Kentucky CTE

Advanced Manufacturing: Industrial Maintenance Technology: Fluid Power 470321 (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

Design simple hydraulic and pneumatic systems. 4

4 Design simple hydraulic and pneumatic systems. 4

Draw hydraulic and pneumatic circuits. 5

5 Draw hydraulic and pneumatic circuits. 5

Install a pneumatic pressure regulator. 6

6 Install a pneumatic pressure regulator. 6

Check and replace the pneumatic pressure regulator. 7

7 Check and replace the pneumatic pressure regulator. 7

Ins Skip to main content nstall pressure relief valve. 8

valve. 8

Check and replace the pressure relief valve. 9

9 Check and replace the pressure relief valve. 9

Install a non-rotating cylinder. 10

10 Install a non-rotating cylinder. 10

Install hydraulic and pneumatic motors. 11

11 Install hydraulic and pneumatic motors. 11

Install pressure booster (intensifier). 12

12 Install pressure booster (intensifier). 12

Install a pressure-reducing valve. 13

13 Install a pressure-reducing valve. 13

Install a rotating cylinder. 14

14 Install a rotating cylinder. 14

Replace 2-way, 3-way, and 4-way valves (solenoid-operated valves). 15

15 Replace 2-way, 3-way, and 4-way valves (solenoid-operated valves). 15

Replace an accumulator. 16

16 Replace an accumulator. 16

Adjust the pressure on hydraulic systems. 17

17 Adjust the pressure on hydraulic systems. 17

Change filters in hydraulic systems. 18

18 Change filters in hydraulic systems. 18

Change hydraulic fluid. 19

19 Change hydraulic fluid. 19

Install hydraulic pressure regulator. 20

20 Install hydraulic pressure regulator. 20

Check and replace the hydraulic pressure regulator. 21

21 Check and replace the hydraulic pressure regulator. 21

Ins Skip to main content

sequence valve. 22

Install hydraulic sequence valve. 22

Check and replace the hydraulic sequence valve. 23

23 Check and replace the hydraulic sequence valve. 23

Install counter-balance valve. 24

24 Install counter-balance valve. 24

Install flow control or speed control valve. 25

25 Install flow control or speed control valve. 25

Install hydraulic pump. 26

26 Install hydraulic pump. 26

Replace the hydraulic cylinder. 27

27 Replace the hydraulic cylinder. 27