

Industrial Maintenance/Mechatronics Technology

The Industrial Maintenance/Mechatronics program is designed to provide students with general skills in a variety of areas common to industry.

The mission of the Industrial Maintenance/Mechatronics program is to provide the most competency-based training for the students that will benefit and equip each and every individual to achieve his/her goals as they enter or re-enter the workforce. This can be done by: Seeing each and every student as an individual with their own unique skills, gifts, and abilities. Finding out what those skills and gifts are and shaping their abilities through the training to enhance the same. Carefully and closely matching jobs and students to find as close a connection as possible that will benefit the student, the employer, and the success of the program in the years to come. Building a strong relationship with community businesses that will have the utmost confidence in our students and in the program so that their first thoughts for filling available positions will be the IM program of TCAT Knoxville and the school as a whole.

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

Course Outline:

First Trimester

Orientation & Safety
Technology Foundations
OSHA 10 Training
Mechanical Maintenance
Hydraulics
Pneumatics

Second Trimester

Basic Electricity
Electrical Motor Control
Intro to PLCs

Third Trimesters

Programmable Logic Controllers I

Fourth Trimester

Programmable Logic Controllers II and Robotics
Intro to Robotics

Typical Job Opportunities

Industrial Maintenance
Mechanical Maintenance
Electrical Maintenance

Diploma & Required Clock Hours

Industrial Maintenance Technician—1,728

Certificates & Required Clock Hours

Industrial Maintenance Helper—864

Programmable Logic Controllers—432

Advanced Programmable Logic Controllers & Robotics-432

Total Completion Rate 2016: 83%

HOW TO APPLY

All Documents Must be Presented Together to Apply

- 1. FAFSA—Provide Proof of Completed FAFSA**
School Code = 004025 at <https://fafsa.ed.gov/>
- 2. Immunizations—Provide Proof of Required Immunizations (Form is Attached)**
- 3. Complete TCAT Application for Enrollment (Form is Attached)**



Industrial Maintenance/Mechatronics

Book, Tool, and Supply List

1st Trimester			
Tuition	Cost		Total
Tuition*	\$1,139.00		
Technology Access Fee*	\$ 67.00		
Student Activity Fee*	\$ 10.00		
TOTAL			\$1,216.00

Books	ISBN	Cost	Required	
Industrial Mechanics, 4th edition	9780826937124	\$ 105.00	x	
Industrial Mechanics workbook, 4th edition	9780826937131	\$ 29.00	x	
Electrical Motor Controls (w/CD), 5th Ed.	9780826912268	\$ 136.00	x	
Electrical Motor Controls for Integrated Systems WB	9780826912275	\$ 35.00	x	
Programmable Logic Controllers (ACT MAN)	9781259682476	\$ 98.00	x	
Programmable Logic Controllers (w/out Logixpro Lab & CD)	9780073373843	\$ 226.00	x	
TOTAL				\$629.00

Supplies	Needed By	Cost	Required	
Denim Jeans	First day of class	\$ 35.00	x	
3 Black Short Sleeve Work Shirts (collared or polo)	First day of class	\$ 75.00	x	
Black or Brown Belt	First day of class	\$ 20.00	x	
Steel Toe Work Boots	First day of class	\$ 140.00	x	
Safety Glasses	First day of class	\$ 10.00	x	
TOTAL				\$280.00

Tools	Needed By	Cost	Required	
Tool Box or Tool Pouch	Per Instructor		x	
Combination Insulated Screwdriver Set	Per Instructor		x	
Wire Strippers	Per Instructor		x	
Needle Nose Pliers	Per Instructor		x	
2 Hex Head Key Sets (1 standard and 1 metric)	Per Instructor		x	
6" Steel Ruler with Sliding Bar	Per Instructor		x	
Digital Multimeter Auto Ranging	Per Instructor		x	
Clamp-on Amp Meter	Per Instructor		x	
Electrical Crimping Pliers	Per Instructor		x	
TOTAL				\$495.00

Miscellaneous Cost	Cost	Required	
OSHA 10 Training	\$ 25.00	x	
TOTAL			\$25.00

2nd Trimester			
Tuition	Cost		Total
Tuition*	\$1,139.00		
Technology Access Fee*	\$ 67.00		
Student Activity Fee*	\$ 10.00		
TOTAL			\$1,216.00

3rd Trimester

All Costs are Estimated and Subject to Change Without Notice Revised: 5/3/2017

*Denotes costs that can be covered by TN Promise and TN Reconnect

Tuition	Cost	Total
Tuition*	\$1,139.00	
Technology Access Fee*	\$ 67.00	
Student Activity Fee*	\$ 10.00	
TOTAL		\$1,216.00

4th Trimester		
Tuition	Cost	Total
Tuition*	\$1,139.00	
Technology Access Fee*	\$ 67.00	
Student Activity Fee*	\$ 10.00	
TOTAL		\$1,216.00

Miscellaneous Cost	Cost	Required	
Graduation Supplies	\$ 40.00	x	
TOTAL			\$40.00
TOTAL PROGRAM COST			\$6,333.00

All Costs are Estimated and Subject to Change Without Notice Revised: 5/3/2017

*Denotes costs that can be covered by TN Promise and TN Reconnect

TCAT - Knoxville Certification of Immunization Measles, Mumps, and Rubella (MMR)

Student's name: _____ Program of Enrollment: _____

PART I (TO BE COMPLETED BY STUDENT)

Proof of MMR immunization is not required for the following reason:

- I graduated from a Tennessee public or private high school in 1999 or after. (transcript attached)
- I attended a Tennessee public or private high school in 2001 or after. (transcript attached)
- I was born prior to January 1, 1957. (copy of photo ID or birth certificate attached)
- I am active duty or former military personnel. (copy of DD214 or active military ID attached)

IF THE ABOVE IS CHECKED, PLEASE SIGN BELOW.

PART II (TO BE COMPLETED BY STUDENT)

Proof of MMR immunization is not required for the following reason:

- I refuse immunization because of religious doctrine. (Reason affirmed under the penalties of perjury. Please attach statement.)

IF THE ABOVE IS CHECKED, PLEASE SIGN BELOW.

PART III—MMR (TO BE COMPLETED BY PHYSICIAN)

Please circle the number that applies to this patient:

1. Patient has received two doses of measles vaccination since the age of 12 months:

Month/year _____ Month/year _____

2. Vaccination is medically contraindicated because of pregnancy, allergy to vaccine, etc. (Please list reasons.)

3. Patient had disease, as confirmed by medical record:

Month/year _____

4. Patient is immune to disease, as confirmed by laboratory.

Comment _____

ATTEST

(Must be signed by an M.D. or D.O.)

Name of physician (Please print) _____

Office telephone _____

Physician's signature _____ Date _____

Student's signature _____ Date _____

TCAT - Knoxville Certification of Immunization Varicella (Chicken Pox)

Student's name: _____ Program of Enrollment: _____

PART I (TO BE COMPLETED BY STUDENT)

Proof of varicella (chicken pox) immunization is not required for the following reason:

- I attended a Tennessee public high school between 1999 and May 2016. **(Must provide proof of second varicella vaccine dose from your physician office.)** (transcript attached)
- I was born prior to January 1, 1980. (copy of photo ID or birth certificate attached)
- I am active duty or former military personnel. (copy of DD214 attached)

IF THE ABOVE IS CHECKED, PLEASE SIGN BELOW.

PART II (TO BE COMPLETED BY STUDENT)

Proof of varicella (chicken pox) immunization is not required for the following reason:

- I refuse immunization because of religious doctrine. (Reason affirmed under the penalties of perjury. Please attach statement.)

IF THE ABOVE IS CHECKED, PLEASE SIGN BELOW.

PART III—VARICELLA (TO BE COMPLETED BY PHYSICIAN)

Please circle the number that applies to this patient:

1. Patient has received two doses of varicella (chicken pox) vaccination since the age of 12 months:
Month/year _____ Month/year _____
2. Vaccination is medically contraindicated because of pregnancy, allergy to vaccine, etc. (Please list reasons.)

3. Patient had disease, as confirmed by medical record:
Month/year _____
4. Patient is immune to disease, as confirmed by laboratory.
Comment _____

ATTEST

(Must be signed by an M.D. or D.O.)

Name of physician (Please print) _____

Office telephone _____

Physician's signature _____ Date _____

Student's signature _____ Date _____



TENNESSEE COLLEGES OF APPLIED TECHNOLOGY

ENROLLMENT APPLICATION

Applicants must complete every item on this form, sign and date and return it to the College.

Personal Information	<p>Full Legal Name</p> <p>_____</p> <p> Last First Middle</p> <p>Address _____ City _____</p> <p>County _____ State _____ Zip _____ Email Address _____</p> <p> - / / Gender: ___ M ___ F</p> <p>Social Security _____ Date of Birth _____ Age _____</p> <p>Marital Status: ___ Married ___ Single Preferred Phone Number: _____</p> <p>Race: Do you consider yourself to be Hispanic/Latino/Spanish origin? ___ Yes ___ No</p> <p>Select one or more of the following racial categories to best describe you:</p> <p>___ American Indian/Alaska Native ___ Native Hawaiian/Pacific Islander</p> <p>___ Asian ___ White</p> <p>___ Black or African American</p> <p>Citizenship status: ___ US Citizen or US National ___ US Dual Citizen ___ US Permanent Resident or Refugee ___ Other</p> <p>US Forces Status: ___ Currently Serving ___ Previously Serving ___ Current Dependent ___ N/A</p> <p>ALL MALES 18 OR OLDER MUST be registered with Selective Service. Have you registered for Selective Service?</p> <p>___ Not required to registered ___ Registered ___ Required to register, but not registered</p>
Prior Education/ Training	<p>Education (insert highest level of education completed): _____</p> <p>Name of last high school attended: _____</p> <p>High school graduation date (mm/yyyy): _____ GED Diploma Date _____</p> <p>Are you seeking credit for prior education, training or work experience? ___ Yes ___ No</p>
Program	<p>Please review the campuses website and provide the program name choice for career training (Example: Administration Office Technology)</p> <p>_____</p> <p>When will you be available to enroll in class? ___ Fall ___ Spring ___ Summer</p> <p>Do you plan to apply for financial aid? ___ Yes ___ No</p>

Signature of Applicant: _____ Date of Application: _____

The Tennessee Colleges of Applied Technology (TCATs) do not discriminate on the basis of race, color, religion, creed, ethnic or national origin, sex, sexual orientation, gender identity/expression, disability, age, status as a covered veteran, genetic information and any other category protected by federal or state civil rights law with respect to all employment, programs and activities sponsored by the TCATs.



Application for Enrollment

The information is for Office use only:

ADMISSIONS REQUIREMENTS

- FAFSA I will not be filing financial aid. I will be paying for my education. Students Initials: _____
- Immunizations Education Transcripts

SPECIAL ADMISSIONS REQUIREMENTS

Cosmetology:

- Photo Proof of Age Copy of SS Card RT/LT Handed Manicuring Only

Dental Assisting, Medical Assisting, and Surgical Technology

Compass required scores: Math 30 and Reading 70

- COMPASS or ACT – Scores: _____ Math _____ Reading (Date: _____)
- CPR Documentation (BLS for Healthcare Providers)

Practical Nursing:

Compass required scores: Math 50 and Reading 80

- Notarized Declaration of Citizenship Copy of ID Used to Declare Citizenship
- CPR Documentation (BLS for Healthcare Providers)
- COMPASS or ACT – Scores: _____ Math _____ Reading (Date: _____)

Truck Driving:

- MVR DOT Physical Valid Driver's License
- U.S. Citizenship / Residency

Staff Signature: _____

Date: _____