

# DESIGN, PRODUCTION & REPAIR – VEHICLE MAINTENANCE AND REPAIR PATHWAY –

This pathway focuses on using mechanical, electrical, and technological skills to inspect, maintain, and repair vehicles and transportation systems. It includes topics like automotive technology, engine repair, diagnostics, electronics, brake systems, steering and suspension, and the ethical and safety standards of the automotive industry. Students learn how to use advanced tools and computer systems to troubleshoot problems, perform repairs, and ensure vehicles operate safely and efficiently.

**CAREERS INCLUDE** Automotive Service Technician, Diesel Mechanic, Auto Body Repair Technician, Service Manager, Automotive Engineer, Transmission Specialist, Brake and Suspension Technician, Collision Repair Specialist, Electric Vehicle Technician, Automotive Painter, Parts Manager, Performance Tuning Specialist, Fleet Maintenance Supervisor, Motorcycle Mechanic, Heavy Equipment Mechanic, Shop Foreman, Automotive Inspector, Service Writer / Advisor, Tire Technician

## SAMPLE PLAN OF STUDY\*

\*This course has a co/prerequisite. †This course counts as a STEM Elective. ^This course is at EDTech (Eudora)

<p><b>FRESHMAN YEAR</b></p> <p>(1.0) English                  (1.0) Math (based on math course progression)                  (1.0) Science                  (1.0) Social Studies                  (1.0) Physical Education                  (1.0) Performing/Fine Arts Credit                  (0.5) <b>Introduction to Skilled Trades</b>                  (0.5) Business Management (recommended)                  (1.0) Electives</p>	<p><b>SOPHOMORE YEAR</b></p> <p>(1.0) English                  (1.0) Math (based on math course progression)                  (1.0) Science                  (1.0) Social Studies                  (0.5) Health                  (0.5) Communications Credit                  (0.5) <b>Entrepreneurship †</b>                  (1.5) Electives</p>
<p><b>JUNIOR YEAR</b></p> <p>(1.0) English 11/AP Lang &amp; Comp                  (1.0) Math (based on math course progression)                  (1.0) Science                  (1.0) Social Studies                  (1.0) <b>Auto Collision I †^</b>                  (1.0) <b>Auto Refinishing I †^</b>                  (2.0) Electives</p>	<p><b>SENIOR YEAR</b></p> <p>(1.0) English 12 or AP Lit &amp; Comp or AP Lang &amp; Comp                  (1.0) Math (based on math course progression)                  (1.0) Science                  (0.5) Political Participation or Con. Law/AP Government                  (0.5) Financial Literacy                  (1.0) <b>Auto Collision II †**^</b>                  (1.0) <b>Auto Refinishing II †**^</b>                  (2.0) Electives</p>

**BOLDED COURSES LEAD TO PATHWAY COMPLETION**

**PATHWAY COURSES:** Pathway completion requires students to complete three (3) credits in the pathway, with at least two (2) of those credits being a combination of technical and application-level courses. Additionally, a student must earn one of the following: an industry-recognized certification (IRC), nine (9) + college hours aligned to the pathway, or complete a high-quality work-based learning experience (Internship).

INTRODUCTORY LEVEL	TECHNICAL LEVEL	APPLICATION LEVEL
Introduction to Skilled Trades	Entrepreneurship † Auto Collision I †^ Auto Refinishing I †^	Auto Collision II †**^ Auto Refinishing II †**^

<p><b>Other Recommended Courses:</b></p> <p>Production Blueprint Reading * † ‡                  Introduction to Welding * † ‡                  Production Methods I * † ‡ †</p>
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<p><b>Graduation Requirements:</b></p> <p>English – 4 credits                  Math - 4 credits                  Science – 3 credits                  Social Studies – 3.5 credits                  STEM Elective – 1 credit                  Fine Arts – 1 credit                  Communication – 0.5 credit                  Financial Literacy – 0.5 credit                  Physical Education/Health – 1.5 credits                  Postsecondary Assets – 2 required</p>
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\*This sample plan of study offers an example of what a student's individual plan of study in this pathway might look like. Please note that some courses may not be offered on an annual basis and participation in classes may be subject to space availability.