LAUSD UNIFIED Division of Adult and Career Education

Career Technical Education (CTE) Course Outline

Course Title:	Auto Tech: Engine Repair
Course Number:	79-90-74
Date:	July 2024
Industry Sector:	Transportation
Pathway:	Systems Diagnostics and Service
CBEDS Title:	Automotive Service
CBEDS Code:	5668
Credits:	10

Hours:

Total
150

Course Description:

This course is a competency-based course that provides students with technical instruction and practical experience in an automobile area incorporating sustainable and green vehicle technologies. Instruction includes an introduction, safety – general, resource management, trade mathematics, tools and equipment, service manuals and computer-based information systems, engine repair principles, fuel, air induction, diagnosis, and repair, electrical systems, general engine diagnosis R & R, cylinder head and valve train diagnosis and repair, engine block assembly diagnosis and repair, lubrication and cooling systems diagnosis and repair, employability skills and resume preparation, and entrepreneurial skills. The competencies in this course are aligned with the California High School Academic Content Standards and the California Career Technical Education Model Curriculum Standards.

Prerequisites:	Enrollment requires successful completion of Technology/1: Automotive Systems (79-90-83) and Technology/2: Automotive Systems (79-90-85) courses.
NOTE:	For Perkins purposes this course has been designated as an **introductory/concentrator** course. This course **cannot** be repeated once a student receives a Certificate of Completion.
A-G Approval	N/A
Methods of Instruction:	Lecture and discussion, multimedia presentations, visual aids, projects individualized instruction, shop work
Student Evaluation:	Summative: End of section assessments
Industry Certification:	N/A
Recommended Texts:	Duffy, James E. Auto Engine Repair, 9th Edition. Goodheart-Willcox Publishing, 2018. Duffy, James E. Modern Automotive Technology, 10th Edition. Goodheart-Willcox Publishing, 2022. Giles, Tim. Automotive Engines: Diagnosis, Repair, Rebuilding, 8th Edition. Cengage Learning, 2019. VanGelder, Kirl. Fundamentals of Automotive Technology, 3rd Edition, DDX/Jones & Barlett Learning, 2023
Link to Resource Folder	https://bit.ly/enginerepairresources

Approved by: Renny L. Neyra, Executive Director

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
A. INTRODUCTION Understand, apply, and evaluate classroom and workplace policies and procedures. (2 hours)	1. Discuss the scope and purpose of the course. 2. Discuss the classroom policies and procedures. 3. Discuss and demonstrate Zoom, Schoology, and basic computer skills. 4. Assess students' basic knowledge in engine performance principles. 5. Discuss, identify, research, and draw conclusions on the different career paths, occupations, employment outlook, and career advancements in the transportation industry sector which have an impact on vehicles. 6. Discuss the opportunities available for promoting gender equity and the representation of non-traditional populations in the automotive industry. 7. Explain and recognize the importance of ethics, teamwork, respecting individual and cultural differences and diversity in the workplace. 8. Describe the role of the Automotive Service of Excellence (ASE) as it applies to the automotive industry. 9. Describe the role of the Automotive Service Education Foundation (ASEF) in auto technician training.	**Career Ready Practice:** 1, 2, 3, 4, 5, 8, 9, 10, 11 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3, 2.5 Career Planning & Management: 3.1, 3.4, 3.5, 3.6, 3.9 Technology: 4.1, 4.5 Problem Solving & Critical Thinking: 5.4 Ethics & Legal Responsibilities: 8.2, 8.3, 8.4, 8.5 Leadership & Teamwork: 9.3, 9.4, 9.6 Demonstration & Application: 11.1, 11.2 **CTE Pathway:** C2.6
B. SAFETY - GENERAL		**Career Ready Practice:**

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
Understand safety procedures and techniques in the auto repair and maintenance sector. (5 hours)	1. Discuss classroom and workplace first aid, emergency procedures, and accidents or injury prevention. 2. Discuss the California Occupational Safety and Health Administration (Cal/OSHA) workplace requirements for auto technicians to maintain a safe and healthy working environment. 3. Discuss the impact of Environmental Protection Agency (EPA) legislation on Transportation Industry Sector practices in protecting and preserving the environment. 4. Describe and demonstrate ASEF standards regarding proper handling, storage and disposal of chemicals and materials used in an auto shop. 5. Discuss the impact of California Air Resources Board (ARB) legislation on the Transportation Industry Sector. 6. Discuss the Bureau of Automotive Repair (BAR) standards for consumer and environmental protection. 7. Discuss the use of the Safety Data Sheet (SDS) as it applies to the automotive industry. 8. Discuss the safety items required by the federal, state, and local regulations. 9. Discuss the importance of proper personal hygiene in the classroom and auto shop. 10. Describe and demonstrate the standards regarding proper use of protective equipment in an auto shop: a. clothing and gloves b. respiratory gear c. eye gear d. work shoes e. ventilation f. handling, storage, and disposal of chemicals and hazardous materials used in an auto shop g. proper use of tools and equipment 11. Practice personal safety when lifting, bending, or moving equipment and supplies. 12. Pass the safety test with 100% accuracy.	1, 2, 10, 12 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3 Health & Safety: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7 Technical Knowledge & Skills: 10.2, 10.4 Demonstration & Application: 11.1 **CTE Pathway:** C1.2, C1.4, C2.2

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
C. RESOURCE MANAGEMENT Understand, apply, and evaluate the resource management principles and techniques in the auto repair and maintenance business. (1 hour)	1. Define and describe the benefits of the following: a. resources b. management c. sustainability d. profitability e. company growth 2. Describe and list specific examples of the effective management of the following resources in the auto shop repair and maintenance business: a. time b. materials c. personnel 3. Pass a resource management assessment with an 80% score or higher.	**Career Ready Practice:** 1, 2, 7 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3 Responsibility & Flexibility: 7.1, 7.4 Technical Knowledge & Skills: 10.1 **CTE Pathway:** C5.2
D. TRADE MATHEMATICS Understand, apply, and evaluate the mathematical requirements used in auto diagnosis, maintenance, and repair.	1. Define and identify the practical math terminology in auto repair and maintenance. 2. Describe, demonstrate, and ask questions regarding problem-solving techniques involving: a. basic trade mathematical operations. b. changing fractions to decimals c. changing decimals to fractions d. engineering notation 3. Describe, demonstrate, and interpret the English and metric units of the measuring system and draw conclusions to make informed decisions. 4. Describe and demonstrate problem-solving techniques for: a. algebraic problems	**Career Ready Practice:** 1, 2, 5, 10 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3 Problem Solving & Critical Thinking: 5,1, 5.2

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(4 hours)	b. percentages c. reading and interpreting graphs d. calculator e. geometric problems that apply to auto repair and maintenance such as angles and degrees 5. Pass a trade mathematics assessment with an 80% score or higher.	Technical Knowledge & Skills: 10.1 Demonstration & Application: 11.1 **CTE Pathway:** C2.4
E. TOOLS AND EQUIPMENT Understand, apply, and evaluate the policies and procedures for using engine repair tools and equipment.	1. Define, discuss, and demonstrate the proper use, maintenance, and storage techniques for: a. ball (small hole) gauges b. cam bearing driver set (suggested) c. camshaft holding tool (appropriate for units being taught) d. cylinder deglazer e. dial bore indicator f. antifreeze/coolant tester g. engine stands/benches h. inside micrometer set of 0 – 6" and 0 – 125 mm i. oil pressure gauge j. outside micrometer set of 0 – 6" and 0 – 125 mm k. portable crane – ½ ton l. ring compressor m. ring expander n. ring groove cleaner o. straight edge p. telescoping gauge set q. torque angle gauge r. transaxle removal and installation equipment s. V-Blocks t. valve spring compressor u. valve spring tester	**Career Ready Practice:** 1, 2, 10 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3 Technical Knowledge & Skills: 10.1 Demonstration & Application: 11.1 **CTE Pathway:** C2.2, C2.3

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(6 hours)	v. torque wrenches 3/8" and ½" digital w. feeler and plastic gauge 2. Review and demonstrate the following: a. selection of the appropriate hand, power tools, and equipment for each job b. procedure for checking out hand, power tools, and equipment from the tool room c. safe use of the most common hand, power tools and equipment d. practice personal safety when lifting, bending, or moving equipment and supplies 3. Pass a tools and equipment assessment with an 80% score or higher.	
F. SERVICE MANUALS AND COMPUTER-BASED INFORMATION SYSTEMS Understand, apply, and evaluate the contents of service manuals and computer-based information systems as important sources of reference to an auto technician. (2 Hours)	1. Identify the different types of service manuals. 2. State the different types of information that can be found in service manuals such as specifications, troubleshooting charts, and repair information. 3. Describe and demonstrate the use of service manuals. 4. Describe and demonstrate the use of web-based search engines in finding automotive technical information. 5. Complete work order to include customer information, vehicle identifying information, customer concern, related service history, cause, and correction. 6. Pass a service manual and computer-based information system assessment with an 80% score or higher.	**Career Ready Practice:** 1, 2, 4, 10, 11 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3 Technology: 4.1, 4.2 Demonstration & Application: 11.1 **CTE Pathway:** C2.6, C4.3, C4.4
G. ENGINE REPAIR PRINCIPLES	1. Describe the internal combustion process for gas and diesel engines. 2. Explain energy and work principles of auto engines.	**Career Ready Practice:** 1, 2, 4, 5, 9, 10

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
Understand and evaluate the function of various engine components. (4 hours)	3. Describe the operation of the two-stroke and four-stroke cycle. 4. Identify and demonstrate various engine components such as pistons, blocks, heads, bearings, and crankshafts. 5. Identify various engine components such as in-line, V type and overhead cam. 6. Form teams to describe, define, and demonstrate the function and operation of: a. crankshaft b. rod and main bearings c. lubrication system d. crankshaft bearings e. camshaft f. cylinder head and valves 7. Describe the importance of valve timing. 8. Describe the engine maintenance procedures. 9. Perform compression tests, interpret information to make informed decisions. 10. Pass an engine repair principles assessment with an 80% score or higher.	**CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3, 2.5 Technology: 4.1 Problem Solving & Critical Thinking: 5.3, 5.4 Leadership & Teamwork: 9.3, 9.7 Technical Knowledge & Skills: 10.1 Demonstration & Application: 11.1 **CTE Pathway:** C3.1
H. FUEL, AIR INDUCTION, DIAGNOSIS, AND REPAIR Understand, apply, and evaluate the diagnostic and repair techniques for the fuel, air	1. Diagnose hot or cold no-starting, hard starting, poor drivability, incorrect idle speed, poor idle, flooding, hesitation, surging, engine misfire, power loss, stalling, poor mileage, dieseling, and emissions problems; determine necessary action. 2. Practice the safe handling and storage of gasoline fumes in accordance with SDS and the requirements of local, State, and federal regulatory agencies.	**Career Ready Practice:** 1, 2, 4, 5, 9, 10 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3, 2.5

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
induction and exhaust systems according to the manufacturer's specifications. (9 hours)	3. Check fuel for contaminants and quality; determine necessary action. 4. Form teams to inspect, test, and repair the fuel pumps and pump control systems for pressure, regulation, and volume; perform necessary action. 5. Demonstrate how to replace fuel filters. 6. Inspect throttle body, air induction system, intake manifold, cabin air filter, oxygen sensor, and gaskets for vacuum leaks and/or unmetered air. 7. Pass a fuel, air induction, diagnosis, and repair assessment with an 80% score or higher.	Technology: 4.2 Problem Solving & Critical Thinking: 5.2, 5.3, 5.4 Health & Safety: 6.1, 6.2, 6.6 Leadership & Teamwork: 9.3, 9.7 Demonstration & Application: 11.1 **CTE Pathway:** C1.2, C2.3, C6.1, C6.4
I. ELECTRICAL SYSTEMS Understand the fundamentals of electricity as it is used in automobiles.	1. Define and describe the following terms: a. electron flow theory b. conventional flow theory c. magnetic induction theory 2. Explain and demonstrate the operation of a: a. storage battery b. starting system c. charging system d. lighting and accessory systems 3. Pass an electrical systems assessment with an 80% score or higher.	**Career Ready Practice:** 1, 2, 4, 10 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3, 2.5 Technology: 4.2 Technical Knowledge & Skills: 10.1

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(4 hours)		Demonstration & Application: 11.1 **CTE Pathway:** C3.5, C7.1, C7.2, C7.3, C7.4, C7.7
J. GENERAL ENGINE DIAGNOSIS: REMOVAL AND REINSTALLATION (R&R) Understand, apply, and evaluate the removal and reinstallation techniques for engines according to the manufacturer's specifications.	1. Complete work order to include customer information, vehicle identifying information, customer concern, related service history, cause, and correction. 2. Identify and interpret engine concern; determine necessary action. 3. Research applicable vehicle and service information, such as internal engine operation, vehicle service history, service precautions and technical service bulletins. 4. Locate and interpret vehicle and major component identification numbers. 5. Inspect engine assembly for fuel, oil, coolant, and other leaks; determine necessary action. 6. Diagnose engine noises and vibrations; determine necessary action. 7. Diagnose the cause of excessive oil consumption, coolant consumption, unusual exhaust color and odor; determine necessary action. 8. Demonstrate and perform and determine necessary action to: a. engine vacuum test b. cylinder power balance tests c. cylinder cranking and running compression tests d. cylinder leakage tests 9. Form teams to remove and reinstall the engine in an OBDII or newer vehicle; reconnect all attaching components and restore the vehicle to running condition.	**Career Ready Practice:** 1, 2, 4, 5, 9, 10, 11 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3, 2.5 Technology: 4.2, 4.5 Problem Solving & Critical Thinking: 5.2, 5.3, 5.4 Leadership & Teamwork: 9.3, 9.7 Demonstration & Application: 11.1 **CTE Pathway:** C2.3, C2.5, C3.1, C4.3, C4.4, C6.1,

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(30 hours)	10. Perform common fastener and thread repair, to include removing broken bolts, restoring internal and external threads with thread insert. 11. Inspect, remove, and replace engine mounts. 12. Pass a general engine diagnosis R & R assessment with an 80% score or higher.	
K. CYLINDER HEAD AND VALVE TRAIN DIAGNOSIS AND REPAIR Understand, apply, and evaluate the diagnostic and repair techniques for the cylinder head and valve train according to the manufacturer's specifications.	1. Remove cylinder head; inspect gasket condition; install cylinder head and gasket; tighten according to the manufacturer's specifications and procedures. 2. Clean and visually inspect a cylinder head for cracks; check gasket surface areas of warpage and surface finish; check passage condition. 3. Inspect valve springs for squareness and free height comparison; determine necessary action. 4. Replace the valve stem seals on an assembled engine; inspect valve spring retainers, locks/keepers, and valve lock/keeper grooves; determine necessary action. 5. Inspect valve guides for wear; check valve stem-to-guide clearance; determine necessary action. 6. Inspect valve and valve seats; determine necessary actions. 7. Demonstrate how to check valve spring assembled height and valve stem height; determine necessary action. 8. Form teams to inspect pushrods, rocker arms, rocker arm pivots and shafts for wear, bending, cracks, looseness, and blocked oil passages (orifices); determine necessary action. 9. Inspect valve lifters; determine necessary action.	**Career Ready Practice:** 1, 2, 4, 5, 9, 10 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3, 2.5 Technology: 4.2 Problem Solving & Critical Thinking: 5.3, 5.4 Leadership & Teamwork: 9.3, 9.7 Demonstration & Application: 11.1 **CTE Pathway:** C2.1, C2.5, C2,7, C3.7, C6.1

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(25 hours)	10. Adjust valves (mechanical or hydraulic lifters). 11. Inspect and replace camshaft and drive belt/chain (includes checking drive gear wear and backlash, end play, sprocket and chain wear, overhead cam drive sprockets(s), drive belt(s), belt tension, tensioners, camshaft reluctor ring/tone-wheel, and variable valve timing components). 12. Inspect and/or measure camshaft for runout, journal wear and lobe wear. 13. Inspect camshaft bearing surface for wear, damage, out-of-round, and alignment; determine necessary action. 14. Establish camshaft position sensor indexing. 15. Pass a cylinder head and valve train diagnosis and repair assessment with an 80% score or higher.	
L. ENGINE BLOCK ASSEMBLY DIAGNOSIS AND REPAIR Understand, apply, and evaluate the diagnostic repair techniques for the engine block assembly components according to the manufacturer's specifications.	1. Form teams to disassemble the engine block; clean and prepare components for inspection and reassembly. 2. Inspect engine block for visible cracks, passage condition, core and gallery plug condition, surface, and warpage; determine necessary action. 3. Inspect and measure cylinder walls/sleeves for damage, wear, and ridges; determine necessary action. 4. Deglaze and clean cylinder walls. 5. Inspect and measure camshaft bearings for wear, damage, out-of-round, and alignment; determine necessary action. 6. Inspect crankshaft for straightness, journal damage, keyway damage, thrust flange and sealing surface condition, and visual surface cracks; check oil passage condition; measure end play and journal wear; check crankshaft position sensor reluctor ring	**Career Ready Practice:** 1, 2, 4, 5, 9, 10 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3, 2.5 Technology: 4.2 Problem Solving & Critical Thinking: 5.2, 5.4 Leadership & Teamwork: 9.3, 9.7

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(30 hours)	(where applicable); determine necessary action. 7. Inspect main and connecting rod bearing for damage and wear; determine necessary action. 8. Identify piston and bearing wear patterns that indicate connecting rod alignment and main bearing bore problems; determine necessary action. 9. Inspect and measure piston skirts and ring lands; determine necessary action. 10. Remove and replace the piston pin. 11. Determine piston-to-bore clearance. 12. Inspect, measure, and install piston rings. 13. Inspect auxiliary shaft(s) (balance, intermediate, idler, counterbalance, or silencer); inspect shaft(s) and support bearings for damage and wear; determine necessary action; reinstall and time. 14. Remove, inspect, or replace crankshaft vibration damper (harmonic balancer). 15. Demonstrate and assemble the engine block. 16. Pass an engine block assembly diagnosis and repair assessment with an 80% score or higher.	Demonstration & Application: 11.1 **CTE Pathway:** C2.2, C2.5, C3.7, C6.1
M. LUBRICATION AND COOLING SYSTEMS DIAGNOSIS AND REPAIR Understand, apply, and evaluate the diagnostic and repair techniques for the lubrication and cooling systems according to the	1. Perform oil pressure tests; determine necessary action. 2. Form teams to inspect oil pump gears or rotors, housing, pressure relief devices and pump drive using repair manuals; perform necessary action. 3. Demonstrate how to perform a visual inspection and a cooling system pressure test; check coolant condition; inspect and test radiator, pressure cap, coolant recovery tank and hoses; determine necessary action.	**Career Ready Practice:** 1, 2, 4, 5, 9, 10 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3, 2.5 Technology: 4.2

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
manufacturer's specifications. (20 hours)	4. Inspect, replace, and adjust drive belts, tensioners, and pulleys; check pulley and belt alignment. 5. Inspect and replace engine cooling and heater system hoses. 6. Inspect, test, and replace thermostat and gasket/seal. 7. Test coolant; drain and recover coolant; flush and refill cooling system with recommended coolant; bleed air as required. 8. Inspect, remove, and replace the water pump. 9. Remove and replace the radiator. 10. Inspect, test fan(s) (electrical or mechanical), fan clutch, fan shroud and air dams. 11. Inspect auxiliary coolers; determine necessary action. 12. Inspect, test, and replace oil temperature and pressure switches and sensors. 13. Perform oil and filter change. 14. Identify causes of engine overheating. 15. Pass a lubrication and cooling systems diagnosis and repair assessment with an 80% score or higher.	Problem Solving & Critical Thinking: 5.3, 5.4 Leadership & Teamwork: 9.3, 9.7 Demonstration & Application: 11.1 **CTE Pathway:** C3.7, C4.3, C6.2
N. EMPLOYABILITY SKILLS AND RESUME PREPARATION Understand, apply, and evaluate the employability skills and resume preparation desired of	1. Understand and define employer requirements for soft skills such as: a. attitude toward work b. communication and collaboration c. critical thinking, problem solving, and decision-making d. customer service e. diversity in the workplace f. flexibility and adaptability g. interpersonal skills h. leadership and responsibility i. punctuality and attendance	**Career Ready Practice:** 1, 2, 3, 4, 5, 7, 8, 9, 10, 11 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3, 2.4. 2.5 Career Planning & Management:

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
automotive technicians. (4 hours)	j. quality of work k. respect, cultural and diversity differences l. teamwork m. time management n. trust and ethical behavior o. work ethic 2. Develop a career plan that reflects career interests, pathways, and post-secondary options. 3. Create/revise a resume, cover letter and/or portfolio. 4. Demonstrate, analyze, research, and review the role of online job searching platforms and career websites to make informed decisions. 5. Understand the importance of assessing social media account content for professionalism. 6. Demonstrate and complete and/or review an on-line job application. 7. Understand and demonstrate interview skills to get the job: a. do's and don'ts for job interviews b. how to dress for the job 8. Demonstrate and create sample follow-up letters. 9. Understand the importance of the continuous upgrading of job skills as it relates to: a. certification, licensure, and/or renewal b. professional organizations/events c. industry associations and/or organized labor	3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.9 Technology: 4.1, 4.2, 4.3, 4.5 Problem Solving & Critical Thinking: 5.1, 5.4 Responsibility & Flexibility: 7.2, 7.3, 7.4, 7.7 Ethics & Legal Responsibilities: 8.3, 8.4, 8.5 Leadership & Teamwork: 9.1, 9.2, 9.3, 9.4, 9.6, 9.7 Technical Knowledge & Skills: 10.1, 10.3 Demonstration & Application: 11.1, 11.2, 11.5 **CTE Pathway:** C5.4, C5.5

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
I. ENTREPRENEURIAL SKILLS Understand, apply, and evaluate the process involved in becoming an entrepreneur in the automotive industry. (4 hours)	1. Define entrepreneurship. 2. Identify and research the necessary characteristics of successful entrepreneurs. 3. Examine personal goals prior to starting a business. 4. Evaluate sources of monetary investment in a business opportunity. 5. Explain licensing/permit requirements for a business. 6. Explain how the Small Business Administration (SBA) assists entrepreneurs with lenders and funding to help them plan, start and grow a business. 7. Demonstrate a budget to identify start-up expenses. 8. Pass an entrepreneurial skills assessment with an 80% score or higher.	**Career Ready Practice:** 1, 2, 4, 10, 11 **CTE Anchor:** Academics: 1.0 Communications: 2.1, 2.3, 2.5 Technology: 4.1, 4.2, 4.5 Responsibility & Flexibility: 7.1, 7.6 Technical Knowledge & Skills: 10.1, 10.3, 10.4 Demonstration & Application: 11.1, 11.2, 11.3, 11.4, **CTE Pathway:** C5.1, C5.2, C5.3, C5.5

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