

**APPROVED
PATHWAY:**

- Includes minimum of three secondary-level credits.
- Includes a work-based element.
- Consists of a sequence:
 - Introductory-level.
 - Technical-level.
 - Application-level courses.
- Supporting documentation includes Articulation Agreement(s), Certification, Program Improvement Plan and a Program of Study.
- Technical-level and Application-level courses receive .5 state-weighted funding in an approved CTE pathway.



TRANSPORTATION CAREER CLUSTER DESIGN

Mobile Equipment Maintenance Pathway

CIP CODE 47.9999

Automotive Collision Strand

INTRODUCTORY LEVEL

Must choose **ONE** of the boxed courses.

Title	Code	Credit
*Introduction to Industrial Technology	38001	.5 credit
*Introduction to Transportation	40100	.5 credit

Title	Code	Credit
Automotive Information	40050	.5 credit
Business Essentials	12050	.5 credit

TECHNICAL LEVEL

Title	Code	Credit
Auto Collision I	40300	1 credit
Auto Refinishing I	40310	1 credit

Title	Code	Credit
^Entrepreneurship	12053	.5 credit

APPLICATION LEVEL

Must choose **ONE** of the boxed courses.

Title	Code	Credit
**Auto Collision II	40302	1 credit
**Auto Refinishing II	40312	1 credit

Title	Code	Credit
***Work Experience in Transportation	40250	.5 credit
*** Work Experience in Transportation - Comprehensive	40251	1 credit

- ^ Will not count as one of the 3 required secondary level credits for pathway approval. Will count as a funded course.
- * One of these two courses is required for pathway approval.
- ** Has a specific prerequisite course(s) - See Competency Profile for details.
- *** Has prerequisites - Must take at least 1.0 credit of Technical level course and Application level course combined.

KANSAS STATE CAREER CLUSTER COMPETENCY PROFILE FOR: TRANSPORTATION CLUSTER PATHWAYS

Directions: The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

Rating Scale:

- 4. Exemplary Achievement: Student possesses outstanding knowledge, skills, or professional attitude.
- 3. Proficient Achievement: Student demonstrates good knowledge, skills, or professional attitude.
Requires limited supervision.
- 2. Limited Achievement: Student demonstrates fragmented knowledge, skills, or professional attitude.
Requires close supervision.
- 1. Inadequate Achievement: Student lacks knowledge, skills, or professional attitude.
- 0. No Instruction / Training: Student has not received instruction or training in this area.

Student: _____

Graduation Date: _____

I certify that the student has received training in the areas indicated.

Instructor Signature: _____

COMMON CAREER TECHNICAL CORE – Career Ready Standards (To be taught throughout the pathway.) www.careertech.org		4	3	2	1	0
1.	Act as a responsible and contributing citizen and employee.					
2.	Apply appropriate academic and technical skills.					
3.	Attend to personal health and financial well-being.					
4.	Communicate clearly, effectively and with reason.					
5.	Consider the environmental, social, and economic impacts of decisions.					
6.	Demonstrate creativity and innovation.					
7.	Employ valid and reliable research strategies.					
8.	Utilize critical thinking to make sense of problems and persevere in solving them.					
9.	Model integrity, ethical leadership, and effective management					
10.	Plan education and career path aligned to personal goals.					
11.	Use technology to enhance productivity.					
12.	Work productively in teams while using cultural/global competence.					

COMMON CAREER TECHNICAL CORE – Transportation Cluster Standards (To be taught throughout the pathway.) www.careertech.org		4	3	2	1	0
1.	Describe the nature and scope of the Transportation, Distribution & Logistics.					
2.	Career Cluster and the role of transportation, distribution and logistics in society and the economy.					
3.	Describe the application and use of new and emerging advanced techniques to provide solutions for transportation, distribution, and logistics problems.					
4.	Describe the key operational activities required of successful transportation, distribution, and logistics facilities.					
5.	Identify governmental policies and procedures for transportation, distribution, and logistics facilities.					
6.	Describe transportation, distribution and logistics employee rights and responsibilities and employers' obligations concerning occupational safety and health.					
7.	Describe career opportunities and means to achieve those opportunities in each of the Transportation, Distribution & Logistics Career Pathways.					
8.	Develop preventative maintenance plans and systems to keep facility and mobile equipment inventory in operation.					
9.	Design ways to improve facility and equipment system performance.					

Design, Production & Repair Fields

Course:	Introduction to Industrial Technology	Course #:	38001	Credit:	.5
Pathways & CIP Codes:	Construction & Design (46.0000) Aviation Production (15.0000) Engineering & Applied Math (14.0101) Manufacturing (48.0000) Aviation Maintenance (47.0608) Mobile Equipment Maintenance (47.9999)	Strand(s):	Construction & Design Design & Production Production & Maintenance Avionics & Airframe Auto Collision & Technology	Level:	Introduction
Course Description:	An introductory level course designed to instruct students in the basic skills necessary to all occupations in the Construction, Engineering, Manufacturing, & Transportation career clusters.				

Directions: *The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.*

Rating Scale:

4. Exemplary Achievement: Student possesses outstanding knowledge, skills, or professional attitude.
3. Proficient Achievement: Student demonstrates good knowledge, skills, or professional attitude.
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Benchmark 1.0: Basic Safety		4	3	2	1	0
1.1	Identify causes of accidents and the impact of accident costs.					
1.2	Follow safe behavior procedures on and around ladders, scaffolds and stairs.					
1.3	Follow safe behavior procedures around electrical hazards.					
1.4	Demonstrate the use, care and inspection of appropriate personal protective equipment (PPE).					
1.5	Explain the importance of hazard communications (HazCom) and material safety data sheets (MSDSs).					
1.6	Respond to hazardous-materials and hazardous-waste emergency situationsn accordance with regulatory requirements.					
1.7	Follow safety procedures required for lifting heavy objects.					
1.8	Demonstrate a working knowledge of safety education, environment, and enforcement for life and work.					
1.9	Apply safe practices while using tools and equipment.					
1.10	Apply safe practices for housekeeping, dress, fire, chemicals & personal protection while working in a shop.					

1.11	Describe fire prevention and firefighting techniques.					
1.12	Explain the purpose of OSHA and how it promotes safety on the job.					

Benchmark 2.0: Industrial Math		4	3	2	1	0
2.1	Add, subtract, multiply, and divide whole numbers, fractions, decimals and percentages.					
2.2	Use a standard ruler, a metric ruler, and a measuring tape to measure.					
2.3	Demonstrate conversion skills for decimals and fractions.					
2.4	Recognize and perform calculations using metric units of length, weight, volume and temperature.					

Benchmark 3.0: Hand Tools		4	3	2	1	0
3.1	Recognize and identify some of the basic hand tools and their proper uses in industrial trades.					
3.2	Demonstrate the safe use of common hand tools.					

Benchmark 4.0: Power Tools		4	3	2	1	0
4.1	Recognize and identify some of the basic power tools and their proper uses in the industrial trades.					
4.2	Demonstrate the safe use of common power tools.					
4.3	Perform preventive maintenance on basic power tools used in the industrial trades.					

Benchmark 5.0: Blueprint Reading		4	3	2	1	0
5.1	Perform the drafting principles needed to draw the basic geometric shapes.					
5.2	Develop a pictorial sketch of an object.					
5.3	Develop a multi-view drawing.					
5.4	Identify basic symbols used in blueprints.					
5.5	Identify various types of blueprint views used in Architecture and Construction, Engineering, Manufacturing, and Transportation.					

Benchmark 6.0: Communication Skills		4	3	2	1	0
6.1	Interpret information and follow instructions presented in both verbal and written form.					
6.2	Communicate effectively in on-the-job situations using verbal and written skills in various delivery modes (face-to-face, paper, & electronic).					
6.3	Create and complete various written documents used in industrial trades.					
6.4	Demonstrate knowledge and use of computer systems and word processing software in effective communication.					

Benchmark 7.0: Employability Skills		4	3	2	1	0
7.1	Create and utilize employment documents including a resume and portfolio.					
7.2	Demonstrate job seeking and interview skills.					
7.3	Understand and respond to performance reviews.					

Benchmark 8.0: 21 st Century/Foundation Skills		4	3	2	1	0
8.1	Demonstrate critical thinking skills and the ability to solve problems using those skills.					
8.2	Define effective relationship skills.					
8.3	Demonstrate a working knowledge of workplace issues such as sexual harassment, stress, and substance abuse.					
8.4	Demonstrate the ability to achieve common goals through team work.					

Benchmark 9.0: Materials Handling		4	3	2	1	0
9.1	Verify that health, safety, environmental, and government regulations are met.					
9.2	Recognize hazards and follow safety procedures required for materials handling.					
9.3	Demonstrate ability to load and unload materials properly and safely.					

Kansas Transportation, Distribution and Logistics Cluster

Course:	Introduction to Transportation	Course #:	40100	Credit:	.5
Pathways & CIP Codes:	Mobile Equipment Maintenance (47.9999)	Strand(s):	Auto Collision Auto Technology – One & Two	Level:	Introductory
Course Description:	This course gives students an overview of the transportation industry skills and career opportunities, as well as the education required to acquire each career.				

Directions: *The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.*

Rating Scale:

4. Exemplary Achievement: Student possesses outstanding knowledge, skills, or professional attitude.
3. Proficient Achievement: Student demonstrates good knowledge, skills, or professional attitude.
Requires limited supervision.
2. Limited Achievement: Student demonstrates fragmented knowledge, skills, or professional attitude.
Requires close supervision.
1. Inadequate Achievement: Student lacks knowledge, skills, or professional attitude.
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Graduation Date: _____

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Instructor Signature: _____

Competencies:		4	3	2	1	0
1.1	Explain basic principles of automotive systems and repair.					
1.2	Explain basic principles of collision repair and techniques.					
1.3	Explain basic principles of refinishing and coatings.					
1.4	Explain basic principles of small engine and powersport repair.					
1.5	Explain basic principles of repairing vehicle interiors.					
1.6	Explain basic knowledge of custom vehicle parts, applications, and modifications.					
1.7	Explain basic knowledge of alternative fuels and transportation sources.					
1.8	Explain basic principles of diesel and heavy equipment maintenance and/or repair.					
1.9	Research and explore career and educational opportunities in transportation.					
1.10	Explain basic principles of safety and tools recognized in the transportation industry.					

Kansas Transportation, Distribution and Logistics Cluster

Course:	Automotive Information	Course #:	40050	Credit:	.5
Pathways & CIP Codes:	Mobile Equipment Maintenance (47.9999)	Strand(s):	Auto Collision Auto Technology – One & Two	Level:	Introductory
Course Description:	<p>Provides students with the opportunity to learn practical car maintenance skills. Students will attain basic skills and knowledge needed to own and maintain a vehicle. The students will learn what to consider when buying a car, shopping for car insurance, acquiring a title, etc.</p> <p><i>(May be offered as a supplemental course in this pathway. This course will count toward 3 minimum high school credits required for pathway approval if taught at the high school level. It will not count as the ONLY Introductory course for this pathway.)</i></p>				

Directions: The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

Rating Scale:

4. Exemplary Achievement: Student possesses outstanding knowledge, skills, or professional attitude.
3. Proficient Achievement: Student demonstrates good knowledge, skills, or professional attitude.
Requires limited supervision.
2. Limited Achievement: Student demonstrates fragmented knowledge, skills, or professional attitude.
Requires close supervision.
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Student: _____

Graduation Date: _____

I certify that the student has received training in the areas indicated.

Instructor Signature: _____

Benchmark 1.0: Automotive Safety and Tools		4	3	2	1	0
1.1	Identifying and safely use automotive tools and equipment.					

Benchmark 2.0: Electrical Systems		4	3	2	1	0
2.1	Check and clean battery terminals, jump start a vehicle, change fuses, headlights, and taillights.					

Benchmark 3.0: Powertrain and Chassis		4	3	2	1	0
3.1	Identify parts and components.					
3.2	Identify noises.					

Benchmark 4.0: Brake Systems		4	3	2	1	0
4.1	Identify and inspect brake systems components.					

Benchmark 5.0: Engine Performance		4	3	2	1	0
5.1	Identify idle quality, or engine misfire concerns.					

Benchmark 6.0: Tires & Steering Alignment		4	3	2	1	0
6.1	Inspect tire wear and condition.					
6.2	Find correct tire inflation information.					
6.3	Check tire air pressure.					
6.4	Identify and recognize procedures related to relearning tire pressure monitoring systems.					
6.5	Change a tire and/or properly rotate tires.					
6.6	Identify concerns that relate to tire balance.					
6.7	Visually check for alignment problems.					

Benchmark 7.0: Fluids		4	3	2	1	0
7.1	Check, identify, and fill fluids, including engine, transmission, brake, power steering, washer, and coolant.					

Benchmark 8.0: How to Buy a Car		4	3	2	1	0
8.1	Conduct research on vehicle insurance, titles, taxes, mechanical condition, and appearance as it applies to buying a vehicle.					

Benchmark 9.0: Recommended Maintenance		4	3	2	1	0
9.1	Demonstrate knowledge of fluids, timing belt, filters, etc. service intervals - including where this information can be found.					

Benchmark 10.0: Vehicle Upkeep - Interior and Exterior		4	3	2	1	0
10.1	Maintain the interior and exterior of their vehicle to keep it in the best condition.					

Name: _____ ID: _____

Instructor: _____ School Year: _____

Enrollment Date	Completion Date	Credits Completed
___/___/___	___/___/___	___/___/___

I certify that the student received the training in the area indicated.

Student Signature: _____ Date: _____

Instructor Signature: _____ Date: _____

Introductory Level Course
This is a core course designed to give students an overview of the business, marketing and finance career cluster occupations. Students will develop an understanding of how academic skills in mathematics, economics, and written and oral communications are integral components of success in these occupations. Students will examine current events to determine their impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources should be managed to achieve company goals, and identify employability and personal skills needed to obtain a career and be successful in the workplace. As students learn about different types of business ownership, they will interpret industry laws and regulations to ensure compliance, identify principles of business management, and analyze business practices to determine ethics and social responsibilities.

Rating Scale: 4 - Exemplary Achievement 3 - Proficient Achievement
2 - Limited Achievement 1 - Inadequate Achievement 0 - No Exposure

Topic	1		
Benchmark	1.0		
		Competencies	Sample Indicators
	1.1	Analyze fundamental economic concepts necessary for employment in business.	Distinguish between economic goods and services. <div>43210</div>
			Explain the concept of economic resources. <div></div>
			Describe the concepts of economics and economic activities. <div></div>
			Determine economic utilities created by business activities. <div></div>
			Explain the principles of supply and demand. <div></div>
			Describe the functions of prices in markets. <div></div>

	1.2	Describe the nature of business and its contribution to society.	Explain the role of business in society.	4	3	2	1	0
			Describe types of business activities.					
			Explain the organizational design of businesses.					
			Discuss the global environment in which businesses operate.					
			Describe factors that affect the business environment.					
			Explain how organizations adapt to today's markets.					
	1.3	Recognize how economic systems influence environments in which businesses function.	Explain the types of economic systems.	4	3	2	1	0
			Explain the concept of private enterprise.					
			Identify factors affecting a business's profit.					
			Determine factors affecting business risk.					
			Explain the concept of competitions.					
			Describe market structures.					
	1.4	Analyze cost/profit relationships to guide business decision-making.	Explain the concept of productivity.	4	3	2	1	0
			Analyze impact of specialization/division of labor on productivity.					
			Explain the concept of organized labor and business.					
			Explain the impact of the law of diminishing returns.					
			Describe the concept of economies of scale.					

	1.5	Describe the purpose and origin of business within the U.S.	Discuss the various commodities of trade within US history.	4	3	2	1	0
			Explain the origins of Wall Street.					
			Describe the evolution in consumer awareness and buyer relationships.					
			Explain the concept of Gross Domestic Product and its development with the U.S.					
	1.6	Analyze the history and importance of trade within a global marketplace.	Difference between imports and exports.	4	3	2	1	0
			Explain the role of cultures and political systems on global trade.					
			Explain the currency exchanges and how the value fluctuates.					
	1.7	Apply verbal skills when obtaining and conveying information.	Participate in group discussions.	4	3	2	1	0
			Demonstrate open listening when cultivating relationships.					
			Share thoughts respectfully while being direct.					
	1.8	Compose internal and external multi-paragraph documents clearly, succinctly, and accurately to convey and obtain information.	Prepare simple written correspondence (cover letters, memorandums, resumes).	4	3	2	1	0
			Identify the elements of effective written communications.					
			Use appropriate etiquette in written communications.					
			Write analytical reports (i.e., reports that examine a problem/issue and recommend an action.)					
			Write research reports.					
			Develop and deliver formal and informal presentations using appropriate media to engage					

	1.9	Prepare oral presentations to provide information for specific purposes and audiences.	Organize information effectively.	4	3	2	1	0
			Select and use appropriate graphic aids.					
			Make oral presentations.					
			Describe business's responsibility to know and abide by laws and regulations that affect business					
	1.10	Describe the nature of legally binding business contracts.	Identify the basic torts relating to business enterprises.	4	3	2	1	0
			Describe the nature of legally binding contracts.					
			Understand the civil foundations of the legal requirements of business to demonstrate					
	1.11	Identify regulatory agencies and regulatory legislation.	Describe the nature of legal procedure.	4	3	2	1	0
			Discuss the nature of debtor-creditor relationships.					
			Explain the nature of agency relationships.					
			Discuss the nature of environmental law.					
			Discuss the role of administrative law.					
	1.12	Identify types of business ownership.	Explain types of business ownership.	4	3	2	1	0
			Select form of business ownership.					
Topic	2							
Benchmark	2.0	Technical Skills: Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.						

		Competencies	Sample Indicators				
		Perform customer service activities to support customer relationships and encourage repeat business.	Explain a customer-service mindset.				
	2.1			4	3	2	1
			Respond to customer inquiries and complaints.				
			Interpret business policies to customers/clients.				
			Understands the techniques and strategies used to foster positive-ongoing relationships with				
	2.2	Utilize technology to facilitate customer relationship management.	Understand the nature of customer relationship management.	4	3	2	1
Topic	3						
Benchmark	3.0	EMOTIONAL INTELLIGENCE: Employ and manage techniques, strategies, and systems used by management to foster self-understanding and enhance business relationships					
		Competencies	Sample Indicators				
		Demonstrate managerial and business ethics.	Discuss ethics, responsibility, honesty, integrity, and work habits.	4	3	2	1
	3.1						
	3.2	Develop personal traits and behaviors to foster career advancement.	Identify desirable personality traits important to business.	4	3	2	1
			Exhibit a positive attitude.				
			Exhibit self-confidence.				
			Demonstrate interest and enthusiasm.				
			Demonstrate initiative.				
			Foster positive working relationships.				
			Participate as a team member.				

			Explain the nature of effective communications.					
Topic	4							
Benchmark	4.0	ENTREPRENEURSHIP: Assess entrepreneurship/small-business management-career information to enhance opportunities for career success.						
		Competencies	Sample Indicators					
	4.1	Analyze entrepreneur careers to determine careers of interest.	Discuss entrepreneurial discovery processes.	4	3	2	1	0
			Describe entrepreneurial planning considerations.					
			Explain the need for entrepreneurial discovery.					
			Assess global trends and opportunities for business ventures.					
	4.2	Compare individual's abilities, interests, and attitudes with those associated with entrepreneurial success to determine the match between the two.	Analyze desired lifestyle associated with entrepreneurship.	4	3	2	1	0
			Discern between desired benefits and those associated with entrepreneurship.					
			Research current business issues and entrepreneurs (e.g., Donald Trump, Martha Stewart, Mark Zuckerberg, Magic Johnson, etc.)					
			Contrast personal characteristics with those associated with entrepreneurial success.					
			Examine similarities and differences between personal educational goals and educational requirements for entrepreneurship.					
Topic	5							

Benchmark	5.0	FINANCIAL ANALYSIS: Understand how to maintain, monitor, plan, and control the use of financial resources to protect an entrepreneur and business’s fiscal well-being.						
		Competencies	Sample Indicators					
	5.1	Analyze how proper management of personal finance relates with maintaining business financial efficiency.	Explain forms of financial exchange.	4	3	2	1	0
			Manage personal finances to achieve financial goals with savings and investing.					
			Identify a business’s risks.					
			Explain the time value of money.					
			Explain the purposes and importance of credit.					
	5.2	Define the accounting equation and how accounting can assist in maintaining financial solvency.	Interpret cash-flow statements.	4	3	2	1	0
			Monitor business’s profitability.					
			Develop personal budget.					
			Properly maintain a personal financial account (e.g., savings, checking, etc.)					
			Interpret a pay stub.					
			Read and reconcile bank statements.					
			Maintain financial records.					
			Describe sources of income (e.g., wages/salaries, interest, rent, dividends, transfer payments, etc.)					

Topic	6										
Benchmark	6.0	INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information.									
		Competencies	Sample Indicators								
	6.1	Use information technology tools to manage and perform work responsibilities.	Assess information needs.	4	3	2	1	0			
			Use information literacy skills to increase workplace efficiency and effectiveness.								
			Identify ways that technology impacts business.								
			Explain the role of information systems.								
			Operate writing and publishing applications to prepare business communications.								
	6.2	Prepare simple documents and other business communications.	Demonstrate basic research skills.	4	3	2	1	0			
			Evaluate quality and source of information.								
Topic	7										
Benchmark	7.0	MARKETING: Manage marketing activities to facilitate business development and growth.									
		Competencies	Sample Indicators								
	7.1	Understand marketing's role and function in business to facilitate economic exchanges with customers.	Plan product mix.	4	3	2	1	0			
			Determine services to provide customers.								
			Explain the role of customer service in positioning/image.								
			Analyze factors that contribute to business success.								

			Develop strategies to position product/business.					
			Acquire foundational knowledge of customer, client, and business behavior to understand what motivates decision-making.					
	7.2	Explain marketing and its importance in global economy.	Identify considerations in implementing international marketing strategies.	4	3	2	1	0
	7.3	Describe marketing functions and related activities.	Identify elements of the marketing mix.	4	3	2	1	0
Topic	8							
Benchmark	8.0	EMPLOYABILITY AND CAREER DEVELOPMENT: Know and understand the importance of employability skills. Explore, plan, and effectively manage careers. Know and understand the importance of entrepreneurship skills. Explore, obtain, and develop strategies for ensuring a successful business career.						
		Competencies	Sample Indicators					
	8.1	Develop personal traits and behaviors to foster career advancement.	Discuss appropriate personal appearance.	4	3	2	1	0
			Explain the importance of having a vision through properly setting personal short, mid and long-term goals.					
			Conduct mock interviews using local business representatives as interviewers.					
			Use time-management skills.					
	8.2	Identify the impact business has on local communities.	Invite guest speakers from represented modules (e.g., accountant, banker, marketer, etc.) to speak	4	3	2	1	0
			Tour a large business in the local community.					
			Tour a small business in the local community.					
	8.3	List the standards and qualifications that must be met in career.	Prepare a resume.	4	3	2	1	0

			Prepare a letter of application.					
			Complete an employment application.					
			Interview for employment.					
	8.4	Utilize critical thinking and decision-making skills to exhibit qualifications to a potential employer.	Demonstrate problem-solving skills.	4	3	2	1	0
			Obtain needed information efficiently					
			Evaluate quality and source of information.					
			Apply information to accomplish a task.					
	8.5	Demonstrate project-management skills.		4	3	2	1	0
	8.6	Demonstrate employability/career success skills.	Place artifacts that demonstrate employability/career success skills in the electronic portfolio section of the IPS (Individual Plan of Study).	4	3	2	1	0

Kansas Transportation, Distribution and Logistics Cluster

Course:	Auto Collision I	Course #:	40300	Credit:	1.0
Pathways & CIP Codes:	Mobile Equipment Maintenance (47.9999)	Strand(s):	Automotive Collision	Level:	Technical
Course Description:	A comprehensive, technical level course designed to instruct students in the knowledge and skills common to the Auto Collision Industry.				

Directions: *The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.*

Rating Scale:

4. Exemplary Achievement: Student possesses outstanding knowledge, skills, or professional attitude.
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Requires limited supervision.
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Student: _____

Graduation Date: _____

I certify that the student has received training in the areas indicated.

Instructor Signature: _____

Benchmark 1.0: Orientation		4	3	2	1	0
1.1	Demonstrate first aid and safety.					
1.2	Demonstrate proper handling and use of dangerous and hazardous materials.					
1.3	Demonstrate proper use, care, and cleaning of tools and equipment.					
1.4	Demonstrate knowledge of collision and repair industry.					
1.5	Identify auto body and components.					
1.6	Identify frame and unibody components.					

Benchmark 2.0: Cosmetic Panel Repair		4	3	2	1	0
2.1	Analyze sheet metal damage.					
2.2	Straighten sheet metal panel.					
2.3	Demonstrate proper shrinking techniques.					
2.4	Demonstrate proper repair procedures for high strength steels.					

Benchmark 3.0: Welding and Cutting Steel		4	3	2	1	0
3.1	Set up and use various welding equipment.					
3.2	Set up and use GMAW equipment.					
3.3	Set up and use Plasma Arc Torch.					

Benchmark 4.0: Remove and Install Parts and Assemblies		4	3	2	1	0
4.1	Remove and install trim components.					
4.2	Remove, install, and adjust bolt panels and assemblies.					
4.3	Remove and install glass.					
4.4	Remove and install welded bonded panels.					

Benchmark 5.0: Plastic Repair		4	3	2	1	0
5.1	Identify plastic types.					
5.2	Use proper repair techniques for plastics.					

Benchmark 6.0: Sealant and Corrosion Protection		4	3	2	1	0
6.1	Display proper selection and application of seam sealers.					
6.2	Identify and perform necessary steps to restore corrosion protections.					
6.3	Identify and demonstrate proper use of sound deadening materials and foams.					

Benchmark 7.0: Detailing		4	3	2	1	0
7.1	Prepare vehicle for delivery (clean, vacuum, and apply dressing).					
7.2	Perform final vehicle inspection.					

Kansas Transportation, Distribution and Logistics Cluster

Course:	Auto Refinishing I	Course #:	40310	Credit:	1.0
Pathways & CIP Codes:	Mobile Equipment Maintenance (47.9999)	Strand(s):	Automotive Collision	Level:	Technical
Course Description:	A comprehensive, technical level course designed to instruct students in the knowledge and skills common to the Auto Refinishing Industry.				

Directions: *The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.*

Rating Scale:

4. Exemplary Achievement: Student possesses outstanding knowledge, skills, or professional attitude.
3. Proficient Achievement: Student demonstrates good knowledge, skills, or professional attitude.
Requires limited supervision.
2. Limited Achievement: Student demonstrates fragmented knowledge, skills, or professional attitude.
Requires close supervision.
1. Inadequate Achievement: Student lacks knowledge, skills, or professional attitude.
0. No Instruction / Training: Student has not received instruction or training in this area.

Student: _____

Graduation Date: _____

I certify that the student has received training in the areas indicated.

Instructor Signature: _____

Benchmark 1.0: Orientation to Refinishing Process		4	3	2	1	0
1.1	Demonstrate basic understanding of the refinishing trade and use of terminology.					
1.2	Identify and perform good safety practices in the shop, including safe & proper use and cleaning of tools and equipment.					
1.3	Understand maintenance and limitations of ventilation and filtration as it pertains to shop environment and personal safety.					
1.4	Demonstrate proper handling and disposal procedures of hazardous materials.					
1.5	Demonstrate proficiency in safely using tools and equipment related to the refinishing trade, to include preventive maintenance procedures.					

Benchmark 2.0: Refinishing		4	3	2	1	0
2.1	Identify and describe refinishing materials and equipment.					
2.2	Identify & describe surface preparation for refinishing (e.g. wax and grease removers; sanding).					
2.3	Prepare surface for refinishing including using proper masking techniques.					
2.4	Identify & demonstrate knowledge of masking (types of masking tape and paper).					
2.5	Identify basic types of primers and their uses.					
2.6	Apply primers, sealers, and topcoats.					
2.7	Prepare surface for refinishing (wax and grease removers; metal conditioners; sanding).					

2.8	Demonstrate masking skills (types of masking tapes and paper and their uses; apron; spray mask; pre-mask; reverse masking).					
2.9	Demonstrate sand, buff, and polish procedures.					

Benchmark 3.0: Spray Guns		4	3	2	1	0
3.1	Identify types of spray guns and their purpose.					
3.2	Identify parts and cleaning of spray guns.					

Benchmark 4.0: Finish Applications		4	3	2	1	0
4.1	Demonstrate knowledge of paint reduction.					
4.2	Demonstrate gun spraying techniques.					
4.3	Demonstrate application of primers and topcoats.					
4.4	Demonstrate use of block and finish primers.					
4.5	Perform color sanding.					

Benchmark 5.0: Paint Defects – Causes and Cures		4	3	2	1	0
5.1	Identify and analyze cause(s) of paint and primer defects.					
5.2	Apply problem solving skills to resolve defects.					

Benchmark 6.0: Detail		4	3	2	1	0
6.1	Demonstrate proficiency in compound and polish procedures.					
6.2	Clean interior and exterior surfaces and body openings.					
6.3	Apply decals and striping.					
6.4	Clean, inspect, and analyze work.					

Benchmark 7.0: Primer		4	3	2	1	0
7.1	Explain primers and their use in the industry.					
7.2	Compare and contrast primer classifications (physical drying; chemical drying).					
7.3	Evaluate types of primers (metal conditioners; self-etching primer; primer surface and sealer; sealers; polyester primer surface).					

Benchmark 8.0: Spray Gun Operation		4	3	2	1	0
8.1	Describe the mechanical operation and atomization.					
8.2	Describe parts and functions.					

8.3	Distinguish types of spray guns and their uses (siphon feed and gravity feed).					
8.4	Demonstrate spray patterns.					
8.5	Recognize and analyze spray problem.					
8.6	Demonstrate proficiency in spray gun cleaning and preventive maintenance.					

Benchmark 9.0: Paint Components Knowledge		4	3	2	1	0
9.1	Discuss pigment.					
9.2	Discuss binders/resins, solvents/volatiles.					
9.3	Discuss use of additives.					
9.4	Discuss solids content.					

Benchmark 10.0: Paint and Primer Application		4	3	2	1	0
10.1	Demonstrate proficiency in paint reduction.					
10.2	Demonstrate proficiency in measuring paint reduction (percentages; mixing cup types; mixing sticks).					
10.3	Discuss use of air pressure in paint application processes.					
10.4	Safely use compressors and air filtration in finish applications.					

Benchmark 11.0: Basic Color Principles		4	3	2	1	0
11.1	Discuss the theory of light as it pertains to paint.					
11.2	Differentiate primary, secondary, intermediate, tertiary, and colors.					
11.3	Explain color mixing.					

Benchmark 12.0: General Spraying Techniques		4	3	2	1	0
12.1	Demonstrate knowledge of gun distance, angle, and speed.					
12.2	Demonstrate knowledge of triggering.					
12.3	Demonstrate overlap procedures. Identify gun control problems and causes, and select appropriate solutions.					

Benchmark 13.0: Application		4	3	2	1	0
13.1	Apply primers, topcoats, and blends.					
13.2	Apply block and finish primers.					
13.3	Apply multi-state coating.					
13.4	Demonstrate proper procedures for color sanding.					

Name: _____ ID: _____

Instructor: _____ School Year: _____

Enrollment Date Completion Date Credits Completed
____/____/____ ____/____/____ ____/____/____

I certify that the student received the training in the area indicated.

Student Signature: _____ Date: _____

Instructor Signature: _____ Date: _____

Technical Level Course
Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own businesses or the ability to use the entrepreneurial mindset in an existing organization. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, and communication.

Rating Scale: 4 - Exemplary Achievement 3 - Proficient Achievement
2 - Limited Achievement 1 - Inadequate Achievement 0 - No Exposure

Topic	1								
Benchmark	1.0	Solve mathematical problems and use the information as it relates with entrepreneurship/small business ownership.							
		Competencies	Sample Indicators						
	1.1	Solve mathematical problems using numbers and operat	Recognize relationships among numbers.	4	3	2	1	0	
			Employ mathematical operations.						
			Perform computations successfully.						
			Predict reasonable estimations.						
	1.2	Incorporate algebraic skills to make business decisions.	Recognize patterns and mathematical relations.	4	3	2	1	0	
			Use algebraic symbols to represent, solve, and analyze mathematical problems.						

		Create mathematical models from real-life situations.						
		Represent changes in quantities mathematically.						
		Determine rate of change mathematically.						
		Interpret graphical and numerical data.						
1.3	Demonstrate an understanding of how basic economic concepts are utilized by an entrepreneur/small business	Explain the principles of supply and demand.	4	3	2	1	0	
		Explain the factors of production.						
		Explain the concept of scarcity.						
		Explain the concept of opportunity costs.						
1.4	Explain and describe cost/benefit analysis as it explains cost-profit relationships.	Describe cost/benefit analysis.	4	3	2	1	0	
		Analyze the impact of specialization/division of labor on productivity.						
		Explain the concept of organized labor and business.						
		Explain the law of diminishing returns.						
		Describe the concept of economies of scale.						
1.5	Explain and demonstrate the nature of effective communications.	Apply effective listening skills.	4	3	2	1	0	
		Explain the nature of effective verbal communications.						
		Demonstrate effective verbal, written, and digital communications.						
		Make oral presentations.						

			Prepare simple written reports (e.g. cover letters, memorandums, resumes)					
			Use appropriate etiquette in written communications.					
			Use proper grammar and vocabulary.					
	1.6	Describe methods in dealing with conflict as it relates with entrepreneurship/small business ownership.	Explain negotiation skills	4	3	2	1	0
			Describe techniques and importance of handling difficult customers/clients.					
Benchmark	2.0	Describe an entrepreneur's responsibility to know and abide by laws and regulations that affect all individuals involved in the business operations.						
		Competencies	Sample Indicators					
	2.1	Describe the relationship between principled entrepreneurship and personal responsibility.	Understand the civil foundations of the legal environment of business.	4	3	2	1	0
			Explain the difference and similarities between business and consumer rights to operate in a free market system.					
	2.2	Describe the relationship between government and business.	Describe the nature of legal procedures in business.	4	3	2	1	0
			Explain how an entrepreneur can protect its intellectual property rights (i.e., patents, trademarks, copyrights).					
	2.3	Identify types of business ownership.		4	3	2	1	0
	2.4	Demonstrate understanding of managerial and business ethics.	Discuss ethics, responsibility, honesty, integrity, and work habits.	4	3	2	1	0
	2.5	Analyze and define entrepreneurship.	Define entrepreneurship and entrepreneurs.	4	3	2	1	0
			Contrast the expressions of the entrepreneurial mindset (e.g., classic, change agent, intrapreneur), identifying their value and role.					

	2.6	Expound on the importance of entrepreneurship on market economies.	Describe the need for entrepreneurial discovery.	4	3	2	1	0
			Analyze the importance of entrepreneurship to US/global economy.					
	2.7	Explain characteristics of an entrepreneur as it relates to personal assessment and management.	Analyze desired lifestyle and that associated with entrepreneurship.	4	3	2	1	0
			Discern between desired benefits and those associated with entrepreneurship.					
			Examine similarities and differences between personal educational goals and educational requirements for entrepreneurship.					
Benchmark	3.0	Developing and recognizing a successful business venture opportunity through entrepreneurial discovery, concept development, resourcing, actualization and harvesting.						
		Competencies	Sample Indicators					
	3.1	Identify successful methods in developing and assessing innovative business ideas.	Utilize techniques for idea creation.	4	3	2	1	0
			Incorporate innovative thinking methods to meet consumer demands.					
			Identify methods in which technology creates innovation.					
			Use creativity in business activities/decisions.					
	3.2	Give explanation on how entrepreneurs recognize marketplace opportunities.	Assess global trends and opportunities for business ventures.	4	3	2	1	0
			Observe trends in the marketplace.					
	3.3	Explain tools used by entrepreneurs for venture planning.	Assess start-up requirements.	4	3	2	1	0
			Assess risks associated with venture.					
			Describe external resources useful to entrepreneurs during concept development.					

			Use components of a business plan to define venture idea.					
	3.4	Explain proper methods in assessing and calculating risk in developing a business venture.	Select an existing business and identify its initial business risks.	4	3	2	1	0
			Using financial and economic tools (e.g., Break-even, ROI, cost-benefit analysis, etc.) determine a venture's risk threshold (i.e., investing in a new business versus an established franchise).					
			Explain the complexity of business operations.					
			Explain the need for business systems and procedures.					
			Explain methods/processes for organizing work flow.					
			Identify processes for ongoing opportunity recognition.					
			Understand the need for changes in a business environment.					
	3.5	Describe the need for continuation planning as it relates with entrepreneurship/small business ownership.	Describe methods of venture harvesting.	4	3	2	1	0
			Evaluate options for continued venture involvement.					
			Develop exit strategies.					
	3.6	The student demonstrates an understanding of information management concepts and how they support effective business operations.	Explain the role of and justification for information management.	4	3	2	1	0
			Describe the nature of business records.					
			Explain the business and legal benefits of a records management system.					

			Explain how a records management program is established.					
			Describe the steps in planning and implementing a records management system.					
	3.7	Describe the impact of the Internet on entrepreneurship/small business ownership.	Explain the nature of e-commerce.	4	3	2	1	0
			Develop basic website.					
			Communicate by computer.					
			Demonstrate basic search skills on the Web.					
			Evaluate credibility of Internet resources.					
Benchmark	4.0	Understands the concepts, processes, and systems needed to determine and satisfy customer needs/wants/expectations, meet business goals/objectives, and create new product/service ideas.						
		Competencies	Sample Indicators					
	4.1	Understand marketing's role and function in business to facilitate economic exchanges with customers.	Determine services to provide customers.	4	3	2	1	0
			Explain the role of customer service in positioning/image.					
	4.2	Analyze the role of marketing research in constructing a small business management model.	Identify the reasons for conducting research.	4	3	2	1	0
			Explain the methods of market research, including an evaluation of the main research techniques.					
	4.3	Identify and explain primary and secondary market research.	Analyze the market viability of a new venture by conducting primary market research (surveys, interviews, etc) and secondary market research (publicly available reports, articles, etc).	4	3	2	1	0
	4.4	Describe marketing functions and related activities.	Identify elements of the marketing mix.	4	3	2	1	0

	4.5	Describe the components and purpose of a business plan.	Write a business venture executive summary.	4	3	2	1	0
			Describe the business venture in a company overview.					
			Determine the company mission statement, goals and objectives.					
			Describe the business environment and competition.					
			Describe the company description and marketing strategy.					
			Identify financial considerations.					
	4.6	Examine and explain the components and purpose of a financial plan for a business.	Estimate expenses for a start-up business.	4	3	2	1	0
			Identify break-even point.					
			Set profit goals.					
			Identify sources of capital.					
	4.7	Identify and evaluate a local entrepreneurial venture/business.	Evaluate all functions of business.	4	3	2	1	0
Benchmark	5.0	Understand organizational and financial tools used in making business decisions as it relates to entrepreneurship/small business ownership.						
		Competencies	Sample Indicators					
	5.1	Develop organizational skills to improve efficiency.	Apply time management principles.	4	3	2	1	0
			Develop a project plan.					
			Develop project management skills.					
			Describe the way technology affects operations management.					

	5.2	Identify and explain expense control strategies to enhance the financial well-being of a business.	Explain the nature of overhead/operating costs.	4	3	2	1	0
			Define expense control plans.					
	5.3	Give explanation on how entrepreneurs incorporate accounting in making business decisions.	Explain accounting standards (GAAP)	4	3	2	1	0
			Prepare estimated/projected income statement.					
			Estimate cash-flow needs.					
			Prepare estimated/projected balance sheet.					
			Calculate financial ratios.					
	5.4	Understand the need for proper financial and money management as it relates to an entrepreneur/small business owner.	Explain the purposes and importance of obtaining business credit.	4	3	2	1	0
			Describe use of credit bureaus.					
			Explain the nature of overhead/operating expenses.					
			Determine financing needed to start a business.					
			Determine risks associated with obtaining business credit.					
			Explain sources of financial assistance.					
			Explain loan evaluation criteria used by lending institutions.					
			Identify sources of business loans.					
			Determine business's value.					

			Explain the importance of having financial goals and objectives.					
			Define how to build and monitor a budget.					
			Explain the nature of capital investment.					
Benchmark	6.0	Know and understand the importance of employability skills. Explore, plan, and effectively manage careers. Know and understand the importance of entrepreneurship skills. Obtain and develop strategies for ensuring a successful career in entrepreneurship/small business ownership.						
		Competencies	Sample Indicators					
	6.1	Develop personal traits and behaviors to foster career advancement.	Discuss appropriate personal appearance.	4	3	2	1	0
			Set personal goals.					
			Use time-management skills.					
			Discuss the role of one's community and network in achieving personal and professional success.					
	6.2	Demonstrate employability/career success skills.	Place artifacts that demonstrate employability/career success skills in the electronic portfolio section of the IPS (Individual Plan of Study).	4	3	2	1	0

Kansas Transportation, Distribution and Logistics Cluster

Course:	Auto Collision II	Course #:	40302	Credit:	1.0
Pathways & CIP Codes:	Mobile Equipment Maintenance (47.9999)	Strand(s):	Automotive Collision	Level:	Application
Course Description:	A comprehensive, application level course designed to provide students with the advanced skills needed to perform diagnosis and repair in the Auto Collision Industry. <i>(Prerequisite: Auto Collision I.)</i>				

Directions: *The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.*

Rating Scale:

4. Exemplary Achievement: Student possesses outstanding knowledge, skills, or professional attitude.
3. Proficient Achievement: Student demonstrates good knowledge, skills, or professional attitude.
Requires limited supervision.
2. Limited Achievement: Student demonstrates fragmented knowledge, skills, or professional attitude.
Requires close supervision.
1. Inadequate Achievement: Student lacks knowledge, skills, or professional attitude.
0. No Instruction / Training: Student has not received instruction or training in this area.

Student: _____

Graduation Date: _____

I certify that the student has received training in the areas indicated.

Instructor Signature: _____

Benchmark 1.0: Orientation		4	3	2	1	0
1.1	Access and utilize environmental protection regulations and practices.					

Benchmark 2.0: Collision Report Writing		4	3	2	1	0
2.1	Analyze damage and select appropriate repair procedures.					
2.2	Interpret and apply collision estimation information.					
2.3	Prepare damage report in logical sequence.					
2.4	Research and understand new, advanced materials used in vehicle construction.					

Benchmark 3.0: Advanced Cosmetic Panel Repair		4	3	2	1	0
3.1	Straighten complex sheet metal damage.					
3.2	Demonstrate proficient use of body fillers.					

Benchmark 4.0: Introduction to Structural Repair		4	3	2	1	0
4.1	Use GMAW equipment to perform welds.					
4.2	Straighten and align frame or unibody damage.					

4.3	Replace unitized components.					
4.4	Explore resistance spot welding.					

Benchmark 5.0: Electrical Operations		4	3	2	1	0
5.1	Read and apply wiring diagrams.					
5.2	Replace or repair damaged wiring.					
5.3	Replace and aim headlight assemblies.					
5.4	Demonstrate safety knowledge of supplemental restraint systems.					
5.5	Explore Advanced Driver Assist Systems (ADAS).					

Benchmark 6.0: Collision Related Mechanical Operations		4	3	2	1	0
6.1	Remove and replace components as needed based on diagnostics.					
6.2	Demonstrate basic understanding of wheel alignment terminology.					

Kansas Transportation, Distribution and Logistics Cluster

Course:	Auto Refinishing II	Course #:	40312	Credit:	1.0
Pathways & CIP Codes:	Mobile Equipment Maintenance (47.9999)	Strand(s):	Automotive Collision	Level:	Application
Course Description:	A comprehensive, application level course designed to provide students with the advanced skills needed to perform diagnosis and repair in the Auto Refinishing Industry. <i>(Prerequisite: Auto Refinishing I.)</i>				

Directions: *The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.*

Rating Scale:

4. Exemplary Achievement: Student possesses outstanding knowledge, skills, or professional attitude.
3. Proficient Achievement: Student demonstrates good knowledge, skills, or professional attitude.
Requires limited supervision.
2. Limited Achievement: Student demonstrates fragmented knowledge, skills, or professional attitude.
Requires close supervision.
1. Inadequate Achievement: Student lacks knowledge, skills, or professional attitude.
0. No Instruction / Training: Student has not received instruction or training in this area.

Student: _____

Graduation Date: _____

I certify that the student has received training in the areas indicated.

Instructor Signature: _____

Benchmark 1.0: Orientation		4	3	2	1	0
1.1	Discuss differences between the refinishing industry and the custom refinishing /application industry.					
1.2	Utilize good safety practices in the shop.					
1.3	Research and discuss maintenance and limitations of ventilation and filtration as it pertains to shop environment and personal safety.					
1.4	Demonstrate proper handling and disposal procedures for hazardous materials.					
1.5	Demonstrate knowledge, safety, and preventive maintenance procedures of tools and power equipment.					

Benchmark 2.0: Refinishing		4	3	2	1	0
2.1	Identify and discuss usage of custom refinishing / application materials.					
2.2	Inspect and adjust spray equipment / adjust application equipment.					
2.3	Prepare surface for paint including proper masking procedures.					
2.4	Apply primer, sealer, and/or basecoat where needed.					
2.5	Apply clear coat /intercoat if required for custom procedure.					
2.6	Clean and inspect work.					
2.7	Apply tri-stage finish.					

2.8	Apply various blending techniques.					
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Benchmark 3.0: Custom Application		4	3	2	1	0
3.1	Identify and discuss custom technique to be used and formulate a plan of action.					
3.2	Prepare and organize materials.					
3.3	Prepare surface for paint or application.					
3.4	Formulate paint.					
3.5	Apply custom technique or application to the surface.					
3.6	Apply clear coat.					

Benchmark 4.0: Paint Defects – Causes and Cures		4	3	2	1	0
4.1	Identify paint or application defects and their cause(s).					
4.2	Apply problem solving skills to resolve defects.					

Benchmark 5.0: Final Detail		4	3	2	1	0
5.1	Color sand and buff paint surface.					
5.2	Clean and inspect work.					

Kansas Transportation, Distribution and Logistics Cluster

Course:	Work Experience in Transportation	Course #:	40250	Credit:	.5
Pathways & CIP Codes:	Mobile Equipment Maintenance (47.9999)	Strand(s):	Auto Collision Auto Technology – One & Two	Level:	Application
Course Description:	An advanced research and application level course covering specific topics in transportation. Should include opportunities for Work-Based Learning (WBL) such as in-house training, job shadowing, and/or internships. <i>(Prerequisite: Must take at least 1.0 credit of Technical level course and Application level course combined.)</i>				

Directions: The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

Rating Scale:

4. Exemplary Achievement: Student possesses outstanding knowledge, skills, or professional attitude.
3. Proficient Achievement: Student demonstrates good knowledge, skills, or professional attitude.
Requires limited supervision.
2. Limited Achievement: Student demonstrates fragmented knowledge, skills, or professional attitude.
Requires close supervision.
1. Inadequate Achievement: Student lacks knowledge, skills, or professional attitude.
0. No Instruction / Training: Student has not received instruction or training in this area.

Student: _____

Graduation Date: _____

I certify that the student has received training in the areas indicated.

Instructor Signature: _____

Benchmark 1.0: Employability Skills and Career Development Strategies		4	3	2	1	0
1.1	Complete a Work-Based Learning experience plan.					
1.2	Enhance Individual Plan of Study through interest assessment(s).					
1.3	Research and report on careers in transportation.					
1.4	Research licensing certification and credentialing in the transportation industry.					
1.5	Create a professional portfolio to document activities completed while working with a mentor or through an internship in the transportation industry.					
1.6	Prepare a resume to include in student Individual Plan of Study (IPS).					
1.7	Prepare a letter of application to include in student Individual Plan of Study (IPS).					
1.8	Demonstrate interview skills through mock or actual employment interview.					

Benchmark 2.0: Interpersonal Skills – Making Informed Decisions to Continue Business Operations		4	3	2	1	0
2.1	Demonstrate sound customer services principles when working with customer or client to complete a client-driven project.					
2.2	Develop and maintain professional working relationships.					

Benchmark 3.0: Communication in the Workplace - Concepts, Strategies, and Systems		4	3	2	1	0
3.1	Apply verbal skills when obtaining and conveying information.					
3.2	Use appropriate grammar and word usage in the creation and delivery of a formal graphic presentation using current standards and technology.					
3.3	Develop and deliver oral presentations to provide information for specific purposes.					

Benchmark 4.0: Professional Workplace - Technical Knowledge and Skills		4	3	2	1	0
4.1	Research and report on "Green" applications in the Transportation industry.					
4.2	Research and discuss modern & future trends in equipment, methods, & techniques.					
4.3	Conduct project and facility evaluations and critique their effectiveness.					
4.4	Understand MSDS (Material Safety Data Sheets) and other safety resources required for the workplace.					
4.5	Demonstrate an understanding of OSHA regulations for personal safety, including utilization of PPE, safe use of tools & equipment, and safe handling of hazardous materials.					
4.6	Access and utilize industry resources.					
4.7	Utilize knowledge and skills to perform job duties to industry standards.					
4.8	Utilize effective management techniques to organize workflow.					

Kansas Transportation, Distribution and Logistics Cluster

Course:	Work Experience in Transportation - Comprehensive	Course #:	40251	Credit:	1.0
Pathways & CIP Codes:	Mobile Equipment Maintenance (47.9999)	Strand(s):	Auto Collision Auto Technology – One & Two	Level:	Application
Course Description:	An advanced research and application course covering specific topics in transportation. Should include opportunities for Work-Based Learning (WBL) such as in-house training, job shadowing, and/or internships. In relationship to the half credit version, the full credit version requires more in-depth research opportunities, the creation of a portfolio documentation of internship activities, and the completion of the OSHA 10 Safety Certification course. <i>(Prerequisite: Must take at least 1.0 credit of Technical level course and Application level course combined.)</i>				

Directions: *The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.*

Rating Scale:

4. Exemplary Achievement: Student possesses outstanding knowledge, skills, or professional attitude.
3. Proficient Achievement: Student demonstrates good knowledge, skills, or professional attitude.
Requires limited supervision.
2. Limited Achievement: Student demonstrates fragmented knowledge, skills, or professional attitude.
Requires close supervision.
1. Inadequate Achievement: Student lacks knowledge, skills, or professional attitude.
0. No Instruction / Training: Student has not received instruction or training in this area.

Student: _____

Graduation Date: _____

I certify that the student has received training in the areas indicated.

Instructor Signature: _____

Benchmark 1.0: Employability Skills and Career Development Strategies		4	3	2	1	0
1.1	Complete a Work-Based Learning experience plan.					
1.2	Enhance Individual Plan of Study through interest assessment(s).					
1.3	Research and report on careers in transportation.					
1.4	Research licensing certification and credentialing in the transportation industry.					
1.5	Create a professional portfolio to document activities completed while working with a mentor or through an internship in the transportation industry.					
1.6	Prepare a resume to include in student Individual Plan of Study (IPS).					
1.7	Prepare a letter of application to include in student Individual Plan of Study (IPS).					
1.8	Demonstrate interview skills through mock or actual employment interview.					

Benchmark 2.0: Interpersonal Skills – Making Informed Decisions to Continue Business Operations		4	3	2	1	0
2.1	Demonstrate sound customer services principles when working with customer or client to complete a client-driven project.					
2.2	Develop and maintain professional working relationships.					

Benchmark 3.0: Communication in the Workplace - Concepts, Strategies, and Systems		4	3	2	1	0
3.1	Apply verbal skills when obtaining and conveying information.					
3.2	Use appropriate grammar and word usage in the creation and delivery of a formal graphic presentation using current standards and technology.					
3.3	Develop and deliver oral presentations to provide information for specific purposes.					
3.4	Prepare simple documents and other business communications.					
3.5	Use information technology tools to manage and perform work responsibilities.					

Benchmark 4.0: Professional Workplace - Technical Knowledge and Skills		4	3	2	1	0
4.1	Research and report on “Green” applications in the Transportation industry.					
4.2	Research and discuss modern & future trends in equipment, methods, & techniques.					
4.3	Conduct project and facility evaluations and critique their effectiveness.					
4.4	Understand MSDS (Material Safety Data Sheets) and other safety resources required for the workplace.					
4.5	Demonstrate an understanding of OSHA regulations for personal safety, including utilization of PPE, safe use of tools & equipment, and safe handling of hazardous materials.					
4.6	Access and utilize industry resources.					
4.7	Utilize knowledge and skills to perform job duties to industry standards.					
4.8	Utilize effective management techniques to organize workflow.					