DESCRIPTION
The Certificate of Achievement in Engineering Technology, Industrial Emphasis is an 18-month program that provides students with classroom and laboratory experiences in electricity, mechanical power, pneumatics, hydraulics and ferrous and non-ferrous material. The industrial emphasis focuses on those skills used in industrial settings. Courses include Industrial Electricity, Mechanical Power Transmission and Programmable Logic Controllers.

STUDENT LEARNING OUTCOMES
• Show the knowledge and demonstrate the ability to select, test, set up, and maintain various electromechanical systems and machinery and perform basic system calculations.
• Demonstrate the ability to apply various troubleshooting techniques for the identification and correction of faults in electrical, mechanical, and fluid power systems.
• Assemble, operate, and maintain various electrical motor controllers, mechanical power transmission systems, and high pressure fluid power systems.
• Show the ability and skills to prepare technical reports and communicate the results through effective oral communications.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (3 CREDITS)
COMMUNICATIONS (3 credits)
Recommended: COM 115 Applied Communication

SPECIAL PROGRAM REQUIREMENTS (29 CREDITS)
CORE REQUIREMENTS (29 credits)
CADD 100  Introduction to Computer Aided Drafting 3
MT 102B  Fundamentals of Electricity 4
MT 104B  Industrial Electricity 4
MT 106B  Mechanical Power Transmission 4
MT 108B  Fluid Power (Pneumatics, Hydraulics, Instrumentation) 4
MT 110B  Material Science I (Ferrous and Non-Ferrous) 4
MT 115B  Programmable Logic Controllers I 3
MT 116B  Programmable Logic Controllers II 3
Choose one from the following (0-3 credits)
IS 100B  Core Computing Competency 0
IS 101  Introduction to Information Systems 3

Computation included in MT 102B, 104B
Human Relations included in MT 115B, 116B

FULL-TIME STUDENT DEGREE PLAN
Plan can be modified to fit the needs of part-time students by adding more semesters.

FIRST SEMESTER Credits
COM 115 Applied Communication 3
MT 102B Fundamentals of Electricity 4
MT 106B Mechanical Power Transmission 4
MT 115B Programmable Logic Controllers I 3
TOTAL CREDITS ...............................................................................................14

SECOND SEMESTER Credits
MT 104B Industrial Electricity 4
MT 108B Fluid Power (Pneumatics, Hydraulics, Instrumentation) 4
MT 116B Programmable Logic Controllers II 3
TOTAL CREDITS ...............................................................................................11

THIRD SEMESTER Credits
IS 100B or IS 101 0-3
MT 110B Material Science I (Ferrous and Non-Ferrous) 4
CADD 100 Introduction to Computer Aided Drafting 3
TOTAL CREDITS .............................................................................................7-10

DEGREE PLAN TOTAL CREDITS ........................................................................32-35

1IS 100B is a certification test, if certification test isn’t passed, student must take IS 101. The student can always bypass IS 100B and just take IS 101.