2025-2026 PROGRAM GUIDE STEM CLUSTER AND STEM MIDDLE SCHOOL



ALABAMA STATE DEPARTMENT OF EDUCATION CAREER AND TECHNICAL EDUCATION LISA BRUCE, EDUCATION ADMINISTRATOR BEN SCHEIERMAN, EDUCATION SPECIALIST ASHLEY CRUM, ADMINISTRATIVE ASSISTANT (334) 694-4746

STEM Cluster Program Guide

The STEM cluster course of study is designed to address the challenges of a changing, technological, diverse, and global society. Students develop their abilities to analyze, communicate, manage, and lead. The rigorous content standards contained in these courses require students to use creative and innovative, critical-thinking skills. Experiences should be project-based and require higher-order thinking, communication, management, and leadership skills.

**Courses highlighted in yellow are shared with other clusters. See "Shared Courses" table on page 8 for additional details.

Courses inglinging	ted in yellow are shared with other clusters. See	CTE Engineering Program	
Career	(Maret too all those		
Pathway		courses from this program list within two y	
Program		the integration of academics. To achieve the solution skills for reading, writing, speaking, listening, v	
Trogram		s; and knowledge of current and emerging technologies	
Course	, ,		
Number	Career Pathway Program Courses	Career Readiness Indicator (CRI)	In Demand Occupations
21002G1000	Applications of Engineering and Technology	Autodesk – AutoCAD Certified User	Aerospace Engineer/Tech
	- Mathematics credit eligible	Autodesk – Fusion 360 Certified User	Aesthetics Specialist
21015G1000	Basic Programming for Engineers	Autodesk – Inventor Certified User	Agricultural Engineers
21047G1000	Capstone of Engineering and Technology	Autodesk – Revit Certified User	Architectural Engineer/Tech
21047G1001	Career Pathway Project in STEM	Certified OnShape Professional	Bioengineers
21015G1001	Computer Engineering and Technology	Certiport Information Technology Specialist	Chemical Engineers
21997G1000	CTE Lab in STEM	(ITS) – Databases	Civil Engineer/Tech Control Control Contr
21014G1000	Environmental Engineering – Mathematics	Certiport Information Technology Specialist (ITS) – HTML & CSS	Control Systems Engineer/Tech Computer Hardware Engineers
	credit eligible	Certiport Information Technology Specialist	Computer Hardware Engineers Drafters
21005G1000	Foundations of Engineering and Technology	(ITS) – HTML5 Application Development	Electrical Engineer/Tech
21998G1050	Internship in STEM	Certiport Information Technology Specialist	Electro-Mechanical Technicians
21009G1000	Robotic Systems	(ITS) – Java	Engineer/Technician all
		Certiport Information Technology Specialist	Disciplines
		(ITS) – JavaScript	Environmental Engineer/Specialist
		Certiport Information Technology Specialist	Ergonomics Specialist
		(ITS) – Python	Industrial Engineer/Tech
		Certiport Information Technology Specialist (ITS) – Software Development	Manufacturing Engineer/Tech
		Drone Operator – Skills for Success	Materials Engineer/Tech
		Electronic Systems Associate – ESA 1 Direct	Mechanical Engineer/Tech Detrology Fractions/Tech
		Current	Petroleum Engineer/TechRobotics Engineer/Tech
		Electronic Systems Associate – ESA 2	Robotics Eligineer/Tech
		Alternating Current	
		Electronic Systems Associate – ESA 3	
		Semiconductors Devices and Circuits	
		Electronic Systems Associate – ESA 4	
		Digital Devices and Circuits	
		FAA Part 107 FANUC CERT – Handling Tool Operations	
		and Programming	
		Microsoft Office – Access Expert 2019/O365	
		Microsoft Office – Excel Expert 2019/O365	
		Oracle Certified Associate (OCA) – Java	
		Programmer	
		QuantHub- Applied Data Skills	
		Solid Edge Certified Associate	
		SolidWorks Associate	

Career Pathway Program	Greenpower Program The Greenpower challenge – to design and build an electric car to race at Greenpower events. Students build age-appropriate kit cars according to regulations and then race them at motorsport venues around the state/country. The Greenpower challenge harnesses the excitement of motorsport to inspire more than 10,000 participants a year to excel in STEM.			
Course Number	Career Pathway Program Courses	Career Readiness Indicator (CRI)	In Demand Occupations	
21047G1001 21997G1000 21105G1001 21105G1002 21105G1003 21105G0708	Career Pathway Project in STEM CTE Lab in STEM Greenpower F24 Eng Design & Race Ch I Greenpower F24 Eng Design & Race Ch II Introduction to Greenpower (HS) Introduction to Greenpower (MS)	Autodesk – AutoCAD Certified User Autodesk – Fusion 360 Certified User Autodesk – Inventor Certified User Autodesk – Revit Certified User Certified OnShape Professional Certiport Information Technology Specialist (ITS) – Databases Certiport Information Technology Specialist (ITS) – HTML & CSS Certiport Information Technology Specialist (ITS) – HTML 5 Application Development Certiport Information Technology Specialist (ITS) – Java Certiport Information Technology Specialist (ITS) – Java Certiport Information Technology Specialist (ITS) – JavaScript Certiport Information Technology Specialist (ITS) – Python Certiport Information Technology Specialist (ITS) – Software Development FAA Part 107 FANUC CERT – Handling Tool Operations and Programming Microsoft Office – Access Expert 2019/O365	Aerospace Engineer/Tech Aesthetics Specialist Architectural Engineer/Tech Civil Engineer/Tech Control Systems Engineer/Tech Electrical Engineer/Tech Engineer/Technician all Disciplines Environmental Scientist/Specialist Ergonomics Specialist Industrial Engineer/Tech Manufacturing Engineer/Tech Materials Engineer/Tech Mechanical Engineer/Tech Petroleum Engineer/Tech Robotics Engineer/Tech	
		Microsoft Office – Excel Expert 2019/O365 Oracle Certified Associate (OCA) – Java Programmer Solid Edge Certified Associate SolidWorks Associate		

Career Pathway Program Course	*Project Lead The Way (PLTW) Engineering Program (Must teach three courses from this program list within two years.) From launching space explorations to delivering safe, clean water to communities, engineers find solutions to pressing problems and turn their ideas into reality. PLTW Engineering empowers students to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers. The program's courses engage students in compelling, real-world challenges that help them become better collaborators and thinkers. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take.				
Course Number	Career Pathway Program Courses	Career Readiness Indicator (CRI)	In Demand Occupations		
21019G1000	Aerospace Engineering – PLTW	Autodesk – AutoCAD Certified User	Aerospace Engineer/Tech		
21047G1001	Career Pathway Project in STEM	Autodesk – Fusion 360 Certified User	Aesthetics Specialist		
21021G1000	Civil Engineering and Architecture – PLTW	Autodesk – Inventor Certified User	Agricultural Engineers		
21022G1000	Computer Integrated Manufacturing – PLTW	Autodesk – Revit Certified User Certified OnShape Professional	Architectural Engineer/Tech Bioengineers		
21997G1000	CTE Lab in STEM	Certiport Information Technology Specialist (TTS) Databases	Chemical Engineers Civil Engineer/Teals		
21023G1000	Digital Electronics – PLTW	(ITS) – Databases • Certiport Information Technology Specialist	Civil Engineer/Tech Control Systems Engineer/Tech		
21026G1000	Engineering Essentials – PLTW	(ITS) – HTML & CSS	Computer Hardware Engineers		
21024G1000	Environmental Sustainability – PLTW	Certiport Information Technology Specialist	Drafters		
21017G1000	Introduction to Engineering Design – PLTW Mathematics credit eligible	(ITS) – HTML5 Application Development • Certiport Information Technology Specialist	Electrical Engineer/Tech Electro-Mechanical Technicians		
21025G1001	PLTW Capstone	(ITS) – Java • Engineer/Technician a			
21018G1000	Principles of Engineering – PLTW Science credit eligible	Certiport Information Technology Specialist (ITS) – JavaScript Certiport Information Technology Specialist (ITS) – Python Certiport Information Technology Specialist (ITS) – Software Development Drone Operator – Skills for Success Electronic Systems Associate – ESA 1 Direct Current Electronic Systems Associate – ESA 2 Alternating Current Electronic Systems Associate – ESA 3 Semiconductors Devices and Circuits Electronic Systems Associate – ESA 4 Digital Devices and Circuits FAA Part 107 FANUC CERT – Handling Tool Operations and Programming Microsoft Office – Access Expert 2019/O365 Microsoft Office – Excel Expert 2019/O365 Oracle Certified Associate (OCA) – Java Programmer QuantHub- Applied Data Skills Solid Edge Certified Associate SolidWorks Associate	Environmental Engineer/Specialist Ergonomics Specialist Industrial Engineer/Tech Manufacturing Engineer/Tech Materials Engineer/Tech Mechanical Engineer/Tech Petroleum Engineer/Tech Robotics Engineer/Tech		

*NOTE: This is a purchased curriculum. LEAs must contact PLTW for additional information prior to utilizing the course codes listed above with a PLTW suffix, as it does require submission of a signed copy of the Terms and Conditions, participation in mandatory training and payment of a participation fee to the provider.

	*SRFR AC Aerospace Engineering Program			
Career Pathway Program	*SREB AC Aerospace Engineering Program (Must teach three courses from this program list within two years.) Schools are challenged to better prepare students for a wide array of postsecondary options. The workforce of today and tomorrow demands a higher level of skill — people who grasp complex problems, understand technology and troubleshoot problems. Advanced Career (AC) answers both of these needs. By fusing a rigorous academic core with challenging project work and advanced technology in a career pathway program of study, AC courses give students a greater depth of knowledge and skills and prepare them for more options after high school.			
Course Number	Career Pathway Program Courses	Career Readiness Indicator (CRI)	In Demand Occupations	
21013G1016	Advanced Aerospace Technology – SREB AC	Autodesk – AutoCAD Certified User Autodesk – Fusion 360 Certified User	Aerospace Engineer/TechAesthetics Specialist	
21013G1001	Aeronautics Engineering Applications – SREB AC	Autodesk – Inventor Certified User Autodesk – Revit Certified User	Architectural Engineer/TechCivil Engineer/Tech	
21013G1002	Astronautics Engineering Applications – SREB AC	Certified OnShape Professional Certiport Information Technology Specialist	Control Systems Engineer/TechElectrical Engineer/Tech	
21047G1001	Career Pathway Project in STEM	(ITS) – Databases	 Engineer/Technician all Disciplines 	
21997G1000	CTE Lab in STEM	Certiport Information Technology Specialist The Conference of the Conferenc	Environmental Scientist/Specialist	
21013G1015	Fundamentals of Aerospace Technology – SREB AC	 (ITS) – HTML & CSS Certiport Information Technology Specialist (ITS) – HTML5 Application Development Certiport Information Technology Specialist (ITS) – Java Certiport Information Technology Specialist (ITS) – JavaScript Certiport Information Technology Specialist (ITS) – Python Certiport Information Technology Specialist (ITS) – Software Development Drone Operator – Skills for Success Electronic Systems Associate – ESA 1 Direct Current Electronic Systems Associate – ESA 2 Alternating Current Electronic Systems Associate – ESA 3 Semiconductors Devices and Circuits Electronic Systems Associate – ESA 4 Digital Devices and Circuits FAA part 107 FANUC CERT-Handling Tool Operations and Programming Microsoft Office – Access Expert 2019/O365 Microsoft Office – Excel Expert 2019/O365 Oracle Certified Associate (OCA) – Java Programmer Solid Edge Certified Associate 	 Ergonomics Specialist Industrial Engineer/Tech Manufacturing Engineer/Tech Materials Engineer/Tech Mechanical Engineer/Tech/Mgr. Petroleum Engineer/Tech Robotics Engineer/Tech 	

*NOTE: LEAs must contact SREB for additional information prior to utilizing any of the course codes listed above with a SREB suffix, as it does require commitment to the conditions in a MOU and participation in mandatory training provided by the provider.

Career Pathway Program	SREB AC Clean Energy Program (Must teach three courses from this program list within two years) Schools are challenged to better prepare students for a wide array of postsecondary options. The workforce of today and tomorrow demands a higher level of skill — people who grasp complex problems, understand technology, and troubleshoot problems. Advanced Career (AC) answers both needs. By fusing a rigorous academic core with challenging project work and advanced technology in a career pathway program of study, AC courses give students a greater depth of knowledge and skills and prepare them for more options after high school. Clean Energy is for students who want to apply their science and math skills and apply engineering processes as they tackle the world's energy needs within a green point of view.			
Course Number	Career Pathway Program Courses	Career Readiness Indicator (CRI)	Workforce Careers	
18506G1014 21047G1001 21997G1000 18506G1024 18506G1034 18506G1034	SREB AC - Clean Energy Systems - Required Foundation Course Career Pathway Project in STEM CTE Lab in STEM SREB AC - Clean Energy Application SREB AC - Clean Energy Innovations SREB AC - Clean Energy Strategies	 Autodesk Inventor Certified User Autodesk – AutoCAD Certified User Autodesk – Fusion 360 Certified User Autodesk – Revit Certified User Certified OnShape Professional Certiport Information Technology Specialist (ITS) – Databases Certiport Information Technology Specialist (ITS) – HTML & CSS Certiport Information Technology Specialist (ITS) – HTML5 Application Development Certiport Information Technology Specialist (ITS) – Java Certiport Information Technology Specialist (ITS) – JavaScript Certiport Information Technology Specialist (ITS) – Python Certiport Information Technology Specialist (ITS) – Software Development Construction and Skilled Trade Assessment (CAST) FAA Part 107 FANUC CERT – Handling Tool Operations and Programming Microsoft Office – Access Expert 2019/O365 Microsoft Office – Excel Expert 2019/O365 NCCER Core (Module 6 is an elective and not required for CRI) Oracle Certified Associate (OCA) – Java Programmer Solid Edge Certified Associate Solid Works Associate 	Control Systems Engineer/Tech Electrical Engineer/Tech Environmental Engineer/Specialist Environmental Engineer/Tech	

Career Pathway Program	*SREB AC Innovations in Science and Technology Program (Must teach three courses from this program list within two years.) Schools are challenged to better prepare students for a wide array of postsecondary options. The workforce of today and tomorrow demands a higher level of skill — people who grasp complex problems, understand technology and troubleshoot problems. Advanced Career (AC) answers both of these needs. By fusing a rigorous academic core with challenging project work and advanced technology in a career pathway program of study, AC courses give students a greater depth of knowledge and skills and prepare them for more options after high school.			
Course Number	Career Pathway Program Courses	Career Readiness Indicator (CRI)	In Demand Occupations	
21047G1001	Career Pathway Project in STEM	Autodesk – AutoCAD Certified User	Aerospace Engineer/Tech	
21990G1002	Core Applications of Science and Technology – SREB AC	Autodesk – Fusion 360 Certified User Autodesk – Revit Certified User	Aesthetics Specialist Architectural Engineer/Tech	
21990G1004	Creativity and Innovations – SREB AC	Autodesk – Inventor Certified User Certified On Share Participant	Civil Engineer/Tech Control Sections Franciscon/Tech	
21997G1000	CTE Lab in STEM	Certified OnShape Professional Certiport Information Technology Specialist	Control Systems Engineer/TechElectrical Engineer/Tech	
21990G1003	Impacts of Science and Technology – SREB AC	(ITS) – Databases • Certiport Information Technology Specialist	Engineer/Technician all Disciplines Environmental Scientist/Specialist	
*NOTE: LEAs	The Nature of Science and Technology – SREB AC	 (ITS) – HTML & CSS Certiport Information Technology Specialist (ITS) – HTML5 Application Development Certiport Information Technology Specialist (ITS) – Java Certiport Information Technology Specialist (ITS) – JavaScript Certiport Information Technology Specialist (ITS) – Python Certiport Information Technology Specialist (ITS) – Software Development Electronic Systems Associate – ESA 1 Direct Current Electronic Systems Associate – ESA 2 Alternating Current Electronic Systems Associate – ESA 3 Semiconductors Devices and Circuits Electronic Systems Associate – ESA 4 Digital Devices and Circuits FAA part 107 FANUC CERT – Handling Tool Operations and Programming Microsoft Office – Access Expert 2019/O365 Microsoft Office – Excel Expert 2019/O365 Oracle Certified Associate (OCA) – Java Programmer Solid Edge Certified Associate Solid Edge Certified Associate Solid Urits Associate 	Ergonomics Specialist Industrial Engineer/Tech Manufacturing Engineer/Tech Materials Engineer/Tech Mechanical Engineer/Tech/Mgr. Petroleum Engineer/Tech Robotics Engineer/Tech with a SREB suffix, as it does require	

*NOTE: LEAs must contact SREB for additional information prior to utilizing any of the course codes listed above with a SREB suffix, as it does require commitment to the conditions in a MOU and participation in mandatory training provided by the provider.

Career Pathway Program	Middle School STEM Technologies Program STEM Technologies provide students with knowledge and processes needed to begin their attainment of technological literacy and awareness of careers in science, technology, engineering, and mathematics. Students gain knowledge and skills in the application, design, production, and assessment of products, services, and systems in a variety of areas.					
Course Number	Career Pathway Program Courses Career Readiness Indicator (CRI) In Demand Occupations					
21052G0608	STEM Technologies I	N/A	Aerospace Engineer/Tech			
21052G0708	STEM Technologies II		Aesthetics Specialist			
21052G0808	STEM Technologies III		 Architectural Engineer/Tech Civil Engineer/Tech Control Systems Engineer/Tech Electrical Engineer/Tech Engineer/Technician all Disciplines Environmental Scientist/Specialist Ergonomics Specialist Industrial Engineer/Tech Manufacturing Engineer/Tech Materials Engineer/Tech Mechanical Engineer/Tech/Mgr. Petroleum Engineer/Tech Robotics Engineer/Tech 			

Career Pathway Program	*PLTW Middle School (PLTW Gateway) Program From launching space explorations to delivering safe, clean water to communities, engineers find solutions to pressing problems and turn their ideas into reality. PLTW Engineering empowers students to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers. The program's courses engage students in compelling, real-world challenges that help them become better collaborators and thinkers. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take.				
Course Number	Career Pathway Program Courses Career Readiness Indicator (CRI) In Demand Occupations				
10099G6800	App Creators-PLTW	N/A	Aerospace Engineer/Tech		
21009G0708	Automation and Robotics – PLTW		Aesthetics Specialist		
10099G6801	Computer Science for Innovators and Makers – PLTW		Architectural Engineer/Tech Civil Engineer/Tech		
21007G0708	Design and Modeling – PLTW		Control Systems Engineer/Tech		
21024G0708	Energy and the Environment – PLTW		Electrical Engineer/Tech Engineer/Technician all Disciplines		
21019G0708	Flight and Space – PLTW		Engineer/ reclinician an Disciplines Environmental Scientist/Specialist		
21024G0608	Green Architecture – PLTW		Ergonomics Specialist		
21023G0708	Magic of Electrons – PLTW		Industrial Engineer/Tech		
14001G0608	Medical Detectives – PLTW		Manufacturing Engineer/Tech		
21051G0708	Science and Technology – PLTW		Materials Engineer/Tech Mechanical Engineer/Tech/Mgr. Petroleum Engineer/Tech Robotics Engineer/Tech		

*NOTE: This is a purchased curriculum. LEAs must contact PLTW for additional information prior to utilizing the course codes listed above with a PLTW suffix, as it does require submission of a signed copy of the Terms and Conditions, participation in mandatory training and payment of a participation fee to the provider.

Career Pathway Program	*We Build It Better Middle School Program This program, delivered through seven We Build It Better innovation kits, will introduce inventive technologies, expose students to techniques that help build new skill sets, provide hours of curriculum and activities, offer unique resources, and promote career awareness. Aimed at middle school students, the overall objective of the program is to weave 21st century work skills with higher level thinking skills such as measurement, product design, tools, electrical wiring, fiber optics and coding to encourage students to design inventions on their own.					
Course Number	Career Pathway Program Courses Career Readiness Indicator (CRI) In Demand Occupations					
21052G6800	We Build It Better	N/A BIB for additional information prior to utilizing the	Aerospace Engineer/Tech Aesthetics Specialist Architectural Engineer/Tech Civil Engineer/Tech Control Systems Engineer/Tech Electrical Engineer/Tech Engineer/Technician all Disciplines Environmental Scientist/Specialist Ergonomics Specialist Industrial Engineer/Tech Manufacturing Engineer/Tech Materials Engineer/Tech Mechanical Engineer/Tech/Mgr. Petroleum Engineer/Tech Robotics Engineer/Tech			

*NOTE: This is a purchased curriculum. <u>LEAs must contact WBIB for additional information prior to utilizing the course codes listed above</u>, as it requires participation in mandatory training and purchase of specific training equipment.

<u>2025 – 2026 Subject and Personnel Codes</u> STEM Engineering Cluster and Middle School Program

STEM Engineering Cluster Courses			
Course Number	Course Name		
21013G1016	Advanced Aerospace Technology – SREB AC		
21013G1001	Aeronautics Engineering Applications – SREB AC		
21019G1001	Aerospace Engineering – PLTW		
21002G1000	Applications of Engineering and Technology – Mathematics credit eligible		
21013G1002	Astronautics Engineering Applications – SREB AC		
21015G1000	Basic Programming for Engineers		
21047G1000	Capstone of Engineering and Technology		
21047G1001	Career Pathway Project in STEM		
21021G1000	Civil Engineering and Architecture – PLTW		
18506G1014	Clean Energy Systems – SREB AC		
21015G1001	Computer Engineering and Technology		
21022G1000	Computer Integrated Manufacturing – PLTW		
21990G1002	Core Applications of Science and Technology – SREB AC		
21990G1004	Creativity and Innovations – SREB AC		
21997G1000	CTE Lab in STEM		
21023G1000	Digital Electronics – PLTW		
21026G1000	Engineering Essentials – PLTW		
21014G1000	Environmental Engineering – Mathematics credit eligible		
21024G1000	Environmental Sustainability – PLTW		
21005G1000	Foundations of Engineering and Technology		
21013G1015	Fundamentals of Aerospace Technology –SREB AC		
21105G1001	Greenpower F24 Eng Design & Race Ch I		
21105G1002	Greenpower F24 Eng Design & Race Ch II		
21990G1003	Impacts of Science and Technology – SREB AC		
21998G1050	Internship in STEM		
21017G1000	Introduction to Engineering Design – PLTW – Mathematics credit eligible		
21025G1001	PLTW Capstone		
21018G1000	Principles of Engineering – PLTW – Science credit eligible		
21009G1000	Robotic Systems		
21990G1001	The Nature of Science and Technology – SREB AC		
	Middle School Courses		
10099G1001	App Creators – PLTW		
21009G0708	Automation and Robotics – PLTW		
10099G6801	Computer Science for Innovators and Makers – PLTW		
21007G0708	Design and Modeling – PLTW		
21024G0708	Energy and the Environment – PLTW		
21019G0708	Flight and Space – PLTW		
21024G0608	Green Architecture – PLTW		
21105G0708	Introduction to Greenpower		
21023G0708	Magic of Electrons – PLTW		
14001G0608	Medical Detectives – PLTW		
21051G0708	Science and Technology – PLTW		
21052G0608	STEM Technologies I		
21052G0708	STEM Technologies II		
21052G0808	STEM Technologies III		
21052G6800	We Build It Better		

Shared Courses				
Course Number Course Name Cluster(s) Required Year to Implement COS				
10099G6800	App Creators – PLTW	Information Technology	2018-2019	
10099G6801	Computer Science for Innovators and Makers – PLTW	Information Technology	2018-2019	
21009G1000	Robotic Systems	Information Technology	2021-2022	

General Note: Course descriptions and content standards for most courses are located on the Alabama Department of Education website at: Alabama Achieves | Career and Technical Education | Courses of Study.

College and Career Readiness Indicator Course Matrix

Program Name	CTE Engineering	Project Lead The Way (PLTW) Engineering	SREB AC Aerospace Engineering	SREB AC Innovations in Science and Technology
Foundation Course(s)	Foundations of Engineering and Technology	Engineering Essentials – PLTW	Fundamentals of Aerospace Technology – SREB AC	The Nature of Science and Technology – SREB AC
Concentrator Course(s)	Applications of Engineering and Technology	Aerospace Engineering – PLTW	Advanced Aerospace Technology – SREB AC	Core Applications of Science and Technology – SREB AC
	Basic Programming for Engineers	Civil Engineering and Architecture – PLTW	Aeronautics Engineering Applications – SREB AC	Impacts of Science and Technology – SREB AC
	Computer Engineering and Technology	Computer Integrated Manufacturing – PLTW		
	Environmental Engineering	Digital Electronics – PLTW		
	Robotic Systems	Environmental Sustainability – PLTW		
		Introduction to Engineering Design – PLTW		
		Principles of Engineering – PLTW		
Capstone Course(s)	Capstone of Engineering and Technology	Career Pathway Project in STEM	Astronautics Engineering Applications – SREB AC	Career Pathway Project in STEM
	Career Pathway Project in	CTE Lab in STEM	Career Pathway Project in	CTE Lab in STEM
	STEM	PLTW Capstone	STEM	Creativity and Innovations –
	CTE Lab in STEM Internship in STE		CTE Lab in STEM	SREB AC
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Program Name	SREB AC Clean Energy Program	Greenpower
Foundation Course(s)	SREB AC – Clean Energy Systems	Introduction to Greenpower
Concentrator Course(s)	SREB AC – Clean Energy Application SREB AC – Clean Energy Innovations	Greenpower F24 Eng Design & Race Ch I Greenpower F24 Eng Design & Race Ch II
Capstone Course(s)	Career Pathway Project in STEM CTE Lab in STEM SREB AC – Clean Energy Strategies	Career Pathway Project in STEM CTE Lab in STEM

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, approved Career Readiness Indicators (CRIs), and in demand occupations.

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