



Industrial Maintenance/Mechatronics

The Industrial Maintenance/Mechatronics Technology Program (IMM) of TCAT Knoxville is designed and managed to produce highly skilled individuals in the areas of mechanical and electrical industrial machinery repair. The program consists of Mechanical Training, to include all types of power transmission techniques, belt drives systems, chain drives, alignment methods, also coupling methods. Also they are trained in pneumatic and hydraulic symbology, operation and application. Continuing their training in basic electrical motor control, sensors, motor drives, AC and DC motor theory and operation and troubleshooting. The program ends with an extensive training period of PLC, Programmable Logic Controller, training, to include both programming and troubleshooting. As part of the IMM program training students are exposed to a good deal of math also.

Program	Location	Length	Days	Time
Day Program	TCAT Knoxville Main Campus	16 Months	Monday-Friday	8:00 am—2:30 pm
Day Program	TCAT Knoxville at Anderson County Campus	16 Months	Monday-Friday	8:00 am—2:30 pm
Night Program	TCAT Knoxville Main Campus	16 Months	Monday-Friday	3:30 pm—10:00 pm

Curriculum/Courses	Completion Award	Required Hours
IMM 0001 Worker Characteristic	Industrial Maintenance Helper	864
IMM 1010 Tech Foundations	Programmable Logic Controllers	1296
IMM 1020 Orientation and Safety	Advanced Programmable Logic Controllers	1728
IMM 1030 Mechanical Maintenance	Industrial Maintenance Technician	1728
IMM 1040 Hydraulics		
IMM 1050 Pneumatics		
IMM 0002 Worker Characteristic		
IMM 2010 Basic Electricity		
IMM 2020 Electric Motor Control		
IMM 2030 Intro to PLCs		
IMM 0003 Worker Characteristic		
IMM 3010 PLCS 1		
IMM 0004 Worker Characteristic		
IMM 4011 Intro to Robotics		
IMM 4021 Advanced PLCs		

Typical Job Opportunities

- Industrial Maintenance
- Mechanical Maintenance
- Electrical Maintenance

HOW TO APPLY

All Documents Must be Presented Together to Apply

- ⇒ Complete the **Free Application For Federal Student Aid (FAFSA)** online – the website is www.fafsa.ed.gov and our school code is 004025.
- ⇒ Complete **TCAT Knoxville Application for Enrollment** online at <https://apply.tbr.edu/?tcat=knoxville>