2024 – 2025

PROGRAM GUIDE FOR:

TRANSPORTATION, DISTRIBUTION AND LOGISTICS CLUSTER

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CAREER AND TECHNICAL EDUCATION
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Transportation, Distribution, and Logistics Cluster Program Guides

The Transportation, Distribution, and Logistics cluster includes specialty areas in automotive technology, aviation technology, collision repair, diesel technology, flight technology, and logistics. The curriculum is based on recognized industry and professional standards found in national organizations and federal regulations.

**Courses highlighted in yellow are shared with other clusters. See "Shared Courses" table on page 4 for additional details.

Career Pathway Program	Automotive Technology Program **(Must teach three courses from this program list within two years)** The Automotive Technology Program is designed to equip students with basic knowledge and skills regarding safety, engine repair, automatic transmissions, and manual drive trains. A major focus of this course is system and component operations. Standards are designed to equip students to diagnose and repair engine performance related systems.		
Course Number	**Career Pathway Program Courses**	**Career Readiness Indicator (CRI)**	**In Demand Occupations**
20104G1011	***Automotive Technology Foundations – Required prerequisite course**	• Alabama Certified Employee (ACE) • ASE Entry-Level – Automobile – Automotive Service Technology • ASE Entry-Level – Automobile – Brakes • ASE Entry-Level – Automobile – Electrical/Electronic Systems • ASE Entry-Level – Automobile – Engine Performance • ASE Entry-Level – Automobile – Engine Repair • ASE Entry-Level – Automobile – Heating and Air Conditioning • ASE Entry-Level – Automobile – Maintenance and Light Repair • ASE Entry-Level – Automobile – Manual Drive Train and Axles • ASE Entry-Level – Automobile – Suspension and Steering • ASE Entry-Level – Automobile – Automatic Transmission and Transaxle	• Automotive Service Technician • Maintenance and Light Repair Technician • Master Automotive Service Technician
20104G1012	Automotive Brake, Suspension, and Steering Repair I		
20104G1013	Automotive Electrical Components I		
20104G1014	Automotive Engine Repair and Performance I		
20104G1015	Automotive Brake, Suspension, and Steering Repair II		
20104G1016	Automotive Electrical Components II		
20104G1017	Automotive Engine Repair and Performance II		
20997G1003	Career Pathway Project in Transportation, Distribution and Logistics		
20997G1001	CTE Lab in Transportation, Distribution and Logistics		
17049G1000	Safety and Health Regulations		
	***NOTE:** Automotive Technology Foundations may be taken concurrently with one of the following courses: Automotive Brake, Suspension, and Steering Repair I; Automotive Electrical Components I; or Automotive Engine Repair and Performance I.		

Career Pathway Program	Aviation Technology Program **(Must teach three courses from this program list within two years)** The Aviation Technology Program is designed to prepare students to continue their education in aviation technology at the college level. Students learn various skills including avionics, sheet metal, engine theory and much more.		
Course Number	**Career Pathway Program Courses**	**Career Readiness Indicator (CRI)**	**In Demand Occupations**
20114G1001	**Airframe Systems – Required corequisite course**	• Alabama Certified Employee (ACE) • FAA Part 107	• Aircraft Mechanic • Avionics Technician • Helicopter Mechanic
20113G1001	**Aircraft Theory of Flight and Operations – Required corequisite course**		
20113G1014	Aircraft Electrical Components		
20113G1011	Aircraft Engine & Propeller Theory		
20113G1013	Aircraft Instruments and Avionics		
20114G1002	Aircraft Non-Metallic Structures		
20114G1003	Aircraft Sheet Metal Structures		
20113G1012	Aircraft Turbine Engine		
20997G1003	Career Pathway Project in Transportation, Distribution and Logistics		
20997G1001	CTE Lab in Transportation, Distribution and Logistics		
20053G1001	Drone Technology		
17049G1000	Safety and Health Regulations		

Career Pathway Program	Collision Repair Program **(Must teach three courses from this program list within two years)** The Collision Repair Program is divided into two divisions, collision repair and refinishing. This program is designed to train students to successfully repair accidental damage and to refinish vehicles. Emphasis is placed on safety, plasma arc cutting and oxyacetylene cutting, resistance type spot welding, and metal inert gas (MIG) welding.		
Course Number	**Career Pathway Program Courses**	**Career Readiness Indicator (CRI)**	**In Demand Occupations**
20997G1003	Career Pathway Project in Transportation, Distribution and Logistics	• Alabama Certified Employee (ACE) • ASE Entry-Level – Collision – Mechanical and Electrical Components • ASE Entry-Level – Collision – Non-structural Analysis and Damage Repair • ASE Entry-Level – Collision – Painting and Refinishing • ASE Entry-Level – Collision – Structural Analysis and Damage Repair • ICAR Auto Refinish Platinum • ICAR Intro to Collision Repair • ICAR Non-Structural Platinum	• Collision Refinishing Technician • Manufacturing Assembly Specialist • Manufacturing Finishing Specialist • Nonstructural Repair Technician • Structural Repair Technician
20997G1001	CTE Lab in Transportation, Distribution and Logistics		
20116G1037	Damage Analysis, Estimating and Customer Service		
20105G1012	Mechanical and Electrical Components I		
20105G1022	Mechanical and Electrical Components II		
20116G1035	Nonstructural Analysis and Damage Repair		
20116G1036	Nonstructural Welding, Cutting, and Joining		
20116G1013	Painting and Refinishing I		
20116G1023	Painting and Refinishing II		
17049G1000	Safety and Health Regulations		
20117G1003	Structural Analysis and Damage Repair		

Career Pathway Program	Diesel Technology Program **(Must teach three courses from this program list within two years)** The Diesel Technology Program is designed for students to gain knowledge and experience related to servicing heavy equipment and medium/heavy duty trucks. Emphasis is placed on diesel engines, electrical, HVAC, hydraulics and preventative maintenance and light repair. All programs are ASE Education Foundation accredited and students are eligible to receive ASE credentials.		
Course Number	**Career Pathway Program Courses**	**Career Readiness Indicator (CRI)**	**In Demand Occupations**
20997G1003	Career Pathway Project in Transportation, Distribution and Logistics	• Alabama Certified Employee (ACE) • ASE Entry-Level – Medium/Heavy Truck – Brakes • ASE Entry-Level – Medium/Heavy Truck – Diesel Engines • ASE Entry-Level – Medium/Heavy Truck – Electrical/Electronic Systems • ASE Entry-Level – Medium/Heavy Truck – Inspection Maintenance and Minor Repair • ASE Entry-Level – Medium/Heavy Truck – Suspension and Steering • Asphalt Roller – Skills for Success • Bulldozer – Skills for Success • CDL A – Skills for Success • CDL B – Skills for Success • CDL HazMat Endorsement – Skills for Success • CDL Passenger Endorsement – Skills for Success • School Bus Endorsement – Skills for Success	• Diesel Truck Technician • Generator Service Technician • Heavy Equipment Technician
20051G1001	Commercial Transportation		
20997G1001	CTE Lab in Transportation, Distribution and Logistics		
20107G1025	Diesel Technology A		
20107G1026	Diesel Technology B		
20107G1027	Diesel Technology C		
20107G1028	Diesel Technology D		
17049G1000	Safety and Health Regulations		

Career Pathway Program	Flight Technology Program **(Must teach three courses from this program list within two years)** The Flight Technology Program is designed to prepare students with knowledge related to flight operations from preflight to post-flight procedures. This program will include reading and interpreting up-to-date weather reports, record flight paths, support flight operations, and perform calculations for fuel usage.		
Course Number	**Career Pathway Program Courses**	**Career Readiness Indicator (CRI)**	**In Demand Occupations**
20114G1001	**Airframe Systems – Required corequisite course**	• Alabama Certified Employee (ACE) • FAA Part 107	• Certified Flight Instructor • Commercial Pilot Airplane • Commercial Pilot Helicopter • Instrument Pilot Airplane Rating • Instrument Pilot Helicopter Rating • Private Pilot Airplane • Private Pilot Helicopter
20113G1001	**Aircraft Theory of Flight and Operations – Required corequisite course**		
20113G1013	Aircraft Instruments and Avionics		
20997G1003	Career Pathway Project in Transportation, Distribution and Logistics		
20997G1001	CTE Lab in Transportation, Distribution and Logistics		
20053G1001	Drone Technology		
20053G1012	Flight Communications		
20053G1011	Flight Navigation		
20053G1013	Flight Operation		
17049G1000	Safety and Health Regulations		

Career Pathway Program	Logistics Program **(Must teach three courses from this program list within two years)** The Logistics Program is designed to prepare students to equip students with knowledge and skills regarding the process of managing the flow of goods through the supply chain from the point of origin to the destination. Standards are written for students to investigate trends in green logistics, various aspects of international environmental laws and requirements, e-commerce applications, and innovative technologies in logistics.		
Course Number	**Career Pathway Program Courses**	**Career Readiness Indicator (CRI)**	**In Demand Occupations**
20997G1003	Career Pathway Project in Transportation, Distribution and Logistics	• Alabama Certified Employee (ACE) • CDL A – Skills for Success • CDL B – Skills for Success • CDL Passenger Endorsement – Skills for Success • School Bus Endorsement – Skills for Success • CDL HazMat Endorsement – Skills for Success • Skid Steer – Skills for Success • Bulldozer – Skills for Success • Asphalt Roller – Skills for Success • FAA Part 107 • MSSC Certified Logistics Associate • MSSC Certified Logistics Technician	• Freight Agent • Procurement Manager • Supply Chain Manager • Transportation Analyst • Warehouse Logistics Manager
20051G1001	Commercial Transportation		
20997G1001	CTE Lab in Transportation, Distribution and Logistics		
20053G1001	Drone Technology		
20152G1001	Foundations of Warehousing and Distribution		
20152G1003	Global Logistics and Supply Chain Management		
20152G1002	Industry Specific Logistics Processes		
20001G1010	Introduction to Logistics		
17049G1000	Safety and Health Regulations		

Career Pathway Program	SREB AC Global Logistics and Supply Chain Management Program **(Must teach three courses from this program list within two years)** Global logistics and supply chain management connects internal functions of an organization with other institutions around the globe. It is vital to understand the roles of logistics and supply chain management in a global economy where individuals and organizations have access to markets across the world. This field requires critical thinking and problem-solving skills to coordinate the movement of goods and services that may be separated by a few feet or thousands of miles. In an industry always striving for optimization, decision-making skills are paramount.		
Course Number	**Career Pathway Program Courses**	**Career Readiness Indicator (CRI)**	**Workforce Careers**
20997G1003	Career Pathway Project in Transportation, Distribution and Logistics	• MSSC Certified Logistics Associate • MSSC Certified Logistics Technician	• Logistics Technician • Procurement Manager • Supply Chain Manager
20997G1001	CTE Lab in Transportation, Distribution and Logistics		
20199G1001	SREB Functional Areas in Logistics		
20199G1002	SREB Global Logistics Management		
20001G1002	SREB Introduction to Logistics		
20199G1003	SREB Logistics and Supply Chain Management		
17049G1000	Safety and Health Regulations		
***NOTE:** LEAs must contact SREB for additional information prior to utilizing any of the course codes listed above, as it does require commitment to the conditions in a MOU and participation in mandatory training provided by the provider.			

2024-2025 Subject and Personnel Codes
Transportation, Distribution, and Logistics Cluster

Transportation, Distribution, and Logistics Cluster Courses			
Course Number	**Course Name**	**Course Number**	**Course Name**
20113G1014	Aircraft Electrical Components	20107G1028	Diesel Technology D
20113G1011	Aircraft Engine & Propeller Theory	20053G1001	Drone Technology
20113G1013	Aircraft Instruments and Avionics	20053G1012	Flight Communications
20114G1002	Aircraft Non-Metallic Structures	20053G1011	Flight Navigation
20114G1003	Aircraft Sheet Metal Structures	20053G1013	Flight Operation
20113G1001	**Aircraft Theory of Flight and Operations – Required corequisite course**	20152G1001	Foundations of Warehousing and Distribution
20113G1012	Aircraft Turbine Engine	20152G1003	Global Logistics and Supply Chain Management
20114G1001	**Airframe Systems – Required corequisite course**	20152G1002	Industry Specific Logistics Processes
20104G1012	Automotive Brake, Suspension, and Steering Repair I	20001G1010	Introduction to Logistics
20104G1013	Automotive Electrical Components I	20105G1012	Mechanical and Electrical Components I
20104G1014	Automotive Engine Repair and Performance I	20105G1022	Mechanical and Electrical Components II
20104G1015	Automotive Brake, Suspension, and Steering Repair II	20116G1035	Nonstructural Analysis and Damage Repair
20104G1016	Automotive Electrical Components II	20116G1036	Non-structural Welding, Cutting, and Joining
20104G1017	Automotive Engine Repair and Performance II	20116G1013	Painting and Refinishing I
20104G1011	**Automotive Technology Foundations – Required prerequisite course**	20116G1023	Painting and Refinishing II
20051G1001	Commercial Transportation	17049G1000	Safety and Health Regulations
20997G1001	CTE Lab in Transportation, Distribution and Logistics	20199G1001	SREB Functional Areas in Logistics
20997G1003	Career Pathway Project in Transportation, Distribution and Logistics	20199G1002	SREB Global Logistics Management
20116G1037	Damage Analysis, Estimating and Customer Service	20001G1002	SREB Introduction to Logistics
20107G1025	Diesel Technology A	20199G1003	SREB Logistics and Supply Chain Management
20107G1026	Diesel Technology B	20117G1003	Structural Analysis and Damage Repair
20107G1027	Diesel Technology C		

Shared Courses			
Course Number	**Course Name**	**Cluster(s)**	**Required Year to Implement COS**
17049G1000	Safety and Health Regulations	Architecture and Construction Health Science **Manufacturing**	2022-2023

General Note: Course descriptions and content standards for most courses are located on the Alabama Department of Education website at: https://www.alabamaachieves.org/career-and-technical-education/cte-courses-of-study/.

College and Career Readiness Indicator Course Matrix

Program Name	Automotive Technology	Aviation Technology	Collision Repair	Diesel Technology
Foundation Course(s)	Automotive Technology Foundation	Aircraft Theory of Flight and Operations	Non-structural Analysis and Damage Repair	Diesel Technology A
Concentrator Course(s)	Automotive Brake, Suspension, and Steering Repair I Automotive Electrical Components I Automotive Engine Repair and Components I Automotive Brake, Suspension, and Steering Repair II Automotive Electrical Components II Automotive Engine Repair and Components II Safety and Health Regulations	Aircraft Electrical Components Aircraft Engine & Propeller Theory Aircraft Instruments and Avionics Aircraft Non-Metallic Structures Aircraft Sheet Metal Structures Aircraft Turbine Engine Airframe Systems Drone Technology Safety and Health Regulations	Damage Analysis, Estimating and Customer Service Mechanical and Electrical Components in Collision I Mechanical and Electrical Components in Collision II Nonstructural Welding, Cutting, and Joining Painting and Refinishing I Painting and Refinishing II Safety and Health Regulations Structural Analysis and Damage Repair	Commercial Transportation Diesel Technology B Diesel Technology C Diesel Technology D Safety and Health Regulations
Capstone Course(s)	Career Pathway Project in Transportation, Distribution and Logistics CTE Lab in Transportation, Distribution and Logistics	Career Pathway Project in Transportation, Distribution and Logistics CTE Lab in Transportation, Distribution and Logistics	Career Pathway Project in Transportation, Distribution and Logistics CTE Lab in Transportation, Distribution and Logistics	Career Pathway Project in Transportation, Distribution and Logistics CTE Lab in Transportation, Distribution and Logistics

Program Name	Flight Technology	Logistics	SREB AC Global Logistics and Supply Chain Management Program
Foundation Course(s)	Aircraft Theory of Flight and Operations	Introduction to Logistics	
Concentrator Course(s)	Aircraft Instruments and Avionics Airframe Systems Drone Technology Flight Communications Flight Navigation Flight Operations Safety and Health Regulations	Commercial Transportation Drone Technology Foundations of Warehousing Global Logistics and Supply Chain Management Industry Specific Logistics Processes Safety and Health Regulations	Safety and Health Regulations SREB Functional Areas in Logistics SREB Global Logistics Management SREB Introduction to Logistics SREB Logistics and Supply Chain Management
Capstone Course(s)	Career Pathway Project in Transportation, Distribution and Logistics CTE Lab in Transportation, Distribution and Logistics	Career Pathway Project in Transportation, Distribution and Logistics CTE Lab in Transportation, Distribution and Logistics	Career Pathway Project in Transportation, Distribution and Logistics CTE Lab in Transportation, Distribution and Logistics

To meet the CCR Indicator as a CTE completer, a student must earn three (3.0) credits with the grade of a "C" or higher in CTE courses that are part of an approved CTE program of study. Additional requirements are outlined in Memorandum **FY22-2065.**

This matrix is intended for general guidance on the CCR completer status and is subject to change. For all CTE programming information, please refer to the CTE Cluster specific Program Guide. It contains a list of approved CTE programs, valid course numbers, required prerequisite courses, approved Career Readiness Indicators (CRIs) and in demand occupations.

***Courses are listed in alphabetical order, not in sequential order.**