

Multi-State Advanced Manufacturing Consortium

US DOL SPONSORED TAACCCT GRANT: TC23767
PRIMARY DEVELOPER: Jim Blair – Henry Ford College

 RELEASE DATE
 2/22/2016

 VERSION
 v 001

 PAGE
 1 of 2

Basic Electricity – Unit 13: Capacitors and AC

Study Guide

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

- 1. Review the course structure.
- Watch https://www.youtube.com/watch?v=P9xSEhPENqM
 Title: Capacitors in AC Circuits with Phasors | Doc Physics

Author: Doc Schuster

- Read and review the AC Capacitor Application Guide found at: https://www.digikey.com/Web%20Export/Supplier%20Content/CDE 338/PDF/CDE ACappGuide.pdf?r edirected=1
- 4. Read information on *AC Capacitor Circuits*, Chapter 4: Reactance and Impedance Capacitive found at: http://www.allaboutcircuits.com/textbook/alternating-current/chpt-4/ac-capacitor-circuits
- 5. Complete the Circuits Lab (PDF) and submit to the lab instructor/course instructor.
- 6. Read information on *Series Resistor-Capacitor Circuits*, Chapter 4: Reactance and Impedance Capacitive found at: http://www.allaboutcircuits.com/textbook/alternating-current/chpt-4/series-resistor-capacitor-circuits
- 7. Read information on *Capacitor Quirks*, Chapter 4: Reactance and Impedance –Capacitive found at: http://www.allaboutcircuits.com/textbook/alternating-current/chpt-4/capacitor-quirks/
- 8. Perform the *Capacitive Reactance* worksheets found at: http://www.allaboutcircuits.com/worksheets/capacitive-reactance
- 9. Read the information on *Low-pass Filters*, Chapter 8: Filters found at: http://www.allaboutcircuits.com/textbook/alternating-current/chpt-8/low-pass-filters







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