

# **AUTOMOTIVE TECHNOLOGY**

Curriculum Guide for Academic Year 2020-2021

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Students planning to **transfer** to a four-year college or university should refer to the ASSIST web site at <u>www.assist.org</u> and **consult a counselor** before beginning a program of study. Please call (562) 938-4561 (LAC) or (562) 938-3920 (PCC) to schedule a counseling appointment. Students may also wish to visit the Transfer Center on either campus.

Program of study leading to: Associate of Science (A.S.)					
Required Major Course		Units	In Progress	Completed Grade	
AUTO 200	Introduction to Automotive Technology	3			
AUTO 211	Automotive Engine Repair	3			
AUTO 212 AUTO 213	Automotive Automatic Transmission Automotive Manual Transmission	3 3			
AUTO 214	Automotive Wheel Alignment	3			
AUTO 215	Automotive Brake Systems	3			
AUTO 216	Automotive Electric Systems	3			
AUTO 217	Automotive Air Conditioning	3			
AUTO 218	Automotive Fuel Systems	3			
AUTO 219	Automotive Light Diesel Engines	3			
	TOTAL UN	IITS 30			
<ul> <li>For graduation with an Associate in Science (A.S.) Degree with a major in Automotive Technology:         <ol> <li>Minimum Unit Requirements: §Any course that appears on a curriculum guide and the General Education Pattern (Plan A) may fulfill both major and general education requirements (Approved by College Curriculum Committee Spring 2012). Any course that appears on a curriculum guide and the General Education Pattern (Plan A) may fulfill both major and general education requirements (Approved by College Curriculum Committee Spring 2012). Any course that appears on a curriculum guide and the General Education Pattern (Plan A) may fulfill both major and general education requirements (Approved by College Curriculum Committee Spring 2012). For this degree, complete a minimum of 60 units in courses numbered 1-599. Please note that additional elective units may be required to meet this minimum based upon courses selected to fulfill General Education for the Associate Degree.</li> </ol></li></ul>					
Automotive Technology Major 30 units General Education/A.S. § 19.0 units					
<ol> <li>Scholarship: Maintain an overall grade point average (GPA) of 2.0 ("C" average) based on all accredited college work applied to the degree, no matter where completed. For this field of concentration, complete each course above with a grade of "C" or better, or "P" if course is graded on a P/NP basis.</li> <li>Residence for the Degree: Complete at least 12 semester units of the required 60 semester units in residence at Long Beach City College in order for the college to grant an Associate of Arts and/or an Associate of Science Degree.</li> </ol>					
<ol> <li>Residence for the Field of Concentration: Complete fifty percent (50%) or more of the unit requirements for this field of concentration in residence; this means at least 15 units of the required 30 must be completed at Long Beach City College. Credit earned by exam, where applicable, may be included.</li> </ol>					

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5. General Education and Proficiency Requirements: Complete the required A.A./A.S. General Education and

- 6. Proficiency requirements\*, otherwise known as "Plan A". For Plan A requirements, refer to the general catalog or view it online at <a href="http://osca.lbcc.edu">http://osca.lbcc.edu</a>. Students must complete the courses outlined on the curriculum guide for the year in which they take their first nursing course. Students who withdraw from the program will be obligated by the guide of the year of their re-entry into the program.
- Complete and submit the degree application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at <u>http://admissions.lbcc.edu/</u>. Refer to the Schedule of Classes (<u>http://schedule.lbcc.edu</u>) and click the "Important Dates" link to view the actual deadline for each semester.

\*The requirements for general education/proficiency and the field of concentration (major) need to be from the same catalog year. This catalog year may be any year between the year of initial enrollment to the present, provided continuous enrollment is maintained throughout. See the catalog for definition of "continuous enrollment".

## Program of study leading to: Certificate of Achievement

<u>REQUIRED COURSES</u>—Complete the 30 units of required courses as listed in the Associate Degree requirements box on the first page.

REC	QUIRED COURSES			In Progress	Completed
		TOTAL UNITS	30		
For gra	duation with a Automotive Technology Certificate of A				
1.	Complete each of the <b>REQUIRED COURSES</b> listed all graded on a P/NP basis.	bove with a <b>minimum gr</b>	ade of "C	", or better, or "	P/NP" if course i
2.	Complete fifty percent (50%) or more of the unit required <b>15 units</b> of the required 30 must be <b>complete</b> applicable may be included				

Complete and submit the certificate application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at <a href="http://admissions.lbcc.edu/">http://admissions.lbcc.edu/</a>. Refer to the Schedule of Classes (<a href="http://admissions.lbcc.edu/">http://admissions.lbcc.edu/</a>. Refer to the Schedule of Classes (<a href="http://schedule.lbcc.edu">http://schedule.lbcc.edu</a>) and click the "Important Dates" link to view the actual deadline for each semester.

### Program of study leading to: Certificate of Achievement, Automotive Engine and Transmission Service

Required Coursework:		Units	In Progress	Completed Grade
ADMT 50	Advanced Manufacturing, Introduction	3		
AUTO 200	Introduction to Automotive Technology	3		
AUTO 201	Automotive Lubrication Service	1		
AUTO 211	Automotive Engine Repair	3		
AUTO 212	Automotive Automatic Transmission	3		
AUTO 213	Automotive Manual Transmission	3		
	TOTAL UNITS	16		

For graduation with an Certificate of Achievement in Engine and Transmission Service:

Complete each of the REQUIRED COURSES with a minimum grade of "C" and a cumulative grade point average of 2.0.
 Complete fifty percent (50%) or more of the unit requirements for this field of concentration in residence; this means at least 8 units of the required 16 must be completed at Long Beach City College. Credit earned by exam, where applicable,

may be included. Complete and submit the certificate application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at <u>http://admissions.lbcc.edu/</u>. Refer to the Schedule of Classes (http://schedule.lbcc.edu) and click the "Important Dates" link to view the actual deadline for each semester.

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# Program of study leading to: Certificate of Achievement Automotive Engine Performance Service

Certificate of Achievement, Automotive Engine renormance dervice				
			In	Completed
Required Coursework:		Units	Progress	Grade
AUTO 200	Introduction to Automotive Technology	3		
AUTO 216	Automotive Electrical Systems	3		
AUTO 218	Automotive Fuel Systems	3		
AUTO 219	Automotive Light Diesel Technology	3		
	TOTAL UNIT	S 12	•	

For graduation with an Certificate of Achievement in Automotive Engine Performance Service:

- Complete each of the **REQUIRED COURSES** with a **minimum grade of "C"** and a cumulative grade point average of 2.0.
- Complete fifty percent (50%) or more of the unit requirements for this field of concentration in residence; this means 2. at least 6 units of the required 12 must be completed at Long Beach City College. Credit earned by exam, where applicable, may be included.

Complete and submit the certificate application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at http://admissions.lbcc.edu/. Refer to the Schedule of Classes (http://schedule.lbcc.edu) and click the "Important Dates" link to view the actual deadline for each semester.

Program of study leading to: Certificate of Achievement, Automotive Maintenance Service					
Required Coursework:		Units	In Progress	Completed Grade	
AUTO 200	Introduction to Automotive Technology	3			
AUTO 214	Automotive Wheel Alignment	3			
AUTO 215	Automotive Brake System	3			
AUTO 216	Automotive Electric Systems	3			
AUTO 217	Automotive Air Conditioning	3			
AUTO 218	Automotive Fuel System	3			
	TOTAL UNITS	18	1		

For graduation with an Certificate of Achievement in Automotive Maintenance Service:

Complete each of the **REQUIRED COURSES** with a minimum grade of "C" and a cumulative grade point average 1. of 2.0.

2. Complete fifty percent (50%) or more of the unit requirements for this field of concentration in residence; this means at least 9 units of the required 18 must be completed at Long Beach City College. Credit earned by exam, where applicable, may be included.

Complete and submit the certificate application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at http://admissions.lbcc.edu// Refer to the Schedule of Classes (http://schedule.lbcc.edu) and click the "Important Dates" link the actual semester deadline

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## Program of study leading to: Certificates of Accomplishment

Certificate: Automotive Qu	iick Service 4923				
REQUIRED COURSES			UNITS	In Progress	Completed Grade
AUTO 200	Introduction to Automotive Technology		3		
AUTO 201	Automotive Lubrication Service		1		
AUTO 202	Automotive Tire Service		1		
AUTO 203	Automotive Brake Service		1		
		TOTAL UNITS	6		

#### For graduation with a **Certificate of Accomplishment**:

1. Complete the above required courses with a minimum grade of "C", or "P/NP" if course is graded on a P/NP basis. 2. Fifty percent (50%) or more of the required units must be completed in residence at LBCC.

Complete and submit the certificate application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at http://admissions.lbcc.edu.

# Program of study leading to: **Certificates of Completion**

#### Certificate: Automotive Quick Service 4924

REQUIRED COUR	SES		HOURS	In Progress	Completed Grade
AUTO 600	Introduction to Automotive Technology		90		
AUTO 601	Automotive Lubrication Service		36		
AUTO 602	Automotive Tire Service		36		
AUTO 603	Automotive Brake Service		36		
		TOTAL HOURS	198		

Complete and submit the certificate application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at http://admissions.lbcc.edu/ . Refer to the Schedule of Classes (http://schedule.lbcc.edu) and click the "Important Dates" link to view the actual deadline for each semester.

## **Career Opportunities**

This Associate Degree or Certificate of Achievement is a two-year program leading to the Associate in Science (A.S.) degree. This degree will help students succeed after transferring to a CSU or UC School Computer Science major program. Students wishing a bachelor's degree (transfer program) should meet with a counselor to discuss transferability of courses.

## **Program Mission and Outcomes**

#### **Program Student Outcome:**

Automotive Technology (A.S. and Certificate of Achievement):

- Evaluate and identify faults in automotive performance components and perform service to factory specifications. Automotive Maintenance Service (Certificate of Achievement):
  - Evaluate and identify faults in automotive performance components and performance components and perform service to factory specifications.

Automotive Engine and Transmission Service and Automotive Engine Performance Service (Certificate of Achievement)

Describe and demonstrate automotive shop practice safety and automotive systems' operation fundamentals in order to apply practical service and diagnostics during automotive servicing and repair.

Automotive Engine Performance Service (Certificate of Achievement):

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- Evaluate and identify faults in automotive engine performance components and perform service to factory specifications.
- Automotive Engine Performance Service (Certificate of Achievement):
  - Evaluate and identify faults in automotive engine performance components and perform service to factory specifications.

Automotive Quick Service (Certificate of Accomplishment):

• Evaluate and prepare vehicles for quick service according to the manufacturer procedures.

Automotive Quick Service (Certificate of Completion)

- Demonstrate mastery of diagnostic tools and equipment used for automotive repair. •
- Identify various automotive components. •
- Demonstrate the technical and organizational employability skills required by the automotive industry.

# Legend

† This course has a prerequisite. Prerequisite courses must be complete with at least a "C" or "P" grade. Refer to the General Catalog (http://www.lbcc.edu/cat/index.html), the Schedule of Classes (http://schedule.lbcc.edu/), or the online Credit Course Outline (http://wdb-asir.lbcc.edu/coursecurriculum/coursedetails/) for specific prerequisite information.