Course 5 Industrial Electronics with PLC Technology

1  2330A Current and Voltage
2  2330B Controlling Current and Voltage
3  2333A Power Distribution
4  2333B Portable Extension Cords
5  2336A Static Electricity
6  2336B Electric Currents and Semiconductor Devices
7  2101A Fractions and Decimal Numbers
8  2101B Reciprocals, Percentage & Powers of Numbers
9  2339A The Three Basics of Electric Circuits: Voltage, Current and Resistance
10 2339B Ohm's Law, Conductors, and Insulators
11 2342A Connecting and Tracing Battery Circuits
12 2342B Identifying Components
13 2342C Tracing Wiring on Printed Circuit Boards
14 2102A Roots of Numbers, Ratio, and Proportion
15 2102B Inverse Proportion and Negative Numbers
16 2323A Parallel Circuits
17 2323B Equivalent Circuits
18 2323C Applications of Kirchhoff's Law
19 2324A Series-Parallel Circuits
20 2324B Voltage and Power
21 2511A Vital Statistics of AC Circuits
22 2511B Magnetism and Magnetic Circuits
23 2511C Induced Voltage and Current
24 2313A Thinking Circuits and Automatic Switches
25 2313B Relays and Robots
26 2103A Scientific Notation
27 2103B Units of Measure
56 3104 Binary Coding and Computer Arithmetic
57 3464 Logic Circuit Tracing by Using Boolean Algebra
58 3466 Digital IC Families with Practical Operating Requirements
59 3343 Clippers, Clampers and Binaries
60 3465 Pulse Processing Circuits
61 3467 Important Digital IC Circuits
62 3468 Digital Systems and How to Troubleshoot Them
63 3471 An Overview of Industrial Control
64 3472 Methods and Operation of the Controller
65 3473 DC Motors and Drives
66 3474 AC Motors and Drives
67 3475 Servo Motors and Servomechanisms
68 3476 Pressure Systems and Temperature Control
69 3477 Flow Control and Level Control Systems
70 3478 Analytical and Industrial Instrumentation
71 3479 Detection Sensors
72 3480 Programmable Logic Controllers
73 3481 PLC Programming, Interfacing and Troubleshooting
74 3482 Motion Control
75 3483 Functional Systems
76 3220 Introduction to Robotics
77 3222 Mechanics Part I - Statics
78 3224 Mechanics Part II - Dynamics
* 3700 Associate-Level CET Study Guide

*Optional exam, not required for graduation and not graded. Provided upon student request.