**ELM-127 Introduction to AC Controls**

**Chapter 4: Resistance, capacitance, inductance and reactance in AC power construction**

**ABOUT THIS COURSE**

Module 1, Power and Energy in AC Circuits

**GUIDELINES FOR SUCCESS**

Read the module Course Description and complete the Learning Activities. When you think you understand the material, proceed to the Assessment Activities. See the instructor at any time for assistance.

**COURSE DESCRIPTION**

This course covers basic protecting workers from the unexpected start-up, or unexpected energization of equipment, circuits, or parts while maintenance is being performed. Protecting workers from exposure to live electrical parts Includes overhead and underground electrical distribution, including systems, equipment, circuits, and parts. This course may not transfer to a baccalaureate degree of art or science within the universities in the Nevada System of Higher Education (NSHE).

**COMPENTENCIES DEVELOPED IN THIS COURSE**

This course covers basic AC/DC circuit principles and practices. Students will explore areas of electrical and electronic circuits including: circuit theory, components, circuit construction and analysis, soldering techniques, proper test equipment usage, and applications in various technical fields.

**Learning Activities**

1. Read Module 1, Power and Energy in AC Circuits
2. Complete the “Self Check Quiz” at the end of the chapter
3. Arrange to complete the module by completing the **Assessment Activities**

**GRADING INFORMATION**

All modules at Truckee Meadows Community College (TMCC) are Pass/Fail. You must achieve 90% or higher on all written assessments, and 100% or higher on all lab assessment activities in order to pass this module.

**ASSESSMENT ACTIVITIES**

Take a written assessment in the Resource Center

Go to the Resource Center to obtain your Lab Assessment assignment and proceed to the lab to complete the task;

**ADA Statement**

Students who feel they may need an accommodation based on the impact of a disability are encouraged to meet privately with their instructors to discuss their specific needs and must contact the Disability Resource Center at 775-673-7277 in RDMT 315 to establish documentation of a disability and to coordinate reasonable accommodations.

Equal Employment Opportunity

*TMCC/WNC/GBC is an EEO/AA (equal opportunity/affirmative action) institution and does not discriminate on the basis of sex, age, race, color, religion, disability, national origin or sexual orientation in the programs or activities it operates. Auxiliary aids and services are available upon request to individuals with disabilities.*

****U. S. Department of Labor

*This project was funded $3,201,968 (100% of its total cost), from a grant awarded under the Trade Adjustment Assistance Community College and Career Training Grants, as implemented by the U.S. Department of Labor’s Employment and Training Administration.*

DOL Attribution

*This workforce solution was funded by a grant awarded by the US Department of Labor’s Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the US Department of Labor. The Department of Labor makes no guarantees, warranties or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability or ownership.*