AUTOMOTIVE AND RELATED TECHNOLOGY

Pathway: Advanced Transportation & Manufacturing Office: B1 - Room 225 Email: <u>ATMpathway@lattc.edu</u> Phone: (213) 763-7081

Award Title	Academic Plan	Award Type	GE Units	Required Course Units	Major Elective Units	Major Units
Automotive and Related Technology	T002906C	A.S.	21*	36	-	36
Automotive and Related Technology	T021845D	С		36	-	36
Auto & Related Technology: Transmission Repair	T010751D	С		18	-	18
Auto & Related Technology: Tune-up	T010752D	С		18	-	18

At least 60 degree applicable units are required to earn an Associate degree. *GE Units requirements may be fulfilled by completing any General Education Pattern; please consult with a counselor for more details.

These programs are Financial Aid Eligible.

PROGRAM OVERVIEW

Los Angeles' long-time infatuation with the motorcar has made it a leading center in automotive design. Employment opportunities continue to thrive, and the demand for trained automotive technicians in the field continues to increase. The Automotive and Related Technology program trains students to work as professionals in this field, offering instruction in maintenance, diagnosis and overhaul procedures of electrical and fuel injection systems.

By fulfilling the program requirements, students will have gained the skills necessary to maintain, repair, and diagnose electrical, fuel injection systems, and overhaul procedures, as well as basic shop practices needed to meet industry standards.

AUTOMOTIVE AND RELATED TECHNOLOGY

Associate in Science Degree Major Units: 36

Requirements for the Associate in Science degree in <u>Automotive and Related</u> <u>Technology</u> may be met by completing <u>36 units</u> of Required Courses with a "C" or better along with <u>General Education units</u>. Information on the General Education unit requirements may be found in the catalog under Graduation Requirements.

Students who complete this degree will be able to perform jobs as a diagnostics, to troubleshoot and repair problems occurring in automotive anti-lock braking systems (ABS), electrical/electronic systems, engine performance, drivability, suspension and steering, automatic and manual transmissions, transaxles, engine repair, heating and air conditioning.



PROGRAM LEARNING OUTCOMES (PLOs)

Upon completion of the **Degree/Certificate** program, students are able to:

- Diagnose and repair various types of vehicles using tools and equipment in accordance with industry standards and NATEF safety.
- Students will demonstrate problem solving skills and technical skills in the automotive industry.
- Write vehicle repair estimates in accordance with NATEF standards.

Students should take the 6 basic courses during Semester I and Semester II:

SEMESTER I & II	UNI	гs	
AUTORTK 100	Heating and Air Conditioning Systems Theory,	3	
	Inspection, & RPR (Repair)		
AUTORTK 113	Drive Train Components Principles & Practices	3	
AUTORTK 114	Steering, Suspension, Brakes, Principles & Practices	3	
AUTORTK 121	Basic Engine Theory, Inspection & Repair	3	
AUTORTK 122	Electrical/Electronic Systems Theory, Inspection & Repair	r 3	
AUTORTK 123	Fuel & Emissions Systems Theory, Inspection & Repair	3	
SEMESTER III	UNI	rs	
AUTORTK 130	Advanced Automotive Diagnosis and Repair I	3	
AUTORTK 131	Automotive Theory and Repair II	3	
AUTORTK 135	Computer Control and Fuel injection	3	
SEMESTER IV	UNI	гs	
AUTORTK 140	Advanced Automotive Diagnosis and Repair IV	3	
AUTORTK 141	Advanced Automotive Diagnosis and Repair V	3	
AUTORTK 142	Advanced Automotive Diagnosis and Repair VI	3	
NOTE: Students are required to provide basic hand tools. Transportation			

NOTE: Students are required to provide basic hand tools, Transportati Technology uniform and personal safety equipment.

AUTOMOTIVE AND RELATED TECHNOLOGY Certificate of Achievement Major Units: 36

A Certificate of Achievement in <u>Automotive and Related Technology</u> may be earned by completing <u>36 units</u> of Required Courses listed under the Associate degree in Automotive and Related Technology with a "C" or better in each course.



AUTO & RELATED TECHNOLOGY: TRANSMISSION REPAIR Certificate of Achievement Major Units: 18

A Certificate of Achievement in <u>Auto & Related Technology: Transmission Repair</u> may be earned by completing <u>18 units</u> of Required Courses with a "C" or better in each course.

PROGRAM LEARNING OUTCOMES (PLOs)

Upon completion of the Certificate program, students are able to:

- Diagnose and repair various types of vehicles using tools and equipment in accordance with industry standards and NATEF safety.
- Students will demonstrate problem solving skills and technical skills in the automotive industry.
- Demonstrate transmission vehicle diagnosis and repair skills accordance with NATEF and industry standards.

REQUIRED COUR	SES UNI	ГS
AUTORTK 100	Heating and Air Conditioning Systems Theory,	3
	Inspection, & RPR (Repair)	
AUTORTK 113	Drive Train Components Principles & Practices	3
AUTORTK 114	Steering, Suspension, Brakes, Principles & Practices	3
AUTORTK 121	Basic Engine Theory, Inspection & Repair	3
AUTORTK 122	Electrical/Electronic Systems Theory, Inspection & Repair	3
AUTORTK 123	Fuel & Emissions Systems Theory, Inspection & Repair	3

AUTO & RELATED TECHNOLOGY: TUNE-UP Certificate of Achievement

Major Units: 18

A Certificate of Achievement in <u>Auto & Related Technology: Tune-Up</u> may be earned by completing <u>18 units</u> of Required Courses with a "C" or better in each course.

PROGRAM LEARNING OUTCOMES (PLOs)

Upon completion of the Certificate program, students are able to:

- Diagnose and repair various types of vehicles using tools and equipment in accordance with industry standards and NATEF safety.
- Students will demonstrate problem solving skills and technical skills in the automotive industry.
- Demonstrate tune-up vehicle repair skills accordance with NATEF and industry standards.

REQUIRED COURSES

	UNIT	S
AUTORTK 100	Heating and Air Conditioning Systems Theory,	3
	Inspection, & RPR (Repair)	
AUTORTK 121	Basic Engine Theory Inspection and Repair	3
AUTORTK 122	Electrical/Electronic Systems Theory, Inspection & Repair	3
AUTORTK 123	Fuel & Emissions Systems Theory, Inspection & Repair	3
AUTORTK 131	Automotive Theory and Repair II	3
AUTORTK 135	Computer Control and Fuel Injection	3

NOTE: Students are required to provide basic hand tools, Transportation Technology uniform and personal safety equipment.

USEFUL LATTC LINKS:

College Catalog, Class Schedule & more: <u>http://www.lattc.edu/</u> academics

Financial Aid Office: <u>http://www.lattc.edu/services/financial-aid</u> Counseling Services & Support: <u>http://www.lattc.edu/services/support</u> Advanced Transportation & Manufacturing Pathway: <u>http://www.lattc.</u> <u>edu/ATM</u> To register: <u>http://www.lattc.edu/student-guides/new-student-guide</u>

For additional information consult a LATTC college counselor.

