

Automotive Technology: Auto Engine Rebuilding

Award Type: Associate in Science

Designed to prepare the student to enter the automotive service profession as a specialist in engine rebuilding and machining.

The graduate of the Associate in Science in Automotive Technology: Auto Engine Rebuilding will:

- Demonstrate an understanding of the science of the automotive engine.
- Demonstrate the ability to work with a high degree of precision and accuracy using all of the machine tools involved in rebuilding of the automotive engine.
- Demonstrate the ability to effectively communicate verbally and in writing with customers, co-workers and the employer.
- Demonstrate the ability to diagnose problems with the various systems of the automobile using systematic procedures and logical methods.
- Demonstrate the ability to identify what technical specifications are needed, where to find them and how to use them in the course of performing their duties.
- Demonstrate an understanding of the legal and ethical issues encountered in the automotive repair workplace and make responsible decisions.
- Demonstrate the required mechanical skills and the ability to use the trade tools at a level of proficiency that is expected in the profession.
- Demonstrate the use of the proper procedure for dealing with hazards encountered in the automotive repair work place.
- Demonstrate the ability to perform the all of the NATEF tasks in each of the core courses in the option or certificate.

Program Requirements

A major of 33 units is required for the degree. Required core courses (21 units):

Course Number	Course Title	Units
AT 133	Automotive Engine Rebuilding	5.0
AT 334	Automotive Machining 1	4.0
AT 336	Automotive Machining 2	4.0
MT 109	Survey of Machining and Manufacturing	4.0

Plus a minimum of 12 units selected from the following:

Course Number	Course Title	Units
AT 117	Print Reading and Interpretation	3.0
AT 300	Shop Math and Measurement	3.0
AT 306	Auto Air Conditioning Systems	4.0
AT 323	Power Trains	5.0
AT 324	Automatic Transmissions	5.0
AT 341	Fuel Injection/Turbocharging	5.0
AT 344	Emission Control/BAR CAC	4.0
AT 370	SkillsUSA	3.0
AT 389	Independent Projects in Automotive Technology	1.0 - 3.0 units
AT 399A	Special Topics in Automotive Technology	2.0