Kentucky CTE

Advanced Manufacturing: Industrial Maintenance Technology: Industrial Maintenance of PLCs 470330 (2026–2027)

Practice and perform safe shop procedures at all times. 1	1 Practice and perform safe shop procedures at all times. 1
Apply the technical math required for employment opportunities in maintenance. 2	2 Apply the technical math required for employment opportunities in maintenance. 2
Perform all duties with emphasis on integrity, responsibility, quality, discipline and teamwork. 3	3 Perform all duties with emphasis on integrity, responsibility, quality, discipline and teamwork. 3
Describe the basic operation of programmable controllers. 4	4 Describe the basic operation of programmable controllers. 4
Apply language functions and symbols used in PLC. 5	5 Apply language functions and symbols used in PLC. 5
Translate relay logic to PLC logic. 6	6 Translate relay logic to PLC logic. 6
Fa configurations using	abricate I/O configurations using serial and parallel. 7

Skip to main content

serial and parallel. 7

Design simple programmable controller applications. 8

8 Design simple programmable controller applications. 8

Program PLCs. 9

9 Program PLCs. 9

Install PLCs to replace relay systems. 10

10 Install PLCs to replace relay systems. 10

Install PLCs to operate fluid power systems. 11

11 Install PLCs to operate fluid power systems. 11

Plan a shutdown procedure for PLC-managed equipment. 12

12 Plan a shutdown procedure for PLC-managed equipment. 12

Troubleshoot hardware faults using PLCs. 13

13 Troubleshoot hardware faults using PLCs. 13

Identify PLC hardware. 14

14 Identify PLC hardware. 14

Program the use of timers, counters, and sequencers in PLC applications. 15

15 Program the use of timers, counters, and sequencers in PLC applications. 15

Develop basic PLC wiring diagrams and ladder logic programs. 16

16 Develop basic PLC wiring diagrams and ladder logic programs. 16

Troubleshoot PLC applications. 17

17 Troubleshoot PLC applications. 17