Electronics Circuit Refresher and Troubleshooting  
CGTCECRT101

Course Description
The Electronics Circuit Refresher and Troubleshooting course provides 40 hours of theory and hands-on troubleshooting for students that have experience working in the field of electronics as a technician. The course provides a brief review of theories and hands-on training in the following areas of electronic circuitry: Direct Current, Alternating Current, Solid State, Linear, and Digital electronic circuits. Troubleshooting and schematic reading are incorporated into the course work in all labs.

Prerequisite: None
Instructor to student ratio: 1:15
Course length: 40 hours

Training Syllabus: Electronics Circuit Refresher and Troubleshooting (CGTCECRT101)

- Multimeter Measurements
- Basic DC Circuits
  - Series Ckt
  - Parallel Ckt
  - Series-Parallel Ckt
- Complex DC Circuits
- AC Test Equipment
  - Oscilloscope
  - Frequency Generator
  - Freq. Counter
- Schematic Reading
- RL Circuits
- RC Circuits
- RC Time Constants & Transients
- RLC Ckt
- Resonant Ckt
- Transformers
- Relays & Switches Ckt
- Limiter Clamper Ckt
- Transistor Amplifiers
  - Common-Emitter Ckt
  - Common-Collector Ckt
  - Common-Base Ckt
- Power Supply & Voltage Regulator Ckt
- Multistage Amplifier
• FET Amplifier
• Sine Wave Osc.
• Non-Sine Wave Osc.
• Multivibrator
• Schmitt Trigger
• SCR Trigger Ckt
• Operational Amplifiers
• Digital Logic Ckt
• Combinational Logic Ckts
• Flip-Flop Ckts
• Register and Memory Ckts
• Arithmetic and Counting Ckt
• D/A Conversion Ckt
• Troubleshooting Digital Systems
• On-Base Continuum