods

7. Read *Magnetic Fields and Inductance*, Chapter 15: Inductors, found at:
   http://www.allaboutcircuits.com/textbook/direct-current/chpt-15/magnetic-fields-and-inductance/

8. Study Module 4.5, "The LR Time Constant" found at:
   http://www.learnabout-electronics.org/ac_theory/dc_ccts45.php

9. Read *Series and Parallel Inductors*, Chapter 15: Inductors found at:
   http://www.allaboutcircuits.com/textbook/direct-current/chpt-15/series-and-parallel-inductors

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10. Watch https://www.youtube.com/watch?v=vwIdZjjd8f
    Title: Electromagnetic Induction and Faraday's Law
    Author: Michael Melloch

11. Watch https://www.youtube.com/watch?v=nd-j3YnFE2o
    Title: Faraday's Law Animation
    Author: Jeff Ferrucci

12. Read "Lenz Law of Electromagnetic Induction" found at:
    http://www.electrical4u.com/lenz-law-of-electromagnetic-induction/

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