

MANUFACTURING & INDUSTRIAL MAINTENANCE

CAREER ACADEMY DESIGN PLAN

2025-2026

I. Defined Mission & Goals

The career academy has a written definition of its mission, goals, and benchmarks. These are developed and available to the administrators, teachers, students, parents, advisory board, and others involved in the academy.

Goal 1	Increase # of industry-based certifications (AWS and NCCER) earned by academy students by 25% by the end of the 25-26 school year.	Specific number of students passing data from NCCER and AWS)
Goal 2	Conduct mock job interviews for all juniors in the Manufacturing & Industrial Maintenance Academy by the end of the 25-26 school year.	Data collection from events sign-in sheets.
Goal 3	Provide all Junior and Senior students in the Manufacturing & Industrial Maintenance Academy at least one opportunity to visit a job site or post-secondary facility to observe industry professionals at work by the end of their 25-26 school year.	Data collection from events sign-in sheets.

Academy Vision

SCTHS Manufacturing & Industrial Maintenance Academy graduates will possess the academic knowledge, employability traits, and technical skills necessary to be successful in the community we serve and beyond.

Academy Mission

The mission of the SCTHS Manufacturing & Industrial Maintenance Academy is to engage students at an early age with academic and career opportunities that lead to post-secondary success.

II. Academy Design

e. Small size, supportive atmosphere. The academy maintains personalization through limited size, academy staff teamwork (including counselors, librarian/media specialists, academy-based administrators, and other support staff), and a supportive atmosphere.

ENROLLMENT by GRADE LEVEL

	Pipefitting	Welding
9 TH	17	36
10 TH	8	33
11 TH	7	18
12 TH	11	21
TOTAL	43	108
ACADEMY GRAND TOTAL		151

V. Professional Development and Continuous Learning

Since an academy places teachers and other adults into roles not normally included in their previous training, providing adequate professional development time, leadership, and support is critical.

a. Common Planning Time

The site administrator ensures that academy staff members are provided common planning time within the high school schedule for purposes of program coordination, curricular integration, business involvement, and resolution of student challenges.

PROFESSIONAL LEARNING COMMUNITY MEETING DATES			
	*DAY/DATE	LOCATION	TIME
Whole Team	8/5/24	Sulzer Turbo Services	8:00-3:30
Whole Team	9/7/25, 10/26/25, 11/4/25,1/6/26, 2/11/26	SCTHS	8:00-11:00

c. Volunteer and parent orientation

Business, community, and post-secondary volunteers are adequately prepared for their roles as speakers, field experiences hosts, mentors, internship supervisors, etc. Parents are adequately prepared for their involvement, (if any), as classroom aides, field experience chaperones, social event organizers, and exhibition judges.

PARENT MEETINGS		
DATE	LOCATION-ACTIVITY	TIME
9 th Grade Parent Orientation: TBD	SCTHS	6:30 PM
ALL PARENTS/Open House: TBD	SCTHS	6:00 PM
8 th Grade Open House: TBD	SCTHS	6:00 PM
8 th Grade Parent Meeting: TBD	SCTHS	6:00 PM
SCTHS Showcase: TBD	SCTHS	6:00 PM

VI. Governance and Leadership

a. Network of support

The academy is connected to an advisory board at the school level or the district level and has members from the district and high school administration, academy staff, employers and post-secondary education. It may also include community representatives, academy parents, and students.

ADVISORY BOARD MEMBERS		
Name	Representative Type	Contact Information
Miller, Leia	Associate CTE Director	Leia.miller@gccisd.net
Guillory, Jennifer	CTE Specialist	jennifer.guillory@gccisd.net
Kami Johnston	CTE	kami.johnston@gccisd.net
Fran Parent	Lee McNair	fparent@lee.edu
Joi Green	SCTHS Counselor	Joi.green@gccisd.net
Hull, Kathrine	SCTHS Counselor	kathrine.hull@gccisd.net
Koby Box	Mustang Cat	kbox@mustangcat.com
Lowery, Jennifer	Samson Controls	Jennifer.Gibson@samsongroup.com
Price, Anthony	District Administration	anthony.Price@gccisd.net
Prentice, Shonna	Campus Principal	Shonna.prentice@gccisd.net
Green, Dusty	Academy CTE Teacher	Dusty.green@gccisd.net
Hathaway, Robert	Academy CTE Teacher	Robert.hathaway@gccisd.net
Woods, Dalton	Academy CTE Teacher	Fred.woods@gccisd.net
Villarreal, Julie	Samson Controls	julie.villarreal@samsongroup.com

White, Alfred	Austin Industrial	alfred.white@covestro.com
Saldana, Carlos	Star Con	saldac@cpchem.com
Ferman, Ofelia	Lee College, Shared DC Advisor	oferman@lee.edu
Salazar, Jordan	Lee College, Assist. Director DC	jsalazar@lee.edu
Decou, Alysha	PCL	adecou@pcl.com
Kennerly, Thomas	PCL	takennerly@pcl.com
Kirby, Justin	Alltex	justink@alltexweld.com
Legg, Darren	Sulzer Turbo Services	Darren.legg@sulzer.com
Thomas-Mayer, Genoio	Elite Welding	gthomas@eliteweldingacademy.com
Carla Thompson	Turner	cthompson@turner-industries.com
Cristine Carrol	Sulzer	Christine.Carroll@sulzer.com
Charles Gooden Jr.	Triumph Industrial Supply	charles.gooden@triumphindustrial.com
Stefani Ducote	APP Manufacturing	sducote@appmfg.com

b. Regular meetings

Meetings of the advisory board are held at least quarterly, with defined agendas, outcomes, and meeting minutes. The advisory board helps to set policies for the academy. It also serves as a center of resource development.

ADVISORY BOARD MEETING DATES

DATE	LOCATION	TIME
9/17/25	SCTHS	4:30pm
11/19/25	SCTHS	3:30pm
2/25/26	SCTHS	4:30pm
5/6/26	SCTHS	3:30pm

d. A student voice

Students have avenues through which they can provide input to the academy policies and practices, thus providing opportunities for student leadership such as through Career and Technical Student Organizations (CTSOs).

CAREER & TECHNICAL STUDENT ORGANIZATION / AMBASSADORS

Organization	Sponsor(s)
Texas High School Welding Series	Dusty Green, Bobby Hathaway, Dalton Woods
SCTHS Academy Ambassadors	Kelsey Rhodes
National Technical Honor Society	Ian Sobczak

*See shared drive for CTSO guidelines.

The teaching and learning within an academy meets or exceeds external standards and college entrance requirements while differing from a comprehensive high school by focusing learning around a career theme.

a. Sequenced, integrated, and relevant curriculum

Curriculum articulates from the beginning of an academy through the senior year with a defined course sequence and at least three core academic classes and one career/theme class each year. Curriculum is integrated among the academic classes and between these and the career class. Learning illustrates applications of academic subjects outside the classroom, incorporates current technology and 21st Century Skills, and includes authentic project-based learning.

INTEGRATED ACADEMICS/COHORT PLAN

	CTE SUBJECT/TEACHER(S)	#1 ACADEMIC SUBJECT/TEACHER(S)	#2 ACADEMIC SUBJECT/TEACHER(S)	#3 ACADEMIC SUBJECT/TEACHER(S)
9 TH	Green/Hathaway/ Woods	Lee-ELA	Power-Math	-Science
10 TH	Green/Hathaway/Woods	Lee/Wooldridge-ELA	Power-Math	-Science Bryson-Soc. Studies
11 TH	Green/Hathaway/ Woods	Wooldridge-ELA	Tatman-Math	-Science Billings/Bryson-Soc. Studies
12 TH	Green/Hathaway/Woods	Wooldridge-ELA	Tatman-Math	-Science Billings-Soc. Studies

VII e. Dual credit options

Options for post-secondary credit exist in a variety of ways and may include articulation agreements, dual credit and/or college credit for upperclassmen, concurrent credit, transcribed credit, AP, AICE and IB credit. The academy articulates its upper-level curriculum with relevant post-secondary programs.

DUAL CREDIT/ CERTIFICATIONS PLAN

***Enter "NA" into any field that is not applicable.**

	POST-SECONDARY EXPERIENCE			CAREER EXPERIENCE		
	Dual Credit Course Or Experience Date	Dual Credit Course Or Experience Date	Dual Credit Course Or Experience Date	Certification Test	Projected Date	Responsible person
9 TH	WLDG 1323/WLDG 1200 WLDG1428/WLDG 1313	PFPB 1350/PFPB 1408		NCCER Core	May 2026	Dusty Green Bobby Hathaway Dalton Woods
10 TH	WLDG 2443/WLDG 1312 WLDG 1430/WLDG 1337	PFPB 1305/PFPB 2407		AWS NCCER Core	May 2026	Dusty Green Bobby Hathaway Dalton Woods
11 TH	WLDG 1435 WLDG 1434	PFPB 2310/PFPB 2408		AWS	May 2026	Dusty Green Bobby Hathaway Dalton Woods
12 TH	WLDG 2453 WLDG 2451	PFPB 2343/PFPB 2441/PFPB 2449(AAS Only)		ASME	May 2026	Dusty Green Bobby Hathaway Dalton Woods

g. Participation in a capstone project.

The senior year capstone project is reflective of the academy in which students are participating.	
SENIOR SHOWCASE / CAPSTONE PLAN	
*This event should take place after all students are accepted and all incoming students and parents should be invited. This will serve as a “get them excited” about being a part of the academy with the intention to reduce attrition of incoming 9th grade students.	
Date	Activity/Partnership Description
Spring 2025	Senior Showcase

VIII. Employer, Post-Secondary Education, and Community Involvement						
b. Community involvement						
Representatives of employers, post-secondary education, and the community help to guide the academy’s curriculum, and provide experiential components such as guest speakers, real-world projects field experience sites, shadowing opportunities, mentors, student internships, community service opportunities, college and other post-secondary education tours, as well as teacher externships.						
ACADEMY EXPERIENCE PLAN *						
	POST-SECONDARY EXPERIENCE			CAREER EXPERIENCE		
	Experience	Projected Date	Leader	Experience	Projected Date	Leader
9 TH	Lee College Orientation	Fall 2025	College/SCTHS Counselor	Guest Speakers	Fall 2025/Spring 2026	Dusty Green/Bobby Hathaway/Dalton Woods
10 TH		Spring 2026	Instructors	Guest Speakers	Fall 2025/Spring 2026	Dusty Green/Bobby Hathaway/Dalton Woods
11 TH	San Jacinto Field Trip Welding	Fall 2025	Instructors	Mock Interviews	Fall 2025/Spring 2026	Dusty Green/Bobby Hathaway/Dalton Woods
12 TH	Lee College	Fall 2025/Spring 2026	Instructors	Pasadena Career Expo Pipefitters Test Weld Testing Sulzer Welding Contest	Fall 2025/Spring 2026	Dusty Green/Bobby Hathaway/Dalton Woods

*Reference CTE Learning Framework for Grade Level Expectations

ACTIVITIES FOR INCOMING 9 TH GRADE STUDENTS	
Date	Activity
May 29, 2024	CTE Experience (Cohort 2027)
TBD	College & Career Night
November 7, 2024	High School Options Assistance Night
Spring 2025	CTE Experience (Cohort 2028)
SUMMER BRIDGE ACTIVITIES	
Date	Activity/Partnership Description
July 16-18, 2024	TSIA Bootcamp
August 5, 2024	Fish Camp
May 28, 2025	Summer Camp for incoming 6 th -8 th grade students