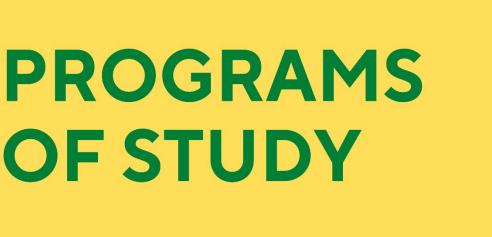
# **CAREER & TECHNICAL EDUCATION**

2025-2026





Tech)

Software

#### STUDENTS, TOMORROW'S TODAY'S **Business &** Agriculture, Food Architecture Arts, A/V Technology Education **Health Science** Hospitality & Communications & Natural Resources & Construction & Training \*Nursing Science \*Animal Science \*Teaching & (Patient Care \*Graphic Design & \*Business, Lodging \*Carpentry \*Ag Technology & Training Interactive Media & Tourism Mgmt. Mechanical \*Diagnostic & Systems Therapeutic \*Plant Science (Dental Assisting) Manufacturing Hospitality Human Law, Public Safety, Information & Tourism Services Technology Corrections \*Welding & Security (High School & \*Programming & \*Culinary Arts \*Cosmetology

(Dual Credit) Options) Development CTE@SFISD.ORG Our Community. Our Legacy. OUR FUTURE. https://www.sfisd.org/departments/career-and-technical-education

**Dual Credit** 

\*Law Enforcement

## Annual Public Notification of Nondiscrimination

Santa Fe Independent School District (SFISD)offers career and technical education programs (CTE) in Agriculture, Food & Natural Resources; Architecture & Construction; Arts, Audio Visual Technology & Communications; Business, Marketing & Finance; Education & Training; Health Science; Hospitality & Tourism; Human Services; Information Technology; Law & Public Service; Manufacturing; and Science, Technology, Engineering & Math. Admission to these programs is based on student interest and teacher/space availability in SFISD CTE programs.

SFISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.

It is the policy of SFISD not to discriminate on the basis of race, color, national origin, sex, handicap, or age in its employment practices as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975, as amended; and Section 504 of the Rehabilitation Act of 1973, as amended.

SFISD will take steps to assure that lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs.

For information about your rights or grievance procedures, contact the Title IX Coordinator and/or Section 504 Coordinator at 4133 Warpath Drive, Santa Fe, TX 77510, 409-925-3526.



# BUILDING ON THE FOUNDATION GRADUATION PLAN **High School Graduation Endorsements**



A coherent sequence of three (3)

additional credits from no more

than two of the options above.

## FOUNDATION GRADUATION REQUIREMENTS:

• Welding

English: 4 credits • Math: 3 credits • Science: 3 credits • Social Studies: 3 credits Foreign Language: 2 credits • P.E.: 1 credit • Fine Arts: 1 credit • Electives: 5 credits

		ules. 5 cleans roleigh Language.	. 2 credits • F.E 1 credit • Fine Arts	. I credit • Electives. 5 credits
Arts & Humanities	Business & Industry	Multidisciplinary	Public Services	Science, Technology, Engineering & Math
A student may earn this endorsement by completing the following:	A student may earn this endorsement by completing the following:	A student may earn this endorsement by completing the following:	A student may earn this endorsement by completing the following:	A student may earn this endorsement by completing the following:
The Foundation Graduation Requirements <b>and</b>	The Foundation Graduation Requirements <b>and</b>	The Foundation Graduation Requirements <b>and</b>	The Foundation Graduation Requirements <b>and</b>	The Foundation Graduation Requirements including Algebra II, Chemistry & Physics and
*1 additional credit in math	*1 additional credit in math	*1 additional credit in math	*1 additional credit in math	*1 additional credit in math
*1 add'l credit in science, CTE Science or approved elective	*1 additional credit in science or CTE Science	*1 additional credit in science or CTE Science	*1 additional credit in science or CTE Science	*1 additional credit in science or CTE Science
*2 additional electives	*2 additional electives	*2 additional electives	*2 additional electives	*2 additional electives
Plus one of the following options	Plus one of the following <u>options</u>	Plus one of the following options	Plus one of the following options	Plus one of the following options
Fine Arts Option: A coherent sequence of four (4) credits from one (1) of the following areas OR four (4) credits consisting of two (2) sequential credits from two (2) of the following areas: • Art • Dance • Music • Dance • Theatre Language other than English OR two (2) levels of one language other than English OR two (2) levels of a different language other than English & two (2) levels of a different language other than English Theatres option Social Studies Option Five (5) social studies credits	CTE Option: A coherent sequence of courses for four (4) or more credits in a CTE Program of Study including: • At least one Advanced Career & Technical Education (CTE) course, and • A sequence of courses from one of the following Programs: • Ag Animal Science • Ag Plant Science • Ag Plant Science • Ag Tech & Mechanical Systems • Business, Lodging & Tourism Management • Carpentry • Culinary Arts • Graphic Design	4X4 Option: Four (4) credits in each of the four foundation subject areas (English, math, science & social studies), including English IV and chemistry and/or physics Advanced CTE Course Option Four (4) Advanced CTE courses that prepare a student to enter the work force or postsecondary education successfully without remediation from within one endorsement area or among endorsement areas that are not in a coherent sequence College Level Course Option Four (4) credits in College Board Advanced Placement or	CTE Option: A coherent sequence of courses for four (4) or more credits in a CTE Program of Study including: • At least one Advanced CTE course, and • A sequence of courses from one of the following Programs of Study: • Cosmetology • Healthcare Diagnostic & Therapeutic • Law Enforcement • Nursing Science • Teaching & Training	<ul> <li>CTE Option:</li> <li>A coherent sequence of courses for four (4) or more credits in a CTE Program of Study, including:</li> <li>At least one Advanced CTE course, and</li> <li>A sequence of courses from one of the following Programs of Study <ul> <li>Ag Animal Science</li> <li>Ag Plant Science</li> <li>Ag Tech &amp; Mechanical</li> <li>Healthcare Diagnostic &amp; Therapeutic</li> <li>Nursing Science</li> <li>Information Technology</li> </ul> </li> <li>Mathematics Option: <ul> <li>Five (5) math credits (total), two (2) of which have Algebra II as a prerequisite</li> </ul> </li> <li>Science Option: <ul> <li>Five (5) science credits (total) including physics and chemistry</li> </ul> </li> </ul>
	<ul> <li>Programming &amp; Software</li> <li>Development</li> </ul>	dual credit courses, selected from English, math, science,		<b>Combination Option:</b> A coherent sequence of three (3)

foreign language or fine arts.

social studies, economics,



# Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

## **Agricultural Technology & Mechanical Systems** Statewide Program of Study



The Agricultural Technology & Mechanical Systems program of study explores the occupations and educational opportunities associated with applying knowledge of engineering technology and biological science to agricultural problems concerned with power and machinery, electrification, structures, soil and water conservation, and processing agricultural products. This program of study may also include exploration into diagnosing, repairing, or overhauling farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems.

### Secondary Courses for High School Credit

#### Level 1

Principles of Agriculture, Food, and Natural Resources

#### Level 2

Agricultural Mechanics and Metal Technologies

### Level 3

Agricultural Structures Design and Fabrications/Lab

#### Level 4

Practicum in AFNR – Ag Tech & Mechanics

#### **Recommended Elective**

Agricultural Leadership, Research & Communications



### **Postsecondary Opportunities**

#### Associates Degrees

- Heavy Equipment Maintenance Technology/ Technician
- Agricultural Mechanization, General
- Small Engine Mechanics and Repair Technology/ Technician
- Welding Technology/ Welder

#### **Bachelor's Degrees**

- Agricultural Engineering
- Agricultural Mechanization, General
- Agricultural Education
- Construction Technology
- Master's, Doctoral, and Professional Degrees
- Agricultural Engineering
- Agricultural Mechanization, General
- Masters of Business Administration

### Work-Based Learning and **Expanded Learning Opportunities**

	Exploration Activities	Work-Based Learning Activities
•	Tour a farm products or machinery plant Participate in FFA	<ul> <li>Earn a welding certification</li> <li>Intern at a farm products or machinery plant</li> </ul>
		<ul> <li>Participate in an FFA supervised agriculture experience</li> </ul>

### **Related Industry-Based Certifications**

- AWS D1.1 Structural Steel
- AWS D9.1 Sheet Metal Welding



American Welding Society

### **Aligned Occupations**

Occupations	Median Wage	Annual Openings	% Growth
Outdoor Power Equipment and Other Small Engine Mechanics	\$32,406	366	16%
Welders	\$41,350	6171	9%
Farm Equipment Mechanics and Service Technicians	\$39,915	304	17%
Mobile Heavy Equipment Mechanics	\$47,299	1627	16%
Agricultural Engineers	\$64,792	9	13%

Successful completion of the Applied Agricultural Engineering program of study will fulfill requirements of a Business & Industry endorsement or STEM endorsement if the math and science requirements are met.



## AFNR – AGRICULTURAL TECHNOLOGY & MECHANICAL SYSTEMS Course Information

	KEY	COURSE NAME	SERVICE ID	PREREQUISITES	CREDIT	FEE
L 1	PRINAF	Principles of Agriculture, Food, and Natural Resources	13000200	None	1	\$15
LEVEL 1	To be prepared for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills through hands-on activities in career opportunities, personal development, globalization, industry standards, details, practices, and expectations.					
	AGMECH	Agricultural Mechanics and Metal Technologies	13002200	Prin. AFNR	1	\$40
<b>LEVEL 2</b>	This course is designed to develop an understanding of agricultural mechanics as it relates to safety and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete, and metal-working techniques. This course will also develop a student's skills in metal equipment assembly and joining processes, installing electric wiring components and fixtures, install plumbing equipment and fixtures, reinforce/place/finish and cure concrete, use basic carpentry skills, plan and install fences, perform appropriate cold and hot metal techniques, develop welding skills. <b>Certification Preparation: American Welding Society</b>					
	AGSDFL	Agricultural Structures Design and Fabrications	13002310	Ag Mech & Metal Tech	2	\$40
<b>LEVEL 3</b>	This course is a continuation of Agricultural Mechanics and Metal Technology. Students will learn how to apply appropriate technology to metal construction related to agricultural structures design and fabrication. They will also gain further knowledge in the different types of power systems used in agricultural facilities. Career opportunities, entry requirements, and industry expectations in this field will be explored. <b>Certification Preparation: American Welding</b> <b>Society</b>					es, entry
	PRACAT	Practicum in AFNR-Ag Tech & Mechanics	13002500	2 credits in Ag Mech POS; Employment or Project Proposal	2	\$40
L 4		onstrate under supervision the p ition and leadership in a lab-base		of knowledge and skills in a	gricultural med	chanics,
LEVEL 4	PRACAF	Practicum in AFNR- Ag Barn	13002500	1 AFNR Class; Transportation	2	\$0
	Students will demonstrate under supervision the practical application of knowledge and skills of the daily activities and maintenance of the Ag Science Facility AND either be employed in a related job or submit an individual project proposal for their practicum. <b>Students may be handling live animals in this class, which may lead to injury.</b>					
IVE	AGLEAD	Ag Leadership, Research, & Com	13001500	Princ. of AFNR; FFA Membership	1	FFA Dues
ELECT	AGLEAD     Com     Isourse     Membership     I     Dues       This course focuses on challenging students to use higher level thinking skills, develop leadership abilities, employ standard research principles, and communicate agricultural positions effectively with all stakeholders.     Dues					
*Caree	ADDITIONAL NOTES:					
SFIS	*Career Preparation for Programs of Study can be taken to satisfy a Level 4 CTE Program of Study credit. Please see CTE Electives List for additional information. FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCE CAREER CLUSTER, PLEASE CONTACT: <u>CTE@sfisd.org</u> or visit our webpage: <u>https://www.sfisd.org/departments/career-and-technical-education</u> SFISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator at 409-925-3526.					



## Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

## **Animal Science** Statewide Program of Study



The Animal Science program of study focuses on the science, research, and business of animals and other living organisms. It teaches CTE learners how to apply biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life. Students may also research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.

### Secondary Courses for High School Credit

#### Level 1

Principles of Agriculture, Food, and Natural Resources

#### Level 2

- Small Animal Management (1 semester) AND
- Equine Science (1 semester)

#### Level 3

- Livestock Production
- Veterinary Medical Applications

#### Level 4

- Advanced Animal Science
- Practicum in Agriculture, Food, and Natural Resources- Veterinary
- Practicum in Agriculture, Food, and Natural Resources- Ag Barn

#### Recommended Electives(s)

- Wildlife, Fisheries and Ecology Management
- Agricultural Leadership, Research, and Communications

### **Postsecondary Opportunities**

#### **Associates Degrees**

### Master's, Doctoral, and

- Food Science and Technology **Veterinary Studies**
- **Biotechnology Laboratory** Technician
- **Biology Technician**

#### **Bachelor's Degrees**

- **Animal Sciences**
- Agriculture
- Biology
- Zoology/ Animal Biology

- **Professional Degrees Biological & Physical** 
  - Sciences
  - **Biological & Biomedical** Sciences
  - Genetics
  - Veterinary Medicine

### Work-Based Learning and **Expanded Learning Opportunities**

E	Exploration Activities	Work-Based Learning Activities
•	Participate in FFA	Compete in an Agri-

- Compete in an Agri-Science Fair 4H
- Volunteer at a local farm or with a veterinarian

## **Related Industry-Based Certifications**

- Certified Veterinary Assistant, Level 1
- Elanco Fundamentals of Animal Science Certification
- **Elanco Veterinary Medical Applications** Certification





Aligned Occupations	Median Wage	Annual Openings	% Growth
Animal Breeders	\$39,139	28	9%
Animal Scientists	\$57,533	22	12%
Medical Scientists	\$63,898	435	27%
Veterinarians	\$93,496	294	24%
Zoologists and Wildlife Biologists	\$67,309	45	32%

Successful completion of the Animal Science program of study will fulfill requirements of a Business and Industry endorsement or STEM endorsement if the math and science requirements are met.





## AFNR – ANIMAL SCIENCE

## **Course Information**

	КЕҮ	COURSE NAME	SERVICE ID	PREREQUISITES	CREDIT	FEE
T.	PRINAF	Principles of AFNR	13000200	None	1	\$15
LEVEL 1	knowledge in agricultu	re. This course allows stu	idents to develop	rces, students will attain ac knowledge and skills throug try standards, details, practi	sh hands-on activ	
	SMAMGT	Small Animal Management	13000400	Principles of AFNR	0.5	\$10
EL 2	Students will enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, animal ownership, and industry expectations. <b>Students may be handling live animals in this class, which may lead to injury.</b>					
LEVEL 2	EQUINE	Equine Science	13000500	Principles of AFNR	0.5	\$10
	Equine Science develops knowledge and skills pertaining to the nutrition, reproduction, health, and management of the equine species, including, but not limited to horses, donkeys, and mules. Students identify breeds, colors, and markings of an equine species, evaluate conformation and performance, develop Course Feed rations, analyze internal and external anatomies, review basic grooming and health practices, and address training and handling practices. <b>Students may be handling live animals in this class, which may lead to injury.</b>					
	LIVEPR	Livestock Production	13000300	SAM & Equine Science	1	\$10
	-		-	e not limited to, beef cattle, class, which may lead to ir		ne, sheep,
LEVEL 3	VETMED	Veterinary Medical Applications	13000600	SAM & Equine Science	1	\$20
LEV	This course provides training in the veterinary assistant field. Students develop technical skills in health, nutrition, examinations, diseases, sanitation and regulatory programs of both large and small animal species. The course includes but is not limited to, animal handling and restraint, health and safety, sanitation and surgical preparation, anatomy, physiology, medical terminology, infectious disease, instrument handling and equipment identification, vaccine preparation and injection techniques, laws and ethics and veterinary office practices. <b>Students may be handling live animals in this class, which may lead to injury. Certification Preparation: Elanco Veterinary Medical Applications</b> *Not recommended to be taken concurrently with Advanced Animal Science					e includes tomy, ie <b>ing live</b>
	ADVANI	Advanced Animal Science	13000700	Biol; Chem or IPC; Alg I; Geom; SAM, Equine, or Livestock Prod	1 (Science)	\$25
LEVEL 4	production. To prepare variety of settings. <b>Stu</b> <b>Preparation: Elanco Fu</b>	for success, students wi	ll learn, reinforce, ve animals in this cience	in, scientific, and technologi apply, and transfer their kn class, which may lead to in	owledge and skil	ls in a

	PRACVT	Practicum in AFNR- Veterinary Tech	13002500	Vet Med Apps; Adv Animal Sci and/or Livestock Prod	2	\$25
	Students will continue their Vet Science education to receive their Certified Veterinary Assistant Certificate from the American Veterinary Medical Association. In this course students are required to HAVE A SECURED INTERNSHIP WITH A LICENSED VETERINARIAN (DVM or TX LVT). Students are responsible for securing their internship. Students will be required to have at least 10 hours per week in their Veterinary clinic throughout the year. Students are responsible for their transportation. Prior to graduation students will complete the CVA Exam and will be required to have a minimum of 300 work hours signed off by their supervisor in order to receive their certification. Students may be handling live animals in this class, which may lead to injury. Certification Preparation: Certified Veterinary Assistant, Level 1					
	PRACAF	Practicum in AFNR- Ag Barn	13002500	1 AFNR Class; Transportation	2	\$0
	Students will demonstrate under supervision the practical application of knowledge and skills of the daily activities and maintenance of the Ag Science Facility AND either be employed in a related job or submit an individual project proposal for their practicum. <b>Students may be handling live animals in this class, which may lead to injury.</b>					
WFEEGTWildlife, Fish & Ecology Mgmt.13001500Princ. of AFNR1\$1					\$15	
IVES		the management of game a rrent agricultural practices.	-	vildlife species, fish and aqua	a crops and their	ecological
ELECTIVES	AGLEAD	Ag Leadership, Research, & Com	13001500	Princ. of AFNR; FFA Membership	1	FFA Dues
		hip abilities, employ standa		on challenging students to us nciples, and communicate ag	-	-
			DITIONAL NOT			
SFISI	*Career Preparation for Programs of Study can be taken to satisfy a Level 4 CTE Program of Study credit. Please see CTE Electives List for additional information. FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCE CAREER CLUSTER, PLEASE CONTACT: <u>CTE@sfisd.org</u> or visit our web page: <u>https://www.sfisd.org/departments/career-and-technical-education</u> SFISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator at 409-925-3526.					







## Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life - food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

## **Plant Science** Statewide Program of Study



The Plant Science program of study focuses on the science, research, and business of plants and other living organisms. It teaches students how to apply biology and life science to real-world life processes of plants and vegetation, either in laboratories or in the field.

### Secondary Courses for High School Credit

- <u>Level 1</u>
   Principles of Agriculture, Food, and Natural Resources
- Floral Design (TX level 3)
- Level 3
- Advanced Floral Design (TX level 4)
- Level 4
- Practicum in Agriculture, Food, and Natural Resources- Floral
  Recommended Electives(s)
- Agricultural Leadership, Research & Communications



### **Postsecondary Opportunities**

#### Associates Degrees

- Applied Horticulture/ Horticulture Operations, General
- Ornamental Horticulture
- Agricultural Business and Management, General
- Turf and Turfgrass Management

#### **Bachelor's Degrees**

- Applied Horticulture/ Horticulture Operations, General
- Agronomy and Crop Science
- Agricultural Business and Management, General
- Turf and Turfgrass Management

#### Master's, Doctoral, and Professional Degrees

- Applied Horticulture/ Horticulture Operations, General
- Agronomy and Crop Science
- Agricultural Business and Management, General
- Farm/Farm and Ranch Management

### **Aligned Occupations**

<b>.</b>			
Occupations	Median Wage	Annual Openings	% Growth
Soil and Plant Scientists	\$54,662	116	21%
Tree Trimmers and Pruners	\$32,240	589	14%
Pesticide Handlers, Sprayers, and Applicators	\$36.733	196	22%
Landscaping Supervisors	\$44,408	807	19%
Biological Technicians	\$42,931	452	17%

Successful completion of the Plant Science program of study will fulfill requirements of a **Business and Industry** Endorsement or **STEM Endorsement** if the math and science requirements are met.

# Work-Based Learning and Expanded Learning

Exploration Activities	Work-Based Learning Activities
Participate in FFA	<ul> <li>Work at a florist or landscaper business &amp; participate in Practicum Indian Blooms Program</li> </ul>

Participate in an FFA supervised agriculture Experience

### **Industry-Based Certification**

 Texas State Florist's Association Knowledge Based Floral Certification





## AFNR – PLANT SCIENCE Course Information

	КЕҮ	COURSE NAME	SERVICE ID	PREREQUISITES	CREDIT	FEE
L 1	PRINAF	Principles of Agriculture, Food, and Natural Resources	13000200	None	1	\$15
LEVEL 1	To be prepared for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills through hands-on activities in career opportunities, personal development, globalization, industry standards, details, practices, and expectations.					
2	FLORAL	Floral Design (TX LEVEL 3)	13001800	None	1 (Fine Art)	\$50
LEVEL 2	This course is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design, as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students develop respect for the traditions and contributions of diverse cultures. Students will create and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgements and evaluations.					styles e and
	FLORAD	Advanced Floral Design (TX LEVEL 4)	N1300270	Floral Design	1	\$35
<b>LEVEL 3</b>	Students build on the knowledge from Floral Design and are introduced to more advanced floral design concepts, with an emphasis on specialty designs and specific occasion planning. This course focuses on building skills in advanced floral design and providing students with a thorough understanding of the design elements and planning techniques used to produce unique specialty floral designs that support the goals and objectives of a specific occasion or event. Through the analysis and evaluation of various occasion and event types, students explore the design needs and expectations of clients and propose and evaluate appropriate creations. From conception to evaluation, students are challenged to create and design appropriate specialty floral designs that meet the needs of the client. Furthermore, an emphasis on budgetary adherence and entrepreneurship equips students with many of the necessary skills needed for success in floral enterprises. <b>Certification Preparation: Texas State Florist's Assoc Knowledge Based</b>					
	PRACFL	Practicum in AFNR- Floral Design (Indian Blooms)	13002500	Pre/Co-Req: Adv. Floral Des; TSFA Knowledge Based Cert	2	\$25
LEVEL 4	entrepreneurship pr design concepts, wit	nts build on the knowledge from the Flo ogram, Indian Blooms. This program is h an emphasis on specialty designs and from start to finish including customer	geared for student specific occasion	s who have an interest in more planning. Students should have	advanced flo	
Ξ	PRACAF	Practicum in AFNR- Ag Barn	13002500	1 AFNR Class; Transportation	2	\$0
	Students will demonstrate under supervision the practical application of knowledge and skills of the daily activities and maintenance of the Ag Science Facility AND either be employed in a related job or submit an individual project proposal for their practicum. Students may be handling live animals in this class, which may lead to injury.					
ELECTIVE	AGLEAD	Ag Leadership, Research, & Communication	13001500	Princ. of AFNR; FFA Membership	1	FFA Dues
ELEC	Agricultural Leadership, Research and Communications focuses on challenging students to use higher level thinking skills, develop leadership abilities, employ standard research principles, and communicate agricultural positions effectively with all stakeholders.					
*Career P	reparation for Programs		NAL NOTES: E Program of Study c	redit. Please see CTE Electives List	for additional in	formation.
SFISD (	*Career Preparation for Programs of Study can be taken to satisfy a Level 4 CTE Program of Study credit. Please see CTE Electives List for additional information. FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCE CAREER CLUSTER, PLEASE CONTACT: <u>CTE@sfisd.org</u> or visit our web page: <u>https://www.sfisd.org/departments/career-and-technical-education</u> SFISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator at 409-925-3526.					



## **Architecture and Construction Career Cluster**

The Architecture and Construction Career Cluster focuses on designing, planning, managing, building, and maintaining the built environment.

## Carpentry Statewide Program of Study



The Carpentry program of study explores the occupations and educational opportunities related to constructing, installing, or repairing structures and fixtures made of wood, such as concrete forms (including frameworks, partitions, joists, studding, rafters, and stairways). This program of study may also include exploration into installing, dismantling, or moving machinery and heavy equipment according to layout plans, blueprints, or other drawings.

## **Secondary Courses for High School Credit**

#### Level 1

**Principles of Construction** 

#### Level 2

Construction Technology I

#### Level 3

Construction Technology II

#### Level 4

- Practicum in Construction Technology
- AND/OR
- Career Preparation for Programs of Study

### Postsecondary Opportunities

#### **Associates Degrees**

- Carpentry/Carpenter
- Industrial Mechanics and Maintenance Technology

#### **Bachelor's Degrees**

**Construction Science** 

#### Master's, Doctoral, and Professional Degrees

**Construction Management** 



Ex	ploration Activities	Work-Based Learning Activities	
•	Shadow a carpenter	•	Obtain an NCCER

- or millwright
- Participate in SkillsUSA
- certification



## **Industry-Based Certifications**

- NCCER Core
- **OSHA**





### **Aligned Occupations**

Occupations	Median Wage	Annual Openings	% Growth
Carpenters	\$35,922	5,031	26%
Cost Estimators	\$63,939	2,239	21%



## CARPENTRY Course Information

	KEY	COURSE	SERVICE ID	PREREQUISITES	CREDIT	FEE	
-	PRINCO	Principles of Construction	13004220	None	1	\$25	
Level	Principles of Construction provides an introduction and lays a solid foundation for those students entering the construction or craft-skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.						
8	CNTEC1	Construction Technology I	13005100	Princ of Construction	2	\$40	
Level 2	In Construction Technology I, students gain knowledge and skills needed to enter the workforce as carpenters or building maintenance supervisors or to prepare for a postsecondary degree in carpentry, construction management, architecture, or engineering. Students will expand knowledge and skills in safety, tool usage, building materials, codes, and framing. <b>Certification Preparation: NCCER Core</b>						
	CNTEC2	Construction Technology II	13005200	Construction Tech I; NCCER Core Cert.	2	\$40	
Level 3	In Construction Technology II, students will gain advanced knowledge and skills needed to enter the workforce as carpenters, building maintenance technicians, or supervisors or to increase preparedness for a postsecondary degree in carpentry, construction management, architecture, or engineering. Students will build on the knowledge base from Construction Technology I and are introduced to exterior and interior finish out skills. <b>Certification Preparation: OSHA</b>						
14	PRACCT Practicum in Construction 13005250 Construction Tech II 2 \$0 Technology						
In Practicum in Construction Technology, students will be challenged with the application of knowledg gained in previous construction-related coursework. In many cases students will be allowed to work a (paid or unpaid) outside of school or be involved in lab-based local projects the school has approved for class.					d to work at a	job	
	_					1	

#### **ADDITIONAL NOTES:**

\*Career Preparation for Programs of Study can be taken to satisfy a Level 4 CTE Program of Study credit. Please see CTE Electives List for additional information. FOR ADDITIONAL INFORMATION ON THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER,

PLEASE CONTACT: CTE@sfisd.org or visit our webpage: https://www.sfisd.org/departments/career-and-technical-education

SFISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator at 409-925-3526.





## Arts, Audio/Video Technology, and Communications Career Cluster

The Arts, A/V Technology and Communications (AAVTC) Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services. Careers in the AAVTC career cluster require a creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication.

## **Graphic Design & Interactive Media** Statewide Program of Study



The Graphic Design and Interactive Media program of study explores the occupations and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. This program of study may also include exploration into designing clothing and accessories, and creating special effects, animation, or other visual images using film, video, computers, or other electronic tools and media, for use in computer games, movies, music videos, and commercials.

### Secondary Courses for High School Credit

#### Level 1

Digital Media

#### Level 2

- Graphic Design and Illustration I/Yearbook I
- Commercial Photography I (Elective)

#### Level 3

Graphic Design and Illustration II/Yearbook II

#### Level 4

- Practicum in Graphic Design and Illustration
  AND/OR
- Career Preparation for Programs of Study





### **Postsecondary Opportunities**

#### **Associates Degrees**

- Animation, Interactive Technology, Video Graphics and Special Effects
- Graphic Design
- Game and Interactive Media Design

#### Bachelor's Degrees

- Animation, Interactive Technology, Video Graphics and Special Effects
- Graphic Design
- Game and Interactive Media Design
- Master's, Doctoral, and Professional Degrees
- Animation, Interactive Technology, Video Graphics and Special Effects
- Graphic Design
- Intermedia/Multimedia

## **Aligned Occupations**

Occupations	Median Wage	Annual Openings	% Growth
Graphic Designers	\$44,824	1,433	15%
Multimedia Artists and Animators	\$67,392	186	21%

Successful completion of the Graphic Design & Multimedia Arts program of study will fulfill requirements of the Business and Industry endorsement.

### Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
Join a website development or coding club	<ul> <li>Intern with a multimedia or animation studio</li> </ul>
Participate in SkillsUSA or TSA	<ul> <li>Obtain a certificate or certification in graphic design</li> </ul>

### **Industry-Based Certifications**

- Adobe Certified Professional in Graphic Design and Illustration Using Adobe Illustrator
- Adobe Certified Professional in Visual Design Using
   Adobe Photoshop





## AAVT&C – GRAPHIC DESIGN & INTERACTIVE MEDIA Course Information

	Course information					
	KEY	COURSE	SERVICE ID	PREREQUISITES	CREDIT	FEE
Level 1 (JH)	PRINDM	Principles of Arts, Audio/Video Technology, and Communications	13008200	None	1	\$ <b>0</b>
-	students will devel	urse is for students to explore arts, a op an understanding of the various ements for those opportunities.				
1	DIMEDI	Digital Media	13027800	None	1	\$15
Level 1 (HS)	address customer r	ze and assess current and emerging needs. Students will develop profici leo, and animation while developin	encies in photograp	hy, designing, importing, and		
	GRAPHD	Graphic Design and Illustration I/Yearbook I	13008800	Digital Media	1	\$15
Level 2	context, in additior expected to develo design. Yearbook s	design and illustration span all aspe n to developing knowledge and skill p an understanding of the industry tudents will apply graphic design kr . <b>Certification Preparation: Adobe</b>	s needed for succes with a focus on fun nowledge and skills i	s in the AAVT&C Career Cluste damental elements and princ into the production of current	er, students w iples of visual : year's yearbo	ill be art and ook instead
	СРНОТ1	Commercial Photography I	13009100	Pre: Digital Media, Pre/Co-Req: GD I	1	\$15
	commercial photog	n this program of study, students in graphy industry with a focus on crea ual Design Using Adobe Photoshop	ating quality photog			
Level 3	GRAPH2	Graphic Design and Illustration II/ Yearbook II	13008910	Graphic Design and Illustration I	2	\$15
Lev	advanced understa	expands on the knowledge and skil nding of the industry with a focus c wledge and skills into the productio	on mastery of conte	nt knowledge and skills. Yeark	ook students	
Level 4	PRACGD	Practicum in Graphic Design & Illustration	13009000	Graphic Design & Illustration I	2	\$15
Lev	Students learn general employability and technical skills required for success in the graphic design industry. Students may have a paid or unpaid internship as part of this course but must provide their own transportation.					
ADDITIONAL NOTES:						
	*Career Preparation for Programs of Study can be taken to satisfy a Level 4 CTE Program of Study credit. Please see CTE Electives List for additional information. FOR ADDITIONAL INFORMATION ON THE ARTS, AUDIO/VIDEO TECHNOLOGY, AND COMMUNICATIONS CAREER CLUSTER, PLEASE CONTACT: CTE@sfisd.org					
FOR ADDITIONAL INFORMATION ON THE ARTS, AUDIO/VIDEO TECHNOLOGY, AND COMMUNICATIONS CAREER CLUSTER, PLEASE CONTACT: <u>CLE@stisd.org</u> or visit our webpage: <u>https://www.sfisd.org/departments/career-and-technical-education</u> SFISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator at 409-925-3526.						
tools used is protecte	for creative projects, d ed. While in class, it wil	PARENT DISCLOSURE STATE e classes will be assigned access to ACC esign, and multimedia production. Ad l be used for educational purposes only re required to adhere to SFISD and Adc	C as part of their educ obe complies with da y and use will be mon	ational experience. ACC provides ta a privacy regulations and ensu itored by teachers. We teach and licies and copyright guidelines. P	res that studen l encourage onl	t information y responsible

schedule implies acceptance of the student's use of Adobe Creative Cloud.

# INDIANS GH SCHO

## **Business & Hospitality Career Cluster**

The Business, Marketing, and Finance Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.

## **Business, Lodging & Tourism Management** Statewide Program of Study



The Business, Lodging & Tourism Management program of study blends the general business and tourism industry. Students are introduced to occupations and educational opportunities related to the marketing or sales of travel and tourism businesses and services. This program of study allows students to learn how to plan, direct, and coordinate marketing or business policies and programs, including identifying potential customers and determining demand and promotional strategies

for products and services.

## **Secondary Courses for High School Credit**

### Class of 2025 & 2026

#### Level 1

**Principles of Business** (retiring)

#### Level 2

**Business Information Mgmt.** 

#### Level 3

- **Business Management**
- Level 4
- Practicum in Entrepreneurship
- **Career Preparation**

#### **Recommended Elective**

- Business English (4th English)
- Statistics & Business Decision Making

### Class of 2027 - 2029

Level 1 Principles of Hospitality & Tourism Level 2

Travel & Tourism Mgmt.

- Level 3
- Intro to Event/Meeting Planning
- **Tourism Marketing Concepts &** Applications (2026-2027)

### Level 4

•

- Practicum in Entrepreneurship
- Career Preparation for Programs of Study

#### **Recommended Elective**

- Business English (4th English Credit)
- Statistics & Business Decision Making
- **Financial Mathematics**

## Postsecondary Opportunities

### **Associates Degrees**

- **Business Administration**
- **Business/Commerce**
- **Public Administration**
- **Business Management**

### **Bachelor's Degrees**

- **Business Administration**
- Business/Commerce
- Public Administration
- Management Science

#### Master's, Doctoral, and **Professional Degrees**

- **Business Administration**
- **Business Management**
- **Public Administration**
- **Management Science**

- **Associates Degrees** Hotel/Motel Administration/
- Management
- Tourism and Travel Services
- Management

#### **Bachelor's Degrees**

- •Hospitality Administration/
- Management, General
- •Hotel and Restaurant Management

### Marketing/ Management, General

#### Master's, Doctoral, and **Professional Degrees**

- Hospitality Administration/
- Management, General
- Hospitality Administration
- Marketing/ Management, General

### Work-Based Learning and **Expanded Learning Opportunities**

Exploration Activities	Work-Based Learning Activities	
Participate in DECA or	<ul> <li>Intern with a local hotel</li></ul>	
Family Career &	or theme park or in a	

- Family, Career & Community Leaders of America (FCCLA) CTE Organizations
- or theme park or in a business office
- Work in the School Store– Indian Outlets



## **Related Industry-Based Certifications**

- Microsoft Office Specialist: Microsoft Word Expert
- **General Management**



NOCTI





**Aligned Occupations** Occupations Median Wage Annual Openings % Growth Administrative Service Managers \$96,138 2,277 21% Management Analysts \$87,651 4,706 32% **General and Operations Managers** \$107,640 20% 18,679 Meeting, Convention & Event Planners \$47,446 1,083 21%

Successful completion of the Business Management program of study will fulfill requirements of the Business and Industry endorsement.



## **BUSINESS, LODGING & TOURISM MANAGEMENT**

# **Course Information**

	KEY	COURSE NAME	SERVICE ID	PREREQ		FEE
н н	PRINHT	Principles of Hospitality & Tourism	13022200	None	1	\$10
LEVEL	Principles of Hospitality and Tourism introduces students to an industry that encompasses lodging, travel and tourism, recreation, amusements, attractions, and food/beverage operations. Students learn knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success in that industry.					n, time
	BUSIM1	Business Information Mgmt. I	13011400	Prin H&T	1	\$10
LEVEL 2	a successful transi applications of em an electronic pres	ent personal and interpersonal skills to stren ition to the workforce and postsecondary ed nerging technologies, create word-processin entation using appropriate software. <b>Certifi</b> <i>usiness Program of Study</i>	lucation. Students a g documents, deve	apply technical skills to ac lop a spreadsheet, formu	ddress business late a database	
LEV	2025-26	Travel & Tourism Management	13022500	Pre/Co-Req: Prin H&T	1	\$10
	Travel and Tourism Management incorporates management principles and procedures of the travel and tourism industry as well as destination geography, airlines, international travel, cruising, travel by rail, lodging, recreation, amusements, attractions, and resorts. Employment qualifications and opportunities are also included in this course. Certification Preparation: General Management Certification					
	BUSMGT	Business Management	13012100	вім і	1	\$10
il 3	Students recognize, evaluate, and prepare for a rapidly evolving global business environment that requires flexibility and adaptability. Students analyze the primary functions of management and leadership: planning, organizing, staffing, directing / leading, and controlling. Topics will social responsibility of business and industry; the economic, financial, technological, international, and ethical aspects of business; and the legal, managerial, marketing, financial, ethical, and international dimensions of business. *Only C/O 2026 Business Program of Study					-
LEVEL	EVENT	Intro to Event & Meeting Planning	N1302269	Pre/Co-Req: Travel & Tourism Mgmt.	1	\$2 <b>5</b>
	This course will introduce students to the concepts and topics necessary for the comprehensive understanding of the fundamentals of the meetings, conventions, events, and exposition industries. The course will review the roles of the organizations and people involved in the businesses that comprise the Meetings, Events, Expositions and Convention (MEEC) industry.					
4	PRACEN	Practicum in Entrepreneurship	N1303425	Pre/Co-Req: Bus Mgmt or Level 2 or 3 POS Course	2	\$20
LEVEL 4	Students will apply classroom learnings and experiences to real-world business problems and opportunities, while expanding their skill sets and professional relationships as a real or simulated business owner versus the experience one would have as an employee. Practicum experiences occur in a paid or unpaid arrangement or the school store appropriate to the student's need for work-based learning experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education.					n employee. ork-based
(0)	BUSENG	Business English	13011600	English III	1 (English)	\$0
ELECTIVES	to exchanging info	n, students enhance communication and res prmation and producing properly formatted n credit requirement.				
	FINMTH	Financial Mathematics	13018000	Algebra I	1 (Math)	\$0

	This is a course about personal money management. Students will apply critical-thinking skills to analyze personal financial decisions based on current and projected economic factors. Note: This course satisfies a math credit requirement.					
	STABDMStatistics and Business Decision MakingAlgebra II & Geometry; 11th grade1 (Math)\$0					
	Statistics and Business Decision Making is an introduction to statistics and the application of statistics to business decision making. Students will use statistics to make business decisions. Students will determine the appropriateness of methods used to collect data to ensure conclusions are valid. Note: This course satisfies a math credit requirement.					
		ADDITION	NAL NOTES:			
*Career	Career Preparation for Programs of Study can be taken to satisfy a Level 4 CTE Program of Study credit. Please see CTE Electives List for additional information.				al information.	
05105	FOR ADDITIONAL INFORMATION ON THE BUSINESS & HOSPITALITY CAREER CLUSTER, PLEASE CONTACT: <u>CTE@sfisd.org</u> or visit our webpage: <u>https://www.sfisd.org/departments/career-and-technical-education</u> SFISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal					
		nate on the basis of race, color, national origins and other designated youth groups. The fo		0 1 0	•	

nondiscrimination policies: Title IX Coordinator at 409-925-3526.







## **Education and Training Career Cluster**

The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services. All parts of courses are designed to introduce learners to the various careers available within the Education and Training career cluster.



## **Teaching and Training** *Statewide Program of Study*





The Teaching and Training program of study prepares CTE learners for careers related to teaching, instruction, and creation of instructional and enrichment materials. The program of study introduces CTE learners to a wide variety of student groups and their corresponding needs. It familiarizes them with the processes for developing curriculum, coordinating educational content, and coaching groups and individuals.

## Secondary Courses for High School Credit

#### Level 1

- Principles of Human Services OR
- Principles of Education & Training

#### Level 2

- Human Growth and Development Level 3
- Instructional Practices TRIBE

#### Level 4

- Practicum in Education and Training TRIBE 2 AND/OR
- Career Preparation for Programs of Study

### **Postsecondary Opportunities**

#### **Associates Degrees**

- Teacher Education
- Education, General (or specific subject area)
- Special Education
- Health and Physical Education/Fitness

#### **Bachelor's Degrees**

- Bilingual and Multilingual Education
- Education, General (or specific subject area)
- Special Education
- Health and Physical Education/Fitness

#### Master's, Doctoral, and Professional Degrees

- Instruction and Learning
- Educational Leadership and Administration, General
- Special Education
- Social and Philosophical Foundations of Education

### Work-Based Learning and Expanded Learning Opportunities

	•	
E	xploration Activities	Work-Based Learning Activities
	Participate in the Texas Association of Future Educators (TAFE) or Family, Career & Community Leaders of America (FCCLA)	<ul> <li>Teach a community education class</li> <li>Intern as a teaching assistant or tutor</li> <li>Serve as a camp counselor</li> <li>TRAINING</li> <li>RECRUITS</li> <li>IN</li> <li>BECOMING</li> <li>EDUCATORS</li> </ul>



• Educational Aide I



## **Aligned Occupations**

Occupations	Median Wage	Annual Openings	% Growth
Adult Basic and Secondary Education and Literacy Teachers and Instructors	\$48,069	862	17%
Middle School Teachers, Except Special and Career/Technical Education	\$54,510	6,407	15%
Career and Technical Education Teachers, Secondary School	\$56,360	719	9%
Special Education Teachers, Secondary School	\$56,720	980	18%

Successful completion of the Teaching and Training program of study will fulfill requirements of the Public Service endorsement.



		E&T – TEACHING Course Info		١G		
	КЕҮ	COURSE NAME	SERVICE ID	PREREQUISITES	CREDIT	FEE
	JH- HUMSEV HS- PRINHU	Principles of Human Services	13024200	None	1	\$0
LEVEL 1	Principles of Human Services is a laboratory course that will enable students to investigate careers in the Education & Training and the Human Services Career Clusters, including teaching, counseling and mental health, early childhood development, family and community, personal care, and consumer services. Each student is expected to learn the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers.					od
LEV	JH- EDTRAI HS- PRINET	Principles of Education & Training	13014200	None	1	\$0
	Education and Training analyze various careers	and Training is designed to introdu Career Cluster. Students use self- k within the Education and Training r choice in the student's interest a	nowledge as well a career Cluster. Stu	as educational and caree	r informatio	
L2	HUMGRO	Human Growth and Development	13014300	10-12 Grade; Pre- or Corequisite: Prin Hum Serv or Prin Ed & Train	1	\$0
LEVEL 2	research, theoretical pe The course covers mate	velopment is an examination of hur rspectives, and common physical, rial that is generally taught in a pos ogy or human development.	cognitive, emotion	al, and social developme	ntal milesto	nes.
	IPEDTR	Instructional Practices- TRIBE	13014400	11 <sup>th</sup> Grade; Human Growth	2	\$20
LEVEL 3	Instructional Practices is a field-based (practicum) internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators or trainers in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel.					
L 4	PRACED Practicum in Education and Training – TRIBE 2		13014500	12 <sup>th</sup> Grade; Instructional Practices	2	\$20
LEVEL 4	Practicum in Education and Training is a field-based internship that expands on the knowledge and skills developed in Instructional Practices. The role of the intern increases by adding engagement with their mentor's professional learning community, staff development, and increased responsibility for arrangements for instruction. <b>Certification</b> <b>Preparation: TEA Educational Aide I</b>					
*Caraa		ADDITIONA		Diagona con CTE Electivos List fo	r additional inf	armation
Caree	PLEASE CONTACT SFISD does not discrir provides equal acces	tudy can be taken to satisfy a Level 4 CTE Pr FOR ADDITIONAL INFORMATION ON THE CTE@sfisd.org or visit our webpage: <u>http:</u> ninate on the basis of race, color, natic s to the Boy Scouts and other designat inquiries regarding the nondiscriminati	EDUCATION AND TRAIN s://www.sfisd.org/depa onal origin, sex, disab ed youth groups. The	IING CAREER CLUSTER, a <u>rtments/career-and-technical-</u> ility or age in its programs o e following person has beer	education or activities and designated t	nd



## **Human Services Career Cluster**

The Human Services Career Cluster focuses on preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care services, and consumer services.



## Cosmetology and Personal Care Services Regional Program of Study





The Cosmetology and Personal Care Services regional program of study introduces CTE learners to knowledge and skills related to providing beauty and personal care services. CTE concentrators may learn about or practice managing personal care facilities and coordinating or supervising personal service workers.

### **Secondary Courses for High School Credit**

This is a dual credit partnership with College of the Mainland. Courses may vary. College tuition / fees apply Level 1

- Principles of Human Services (Recommended, Elective credit)
   Level 2
- Human Growth and Development (Recommended, Elective credit)

#### Level 3

- Principles of Cosmetology Design and Color Theory
- Introduction to Cosmetology
- Cosmetology I/Lab

OR

Barbering I

#### Level 4

- Nail Care, Enhancements, and Spa Services
- Esthetics
- Cosmetology II/Lab

#### OR

Barbering II

### **Postsecondary Opportunities**

#### Certificate/License

- Certified Aesthetic Laser Operator
- Cosmetologist
- Certified Spa Supervisor
- Nail Technician/Specialist and Manicurist

#### Associates Degrees

- Cosmetology/Cosmetologist, General
- Aesthetician/Esthetician and Skin Care Specialist
- Salon/Beauty Salon Management/Manager
- Cosmetology, Barber/Styling, and Nail Instructor

### Work-Based Learning and Expanded Learning Opportunities

Exploration	Work-Based
Activities	Learning Activities
Participate in TIVA or SkillsUSA	<ul> <li>Job shadow a cosmetologist</li> <li>Work part-time at a salon, spa, or</li> </ul>

barbershop

## Related Industry-Based Certifications

- Cosmetology Operator License
- Cosmetology Esthetician Specialty License
- Cosmetology Manicurist Specialty License
- Barber Operating License

### **Aligned Occupations**

Occupations	Median Wage	Annual Openings	% Growth
First-Line Supervisors of Personal Service Workers	\$36,941	1,634	24%
Barbers	\$28,267	348	14%
Hairdressers, Hairstylists, and Cosmetologists	\$21,507	3,489	22%
Manicurists and Pedicurists	\$21,715	418	45%
Shampooers	\$18,720	139	24%
Skincare Specialists	\$26.437	637	22%

Successful completion of the Cosmetology and Personal Care Services regional program of study will fulfill requirements of the Public Service endorsement or STEM endorsement if the math and science requirements are met.



	COSMETOLOGY AND PERSONAL CARE SERVICES Course Information *DUAL CREDIT ONLY - See COM website for more information						
	КЕҮ	COURSE	SERVICE ID	PREREQ	CREDIT	FEE	
	SFJS-HUMSEV SFHS- PRINHU	Principles of Human Services	13024200	None	1	\$0	
; LEVEL :	Principles of Human Services is a laboratory course that will enable students to investigate careers in the Education & Training and the Human Services Career Clusters, including teaching, counseling and mental health, early childhood development, family and community, personal care, and consumer services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers. ELECTIVE CREDIT ONLY, NOT INCLUDED IN THE TEA PROGRAM OF STUDY.						
L 2	HUMGRO	Human Growth & Development	13014300	10-12 Grade; Pre- or Corequisite: Prin Hum Serv or Prin Ed & Train	1	\$0	
Human Growth and Development is an examination of human development across the lifespan with emphasis on research, perspectives, and common physical, cognitive, emotional, and social developmental milestones. The course covers materia generally taught in a postsecondary, one-semester introductory course in developmental psychology or human developme CREDIT ONLY, NOT INCLUDED IN THE TEA PROGRAM OF STUDY.				naterial that i	is		
	DCCOPR	Principles of Cosmetology Design and Color Theory	13025050		1		
	DCCOIN	Introduction to Cosmetology	13025100 CSME 1401	See College of	1		
LEVEL 3	DCCM1A	Cosmetology I/Lab	13025200 CSME 1451	the Mainland Webpage	1 of 2		
	DCCM1A	Cosmetology I/Lab	13025200 CSME 1410	<u>www.com.edu</u>	2 of 2	es, and supplies	
	TBD	Barbering I	N1302534 BARB 1404		3	ees, and	
	DCCOES	Esthetics	N1302533 DC1348		1 of 2	College tuition, fe	
_	DCCONC	Nail Care, Enhancements, & Spa Services	N1302531 CSME 1443	See College of	2	College	
LEVEL 4	DCCO2A	Cosmetology II/Lab	13025300 CSME 1453	the Mainland Webpage www.com.edu	1 OF 2		
	DCCO2B	Cosmetology II/Lab	13025300 CSME 2441	www.com.edu	2 OF 2		
	TBD	Barbering II	N1302535		3		

#### ADDITIONAL NOTES:

\*Courses sequence, credit and schedule varies based on COM's schedule of classes

\*Transportation to College of the Mainland may be provided

\*Courses extend beyond the school day (1:30-6:30 in 2024-2025)

\*Students must purchase their own kit to use throughout the level 3 and 4 courses, and so they are equipped to begin working when their license is earned.\*Courses extend beyond the school day (1:30-6:30 in 2024-2025)

\*Students must purchase their own kit to use throughout the level 3 and 4 courses, and so they are equipped to begin working when their

license is earned.



## **Health Science Career Cluster**

The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, communicate effectively, and work well with others.



## Healthcare Diagnostic & Therapeutic/Nursing Statewide Program of Study-2025



diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study also includes an introduction to the opportunities associated with providing treatment and counsel to patients as well as rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

## Secondary Courses for High School Credit

## **DIAGNOSTIC & THERAPEUTIC**

#### (Dental Assisting) Level 1

Principles of Health Science

#### Level 2

Medical Terminology

#### Level 3

Anatomy and Physiology (science cr)

### Level 4

- Pract. in Health Science- Dental Assist. Mathematics for Medical Prof. (math
- credit)
- Medical Microbiology (science credit)

#### **Recommended Elective(s)**

**Health Science Theory** 

Leadership & Management in Nursing





### Postsecondary Opportunities

#### **Associates Degrees**

- Dental Hygienist
- Medical/Clinical Assistant
- **Bachelor's Degrees**
- **Dental Hygienist**

#### Master's, Doctoral, and Professional Degrees

- Dentist
- **Physician Assistant**
- Family and General Practitioners
- Pharmacist

#### NURSING (Patient Care Technician)

- Level 1 Principles of Health Science
- Level 2
  - Medical Terminology

#### Level 3

- Anatomy and Physiology
- Health Science Theory

#### Level 4

- Pract in Health Science- PCT Leadership & Management in Nursing
- Medical Microbiology (science credit)

#### **Recommended Electives**

Associates Degrees

Bachelor's Degrees

sional Degrees

**Registered Nurse** 

**Nurse Practitioner** 

Nurse Anesthetist

Nursing Administration

Mathematics for Medical Prof. (math credit)



Informatics Nurse Specialists

Master's, Doctoral, and Profes-

### Work-Based Learning and **Expanded Learning Opportunities**

	Exploration Activities	Work-Based Learning Activities
•	Participate in Health Occupation Students of America	<ul> <li>Volunteer at a community wellness center, hospital, assisted living, dental office, or nursing home</li> </ul>

### **Related Industry-Based Certifications**

- Patient Care Technician (PCT)
- Registered Dental Assistant X-Ray Certification



Aligned Occupations	Median Wage	Annual Openings	% Growth
Medical Assistants	\$29,598	8,862	30%
Surgical Technologists	\$45,032	1,150	20%
Registered Nurses	\$68,682	17,493	26%
Physicians and Surgeons	\$213,071	1,151	30%

Successful completion of the Healthcare Diagnostic & Therapeutic or Nursing program of study will fulfill requirements of a Public Service endorsement or STEM endorsement if the math and science requirements are met.







## HEALTHCARE DIAGNOSTIC & THERAPEUTIC SERVICES/NURSING

## **Course Information**

	KEY	COURSE NAME	SERVICE ID	PREREQ	CREDIT	FEE	
	PRINHL	Principles of Health Science	13020200	None	1	<b>\$15</b>	
LEVEL 1	research and de the ability to wo	vides an overview of the therapeutic, diag evelopment systems of the health care ind ork well with others, and that professional thical and legal responsibilities.	ustry. Students w	vill realize that quality he	ealth care depe	ends on	
2	MEDTER	Medical Terminology	13020300	Pre/Co-Req: Pri. Health Sci	1	\$15	
LEVEL	forms, singular	oduces students to the structure of medica and plural forms, plus medical abbreviatio of medical vocabulary appropriate to med y.	ns and acronyms	. The course allows stud	ents to achiev	-	
	ANATPH	Anatomy and Physiology (A&P)	1302060	Bio, + Chem, IPC, or Physics	1 (Science)	\$15	
This college prep course for students interested in sports sciences, medical science, veterinary science, ph biomedical engineering, pharmacy, and other allied health science careers covers the structure and functi- human body systems. Through research, lab activities, and field investigation based on real case studies, s investigate how disease, disorders, cancer, and other illnesses impact body systems and maintaining homeostasis. Scientific methods of investigation include experimental, descriptive, and/or comparative to body systems interact with each other and independently.					d function of tl tudies, student ng	ne ts	
	HLTHSC	Health Science Theory (HST)	13020400	Biology; Pre/Co: Med Term	1	\$15	
	Health Science Theory is designed to provide for the development of multi-occupational knowledge, theory and skills related to a wide variety of health careers. Students have hands-on experiences for knowledge and skill development in healthcare. This course prepares students for the level 4 practicum programs.						
	PRACHS	Practicum in Health Science-Patient Care Technician	13020500	HST and Biology	2	\$25 Scrubs	
	This course provides the development of advanced knowledge and skills related to Patient Care Technician certification and general healthcare industry. Students must be able to provide their own transportation to clinical settings, if applicable. Enrollment is subject to clinical site availability. <b>Certification Preparation: Patient Care Technician</b>						
	PRACDA	Practicum in Health Science- Dental Assisting	13020500	HST and Biology	2	\$25 Scrubs	
LEVEL 4	able to provide	vides the development of advanced knowl their own transportation to clinical setting eparation: Registered Dental Assistant X-	gs, if applicable. E	nrollment is subject to c	-		
	МАТНМР	Math for Medical Professionals	13020970	HST and Biology	1 (Math)	\$10	
	Students apply math to problems arising in healthcare using a problem-solving model, analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, and language and use mathematical relationships to generate solutions and make connections and predictions. (This course is an elective course for Nursing Science students and is strongly encouraged.)						

	MICRO	Medical Microbiology	13020700	Bio, Chem, + 1 H Sci	1 (Science)	\$15	
	Medical Microbiology provides students with an understanding of the amazing world of microorganisms! This course covers the study of bacteria, viruses, fungi, and other microscopic life forms. Students will learn about the structure, function, diversity, and ecological roles of microbial life on Earth. Through a combination of lectures, laboratory exercises, and interactive discussions, students will gain valuable insights into how microorganisms affect various aspects of life, including health, industry, the environment and emerging diseases.						
	HOSA-I Leadership & Mgmt in Nursing 13021225 Bio, Chem, 1 H Sci, HOSA 1 Membership HOSA						
ES	regulatory bodi	hip and management in nursing, studying es, and personal and professional leadersh T ONLY, NOT INCLUDED IN THE TEA PROG	nip skills, including		-	5.	
ELECTIVES	HUMGRO	Human Growth and Development	13014300	10-12 Grade; Pre- or Corequisite: Prin Hum Serv or Prin Ed & Train	1	\$0	
	Human Growth and Development is an examination of human development across the lifespan with emphasis on research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones. The course covers material that is generally taught in a postsecondary/college, one-semester introductory course in developmental psychology or human development. ELECTIVE CREDIT ONLY, NOT INCLUDED IN THE TEA PROGRAM OF STUDY.						
	ADDITIONAL NOTES:						
Car		ograms of Study can be taken to satisfy a Level 4 CTE FOR ADDITIONAL INFORMATION ON THE HEALTH SCIE	<b>.</b> .			information.	
сг		or visit our webpage: <a href="https://www.sfisd.org">https://www.sfisd.org</a>	g/departments/career-a	and-technical-education			
S٢	FISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal						

access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator at 409-925-3526.







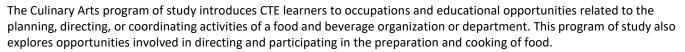


## **Hospitality and Tourism Career Cluster**

The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services. Students acquire knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success.

## **Culinary Arts** Statewide Program of Study





### **Secondary Courses for High School Credit**

#### Level 1

- Introduction to Culinary Arts
- Principles of Hospitality & Tourism

#### Level 2

Culinary Arts

#### Level 3

- Advanced Culinary Arts
- Introduction to Event & Meeting Planning

#### Level 4

- Food Science
- Practicum in Culinary Arts
- Career Preparation for Programs of Study

## **Postsecondary Opportunities**

#### Associates Degrees

- Hotel and Restaurant Management
- Restaurant Culinary and Catering Management
- Hospitality Administration/ Management, General
- Culinary Arts/ Chef Training

#### **Bachelor's Degrees**

- Hotel and Restaurant Management
- Food Service Systems Administration/ Management
- Hospitality Administration/ Management, General
- Culinary Science and Food Service Management

### Master's, Doctoral, and Professional Degrees

- Hotel and Restaurant Management
- Food Service Systems Administration/ Management
- Hospitality Administration/ Management, General
- Business Administration Management, General

### Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities					
<ul> <li>Participate in Family, Career, and Community Leaders of America (FCCLA) or SkillsUSA.</li> </ul>	<ul> <li>Plan a catering event or work for a catering company</li> <li>Participate in a cooking course</li> <li>Work in a restaurant</li> </ul>					
Industry Recod Cortifications						

### **Industry-Based Certifications**

- Culinary Meat Selection & Cookery Certification
- Food Safety & Science Certification
- ServSafe Manager





American Meat Science Association Food Safety & Science Certification

American Meat Science Association Culinary Meat Selection & Cookery Certification

## **Aligned Occupations**

Occupations	Median Wage	Annual Openings	% Growth
Food and Beverage Managers	\$55,619	1,561	28%
Chef and Head Cooks	\$43,285	1,366	25%
Food Science Technicians	\$34,382	236	11%

Successful completion of the Culinary Arts program of study will fulfill requirements of the Business and Industry endorsement.



## CULINARY ARTS Course Information

	KEY	COURSE	SERVICE ID	PREREQ	CREDIT	FEE	
	INTCUL	Introduction to Culinary Arts	13022550	None	1	\$25	
EL 1	This lab-based course is the introduction to the art of cooking and the science of baking and includes management and production skills and techniques. This course will be offered as a laboratory-based course. Students will be trained in culinary procedures, reading and writing standard recipes, identifying global cultures, and traditions related to food. Students will demonstrate prep skills in all commonly used food areas. All students will be required to develop a comprehensive culinary arts portfolio.						
LEVEL	PRINHT	Principles of Hospitality & Tourism	13022200	None	1	\$10	
	amusements, attra management, and	tality and Tourism introduces students t actions, and food/beverage operations. S customer service that meet industry sta ine characteristics needed for success in	Students learn knov Indards. Students w	vledge and skills focusing on co	ommunication, t	time	
L 2	CULART	Culinary Arts	13022600	Pre/Co-Req: Intro to Culinary Arts or Princ. of Hosp & Tourism	2	\$25	
LEVEL	skills and techniqu appropriate indust	nues with the principles of the art of coo es. Students can pursue a national sanit rry certification. Students will continue to cultures, and traditions related to food a	ation certification, a o be trained in culir	a Texas culinary specialist certi ary procedures, reading and v	fication, or any	other	
	ADCULA	Advanced Culinary Arts	13022650	Culinary Arts	2	\$25	
LEVEL 3	This is an advanced course in the art of cooking and the science of baking and includes management and production skills and techniques. This course will be offered as a laboratory-based course or internship course. All students will be required to develop a comprehensive culinary arts portfolio. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations. <b>Certification Preparation: American Meat Science Assos. Culinary Meat Selection &amp; Cookery</b>						
Ξ	EVENT	Intro to Event & Meeting Planning	N1302269	None	1	\$25	
	This course will introduce students to the concepts and topics necessary for the comprehensive understanding of the fundamentals of the meetings, conventions, events, and exposition industries. The course will review the roles of the organizations and people involved in the businesses that comprise the Meetings, Events, Expositions and Convention (MEEC) industry.						
	FOODSC	Food Science	13023000	Biology, Chemistry and 1 add'l Science	1 (Science)	\$25	
iL 4	This course explores the nature and improvement of foods for consumers. Students study nutrition and wellness, food technology, world food supply, diet-related disorders, chemical and physical changes that affect food product quality., technologies used in food processing, and food safety. Investigation of the properties of food and how it affects the human body will also be covered. <b>Certification Preparation: American Meat Science Assos. Food Safety &amp; Science</b>						
LEVEL 4	PRACUL	Practicum in Culinary Arts	13022700	Culinary Arts	2	\$25	
	Practicum in Culinary Arts provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace. <b>Certification Preparation: ServSafe Manager</b>						
*			IONAL NOTES:		int for a data in the		
S	Career Preparation for Programs of Study can be taken to satisfy a Level 4 CTE Program of Study credit. Please see CTE Electives List for additional information. FOR ADDITIONAL INFORMATION ON THE HOSPITALITY AND TOURISM CAREER CLUSTER, PLEASE CONTACT: <u>CTE@sfisd.org</u> or visit our webpage: <u>https://www.sfisd.org/departments/career-and-technical-education</u> SFISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the						

designated youth groups. The following person has been designation nondiscrimination policies: Title IX Coordinator at 409-925-3526.



# **Information Technology**

The Information Technology (IT) Career Cluster focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

### Programming and Software Development



The Programming and Software Development program of study explores the occupations and education opportunities associated with researching, designing, developing, and testing operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computer applications. This program of study may also include exploration into creating, modifying, and testing the codes, forms, and script that allow computer applications to run.

## **Secondary Courses for High School Credit**

#### Level 1 – Junior High

- Fundamentals of Computer Science
- Principles of Information Technology

#### Level 1 - High School

Computer Science I

#### Level 2

Computer Science II

#### Level 3

Computer Science III

#### Level 4

- Practicum in Information Technology
- Career Preparation for Programs of Study



### **Postsecondary Opportunities**

#### **Associates Degrees**

- Computer Programming/Programmer General
- Computer Software Engineer
- Computer Science
- Certified Software Analyst

#### **Bachelor's Degrees**

- Management Information Systems, General
- Computer Software Engineer
- Computer Science
- Information Science/ Studies

#### Master's, Doctoral, and Professional Degrees

- Computer Software Engineer
- Computer Science
- Information Science/ Studies



### Work-Based Learning and Expanded Learning Opportunities

Exploration	Work-Based
Activities	Learning Activities
<ul> <li>Participate in a coding club at school</li> </ul>	<ul> <li>Obtain a programming IBC</li> <li>Work part-time or intern with an IT related business</li> </ul>

## **Industry-Based Certifications**

• Certified Entry-Level Python Programmer (PCEP)



### **Aligned Occupations**

Occupations	Median Wage	Annual Openings	% Growth
Software Developer, Systems Software	\$103,334	2,985	25%
Software Developers, Application	\$104,499	6,311	30%
Computer Programmers	\$79,893	1,454	9%

Successful completion of the Programming and Software Development program of study will fulfill requirements of the Business and Industry endorsement and STEM endorsement if the math and science requirements are met.



## IT - PROGRAMMING AND SOFTWARE DEVELOPMENT Course Information

	KEY	COURSE NAME	SERVICE ID	PREREQUISITES	CREDIT	FEE		
	PRINIT	Principles of Info Tech	13027200	None	1	\$0		
LEVEL 1 (JH)	Students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.							
EVEL	FCS	Fund of Computer Science	03580140	Rec: Prin IT	1	\$0		
-	principles of c creativity and	learn about the computing tools computer science through the stu innovation; communication and ng, and decision making; digital	udy of technolog I collaboration; r	y operations and concepts. esearch and information flue	The six strands ency; critical th	include		
HS)	JH- CS1JH HS- TACS1	Computer Science I	03580200	Pre/Co-Req: Algebra I	1 (LOTE)	\$20		
LEVEL 1 (I	Computer Science I promotes creativity and innovation with opportunities to design, implement, and present meaningful programs through a variety of media. Students collaborate with peers, their instructor, and various electronic communities to solve problems presented in the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems.							
2	TACS2	Computer Science II <sup>A</sup>	03580300	Algebra I, CS I	1 (LOTE)	\$20		
LEVEL 2	Computer Science II will continue and expand on the knowledge and skills learned in Computer Science I. Students will gain an understanding of computer science through the study of technology operations, systems, and concepts							
ĸ	TACS3	Computer Science III <sup>A</sup>	03580350	Computer Science II	1	\$20		
LEVEL 3	Students will	ence III will continue and expand gain an understanding of advand concepts. <b>Certification Preparat</b>	ed computer sci	ence through the study of te	chnology oper			
_	PRACIT	Pract in Information Tech (IT) <sup>A</sup>	13028000	Computer Science III	2	\$10		
By using technology as a tool that supports the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking, problem solving, and decision making; digital citizenship; and technology operations and concepts. Certification Preparation: Certified Entry-Level Python Programmer (PCEP)					results. ation			
ADDITIONAL NOTES:								
*Career Prepa	*Career Preparation for Programs of Study can be taken to satisfy a Level 4 CTE Program of Study credit. Please see CTE Electives List for additional information.							
SFISD doe	EASE CONTACT: <u>C</u> s not discriminat	R ADDITIONAL INFORMATION ON TH <u>TE@sfisd.org</u> or visit our webpage: e on the basis of race, color, national ind other designated youth groups. nondiscrimination policies	https://www.sfise al origin, sex, disab The following pers	J.org/departments/career-and- ility or age in its programs or ac on has been designated to hand	technical-educa ctivities and prov	vides equal		



## Law and Public Service Career Cluster

The Law and Public Service Career Cluster focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services. Students will examine the roles and responsibilities of police, courts,

## Law Enforcement Statewide Program of Study





The Law Enforcement program of study teaches CTE learners about the development of, adherence to, and protection of various branches of law. Students will learn how to appropriately and legally respond to breaches in the law according to statutory rules and regulations as well as investigate how and why the breaches occurred.

## **Secondary Courses for High School Credit**

#### Level 1

• Principles of Law, Public Safety, Corrections, and Security

#### Level 2

Law Enforcement I

#### Level 3

Law Enforcement II

#### Level 4

- Forensic Science
- Practicum in Law, Public Safety Corrections, and Security

### **Postsecondary Opportunities**

#### Associates Degrees

- Criminal Justice/Safety Studies/Law
- Enforcement Administration
- Criminal Justice/Police Science
- Corrections
- Criminalistics and Criminal Science

#### **Bachelor's Degrees**

- Criminal Justice/Safety Studies/Law
- Enforcement Administration
- Criminal Justice/Police Science
- Juvenile Corrections
- Cyber/Computer Forensics and Counterterrorism

#### Master's, Doctoral, and Professional Degrees

- Criminal Justice/Safety Studies/Law
- Enforcement Administration
- Natural Resources
- Law Enforcement and Protective Services



#### Work-Based Learning and Expanded Learning Opportunities

	0 11 1 1 1 1 1
Exploration	Work-Based
Activities	Learning Activities

- Join Skills USA
- Attend court hearings and other legal procedures



## **Related Industry-Based Certification**



Texas Department of Public Safety

Non-Commissioned Security Officer Level II

### **Aligned Occupations**

Occupations	Median Wage	Annual Openings	% Growth
Police and Sheriff's Patrol Officers	\$60,112	5,241	13%
Probation Officers and Correctional Treatment Officers	\$44,054	793	9%
Correctional Officers and Jailers	\$40,186	4,683	9%
Immigration and Customs Inspectors	\$78,104	1,236	9%
First-Line Supervisors of Police and Detectives	\$91,312	253	25%

Successful completion of the Law and Public Service program of study will fulfill requirements of the Public Service endorsement.



## LAW ENFORCEMENT Course Information

	КЕҮ	COURSE NAME	SERVICE ID	PREREQ	CREDITS	FEE		
LEVEL 1	PRINLP	Principles of Law, Public Safety, Corrections, and Security	13029200	0 None 1		\$25		
	corrections. Students protective agencies o	This course introduces students to careers in law enforcement, fire and emergency management services, security, and corrections. Students will explore the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services. The course provides students with an overview of the skills necessary for careers in law enforcement, fire service, security, and corrections.						
EL 2	LAWEN1	Law Enforcement I	13029300	10-12 Grade; Pre/Co-Req: Princ of Law	1	\$25		
LEVEL 2	Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. Students will understand the role of constitutional law at local, state, and federal levels; the U.S. legal system; criminal law; and law enforcement terminology and the classification and elements of crime.							
L3	LAWEN2	Law Enforcement II	13029400	Law Enforcement I	1	\$25		
LEVEL	Law Enforcement II provides the knowledge and skills necessary to prepare for a career in law enforcement. Students will understand ethical and legal responsibilities, patrol procedures, first responder roles, telecommunications, emergency equipment operations, and courtroom testimony. <b>Certification Preparation: Non-Commissioned Security Officer Level II</b>							
	FORENS	Forensic Science	13029500	Biology and Chemistry	1 (Science)	\$15		
L 4	Forensic Science uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis, plus learning the history, legal aspects, and career options for forensic science.							
LEVEL	PRACLP	Practicum in Law, Public Safety, Corrections, and Security	13030100	Pre/Co-Req: Law Enforcement II	2	Uniform Costs		
	The practicum course is designed to give students supervised practical application of previously studied knowledge and skills in law, public safety, corrections, and security. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. Certification Preparation: Non-Commissioned Security Officer Level II							
*	ADDITIONAL NOTES:							
Care	Career Preparation for Programs of Study can be taken to satisfy a Level 4 CTE Program of Study credit. Please see CTE Electives List for additional information. FOR ADDITIONAL INFORMATION ON THE LAW AND PUBLIC SERVICE CAREER CLUSTER, PLEASE CONTACT: <u>CTE@sfisd.org</u> or visit our webpage: <u>https://www.sfisd.org/departments/career-and-technical-education</u> SFISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator at 409-925-3526.							

## **Manufacturing Career Cluster**



The Manufacturing Career Cluster focuses on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

## Welding Statewide Program of Study





The Welding program of study focuses on the development and use of automatic and computer-controlled machines, tools, and robots that perform work on metal or plastic. CTE learners will learn how to modify parts to make or repair machine tools or maintain individual machines, and how to use hand-welding or flame-cutting equipment.

### **Secondary Courses for High School Credit**

#### **Required Electives**

Principles of Construction

#### AND/OR

• Principles of Agriculture, Food & Natural Resources Level 1

#### Level I

Introduction to Welding

#### OR

Dual Credit Option (courses may vary, COM fees apply)

#### Level 2

Welding I

#### OR

Dual Credit Option (courses may vary, COM fees apply)

#### Level 3

Welding II

#### OR

- Dual Credit Option (courses may vary, COM fees apply)
  AND/OR
- Career Preparation for Programs of Study

### **Postsecondary Opportunities**

#### **Associates Degrees**

- Certified Welder or Welder Inspector
- Machine Shop Technology/Assistant
- Operations Management and Supervision
- Occupational Safety and Health Technology/Technician

#### **Bachelor's Degrees**

- Welding Engineering Technology/Technician
- Biomedical Technology/Technician
- Operations Management and Supervision
- Environmental Health

#### Master's, Doctoral, and Professional Degrees

- Welding Engineering Technology/Technician
- Occupational Health and Industrial Hygiene
- Operations Management and Supervision
- Environmental Health



### Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
<ul> <li>Participate and compete in SkillsUSA</li> <li>Job shadow a machinist</li> </ul>	<ul> <li>Work in a local business or industry apprenticeship</li> <li>Join the American Welding Society</li> </ul>



### **Related Industry-Based Certifications**

- API 1104 Welding Pipelines and Related Facilities
- AWS D1.1 Structural Steel
- AWS D9.1 Sheet Metal Welding



### American Welding Society

### **Aligned Occupations**

Occupations	Median Wage	Annual Openings	% Growth
Welders, Cutters, Solderers, and Brazers	\$41,350	6,171	9%
Welding Soldering and Brazing Machine Setters, Operators and Tenders	\$40,040	280	9%

Successful completion of the Welding program of study will fulfill requirements of the Business and Industry endorsement.



## WELDING Course Information

	KEY	COURSE NAME	SERVICE ID	PREREQ	CREDIT	FEE	
	PRINCO	Principles of Construction	13004220	None	1	\$25	
tives only)	Principles of Construction provides an introduction and lays a solid foundation for those students entering the construction or craft-skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.						
LEVEL 1 (Electives only)	PRINAF	Principles of Agriculture, Food, and Natural Resources	13000200	None	1	\$15	
	knowledge in agricul	areers in agriculture, food, and nat ture. This course allows students to , personal development, globalizat	o develop knowled	ge and skills through ha	nds-on activiti		
	WLG-IN	Introduction to Welding	13032250	Prin Construction or Prin AFNR; 10 <sup>th</sup> Grade	1	\$40	
LEVEL 2	Introduction to Welding will introduce welding technology with an emphasis on basic welding laboratory principles and operating procedures. Students will be introduced to the three basic welding processes. Topics include industrial safety and health practices, hand tool and power machine use, measurement, lab operating procedures, welding power sources, welding career potentials, and introduction to welding codes and standards. Students will gain the knowledge, skills, and technologies required for employment in welding and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. <b>Certification Preparation: AWS D9.1 Sheet Metal Welding</b>						
	WELD-I	Welding I	13032300	Intro Weld	2	\$40	
LEVEL 3	Welding I provides the knowledge, skills, and technologies required for employment in metal technology systems. Students will develop knowledge and skills related to this system and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success. <b>Certification Preparation:</b> <b>AWS D1.1 Structural Steel</b>						
t	WELDII	Welding II	13032400	Welding I	2	\$40	
LEVEL 4	Welding II builds on the knowledge and skills developed in Welding I. Students will develop advanced welding concepts and skills as related to personal and career development. Students will integrate academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. <b>Certification Preparation: API 1104 Welding Pipelines and Related Facilities</b>						
*Caree	r Preparation for Programs		NAL NOTES: E Program of Study cre	dit. Please see CTE Electives Li	ist for additional in	nformation.	
	*Career Preparation for Programs of Study can be taken to satisfy a Level 4 CTE Program of Study credit. Please see CTE Electives List for additional information. FOR ADDITIONAL INFORMATION ON THE MANUFACTURINGCAREER CLUSTER, PLEASE CONTACT: <u>CTE@sfisd.org</u> or visit our webpage: <u>https://www.sfisd.org/departments/career-and-technical-education</u> SFISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator at 409-925-3526.						

# **CTE Course Electives**

KEY	COURSE NAME			CREDIT	FEE		
TACS1	Computer Science I	03580200	Pre/Co-Req: Algebra I	1 (LOTE)	\$20		
Computer Science I promotes creativity and innovation with opportunities to design, implement, and present meaningful programs through a variety of media. Students collaborate with peers, their instructor, and various electronic communities to solve problems presented in the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems.							
DIMEDI	Digital Media	13027800	None	1	\$15		
that address cu	nalyze and assess current and emerging istomer needs. Students will develop p audio, video, and animation while deve	roficiencies in pho	tography, designing, in	•			
DOLLAR	Dollars and Sense	13024300	Grades 10-12	0.5	\$0		
	nse focuses on consumer practices and f technology, and preparation for huma			ocesses, decision-m	aking		
INTSTU	Interpersonal Studies	13024400	Grades 10-12	0.5	\$0		
the quality of li development, f	tudies examines how the relationships fe. Students use knowledge and skills in oster quality relationships, promote we to counseling and mental health service	n family studies an ellness of family m	d human development	to enhance persor	nal		
INTCUL	Introduction to Culinary Arts	13022550	None	1	\$25		
production skil culinary procec Students will de	course is the introduction to the art of ls and techniques. This course will be or lures, reading and writing standard reci emonstrate prep skills in all commonly e culinary arts portfolio.	ffered as a laborat ipes, identifying gl	ory-based course. Stuc obal cultures, and trad	lents will be trained itions related to foo	d in		
PRINAF	Principles of Agriculture, Food, and Natural Resources	13000200	None	1	\$15		
knowledge in a	l for careers in agriculture, food, and na griculture. This course allows students nities, personal development, globaliza	to develop knowle	edge and skills through	hands-on activities			
PRINCO	Principles of Construction	13004220	None	1	\$25		
Principles of Construction provides an introduction and lays a solid foundation for those students entering the construction or craft-skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.							
PRINET	Principles of Education & Training	13014200	None	1	\$0		
Principles of Education and Training is designed to introduce learners to the various careers available within the Education and Training Career Cluster. Students use self- knowledge as well as educational and career information to analyze various careers within the Education and Training Career Cluster. Students will develop a graduation plan that leads to a specific career choice in the student's interest area.							
PRINHL	Principles of Health Science	13020200	None	1	\$15		
PRINCL       Principles of Health Science       13020200       None       1       \$15         This course provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry. Students will realize that quality health care depends on the ability to work well with others, and that professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities.       State							

LEVEL 1

	PRINHT	Principles of Hospitality & Tourism	13022200	None	1	\$10		
	Principles of Hospitality and Tourism introduces students to an industry that encompasses lodging, travel and tourism, recreation, amusements, attractions, and food/beverage operations. Students learn knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success in that industry.							
PRINHU         Principles of Human Services         13024200         None         1						\$0		
	Principles of Human Services is a laboratory course that will enable students to investigate careers in the Education & Training and the Human Services Career Clusters, including teaching, counseling and mental health, early childhood development, family and community, personal care, and consumer services. Each student is expected to learn the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers.							
	PRINLP	Principles of Law, Public Safety, Corrections, and Security	13029200	None	1	\$25		
	corrections. Stu protective ager	roduces students to careers in law enfo udents will explore the roles and respon ncies of fire and emergency services. Th aw enforcement, fire service, security, a	nsibilities of police ne course provides	, courts, corrections, pr	vate security, and	d		
	FLORAL	Floral Design	13001800	None	1 (Fine Art)	\$50		
LEVE	This course is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design, as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students develop respect for the traditions and contributions of diverse cultures. Students will create and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgements and evaluations.							
	ANATPH	Anatomy and Physiology (A&P)	1302060	Bio, + Chem, IPC, or Physics	1 (Science)	\$15		
Г3	This college prep course for students interested in sports sciences, medical science, veterinary science, physical therapy, biomedical engineering, pharmacy, and other allied health science careers covers the structure and function of the human body systems. Through research, lab activities, and field investigation based on real case studies, students investigate how disease, disorders, cancer, and other illnesses impact body systems and maintaining homeostasis. Scientific methods of investigation include experimental, descriptive, and/or comparative to illustrate how body systems interact with each other and independently.							
	EVENT	Introd. to Event & Meeting Planning	N1302269	None	1	\$25		
	This course will introduce students to the concepts and topics necessary for the comprehensive understanding of the fundamentals of the meetings, conventions, events, and exposition industries. The course will review the roles of the organizations and people involved in the businesses that comprise the Meetings, Events, Expositions and Convention (MEEC) industry.							
	CPPOS1 (2cr) EXPOS2 (3cr)	Career Preparation for Programs of Study	12701121 (2cr) 12701141 (3cr)	16+ YO, Level 2 POS Course, Employment POS Field		\$0		
/EL 4	FOR STUDENTS WHO ARE EMPLOYED IN A POSITION THAT <u>IS</u> RELATED TO THEIR PROGRAM OF STUDY. Students learn general employability skills as a group. Individual training addresses job specific knowledge and skills. The curriculum is designed to enhance communication and interpersonal skills. Students are required to work a minimum of 10-15 hours per week at an approved training site that aligns to their Program of Study (Ex: Culinary, Healthcare, Business, Lodging & Tourism, etc.). Students must provide their own transportation and may have Work-based Learning (WBL) early release for 1 period. *Note: This course satisfies a Level 4 CTE Program of Study credit.							
-	CAREE1 (2cr) EXCAR2 (3cr)	Career Preparation- General	12701111 (2cr) 12701131 (3cr)	16+ YO, Level 2 POS Cour Employment in POS Fie		\$0		
	FOR STUDENTS WHO ARE EMPLOYED IN A POSITION <u>NOT</u> RELATED TO THEIR PROGRAM OF STUDY. Students learn general employability skills as a group. Individual training addresses job specific knowledge and skills. The curriculum is designed to enhance communication and interpersonal skills. Students are required to work a minimum of 10-15 hours per week at an approved training site. Students must provide their own transportation and may have Work-based Learning (WBL) early release for 1 period.							

	FOODSC	Food Science	13023000	Bio, Chen	n + 1 add'l sci	1 (Science)	\$25		
	This course explores the nature and improvement of foods for consumers. Students study nutrition and wellness, food technology, world food supply, diet-related disorders, chemical and physical changes that affect food product quality, technologies used in food processing, and food safety. Investigation of the properties of food and how it affects the human body will also be covered.								
	FORENS	Forensic Science	13029500	Biology a	nd Chemistry	1 (Science)	\$15		
	Forensic Science is a structured, scientific approach to the investigation of crimes of assault, abuse, neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students learn terminology and investigative procedures in crime scenes, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis, plus learning the history, legal aspects, and career options for forensic science.								
	MICRO	Medical Microbiology	13020700	Bio, Che	em, + 1 H Sci	1 (Science)	\$15		
	Medical Microbiology provides students with an understanding of the amazing world of microorganisms! This course covers the study of bacteria, viruses, fungi, and other microscopic life forms. Students will learn about the structure, function, diversity, and ecological roles of microbial life on Earth. Through a combination of lectures, laboratory exercises, and interactive discussions, students will gain valuable insights into how microorganisms affect various aspects of life, including health, industry, the environment and emerging diseases.								
	AGLEAD	Ag Leadership, Research, & Com	13001500		f AFNR; FFA nbership	1	FFA Dues		
	This course focuses on challenging students to use higher level thinking skills, develop leadership abilities, employ standard research principles, and communicate agricultural positions effectively with all stakeholders.								
	BUSENG	Business English	13011600	13011600 English III		1 (English)	\$0		
	In Business English, students enhance communication and research skills by applying them to the business environment, in addition to exchanging information and producing properly formatted business documents using emerging technology. Note: This course satisfies an English credit requirement.								
	FINMTH	Financial Mathematics	13018000	13018000 Algebra I		1 (Math)	\$0		
ES	This is a course about personal money management. Students will apply critical-thinking skills to analyze personal financial decisions based on current and projected economic factors. Note: This course satisfies a math credit requirement.								
ECTIVES	HOSA-I	Leadership & Mgmt in Nursing	13021225		hem, 1 H Sci, Membership	1	HOSA Dues		
Ц	Explore leadership and management in nursing, studying topics such as ethics, educational levels, career paths, regulatory bodies, and personal and professional leadership skills, including fundraising and other HOSA activities.								
	STABDM	Statistics and Business Decision Making	13016900		gebra II & etry; 11 <sup>th</sup> grade	1 (Math)	\$0		
	making. Students	siness Decision Making is an introduction will use statistics to make business dec ata to ensure conclusions are valid. Note	isions. Students	will determi	ne the appropri	iateness of m			
	WFEEGT	Wildlife, Fish & Ecology Mgmt.	13001500	Prin	nc. of AFNR	1	\$15		
		ines the management of game and non to current agricultural practices.	-game wildlife sp	ecies, fish a	nd aqua crops a	and their ecol	ogical		
	SFISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the								
	nondiscrimination policies: Title IX Coordinator at 409-925-3526. FOR ADDITIONAL INFORMATION ON THE CAREER & TECHNICAL EDUCATION PROGRAMS, PLEASE CONTACT: <u>CTE@sfisd.org</u> or visit our webpage: <u>https://www.sfisd.org/departments/career-and-technical-education</u>								

# EARN YOUR ENTRY-LEVEL INDUSTRY CREDENTIALS THROUGH THESE PARTNERING AGENCIES

\* Industry certifications may vary due to local workforce partner recommendations, teacher approvals, funding and other circumstances out of the district's control.



SFISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator at 409-925-3526.