

# Automotive Technology

## **Automotive Technology, Associate of Applied Science**

The Automotive Technology program uses cutting-edge technology and highly specialized training to prepare you for a lucrative career in the automotive industry.

The automobile industry has evolved dramatically during the past two decades from mechanical to highly technical vehicles. TJC will provide state-of-the-art training and intensive hands-on experience you will need to become a successful, highly effective automotive technician. Automotive program courses will enable you to seek employment as an entry-level technician and prepare you for ASE certification.

We are an Automotive Service Excellence (ASE) accredited Master Automobile Service Technology (MAST) program and a participant in the Mopar Career Automotive Program (CAP) LOCAL national program in partnership with the National Coalition of Certification Centers (NC3). Automotive program courses will enable you to seek employment as an entry-level technician.

**Please see an academic advisor, program professor, or the department chair for details if you're interested in a career as an automotive service technician.**

## **Automotive Technology: Engine Performance, Certificate of Proficiency**

In keeping with the highly technical vehicles of today, TJC's Engine Performance certificate program offers lab facilities with state-of-the-art equipment and ASE certified instructors with real-world experience in the operations of various automotive dealerships. Automotive program courses will enable you to seek employment as an entry-level technician and prepare you for ASE certification.

Please see an academic advisor, program professor, or the department chair for details on this program.

## **Automotive Technology: Chassis and Drive Train, Certificate of Proficiency**

TJC's Chassis and Drive Train certificate program provides you with up-to-date specialty training in many high-performance applications of diesel and automotive upgrades. You will receive hands-on repair and diagnosis of modern hi-tech diesel and gasoline powered vehicles with an emphasis on performance. Automotive program courses will enable you to seek employment as an entry-level technician and prepare you for ASE certification.

Please see an academic advisor, program professor, or the department chair for details on this program.

**AUTOMOTIVE TECHNOLOGY**

# Automotive Technology AAS

Associate of Applied Science

TSI Complete

**MAJOR COURSES 45 CREDITS**

AUMT 1305	Introduction to Automotive Technology
AUMT 1407	Automotive Electrical Systems
AUMT 1419	Automotive Engine Repair
AUMT 2321	Automotive Electrical Diagnosis and Repair
AUMT 2417	Automotive Engine Performance Analysis I
AUMT 2434	Automotive Engine Performance Analysis II
AUMT 1345	Automotive Climate Control Systems
AUMT 1310	Automotive Brake Systems
AUMT 1257	Automotive Brake Systems Theory
AUMT 1416	Auto. Suspension and Steering Systems
AUMT 2413	Automotive Drive Train and Axles
AUMT 2425	Automotive Automatic Transmission and Transaxle
AUMT 2357	Automotive Alternative Fuels

**GENERAL EDUCATION REQUIREMENTS 15 CREDITS**

Every Associate of Applied Science degree plan must contain at least 15 semester hours of general education courses. At least one course must be taken from each of the following areas: humanities/fine arts (language, philosophy & culture/creative arts), social/behavioral science (social and behavioral sciences/American history/government/political science), and natural science/mathematics (life and physical sciences/mathematics).

Major Courses: 45

General Education Requirements: 15

**Total Semester Hours: 60**

**Course Sequence:**

**FIRST SEMESTER CREDIT HOURS**

AUMT 1305	Introduction to Automotive Technology ..	3
AUMT 1407	Automotive Electrical Systems.....	4
AUMT 1419	Automotive Engine Repair.....	4
<b>ENGL 1301</b>	<b>Composition I .....</b>	<b>3</b>

**SECOND SEMESTER**

AUMT 2321	Automotive Electrical Diagnosis .....	3
	and Repair	
AUMT 2417	Automotive Engine Performance.....	4
	Analysis I	
AUMT 2434	Automotive Engine Performance.....	4
	Analysis II	
<b>MATH 1314</b>	<b>College Algebra OR .....</b>	<b>3</b>
	<b>MATH 1332</b>	

**SUMMER**

AUMT 1345	Automotive Climate Control Systems .....	3
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**THIRD SEMESTER**

AUMT 1310	Automotive Brake Systems .....	3
AUMT 1257	Automotive Brake Systems Theory.....	2
AUMT 1416	Automotive Suspension and Steering.....	4
	Systems	
<b>PHIL 2306</b>	<b>Introduction to Ethics.....</b>	<b>3</b>

**FOURTH SEMESTER**

AUMT 2413	Automotive Drive Train and Axles .....	4
AUMT 2425	Automotive Automatic Transmission.....	4
	and Transaxle	
<b>SPCH 1321</b>	<b>Bus. &amp; Professional Communication OR...3</b>	
	<b>SPCH 1315</b>	
<b>SOCI 1301</b>	<b>Introduction to Sociology OR .....</b>	<b>3</b>
	<b>PSYC 2301</b>	

**SUMMER**

AUMT 2357	Automotive Alternative Fuels.....	3
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**Total Semester Hours: 60**

*Courses titled in bold type represent general education requirements.*

*NOTE: Applicants must meet the admission requirements for TJC and achieve minimum scores on the TSI assessments in reading, writing, and math.*

*NOTE: Department-specific courses must be taken in sequence and may have a prerequisite course. Exceptions must be approved in writing by the department chair.*

*All new students are required to attend automotive orientation.*

*Students are required to furnish their own tools. (See an academic advisor, program professor, or the department chair for a required tool list.)*

**AUTOMOTIVE TECHNOLOGY**

# Engine Performance CERT

Certificate of Proficiency

TSI Exempt

<b>FIRST SEMESTER</b>	<b>CREDIT HOURS</b>
AUMT 1305 Introduction to Automotive Technology ..	3
AUMT 1407 Automotive Electrical Systems.....	4
AUMT 1419 Automotive Engine Repair.....	4
 <b>SECOND SEMESTER</b>	
AUMT 2321 Automotive Electrical Diagnosis .....	3
and Repair	
AUMT 2417 Automotive Engine Performance.....	4
Analysis I	
AUMT 2434 Automotive Engine Performance.....	4
Analysis II	
 <b>SUMMER</b>	
AUMT 1345 Automotive Climate Control Systems .....	3

**Total Semester Hours: 25**

*For Automotive Technology certificate programs:*

*NOTE: Applicants must meet the admission requirements for TJC.*

*NOTE: Department-specific courses must be taken in sequence and may have a prerequisite course. Exceptions must be approved in writing by the department chair.*

*All new students are required to attend automotive orientation.*

**Students are required to furnish their own tools. (See an academic advisor, program professor, or the department chair for a required tool list.)**

**AUTOMOTIVE TECHNOLOGY**

# Chassis and Drive Train CERT

Certificate of Proficiency

TSI Exempt

<b>PREREQUISITE</b>	<b>CREDIT HOURS</b>
AUMT 1305 Introduction to Automotive Technology ..	3
AUMT 1407 Automotive Electrical Systems.....	4
 <b>FIRST SEMESTER</b>	
AUMT 1310 Automotive Brake Systems .....	3
AUMT 1257 Automotive Brake Systems Theory.....	2
AUMT 1416 Automotive Suspension and Steering.....	4
Systems	
 <b>SECOND SEMESTER</b>	
AUMT 2413 Automotive Drive Train and Axles .....	4
AUMT 2425 Automotive Automatic Transmission.....	4
and Transaxle	

**Total Semester Hours: 24**

*For Automotive Technology certificate programs:*

*NOTE: Applicants must meet the admission requirements for TJC.*

*NOTE: Department-specific courses must be taken in sequence and may have a prerequisite course. Exceptions must be approved in writing by the department chair.*

*All new students are required to attend automotive orientation.*

**Students are required to furnish their own tools. (See an academic advisor, program professor, or the department chair for a required tool list.)**