

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION X FOR INFORMATION ONLY ____

College COTS Program Area Electrical Technology Date 3/1/07

Submitter _____ Chair/Dean _____ Date _____
Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
These changes are being made to be more towards industry standards and expectations within the industry.

College: College of Technical Sciences
Program Area: Electrical Technology
Date:
Course Prefix & No.: ELEC 106

Course Title: Electrical Formulas and Calculations
Credits: 3

Required by: Electrical Technology

Selective in: n/a

Elective in: n/a
General Education:

Lecture: x
Lecture/Lab:
Contact hours lecture: 3
Contact hours lab:

Current Catalog Description (include all prerequisites):

This course covers the basic formulas needed to determine electrical values in typical electrical installations including power, current, and voltage. Basic methods of calculation for both DC and AC quantities will be discussed and demonstrated as well as the use of modern calculators and computer software to determine necessary values.

Course Outcome Objectives:

The student will be able to:

- Articulate the basic electrical principles including ohms law and the basic power equation
- Identify the source of more complicated electrical formulae needed to calculate AC power, power factor and phase angle, voltage drop, conductor ampacity, etc.
- Utilize a general purpose calculator to compute necessary values
- Use modern computer hardware to perform detailed analysis of AC and DC electrical systems
- Math formulas applying to job invoicing & estimating cost

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.