

AUTO MECHANICS TECHNOLOGY ITC

The Auto Mechanics Technology Program is National Automotive Technician Education Foundation (NATEF) certified. This program develops skills for servicing and repairing all systems of the automobile. Students are taught to use specialized tools and equipment found in automotive shops, and receive instruction in automotive theory, related instruction, and practical shop experience. Auto service technicians understand the sophisticated technology behind each vehicle, and stay current as new technologies emerge. They diagnose, adjust, repair or overhaul all types of vehicles.

Students entering with prior training from high school, military, or industry can challenge portions of the training program by examination and/or performance testing. Students must achieve competencies in course work before moving to the next instructional area. Shop experience is combined with related theory. A specified set of tools is required upon entry. The tool list can be found on the program website.

All students will be subject to a Driver's License Validation check for insurance purposes, and must hold a valid driver's license while enrolled in the program. If a student loses their Driver's License or is not insurable while enrolled in the program, continuation in the program will be reviewed by the instructors on a case by case basis until the end of the semester.

Enrollment Requirements:

- Enrollment priority is on a first-come first-serve basis as determined by the student's faculty advising date.
- The prospective students must have a current valid Driver's License and have had no DUI's in the past 12 months. If you have any questions regarding your driver's license, please contact the Technical & Industrial Division Office prior to submitting your application to LC State.
- Aleks score in Math of 14 or higher, Writing Placement Exam of 2 or higher, or qualify for MTHPT-103 and ENGL-101.
- Physical well-being, good manual dexterity, and the strength to lift heavy objects are necessary.

Upon completion of the program, students must pass all parts of the ASE certification tests in order to graduate.

Upon completion of the Auto Mechanics Technology program, the student will be able to demonstrate ability to:

- Know how to operate shop equipment, lift heavy objects, handle fire equipment, and handle hazardous materials related to auto repair shops in a safe and professional manner
- Understand the function of the chassis, suspension and brake system. Determine how to make repairs using the appropriate equipment; complete proper alignment and balancing after repair; ability to operate hydraulic systems
- Obtain an understanding of engine theory and construction; engine operation; diagnosis of problems; removal and disassembly of engines; repairs and assembly; installation and testing
- Understand the use of math in the repair and diagnosis of vehicles
- Provide written estimates of work to be done
- Obtain an in-depth understanding and working knowledge of computer controlled fuel and engine management, and emissions systems in order to service and maintain them
- Diagnose and repair automatic transmission; replace parts as needed and make necessary adjustments using proper mathematical calculations
- Know the basic operation and repair of all types of clutches, manual transmissions, transaxles, transfer case, front and rear axle differentials
- Gain a through understanding of electricity and its components and comprehend its use as applied to automobiles
- Perform repairs and maintenance on electronic and electrical systems
- Knowledge of computer controlled fuel and engine management
- Understand emissions systems and laws governing operation and service practices; service and maintain the same systems
- Able to use diagnostic equipment and strategies for using the equipment to isolate problems
- Knowledge regarding the function of the entire chassis, suspension, and brake system and the ability to make repairs

Intermediate Technical Certificate

Program Requirements

Code	Title	Credits
Technical Core - ITC A		
Take the following credits:		
AUTMC-100	(G1) SAFETY AND GENERAL AUTOMOTIVE MAINTENANCE AND REPAIR	6.00
AUTMC-102	(A6) ELECTRICAL/ELECTRONIC SYSTEMS	6.00
AUTMC-200	(A5) BRAKES (A7) HEATING, VENTILATION, AND AIR CONDITIONING	6.00
AUTMC-212	(A8) ENGINE PERFORMANCE	6.00
AUTMC-227	(P2) PARTS SPECIALIST	3.00
or MTHPT-103	APPLIED ALGEBRA	

Elective	Elective Credits	3.00
Total Credits		30.00
Code	Title	Credits
Technical Core - ITC B		
Choose 24 credits from below:		24.00
AUTMC-103	(A3) MANUAL DRIVE TRAIN AND AXLES	
AUTMC-105	(A1) ENGINE REPAIR	
AUTMC-115	(A4) STEERING AND SUSPENSION	
AUTMC-209	(A2) AUTOMATIC TRANSMISSION AND TRANSAXLE	
AUTMC-225	(L1) ADVANCED ENGINE PERFORMANCE	
AUTMC-227	(P2) PARTS SPECIALIST	
or MTHPT-137	MATH FOR TECHNOLOGY	
AUTMC-250	(A9) LIGHT VEHICLE DIESEL ENGINES	
AUTMC-260	(L3) LIGHT DUTY HYBRID / ELECTRIC VEHICLES	
AUTMC-270	(C1) AUTOMOBILE SERVICE CONSULTANT	
Elective	Elective Credits 3.00	
Total Credits		24.00