Career and Technology Education

FFA is the club/organization for students enrolled in agricultural sciences. In order for all students to be members of the FFA and eligible to show livestock, they must take a minimum of one semester of agricultural science each school year.

Agriculture Science & Technology

Agriculture, Food & Natural Resources Cluster

Intro to World Agricultural Science and Technology - 8004

Credit: ½, Semester Grade: 9-12
Prerequisite: *None*

Students wanting to explore the many areas of Agri-science and enhance their agricultural understanding should take this hands-on course. Instruction will focus on job opportunities in agriculture, basic animal care and knowledge, plant and soil science, leadership training, and application of project programs in agriculture. Instruction will also focus on opportunities open to the students in the FFA youth organization. The FFA is the largest and premiere youth group in the United States. Membership and raising a project are not required, but recommended.

Applied Ag Science and Technology – 8014

Credit: ½, Semester Grade: 9-12
Prerequisite: Recommendation only 8004

Learning will focus on judging and selection of livestock, poultry, food and plants in a competitive situation. Students will also have the opportunity to work hands on with animals, conduct hands on labs in the greenhouse, and process animals in the meats processing lab. Students will also enter the Ag. Mechanics lab and be introduced to wood and metalworking. There will also be introductory units on Aquaculture and New Technology.

Introduction to Horticulture Science - 8024

Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

Careers in horticulture are one of the top 10 growth areas in the nation. Students who take this course will be introduced to all aspects of plant science and landscape management. Along with classroom instruction, students will have the opportunity to work in our 20 x 40 greenhouse and apply classroom instruction to hands on learning. We will cover everything from propagation, to hydroponics; air layering to airflow management. Students who complete this course will be well prepared for jobs in the horticulture industry.

Plant and Animal Production - 8034

Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

The relationship of producing animals and crops and their association to soil is the underlying theme of production agriculture. Students also study the relationship of managing soil and crop residue to improve soil fertility.

Food Technology - 8044

Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

This course provides an in depth study of the supply and delivery of foods from the production source to the consumer. Instruction will center on the actual production systems used to produce food, fiber, and meat, the storage handling and delivery of these foods, and marketing and retailing of these foods to the consumer. We will have many working labs where we will fabricate animal carcasses and wholesale cuts into retail products. The class will be comparing fat contents of various foods. Tours to food handling facilities in our area are also planned.

Personal Skills Development in Agriculture - 8054

Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

Students develop their potential for premier leadership, personal growth, and career success. Skills in relating to adults, managing conflicts, developing salesmanship, and becoming leaders in FFA and other youth organizations is a focus. Participating in FFA team competition and speaking events are a recommended part of the course.

Agricultural Communications - 8064

Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

This is a leadership development course designed to develop appropriate speaking, writing, and visual communication techniques that will allow the student to excel in our fast paced society. Seniors will spend much time searching the internet for opportunity to apply for scholarships. They will also build resumes and submit them during this course. Mock job interviews will also be conducted. Power points presentations will be given over topics of the students own choosing. FFA team participation is also suggested.

Exploring Aquaculture - 8074
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

Students will have the opportunity to gain practical knowledge in the field of water use and management and the application of growing plant and animal crops in water. Students will cover the full spectrum of Aquaculture from aquarium management to tank and pond culture management. Many labs and field trips are planned. Units on hydroponics, waste management, pollution management, and recreation management will also be covered.

Animal Science - 8084
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

This course is highly recommended for students interested in pursuing careers in veterinary medicine, human medicine, medical research, and other closely related fields. Students study nutrition, health, reproduction, genetics, anatomy, and physiology.

Advanced Animal Science - 8082
Credit: ½, Semester Grade: 11-12
Prerequisite: *Animal Science*

This advanced technical course is lab and field trip oriented and will acquaint students with the newest in developments in animal science. Included will be units on animal genetics, embryo transfer, and animal physiology.

Equine Science - 8094
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

The care and management of horses has developed into Equine Science, a multi-million dollar industry. The course will help the novice and the student who is already active in the horse industry to learn selection, nutrition, reproduction health, judging, and management of horses. Judging trips and tours are an integral and common part of the course.

Wildlife and Recreation Management - 8104
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

This technical course is designed to examine the importance of wildlife and outdoor recreation with emphasis on using wildlife and natural resources. Hunting and fishing techniques will be discussed as well as proper management for these natural resources. Students may earn Hunter or Boater Safety certification.

Entrepreneurship in Agriculture - 8114
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

This technical course is designed to acquaint students with entrepreneurial opportunities in the American system of agribusiness. Included are units in the nature of entrepreneurship, economic principles, business records, capital resources, insurance, business laws, promotion strategies, resource management, application of computers, and the components of a business plan.

Landscape Design, Construction and Maintenance - 8124
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

In the Landscaping business, it is recommended that 10% of the cost of the house be put into landscaping. With the growth we are experiencing in our area, there are unlimited opportunities for students interested in a career in landscaping. We will study design, current trends in landscaping, xeriscaping, water management, plant placement, and actually apply our learning by landscaping areas around the greenhouse, school and projects in the community. Introduction to Horticulture Science is recommended before this course.

Plant and Soil Science - 8134
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

This is a technical course designed to examine soil and plant relationships that affect the production of food and fiber.

Advanced Plant and Soil - 8132
Credit: ½, Semester Grade: 11-12
Prerequisite: *Plant and Soil Science*

This advanced course is designed to examine the interrelatedness of human, scientific, and technological dimensions of crop production using the resources of land, soil, water, energy, and living organisms. Instruction is designed to expand one's knowledge of the scientific and technological dimensions of resources necessary for crop production.

Range Management and Ecology - 8144
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

A course designed to familiarize students with the management and ecological aspects of rangelands. It includes a study and development of technical skills in the areas of rangeland as a renewable natural resource, range plants, ecosystems, water cycles, range conditions, carrying capacities, livestock management, wildlife management, and research in range management and ecology. Also included are topics on safe work practices, record keeping, career exploration, and leadership.

Animal Production - 8154
Credit: 1, Full Year Grade: 11-12
Prerequisite: *Plant and Animal Production or Animal Science or Advanced Animal Science, or Equine Science Recommended*

A pre-employment lab course designed to develop skills in animal production and feedlot operation through the development of competencies in the selection, physiology, nutrition, health, facilities, feeding, and marketing of cattle, sheep, and swine.

Agribusiness Management and Marketing - 8164
Credit: ½, Semester Grade: 11-12
Prerequisite: *None*

The course focuses on developing personal and business plans necessary to make the student more marketable to an employer. Students also study the dynamics of what makes customers buy, how they form opinions, and how products can be marketed to meet their needs. Students market items produced in the school greenhouse, shop, and meats lab. Resume development, scholarship and grant application skills, and publicity work through newspaper articles, fairs, and ag days are included.

Introduction to Agricultural Mechanics - 8214
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

The course is designed for students who enjoy working with their hands and developing work skills for life. Students first learn safety and productive work habits and then skills in hand and power tool identification and usage, basic carpentry, electricity, plumbing, masonry, and painting. A strong emphasis is placed on metal working and welding. The course lays a strong foundation for related agricultural courses.

Agricultural Metal Fabrication Technology - 8224
Credit: ½, Semester Grade: 10-12
Prerequisite: *Introduction to Agricultural Mechanics or Agricultural Structures Technology Recommended*

The course allows students to practice their skills in the welding and metal working process, including "stick" arc welding, M/G welding, oxy-gas cutting and welding, and plasma arc cutting.

Agricultural Structures Technology - 8234
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

This is a technical course-preparing student to maintain, evaluate, design, and build agricultural structures using approved construction techniques.

Floral Design and Interior Landscape Development - 8674
Credit ½ Semester Grade: 9-12
Prerequisite: *Offered at CLHS only*

A course designed to develop skills in the design and arrangement of flowers, foliage, and related plant materials for interior locations.

Advanced Floral Design- 8642
Credit ½, Semester Grade 10-12
Prerequisite: Floral Design I and Advanced Floral *Offered at CLHS only*

This technical course is designed to examine floral design in relation to contemporary designs, business practices, specialty items, creativity, and careers in the floral industry.

Agricultural Mechanics I – 8244
Agricultural Mechanics II- 8274
Credit: 1, Full Year Grade: 11-12
Prerequisite: *Intro. to Ag. Mechanics or Ag. Structures Technology or Ag. Metal Fabrication Technology Recommended*

A pre-employment lab course that prepares students to select, operate, maintain, service, and use power units, machinery, equipment, structures, and utilities. Skills will

be developed in areas of carpentry, electricity, plumbing, metalworking, and welding processes.

Agriculture Work-based Training I - 8254
Credit: 3, Full Year Grade: 11-12
Prerequisite: *Junior standing with at least 10 credits, 16 years old, Teacher Approval*

Agriculture work-based Training I and II is designed to provide technical instruction, on-the-job training, and work experience for high school students preparing to enter employment in various occupations. Students in the work-based training course spend one hour in class each scheduled day of block schedule to receive instruction in the occupations for which they are training and two or more consecutive hours each school day at training stations in order to learn the occupations. Training stations include the areas of: leadership development, mechanized agriculture, food and fiber production, value added and food processing, horticulture, agribusiness marketing and management, environmental and natural resources, agriculture/agribusiness/etc. Local businesses in the community are cooperating with the local school district in training students by providing work experience necessary to become valuable employees. Students must work a minimum of fifteen (15) hours per week at their training station. Students must provide their own transportation to and from their workstations.

Agriculture Work- Based Training II - 8264
Credit: 3, Full Year Grade: 11-12
Prerequisite: *Agriculture Work Based Training I*

Agriculture work-based Training I and II is designed to provide technical instruction, on-the-job training, and work experience for high school students preparing to enter employment in various occupations. Students in the work-based training course spend one hour in class each scheduled day of block schedule to receive instruction in the occupations for which they are training and two or more consecutive hours each school day at training stations in order to learn the occupations. Training stations include the areas of: leadership development, mechanized agriculture, food and fiber production, value added and food processing, horticulture, agribusiness marketing and management, environmental and natural resources, agriculture/agribusiness/etc. Local businesses in the community are cooperating with the local school district in training students by providing work experience necessary to become valuable employees. Students must work a minimum of fifteen (15) hours per week at their training station. Students must provide their own transportation to and from their workstations.

Business Education
Business, Management & Administration, and Information Technology Cluster

Accounting I - 8614
Credit: 1, Full Year Grade: 11-12
Prerequisite: *None*

Accounting, "The Language of Business", introduces the principles and practices of double entry accounting while developing the skills, knowledge, and attitudes necessary for successfully managing business or personal finances. This course provides a good foundation for additional education in the business field and is ideal for students interested in a business career or acquiring an entry level accounting job.

Accounting II - 8624
Credit: 1, Full Year Grade: 12
Prerequisite: *One Year of Accounting*

Learn to apply accounting skills using "real world" accounting software. This course helps students develop additional skills in applying principles used in accounting systems and methods commonly found in business. Accounting II is designed for students interested in either continuing their education or entering the workforce.

Business Computer Information Systems I – 8643 (Dual 8645)
Credit: 1, Full Year Grade: 9 -12
Prerequisite: *Accuplacer required.*

This is a course that will implement computer technology to address the needs of our growing business environment. Correct alpha/numeric keyboarding skills and basic formatting techniques will be covered. The students will manipulate an alpha/numeric keyboard using the touch system with accuracy while at the same time increase their typed words-per-minute rate.
Computer technology will be used to design dynamic multimedia presentations that incorporate graphical images, sounds, and animations with Microsoft PowerPoint. Students learn to create original styles of invitations, business cards, advertisements, and many more form presently used in the business world with Microsoft Publisher. Database design using Microsoft Access will be introduced. Students will use Microsoft Excel to design and manipulate dynamic spreadsheets of information that can be converted to charts for visual effects. The Internet will be used for effective telecommunication and to access and research various topics. (This course counts as a Technology Application Credit.)

Business Computer Information Systems II - 8653 (Dual 8655)
Credit: 1, Full Year Grade: 10 -12
Prerequisite, *Business Computer Information Systems I, Recommended, Teacher Approval. Accuplacer required.*

This advanced computer applications course gives students the opportunity to design databases, integrate different software, and use the Internet. Students analyze and implement computer technologies and select the appropriate technology to address business needs by using advanced techniques in word processing, spreadsheets, and database. In addition, career employment opportunities in various business environments will be explored. Course counts as required Technology Application credit.

Business Image Management and Multimedia - 8683
Credit: 1, Full Year Grade: 10-12
Prerequisite: *None*

This course teaches various methods of digital image acquisition and manipulation using the latest technology offered in the business world today. Software programs, such as Adobe Illustrator and Photoshop, are used to adjust and manipulate media output. Students learn to enhance, edit, and combine original graphic images for creative uses when planning and designing newsletters, brochures, flyers, and effective presentations. Mastery of color modes advanced blending and layering methods, special effects and filters are used to prepare imagery for print and interactive media such as multimedia presentations. The introduction of the fundamental terminology, concepts, and presentation techniques for visual composition focuses on the principles of color, composition, lighting, and other techniques for overall thematic and visual effects on the media. Course counts as required Technology Application credit.

Dual Credit: High School Course Business Image Management and Multimedia - 9133
Grade Placement 10-12
Offered at SVHS and CHS
Monday-Thursday 5:00-8:30 pm
Date: May 11-29
This course develops proficiencies in designing web pages, importing, and manipulating advanced text, graphics design, audio, and video used in presentation management, multimedia productions, publishing systems, and emerging technologies. **Course counts for one credit of Technology Applications credit. Dual credit approved. Accuplacer required.**
Classroom seat count is limited to 25 per campus.

Administrative Procedures - 8704
Credit: 1/2, Semester Grade: 10-12
Prerequisite: *None*

This course provides an advanced and in-depth study of concepts and skills to strengthen individual performance in the workplace and in society. Students develop a foundation in the economical, financial, technological, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs and to make appropriate business decisions. This course will enhance technology skills and oral and written language skills relating to effective communications.

Business Education Career Preparation I – 8724 Dual Credit 8725
Credit: 3, Full Year Grade: 11-12
Prerequisite: *Must be a junior with at least 10 credits, 16 years of age, teacher approval and course application required*

Business Education Career Preparation I and II (BECP) is an on-the-job training program for high school students who are interested in careers related to the Business field. Students must furnish their own transportation. The classroom instruction piece reinforces positive self awareness, occupational skills, technology skills, effective communication, time management skills, money management skills, establishing priorities, and an emphasis on skills necessary to be successful in life. The course provides an in-depth study of concepts that allow an employee to manage and function in the workplace. It serves as the major vehicle for cooperative education.

Business Education Career – Preparation II 8734

Credit: 3, Full Year Grade: 11-12
Prerequisite: *Business Education Career Preparation I Recommended, Teacher Approval*

Business Education Career Preparation I and II (BECP) is an on-the-job training program for high school students who are interested in careers related to the Business field. Students must furnish their own transportation. The classroom instruction piece reinforces positive self awareness, occupational skills, technology skills, effective communication, time management skills, money management skills, establishing priorities, and an emphasis on skills necessary to be successful in life. The course provides an advanced and in-depth study of concepts that allow an employee to manage and function in the workplace. It serves as the major vehicle for cooperative education.

Recordkeeping – 8684

Credit: ½, Semester Grade: 9-12
Prerequisite: *None*

Develops understanding of and skill in maintaining accurate records; includes skills used in everyday business activities both for personal and professional use; provides and opportunity to develop skills related to personal financial management as well as budgeting, financial planning, cashier's records, handling of money, and tasks common to simple office practices.

Business Education Independent Study – 8634

Credit: ½-1, Sem.–Full Year Grade: 11 - 12
Prerequisite: *Two business courses.*

A project-based learning experience developed by a student or group of students, teacher, and an interdisciplinary mentor team. The project provides opportunities for an in-depth study of at least one aspect of the business area. The student or group demonstrates the ability to utilize a variety of resources, advanced technology, and communication skills in the development and presentation of the project.

Business Support Systems – 8664

Credit: ½-1, Sem.-Full Year Grade: 9-12
Prerequisite: *None*

This course introduces practical business procedures and develops a foundation for competent business participation and self-sufficiency in today's world. It introduces the role of business in the lives of individuals, consumers, workers, and citizens. Students will explore characteristics of businesses, the government's role in business, emerging technology, issues regarding money and money management, legal and ethical business issues, and banking systems and services. The curriculum develops flexibility and adaptability for the rapidly changing business environment and other skills necessary for success in the workforce. The course reinforces reading, writing, and calculating skills and develops effective communications and information management using emerging technology.

Telecommunications and Networking – 8204

Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

Students will apply technical skills to address applications of emerging technologies. The course will incorporate a broad base of knowledge that includes legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions. Networks used in airlines, banking, and investment services, and credit card services will be analyzed.

Family and Consumer Sciences

Human Services, Education and Training, Hospitality &Tourism Cluster (s)

Personal and Family Development - 8314

Credit: 1, Full Year Grade: 9-12
Prerequisite: *None*

This comprehensive laboratory course provides individuals with essential knowledge and skills for managing the challenges of living and working in a diverse, global society. This introductory course provides practical information in the areas of self-discovery, relationships, consumer resource management, housing/interior design, child care and development, nutrition and food preparation, clothing care and construction, and career preparation. This course is recommended as a prerequisite for all other Family and Consumer Sciences courses.

Individual and Family Life - 8324

Credit: ½, Semester Grade: 10-12
Prerequisite: *None.*

Are you prepared for the challenges of independent living? Individual and Family Life prepares students with employment skills, and focuses on developing personal, family, and marital relationships, means of coping with family crisis, and provides the skills necessary in making sound financial decisions. Even though this is a grade 10-12 course, the content of this course is more beneficial to grades 11 and 12.

Interior Design - 8364
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

This laboratory course covers the concepts and skills needed to successfully decorate a home and/or business. The content addresses period styles, surface treatments, lighting, use of design, space planning, consideration of occupant needs, and management principles. Other components include the impact of technology, the acquisition of professional services, careers available within the occupational area.

Housing and Exterior Designs - 8304
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

This technical laboratory course focuses on housing and the housing industry. The course appeals to students with an interest in architecture, housing design, real estate, or landscape design. Study topics include types and styles of houses, housing construction features, landscaping, future housing trends, legal and financial aspects of housing, and the various careers related to these areas.

Apparel and Fashion Design I - 8454
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

This technical laboratory course focuses on apparel from the perspectives of personal decision-making related to apparel, the fashion industry, and career preparation. Variety of activities include: fashion design and illustration, personal color and figure analysis, apparel construction and alterations, managing the apparel dollar, fashion retailing and the development of a professional portfolio.

Apparel and Fashion Design II – 8194
Credit: ½, Semester Grade: 10-12
Prerequisite: *Apparel and Fashion Design I Recommended*

This technical laboratory course focuses on Fashion from concept to consumer. Content topics include: custom sewing and designing, draping and flat pattern methods, textile and fabric production, visual merchandising, and fashion advertising, fashion industry trends and globalization of the textile and apparel industry with the continuation of a professional portfolio.

Preparation for Parenting – 8334
Credit: ½, Semester Grade: 10-12
Prerequisite: *None.*

As society points to an every-growing need for parenting education, this practical laboratory course places emphasis on the responsibilities of parenting as it addresses character development, communication, health and safety and managing life as a parent. Students will learn to take the responsibilities seriously and to make sound parenting decisions.

Parenting Education for School Age Parents I 9234 II-
Credit ½ to 1 Full Year Grade: 9-12
Prerequisite: *None*
This laboratory course is designed to address the special needs and interests of male and female students who are parents, who are pregnant, or who are expecting to become parents in the near future. Specials emphasis is placed on prenatal care and development, postnatal care, child development, infant care, and parenting skills. Students are provided opportunities to develop the knowledge and skills to become successful parents and to prepare for managing the multiple roles of student, parent, family member, and wage earner.

Child Development – 8344 (Dual 8345)
Credit: ½, Semester Grade: 10-12
Prerequisite: *Dual Credit available for 11-12 grade students/Accuplacer required SVHS only.*

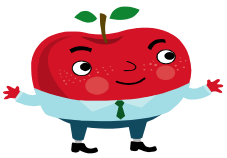
This technical laboratory course is designed to focus on knowledge and skills related to the development, care, guidance, and protection of children. Instruction addresses the principles and procedures for promoting the physical, emotional, social, and intellectual development of the child from conception through age 6, including those with special needs. Other topics include characteristics of quality child care and career options related to the care and education of children.

Family and Community Services
(PALS I) 9046 (PALS II) 9076
Credit: ½ Semester or 1 year Grade 11-12
Prerequisite*: None*
This course is an education and training program designed to involve students in realistic and meaningful community-based activities through an assortment of direct service experiences. Students are provided opportunities to interact with a variety of people while providing services to

individuals, families, and community through community volunteer service. Emphasis is placed on developing and enhancing organizational and leadership skills and characteristics.

Ready, Set, Teach I – 8964
Credit: 2 Grades: 11-12
Prerequisite: *Child Development and Preparation for Parenting recommended, Teacher approval/Application required.*

This course is a 2 credit work-based internship, which provides students learning experience in child development while they work directly with young children and experienced classroom teachers. Students have the opportunity to earn state articulated college credit. The students assist in individualized instruction, preparation of instructional materials, create bulletin boards, plan group activities, assist with record keeping and complete other responsibilities of classroom teachers. During the course of each week, the high school students are involved in instructions from the Family and Consumer Science teacher as well as involved in working in schools with pupils from grades Pre-K through grade 12.



Ready, Set, Teach II - 8974
Credit: 2 Grades: 11-12
Prerequisite: *Ready, Set, Teach I - Child Development, Preparation for Parenting recommended, Teacher approval/Application required.*

This course is a 2 credit work-based internship, which provides students learning experience in child development while they work directly with young children and experienced classroom teachers. The students assist in individualized instruction, preparation of instructional materials, create bulletin boards, plan group activities, assist with record keeping and complete other responsibilities of classroom teachers. During the course of each week, the high school students are involved in instructions from the Family and Consumer Science teacher as well as involved in working in schools with pupils from grades Pre-K through grade 12.

Nutrition and Food Science - 8354
Credit: ½, Semester Grade: 10-12
Prerequisite: *Personal & Family Development Recommended*

This technical laboratory course concentrates on nutrition, food choices, and food management skills for individuals and the family throughout the life cycle. Instruction addresses nutrition and food science from the perspective of food habits and wellness; menu planning; special dietary needs; food costs and budgeting; consumer food-buying strategies; food safety and sanitation procedures; food labels; technology implications; and food handling, storage, and preparation practices. Meal etiquette; career options; and techniques for managing multiple family, community, and career roles are part of the content

Food Science and Technology - 8464
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

Food science explains the whys behind so many kitchen processes. Why won't an egg white whip if a drop of yolk is present? Why does an apple, or peach, or banana turn brown once cut? Food science provides answers to questions like these. Through lab settings, students will also learn about food preservation, food additives, dehydration of food, canning of food, and chemical reactions. This hand on approach makes this a fun way to learn the science behind it all.

Introduction to Hospitality & Tourism- 9224
Credit: ½, Semester Grade 9-10
Prerequisite: *None*

This course will address content that will provide an introduction to various components of the hospitality and tourism industry. Students will receive an overview of the career that encompass the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events and travel related services in hospitality and tourism.

Culinary Arts I - 8944
Credit: 2 Grades: 11-12
Prerequisite: *Nutrition and Food Science recommended. Teacher approval and course application required. Offered at SVHS only*

This course provides occupationally-specific training designed to develop knowledge and skills for employment in the area of food production, management, and services. Instruction includes operation and management of foodservice establishments, marketing strategies, quantity food production skills, food presentation and service techniques, and technology applications in the foodservice industry. Legal considerations, customer service, career options, and managing multiple family, community, and career roles are contained in the content.

Culinary Arts II - 8954
Credit: 2 Grades: 12
Prerequisite: *Culinary Arts I, Nutrition and Food Science, as well as Food Science and Technology. Teacher approval and course application required. Offered at SVHS only.*

This course provides occupationally-specific training designed to develop knowledge and skills for employment in the area of food production, management, and services. Instruction includes operation and management of foodservice establishments, marketing strategies, quantity food production skills, food presentation and service techniques, and technology applications in the foodservice industry. Legal considerations, customer service, career options, and managing multiple family, community, and career roles are contained in the content.

Family and Consumer Science Career Preparation I - 8374
Credit: 3, Full Year Grade: 11-12
Prerequisite: *16 years of age, teacher approval and course application required.*

Family and Consumer Sciences Career Preparation I (FCSCP) is an on-the-job training program for high school students who are interested in occupations related to Family and Consumer Sciences. Students have the opportunity to receive state articulated credit. The student attends one block in a Career Preparation class. The occupation areas are: Food Production; Child Care and Guidance; Hospitality Services; Apparel and Textile Production; Housing, Furnishings, and Equipment; Institutional Maintenance; and Services for Older Adults. A minimum of 15 hours per week is required. Students must furnish their own transportation. The classroom instruction in Career Preparation includes career aptitudes, occupational skills, time and money management, job safety, and skills for success in life. The student has the opportunity to receive state articulated college credit in approved areas.

Family and Consumer Science Career Preparation II - 8384
Credit: 3, Full Year Grade: 12
Prerequisite: *Family and Consumer Science Career Preparation I.*

Family and Consumer Sciences Career Preparation II (FCSCP) is an on-the-job training program for high school students who are interested in occupations related to Family and Consumer Sciences. The occupation areas are: Food Production; Child Care and Guidance; Hospitality Services; Apparel and Textile Production; Housing, Furnishings, and Equipment; Institutional Maintenance; and Services for Older Adults. A minimum of 15 hours per week is required. Students must furnish their own transportation. The classroom instruction in Career Preparation includes career aptitudes, occupational skills, time and money management, job safety, and skills for success in life. The student has the opportunity to receive state articulated college credit in approved areas.

Health Science Technology
Health Science Cluster

Introduction to Health Science Technology - 8414
Credit: ½-1, Semester-Full Year Grade: 9-12
Prerequisite: *None*

The course gives an overview of the health care industry. The focus is on career exploration, leadership development, ethical and legal issues, and the history, economics, and trends in financing health care. Students will develop a concept of health and wellness from the perspective of a consumer as well as a potential professional in the health care industry.
(2 semesters satisfies the health credit for graduation)

Medical Microbiology- 9114
Grade: 12
Credit: ½ Semester *Counts for 4th year of Science Credit with Pathophysiology as the second course.*
Prerequisite: *Biology I, Physics and Chemistry recommended*

This course includes the study of the relationship between microbes and health maintenance; the nature of infectious diseases; identification of their chemical processes, methods of growth, and reproduction. Students will learn to identify beneficial bacteria and their role in nature; study classification, the body's immune responses and defense mechanisms; and evaluate the effects of antimicrobial agents. Lab and fieldwork activities are also part of this course.
This course counts as ½ credit of 4th year of Science credit.

Pathophysiology- 9134
Grade: 12
Credit: ½ Semester *Counts as 4th year of Science Credit with Medical Microbiology*
Prerequisite: Chemistry and Medical Microbiology

Pathophysiology offers students the opportunity to use the background skills and knowledge obtained from the medical microbiology course to make decisions concerning diagnosis, prevention, and treatment of disease caused by microbes. Case studies and clinical analysis techniques provide students with a strong foundation for making choices in future health and medical careers. **This course counts as ½ credit of 4th year of Science credit.**

Medical Terminology- 9174
Credit: ½ Semester Grade9-12
Prerequisite: *None*

This course is designed to help students develop a working knowledge of the language of medicine. Students acquire work building skills by learning prefixes, suffixes, roots and abbreviations. By relating terms to body systems, students identify proper use of words in a medical environment. Knowledge of medical terminology enhances the student's ability to secure employment of purse advanced education in health care.

Mental Health- 9154
Credit: ½ Semester Grade:9-12
Prerequisite: *None*

This course is an introduction to mental health services, careers, history, agencies, and current issues, and the difference between functional and dysfunctional behaviors. Students develop an awareness of the factors that affect health by exploring traditional and emerging treatment modalities.

Health Science Technology I - 8424
Credit: 1, Full Year Grade: 10-12
Prerequisite: *Introduction to Health Science Technology and Biology or Concurrent Enrollment Recommended*

This course is designed to develop health care specific knowledge and skills in effective communications, medical terminology, ethical and legal responsibilities, client care, safety, first aid and CPR. This course prepares the student for the transition to clinical or work based experiences in health care.
(2 semesters satisfies the health credit for graduation)

Health Science Technology II
Clinical Rotation - 8434
Credit: 2 Grades: 10-12
Prerequisite: *Health Science Technology I, Biology, Anatomy and Physiology and Chemistry recommended. Teacher approval and application.*

This is a course designed to provide for development of knowledge and skills related to a wide variety of health careers. Students will have hands-on experiences for continued knowledge and skill development. The course work and lab experiences prepare the student to apply and sit for the Certified Nurses Aide state board exam which requires both a skills and written exam, CNA is offered at SVHS and CHS. Students at CLHS will be introduces to a variety of aspects of health care by rotation among the various departments in the area. Students will observe in a large variety of health care areas. Career areas for rotation include veterinary medicine, nursing, physical therapy, ophthalmology, chiropractic, dentistry, x-ray technology, pharmacy, nursing home, etc. There is a cost for the CNA certification of approximately $83.00 which is required for registering for sitting for the exam. Permission for drug testing by the facility will be required, along with shot records of results of Hepatitis B, Tetanus and current TB.

Please request a check list of requirements prior to enrollment.
(2 semesters satisfies PE credit)

Health Science Technology III – Pharmacology/ Career Preparation – 8394
Credit: 2, for one full year Grade: 12
Prerequisite: *Health Science Tech I ,HST II. Must be a senior and be at least 18 years before graduation date. You cannot have a criminal record. Teacher approval and application.*

An occupationally specific course (s) designed top provide knowledge and skills for certification or licensure in an allied health career. Students develop advanced clinical skills necessary for employment in the health care industry or continued education in health careers. The courses may be taught by different methodologies such as pre-employment laboratory, paid or unpaid work based learning education or an occupationally specific course with clinical training.

This course provides students with the knowledge and skills in the classification and study of pharmacological agents to understand the treatment, care, and restoration of clients' health. Students will learn the material to challenge (at their own expense) the Pharmacology Certification Exam upon turning 18 years of age.

Successful completion of this course will prepare the student to sit, for the National Pharmacy Technician Certification Exam, upon graduation from high school. Pharmacy Technician Certification qualifies the individual to work in hospitals as well as retail pharmacies.

Competencies in Federal Law, Medication Review, Aseptic Techniques, Calculations and Pharmacy Operations will be covered. This class is Internet based is self paced and has approximately 150 hours of instruction. It is a challenging course and requires self discipline and good study skills. There is a cost of approximately $125.00 which is required for registering to sit for the exam.

Anatomy and Physiology of Human Systems 8403 (Dual- 8405)
Credit: 1, Full Year Grade: 11-12
Prerequisite: *Completion of science graduation sequence. Dual Credit available/Accuplacer required for dual credit offering.*

Anatomy and Physiology is an advanced course recommended for students with a strong interest in science and good study skills. In this course, students conduct laboratory investigations and fieldwork. Students will study the structures and functions of the human body and body systems and will investigate the body's responses to forces; maintenance of homeostasis; electrical interactions; transport systems; and energy systems.

Technology Education
Science, Technology, Engineering & Mathematics, Architecture & Construction, Arts, A/V Technology & Communication Cluster

Communication Systems
Photography I - 8754
Credit: 1, Semester-Full Year Grade: 9-12
Prerequisite: *Students must have completed the first semester before being enrolled in the second semester.*

These are technical courses designed to provide advanced knowledge and skills acquisition of the contemporary resources, processes and impacts of graphic communications technology. Activities in this course may include graphic design, computer image composition, continuous tone and process photography, prepares production, image transfer and finishing experience. Examples of student learning activities are taking photographs, publishing a newsletter, using computers to transmit information, and developing quality control methods. Examples of equipment used are cameras, enlarger, video camcorder, recorders, copiers, computers hardware/software and optical systems.

Communications Graphics
Photography II - 8764
Credit: 1, Semester-Full Year Grade: 10-12
Prerequisite: *Students must have completed Photography I. Instructors signature required.*

This is an advanced course designed for students to apply advance skills and knowledge learned in Photograph I. Students will use advance developing processes and digital photography.

Engineering Graphics - 8774
Credit: 1, Full Year Grade: 9-12
Prerequisite: *None*

In this technical course students use a Computer Aided Drafting and Design (CADD) system with AutoCAD software to draw mechanical parts and assemblies, electronic schematics, and other technical illustrations

related to many engineering fields based on the graphic standards accepted by the American National Standards Institute (ANSI). In addition to producing working drawings, students will also design and produce "hands – on" projects using accepted manufacturing processes and will become familiar with Computer Integrated Manufacturing CIM.

Manufacturing Technology - 8784
Credit: 1, Full Year Grade: 10-12
Prerequisite: *Students must have completed the first semester before being enrolled in the second semester.*

Manufacturing Technology is a technical course which enhances the understanding of various metallic and nonmetallic materials, processes, and products. Materials studied may include polymers, ceramics, woods, composites, and metals. Experiences include safety and instruction of tools and machines associated with manufacturing. Mathematical and scientific concepts are stressed as students study various processes used for transforming materials into products. Students study the design of products, quality control, design of production tooling, machine tool setups, and manufacturing systems.

Architectural Graphics - 8794
Credit: 1, Full Year Grade: 10-12
Prerequisite: *Completion of Engineering Graphics is recommended.*

In this advanced technical course students will use a Computer Aided Drafting and Design (CADD) system with AutoCAD software to design and produce the drawings associated with residential home building. Students will study the architectural styles, and construction practices related to modern architecture and will become familiar with the graphic standards accepted by the American Institute of Architects (AIA).

Construction Systems - 8804
Credit: 1, Full Year Grade: 9-12
Prerequisite: *Students must have completed the first semester before being enrolled in the second semester.*

Construction Systems is an exploratory course which addresses the utilization of materials for construction of residential and civil structures. Students study and use common construction tools, machines, materials and processes. Experiences in planning and controlling construction systems and projects allow students to explore the organizational structures and management strategies in construction.

Manufacturing Systems - 8814
Credit: 1, Full Year Grade: 9-12
Prerequisite: *Students must have completed the first semester before being enrolled in the second semester.*

Manufacturing systems is an exploratory course which addresses the knowledge and skills important in manufacturing technology. Students study common manufacturing tools, machines, materials and processes in the laboratory. Experiences in planning and controlling simulated manufacturing systems and projects allow students to explore the organizational structures and management strategies in manufacturing.

Intro to Computer Maintenance – 8484 (Dual- *CHS only 8485)*
Credit: ½-1, Sem. Grade: 11-12
Prerequisite: *Computer Applications or Business Computer Information Systems, or Computer Science Course recommend.*

This course focuses on the assembly and disassembly of modern computer systems. The study of electronic theory necessary to perform basic system maintenance will be included. The operation and checkout system board circuitry, monochrome and color monitors, disk drive systems, computer architecture, and schematic diagrams will be presented. An introduction to DOS software installation and the use of DOS in troubleshooting system abnormalities will be integrated with basic electronics and hardware needed to properly diagnose malfunctions. Upon completion of course, student has possibility of becoming A+ certified computer repair technician. The following Networking interfaces are covered: Basic networking imp configurations, router setup, encrypting, wireless technologies, and network trouble shooting.

Problems and Solutions in Technology - 8824 (Dual *CHS* only 8825)
Credit: ½ - 1 Grade: 11-12
Prerequisite: *Two technology education courses 8485, 8865 and teacher approval. Dual credit prerequisite, must have taken dual credit in a sequence. Seek Instructors approval.*

Problems and Solutions in Technology is a research activity course which allows students to develop advanced technical knowledge and skills in problem solving in one or more of the technology systems of communication, computer applications, construction, energy, power, transportation and manufacturing.

Computer Applications – 8833 (Dual- CHS only 8835)
Credit: 1, Full Year Grade: 9-12
Prerequisite: *Students must have completed the first semester before being enrolled in the second semester.*

Computer Applications is an exploratory course designed to permit students to explore the use of computers communication, construction, energy, power, transportation and manufacturing fields. Activities may include, but are not limited to, computer numerical control, programming, computer-aided design and drafting, telecommunications, desktop publishing, 3-D design and animation, developing multimedia presentations, CNC programming and microprocessor programming. **(Counts as required Technology Applications credit)**

Research, Design and Development - 8844
Credit: 1, Full Year Grade: 11-12
Prerequisite: *Teacher approval. Students must have been completed the first semester before being enrolled in the second semester.*

Research, Design and Development is a research activity course designed to provide an opportunity for research, design and development activities in one or more of the technology systems of communication, computer applications, construction, energy, power, transportation and manufacturing. Students pursue new knowledge and solve real-world problems. Activities include research, data collection, and problem solving, designing, developing prototypes and working models.

Computer Multimedia and Animation Technology - 8854
Credit: 1, Full Year Grade: 10-12
Prerequisite: *Computer Applications or other computer course Recommended. Teacher approval required.*

Computer Multimedia and Animation Technology is a technical course which develops advanced knowledge and skills in the use of computers for multimedia presentations and digital animation. This class introduces students to 3-D modeling and rendering techniques and resources. This hand on course allows students to create, edit and render characters, vehicles, scenes or objects, and to design and produce multimedia presentations that use images, video and audio resources to deliver a message.
(Counts as required Technology Application credit.)

Electricity/Electronics - 8864 (Dual- *CHS* only 8865)
Credit: 1, Full Year Grade: 10-12
Prerequisite: *Computer Applications Recommended. Students must have completed the first semester before being enrolled in second semester.*

Electricity/Electronics is a technical course designed to introduce the concepts and applications of electrical energy and electronics as a component of energy technology. In the electricity component, students focus on the characteristics, generation storage, distribution and application of electrical energy. In the electronic component, students focus on the design, construction, and application of electronics devices and circuits. Practical applications can include, problem solving and the use of test equipment.

Trade and Industrial Education

Architecture & Construction Cluster

Mill and Cabinetmaking I - 8524
Credit: 2, Full Year Grade: 11-12
Prerequisite: *Completion of Manufacturing Systems is recommended*

This course is a pre-employment laboratory course with job specific training for entry-level employment skills in cabinetmaking careers. The course includes blueprint reading, measuring, sawing, planning, shaping, turning, boring, mortising, sanding various types of woods, constructing joints, numerical control and computer controlled production devices, entrepreneurship, leadership, and career opportunities.

Mill and Cabinetmaking II – 8934
Credit: 2, Full Year Grade: 11-12
Prerequisite: *Mill & Cabinetmaking I*

This course is a pre-employment laboratory course with job specific training for entry-level employment skills in cabinetmaking careers. The course includes blueprint reading, measuring, sawing, planning, shaping, turning, boring, mortising, sanding various types of woods, constructing joints, numerical control and computer controlled production devices, entrepreneurship, leadership, and career opportunities.

Introduction to Construction Careers - 8834
Credit: ½, Semester Grade: 9-12
Prerequisite: *None*

A cluster course designed to provide a basic understanding of career opportunities, training requirements, and minimal skills in seven construction-related careers – heating, ventilation, air conditioning, and refrigeration (HVACR); bricklaying/stone masonry; carpentry; electrical trades; painting and decorating; plumbing/pipelining; and industrial/heavy construction.

Building Trades I - 8874
Credit: 2 Full Year Grade: 12
Prerequisites: *Introduction to Construction Careers Recommended*

First-year instruction is designed to provide job-specific training for entry-level employment in construction-related careers. Carpenter, bricklayer/stone mason, electrician, plumber, painter and decorator. Second-year instruction is designed to enhance entry-level training and employment in one of the five construction-related areas. Third-year advanced instruction is designed to offer seniors the opportunity to study, in depth, aspects of the building/ construction trades industry, such as blueprint reading/ specifications, site preparation and layout, cabinetry and millwork, building construction, electricity and electrical wiring. Emphasis may be placed on industrial/heavy construction-related careers in such additional areas as form setting, framing, and load rigging, and cutting.

Transportation, Distribution & Logistics Cluster

Introduction to Transportation – 8554
(Dual 8555) 1/2, Semester Grade 9-11
Prerequisites: *This course will be taught at CHS, CLHS, SVHS Dual Credit AUMT 1305*

Introduction to Automotive Technology - An introduction to the automotive industry automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance.

This is a planned sequence of classroom instruction taught as part of the Automotive Technology Program. Elements of study include Basic Car Care and maintenance procedures. Entrepreneurship, safety, leadership and career opportunities are included.

Automotive Technology I- 8504 (Dual 8505)
Credit: 2, Full Year Grade: 10-12
Prerequisites: *All students must attend class at CHS. Bus transportation from CLHS, SVHS will be provided.*

(Dual Credit) Fees: Uniform/Skills USA. Students must meet requirements of St. Philip's College. Dual Credit, Application/Instructor's Approval

Fall:
AUMT 1307 Automotive Electrical Systems
The course is: An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of batteries, charging systems, and electrical accessories. Emphasis is on electrical diagrams and service manuals.
Institutional Certificate in Automotive Technology
Courses completed: AUMT 1305, AUMT 1307, AUMT 1310, AUMT 1316

SPRING:
AUMT 1310 Automotive Brake Systems – Operation and repair of drum/disc type brake systems. Emphasis is placed on safety and use of modern equipment. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes.

Auto Specialization – 8534 (Dual 8535)
Credit: 2, Full Year Grade: 11-12
Prerequisites: *Automotive Technology I. All students must attend classes at CHS. Bus transportation from SVHS will be provided.*
(Dual Credit)

Fall:
AUMT 1316 Suspension and Steering - Theory and operation of automotive suspension and steering systems including tires and wheels problem diagnosis, component repair, and alignment procedures.

Spring:
AUMT 2317 Engine Performance- Theory, operation, diagnosis, and repair of basic engine dynamics, ignition systems, and fuel delivery systems. Use of basic, engine performance diagnostic equipment. Course will be taught manufacturer specific in the ASEP and ASSET programs.

Automotive Technology II – 8514 (Dual 8515) Career Preparation
Credit: 3, Full Year Grade: 12
Prerequisites: *Fee Skills USA/ personal transportation required to work site/Application and Teacher Approval.*

Fall:
AUMT 2301 Automotive Management
Instruction: in human relations, customer relations, and customer satisfaction. Emphasis is on management techniques and building relationships between the service department and the customer.

SPRING:
AUMT 1366 Practicum- Auto /Automotive Mechanic Technician
Practical general training and experience in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study.

Students will be assigned to a Dealership or Approved Independent Repair. Automotive Technology II Career Preparation is an on the job training program for high school students who are interested in a career related to the Automotive field. Students will work in a paid or unpaid position during the duration of the program. Students must provide their own transportation. The classroom instruction reinforces self awareness, occupational skills, technology skills, effective time management and an emphasis on skills necessary to be successful in the automotive field. Students will complete AYES work journals and a portfolio. Students are required to work a minimum of 15 hours a week Monday through Friday, be 16 years of age and work in an approved training site.

Introduction to Apprenticeship Training - 8884
Credit: 2 Full Year Grade: 12
Prerequisites: *Auto Tech 1, auto Spec I Driver license: Application, Instructor's approval. Students will be assigned to a Dealership or Approved Independent Repair facility.*

Summer: Practicum I auto/Automotive Training
Practical general training and experience in the work place. The high school with the local employer develops and documents and individualized plan for the student. The guided external experiences may be paid or unpaid.

Law, Public Safety, Corrections & Security Cluster

Criminal Investigations - 8564
Credit: 1/2, Semester or 1 Full Year Grade: 10-12
Prerequisites: *None*

Practical application will allow the students to participate in simulated criminal investigations, crime scene investigations, evidence collection and preservation, and documentation. Students will also explore the basic provisions of the Texas Penal Code, Code of Criminal Procedure and the rules of evidence.

Forensic Science-9244
Credit: ½, Semester Grade: 10-12
Prerequisite: *None*

Forensic science is a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminalist behavior. Students will learn basic terminology and investigative procedures related to crime scene, question building, interviewing, criminal behavior characteristics, truth detection methodology, and scientific procedures used to solve crimes. Students will have the opportunity to collect and analyze evidence through case studies and mock crime scenes. Lab activities will be based on crime scene scenarios and analyzing fingerprints, ballistics, and blood spatter. Students will learn about the history, legal aspects of forensic science, and career options available in the forensic field.

Fire Fighter I-9254
Credit: ½ Grades: 11-12
Prerequisite: *None*

The Fire Fighter I introduces students to firefighter safety and development. Students will understand Texas Commission on Fire Protection (TCFP) rules and regulations, proper incident reporting and records, the proper use of personal protective equipment, and the principles of fire science. The instructor uses both academic study and applied instruction to achieve measureable results. Students participate in structured, applied learning activities. Students in the course may work towards certification in Fire Science.

Fundamentals of Criminal Law - 8914
Credit: 1/2, Semester Grade: 10-12
Prerequisites: *None*

This course is a study of the nature of crime and criminal law. Instruction will include classification of crimes and penalties using Texas statues as illustrations. Instruction will also include the impact of crime on society, trends of crime and the court system.

Law Enforcement and Corrections - 8904
Credit: 1/2 - 1, Sem. - Full Grade: 11-12
Prerequisites: *None*

A course designed to provide a study of correctional systems in the criminal justice system, correctional roles, institutional operations, alternatives to institutionalization, treatment, rehabilitation, and current and future issues. This course can be part of a Tech Prep coherent sequence in Criminal Justice with appropriate approval.

Introduction to Security Services – 8924
Credit: 1/2, Semester Grade: 9-12
Prerequisites: *None*

Course would provide a general overview of the entry-level information necessary for a career in the law enforcement or security profession. Course instruction would include requirements for employment, organization of personal and practices of law enforcement and security personnel.

Security Services – 8494
Credit: 1/2, Semester Grade: 9-12
Prerequisites: *Introduction to Security Services Recommended*

A course designed to give students an understanding of patrol procedures, communication systems, apprehension and detention requirements and tools utilized in the law enforcement /security profession. Students will understand basic crime scene investigation and demonstrate the ability to provide oral and written reports. This class involves hands – on training with equipment commonly used in the profession of protective services.

Manufacturing Cluster

Manufacturing and Technology Academy - 9035 (Grade 11)
9135 (Grade 12)
Credit: 3, Full Year Grade 11-12
Prerequisite: *Accuplacer/Application. This course is offered at Central Texas Technology Center. Apply Texas Application required. See Counselor for enrollment packet.*

The MTA program is partnership between SAMA, the local government, Comal, and the Alamo Community College created to provide a dual credit program for high school juniors and seniors. The program introduces students to the technologies involved in manufacturing while imparting important work place habits. Students in the program earn college credit for the manufacturing technology courses taught by the community college.

In addition to the core curriculum being offered, MTA also requires all students to take part in the summer paid internship program where students work for many of the various industry partners. The intent of the internship process is to reinforce all manufacturing skills discovered throughout the first year of instruction.

Students earn between 27 and 30 college hours during the two year program. All students must maintain a "C" or higher for each college course. MTA students will earn a Marketable skills achievement award-Manufacturing skills trade helper. MTA will be offered at the Central Texas Technology Center.

Information Technology and Security Academy- 9065
Credit: 3, Full Year
Prerequisite: *Accuplacer Application/Dual Credit. This course is offered at Central Texas Technology Center. See Counselor for enrollment packet,*

(ITSA) is a dual credit program for high school juniors and seniors sponsored by the Alamo Community College District. The goal of the program is to provide students with an introductory experimental and didactic curriculum in Information Security and Assurance. Students receive specialized instruction and training from college professors in Information Technology, Operating Systems, Networking, Information Security, and Computer Programming.

In addition, the students are eligible to participate in the Summer Internship Program, which provides them with the opportunity to utilize their knowledge, skills, and abilities in a "real-world" work environment.
The students acquire high school and 27 hours of technical college level credit, and at the conclusion of the program, they earn a Certificate of Completion in Information Security and Assurance from the Alamo Community College District. ITSA will be offered at the Central Texas Technology Center.

Earning College Credit in Career and Technology Education

The Advanced Technical Credit Program (Statewide Articulation) is an advanced placement program initiated to provide a method for high school students who continue technical programs of study in college to receive credit for knowledge and skills without duplication of coursework. Students successfully demonstrating college level competence in content enhanced high school courses are eligible to receive banked (in escrow) credit for courses that are part of an associate of applied science (AAS) degree or certificate plan offered by public two-year colleges. Some universities may also honor these courses, particularly those that offer BAAS, BAT, BSIS, or similar baccalaureate degrees.

Local Articulation options (TECH PREP)- provide high school students options for award of articulated credit for high school or college courses not covered by the Advanced Technical Credit Program (Statewide Articulation) and the method to articulate courses and programs with colleges not participating in the ATC program. Conditions for award of credit for courses that are part of an associate of applied sciences (AAS) degree plan are described in locally developed articulation agreements. Some universities may also honor these courses.

Dual credit by concurrent college enrollment- is a process through which students gain early admission to a college or university and enroll in academic and or technical courses for college credit before they graduate from high school (concurrent enrollment). Students may also receive high school credit on successful completion of these courses (dual credit). Tuition for the college course is paid either by the student or by the student's school, or may be waived by participating two or four year college. Students may earn up to six hours of college credit, tuition free each semester.

Career and Technology Graduation Substitutions:

Fourth Year of Science	Human Anatomy and Physiology or Medical Microbiology and Pathophysiology
Physical Education	Any 2-3 credit CTE course substitutes
Health Education	Health Science Technology I
Technology Applications:	BCIS I and BCIS II
	Business Image Management and Multimedia
	Computer Multimedia and Animation
	Computer Applications

Career and Technical Education Student Leadership Organizations

The United States Department of Education (USDOE) recognizes the educational programs and philosophies embraced by the following Career and Technical Student Organizations (CTSOs) as being an integral part of Career and Technical Education (CTE) instructional programs. Comal ISD supports active participation of each youth leadership organization.

- Business Professionals of America (BPA)- Texas
- Family, Career and Community Leaders of America (FCCLA)
- Health Occupations Students of America (HOSA)
- SkillsUSA
- Texas FFA Association
- Texas Technology Students Association (TSA)

The following are the Industry and Program related certifications offered in Comal ISD for Career and Technical Education.

Certified Nurse Aide	Health Science Technology
Automotive Service Excellence (ASE)	Automotive Technology
Serve Safe	Culinary Arts
A+ Certification	Intro. to Computer Maintenance
Microsoft Certified Application (MCAS)	BCIS I, II
N+ Certification	Electricity and Electronics
Certified Cisco Network Associate (CCNA)	Electricity and Electronics/Problems and Solutions in Technology
CPR	Health Science Technology
Pharmacy Technician	Health Science Technology III
Hunter, Boater and Angler Safety	Wildlife and Recreation Management
OSHA Certification	Agri-Science

Career and Technology Dual Credit 2009-2010

BCIS I	Course 8645
BCIS II	Course 8655
BIMM MayMester	Course 9133
BECP I	Course 8725
Child Development SVHS only	Course 8345
Anatomy and Physiology	Course 8405
Intro to Computer Maintenance CHS only	Course 8485
Problems and Solutions in Technology CHS only (after 8485,8865)	Course 8825
Computer Applications CHS only	Course 8835

Electricity and Electronics CHS only	Course 8865
Introduction to Transportation	Course 8555
Automotive Technology I	Course 8505
Auto Specialization	Course 8535
Automotive Technology II	Course 8515