CERTIFICATE

Certificate in Automotive Service Technology - General Service Technician Track

Total Credit Hours: 31

About Certificate in Automotive Service Technology - General Service Technician Track

The Certificate program in Automotive Service Technology (AST) is a competency-based program designed to offer entry level training sufficient for employee success in automotive technician positions. Skills acquired in this program also apply directly to occupational areas including diesel mechanics, small engine repair, generator repair, marine engine service, fleet service, repair service order writing, and entry level automotive service management.

Graduates of the AST Certificate program demonstrate the foundational skill and knowledge to pursue further study in power plant mechanics, marine/diesel repair and automotive engineering in the automotive manufacturing industry.

Two 'tracks' exist within the program. Students completing the General Service Technician Track offer future employers preparatory background in four primary areas of automotive service technology (brakes, electrical/electronic systems, engine performance, and suspension/steering) and are prepared to pass the National Automotive Technicians Education Foundation (NATEF) Certification Examination in those areas. Upon passing of the exam, and after one year of automotive industry work experience, they are eligible to receive NATEF designation as a General Service Technician.

The second option within the Certificate program is the Master Service Technician track, where graduates receive preparatory background in the four above-mentioned automotive areas as well as four additional areas (automatic transmission/transaxle, engine repair, heating/air conditioning, and manual drive trains/axles). These graduates are prepared to pass the National Automotive Technicians Education Foundation (NATEF) Certification Examination in all eight examination areas offered, and upon passing of the exam, they may pursue recognition from ASE as a Master Service Technician.

REQUIREMENTS FOR CERTIFICATE

General Service Technician Track Major Requirements		
Course	**Course Name**	**Credits**
AST100	Introduction to Automotive Service	3
AST140	Suspension and Steering	3
AST150	Brake Systems I	3

AST160	Electrical/Electronic Systems	3
AST180A	Engine Performance I	3
AST180B	Engine Performance II	3
AST240	Theory/Practicum: Suspension & Steering	2
AST250	Theory/Practicum: Brakes	2
AST260	Theory/Practicum: Engine Performance	4
AST280	Theory/Practicum: Electrical/Electronic	5
Certificate Total		

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GENERAL REQUIREMENTS FOR CERTIFICATE

General Requirements for Certificates

Effective fall Semester 2003, several academic policy changes were implemented to ensure that students are adequately prepared to meet business and industry standards. All Undeclared or newly Declared Students enrolled in regularly scheduled postsecondary courses must be enrolled in or must have completed developmental coursework for Math and English or have successfully placed into post-secondary Math and English (or equivalent).

Students must fulfill the English general education requirement by the time they have enrolled in 12 credits of classes. This means that students may take only nine (9) credits before they must begin meeting the general education requirements. All declared students in Certificate programs will be required to successfully complete minimum general education course requirements. For more information, refer to the Admissions Information, General Education Policy section of this catalog.

A. General Education Requirements
Students must demonstrate proficiency in reading, writing, understanding and speaking English as indicated by one of the following:

- Test out of the English Placement Test (or equivalent), or
- Satisfactory completion of EN097 courses and
- Test out of the Math Placement Test (or equivalent), or
- Satisfactory completion of MA098 course

*Students in the Certificate of Construction Technology program can successfully complete their math requirements with MA094 Mathematics for the Trades in lieu of MA098 Intermediate Algebra.

B. Major Requirements. Total Major Requirements vary by program. Minimum Total Credits Required for a Certificate is 30 credits.

* No course may be counted for both Major and General Education requirements.
** Placement testing is not mandatory for admission to the College. Completion of placement testing or equivalent, however, is required for enrollment into English and mathematics courses. Therefore, students who plan to enroll full-time in a program should take the placement test to be eligible for a full load of courses.

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Student Learning Outcomes

Upon successful completion of the Certificate in Automotive Service Technology program, students will be able to:

1. Identify the purposes and proper functioning of the core components of an automotive engine.
2. Perform a cylinder compression cranking test.
3. Demonstrate the proper use of a digital multimeter (DMM) during diagnosis of electrical circuit problems.
4. Diagnose, adjust, repair, or replace automotive components.

Check out some of these amazing Certificate in Automotive Service Technology - General Service Technician Track courses...

AST150 Brake Systems I

This course introduces the student to core principles in brake systems, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in diagnosing and making repairs to automobile brake systems.
+ More Info [1]

AST140 Suspension and Steering

This course covers wheel alignment and correction, wheels and tires, active and passive suspension systems, steering and steering assist, progressive steering systems, and replacement of worn or damaged parts.
+ More Info [2]

AST180A Engine Performance I

This course introduces the student to core principles in systems related to the performance of an engine providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in diagnosing and making repairs to engine performance control systems.
+ More Info [3]

You may also be interested in these related Programs...

[4]

Certificate in Supervision & Management **[4]**

The Certificate in Supervision and Management program prepares students for entry-level and assistant management positions in supervision and management.
+ More Info [4]

[5]

Hybrid Electric Vehicle Technician **[5]**

The Light Duty Hybrid Electric Vehicle Technology Industry Certification program prepares students to become National Institute for Automotive Service Excellence (ASE) Certified Light Duty Hybrid Electric Vehicle Specialist by providing technical skills and competencies, based on the standards set by ASE, in hybrid engines,

motor/generators, energy management systems, transaxles, power electronics, and hybrid electric vehicle support systems.
+ More Info [5]

[6]

Certificate in Medium/Heavy Truck Diesel Technology **[6]**

The Medium/Heavy Truck Diesel Technology program prepares graduates to work in the automotive field with special emphasis in diesel service. Graduates will be able to troubleshoot, maintain, and repair various types of diesel engines, trucks, boats, and other heavy equipment. Students will obtain knowledge and skills in Medium/Heavy Truck in a variety of areas to include: diesel engines; drive trains; brake systems; suspension and steering; heating, ventilation, air conditioning; hydraulics; electrical/electronic systems; and preventive maintenance.
+ More Info [6]