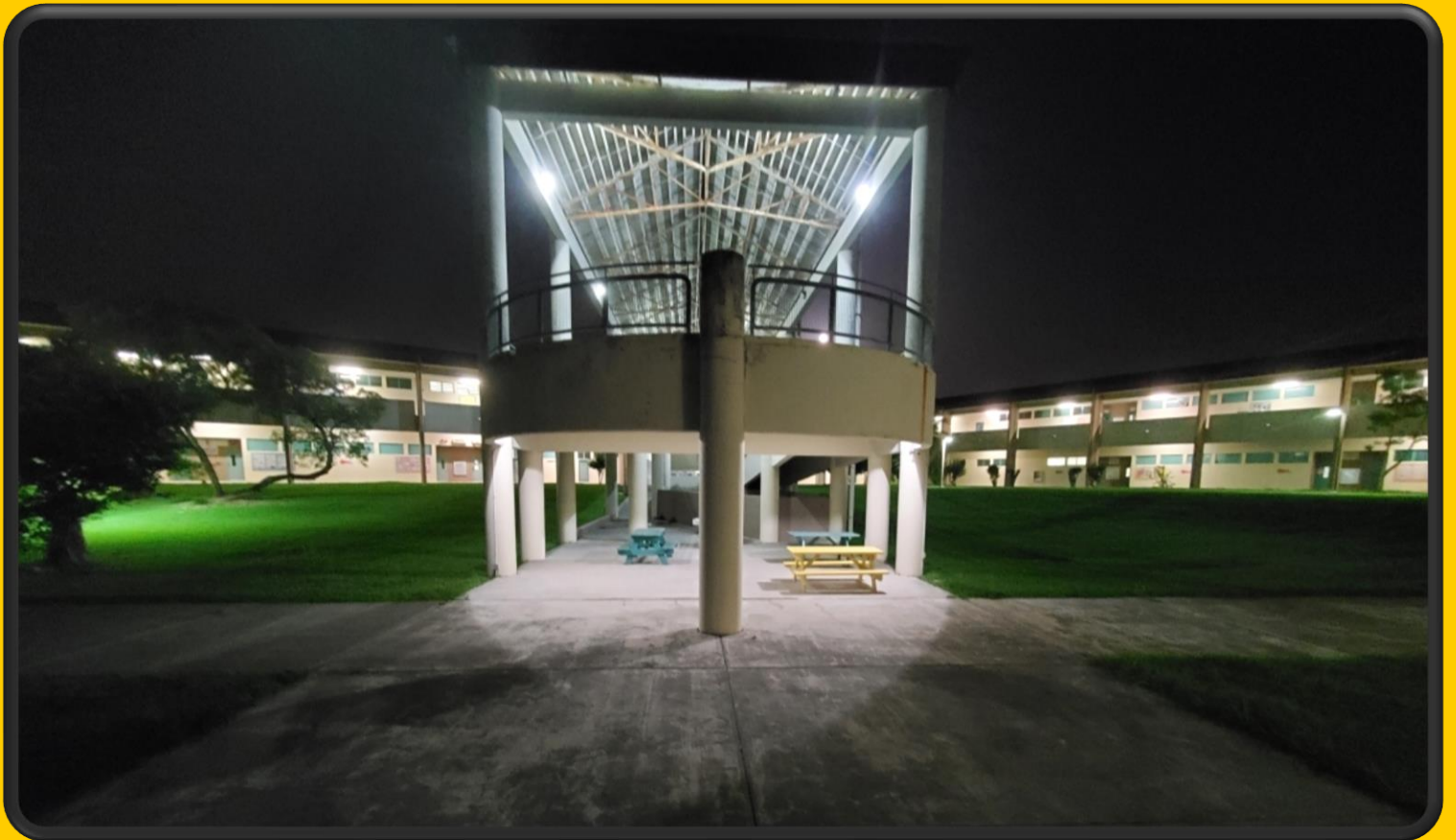# CTEC COURSE CATALOG

St. Croix Career & Technical Education (C-TECH) 2021-2022 Course Catalog

PROGRAMS OF STUDY

Select a Career - Enhance Your Knowledge - Realize Infinite Possibilities !

Table of Contents

MISSION AND VISION OF C-TECH

Mission - The mission of the St. Croix Career and Technical Education (C-TECH) is to provide high school, continuing education and post-secondary students with an opportunity to develop a career or technical skill in a professional, safe, technologically advanced, and stimulating learning environment.

Vision - The vision is to become a viable and vital career and technical institution which serves our high school, the general Virgin Islands community, and other regional areas that aides in the development of a highly skilled, college and career ready, relevant workforce that can adequately serve both the local, national and global communities.

ABOUT THE ST. CROIX CAREER & TECHNICAL EDUCATION (C-TECH)

Brief History
and Profile

The St. Croix Career and Technical Education (C-TECH) is centrally located at Estate Castle Burke, Frederiksted, St. Croix, U.S. Virgin Islands. This site offers easy access from all sections of the island and is also in close proximity to the University of the Virgin Islands.

C-TECH is an area career and occupational institution. Established in 1995, C-TECH is dedicated to providing high quality education, progressive knowledge, and skill-based training in compliance with current labor trends and craft committee guidance.

C-TECH services a multi-cultural, multi-generational, and multi-discipline population that includes high school students, diverse adult learners, and trade persons in pursuit of career changes and/or meeting specific training and professional certification requirements. The population is a unique combination of secondary school students, adults, and post-secondary students in traditional day and evening programs.

The majority of our students originate primarily from two feeder public high schools: The St. Croix Central High School and the St. Croix Educational Complex High School. Students from private and parochial schools are also served. The adult population is enrolled in Post-secondary Education Evening Courses for Adult Learners.

Training, retraining and/or cross-training for unemployed and under-employed adults in twenty occupational specialties is provided. Some courses are offered for enrichment and personal growth. The high school students, on the other hand, are offered thirty-one occupational and elective courses.

C-TECH partners with other community organizations to serve a broader population, including individuals with special needs.

Vincent H. A. Gordon, Jr., Ph.D., Principal

Cheryl Jeremiah-Ambrose, Assistant Principal
Betina Jules-Larocque, Assistant Principal

September 20, 2021

Dear Students, Parents, and Community Members:

Welcome back to a new school year of opportunity to re-energize, re-ignite, and recover your goals as we continue to re-imagine possible with instruction and learning virtually. The administrative team is eagerly and enthusiastically working to ensure your improved success by creating an academic atmosphere that is conducive to your growth and development in your respective fields of study.

Our goal is to enhance, expand, and rebrand St. Croix Career and Technical Education (C-TECH) which has been noted as the island's best well-kept secret. As we enhance and rebrand our course offerings through creating additional courses to the already existing industry, national, and state certified academies and course offerings, we are also actively working on creating new programs of study to provide more opportunities of learning for our students. We are accredited by Middle States Association as a post-secondary and secondary institution. Therefore, we are operating as St. Croix Career and Technical Post-secondary Education for adult learners receiving industry certification during our evening courses, and for our high school students receiving industry certification during our day courses.
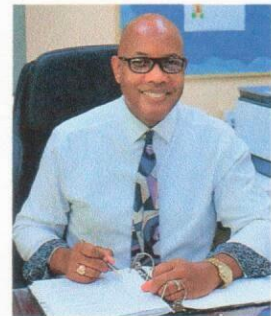
The campus is "a-buzz" with activity as we take the necessary steps towards maintenance upgrades and technological and equipment upgrades according to current industry level standards for each department. These upgraded resources will prepare everyone for their future careers. Our focus will be community project-based learning outcomes for students which positively impacts the St. Croix community specifically and the U. S. Virgin Islands collectively.

As we prepare for our next re-accreditation cycle, we are pursuing the next logical step of our accreditation as a post-secondary and secondary institution by petitioning to become accredited as a technical college-St. Croix Career and Technical Education College. We have begun the conversation with (C-TECH) faculty, the Virgin Islands Career and Technical Education Board (VI CTEB), the State Office of Career and Technical Adult Education, the Department of Education, the Virgin Islands Board of Education, and the U. S. Virgin Islands Legislature. Once all key stakeholders agree with C-TECH's next logical step toward improving the quality of living of the residents of St. Croix while enhancing the economy by job creation through our career and technical education pathways as a technological research institution of higher learning, we can continue to actualize the growth of the U. S. Virgin Islands as truly an American Paradise. "Catch the Vision."

Respectfully,

Vincent H. A. Gordon, Jr.

Principal Vincent H. A. Gordon, Jr., Ph.D.
St. Croix Career and Technical Education (C-TECH)

INTRODUCTION TO CAREER PLANNING

Gone are the days when you could graduate from high school and expect to find a job making a satisfactory wage. It is worse for those who fail to receive a high school diploma. Even those young adults who complete high school and earn a non-technical bachelor's degree are finding it more difficult to obtain a good paying job. WHY???

The world of technology has grown exponentially in the 21st century and the focus of the economy is no longer just St. Croix or the Virgin Islands, or the United States for that matter. The economy has gone GLOBAL! That means it is a world market that is powered by global competition. Businesses are out-sourcing their services and production to the country that can provide the lowest cost with the highest efficiency. People all over the world are competing for jobs. Look around you! The watch factories, once a solid source of income for St. Croix, have left; Cruzan Rum is no longer locally owned; HOVENSA has closed its doors, and Limetree Bay Refinery will soon be closed as well. We are part of the "Global Economy" and you must be technically skilled and academically prepared to have a successful career.

The driving forces in preparing your career path are the technological society of the 21st century and the evolution of job skills. Unskilled labor jobs are disappearing. Eighty percent (80%) of new jobs in the United States in this decade will require some technical education beyond high school.

What is career planning?

Career planning is an extremely crucial but an overwhelming task. This is a step that is often skipped by most of the people in their professional lives. Planning your career means that you are not leaving things to chance but taking control of your career journey.

Career planning is the process of discovering educational, training and professional opportunities that suit your interests, passions and goals. Before searching for jobs, you should set achievable long-term goals that identify what you want to be doing along your career path at five, 10, 15, 20 years and so on. Then, you can set short-term goals between each stage to ensure you have clear, actionable steps you can take to reach your long-term goals. Career planning allows you to outline your goals and reevaluate them as you progress.

Depending on your path, you may complete each step just once, or you may revisit the process to change direction and discover new career options. Here are the chronological stages of the career-planning process:

- Self-exploration and assessment
- Career research
- Exploration and experimentation
- Decision-making and career selection
- Final planning and action
- Job search and acceptance

Visit: The 6-Step Career-Planning Process | Indeed.com

An effective career plan can guide your professional life successfully, from finding your first job to enjoying a rewarding career. With careful career planning, you can take steps to evaluate your professional options and develop a strategic plan for achieving your goals.

CareerClusters

A **Career Cluster** is a grouping of occupations and broad industries based on commonalities. Within each career cluster, there are multiple career pathways that represent a common set of skills and knowledge, both academic and technical, necessary to pursue a full range of career opportunities within that pathway – ranging from entry level to management, including technical and professional career specialties. Based on the skills sets taught, all CTE courses are aligned with one or more career clusters and career pathways.

The National Career Clusters® Framework provides a vital structure for organizing and delivering quality CTE programs through learning and comprehensive programs of study.

There are Sixteen Career Clusters that were adopted by the United States Department of Education and approved by every State and Territory Governor. These *clusters* cover all career possibilities in the 21st Century. The Virgin Islands is specifically concentrating on the following 14 clusters: Agriculture, Food & Natural Resources; Architecture & Construction; Business Management & Administration; Education & Training; Finance; Hospitality & Tourism, Health Science, Human Services, Information Technology; Law, Public Safety, Corrections & Security; Manufacturing; Marketing, Sales & Service; Science, Technology, Engineering & Mathematics (STEM), Transportation, Distribution & Logistics.

Being a part of a cluster gives you an opportunity to research and experience careers in that field, linking business and education which contributes to student learning.

Career Clusters identify the knowledge and skills learners need as they follow a pathway toward their career goals. The knowledge and skills identified form a strong basis for learner success whether the learners are in high school, college, technical training or in the workplace. The career clusters also provide a means of exploring the many occupational options. Each Cluster is divided into different pathways. Pathways are grouped by the knowledge and skills required for occupations in these career fields. Each pathway provides instruction as a basis for success in an array of careers and educational pursuits.
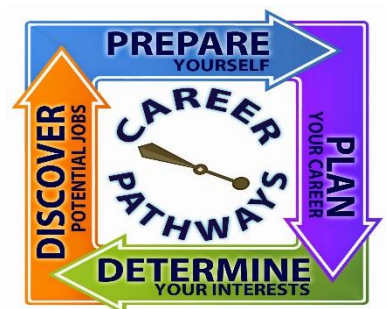
AGRICULTURE, FOODS & NATURAL RESOURCES

Careers in the *Agriculture, Foods, and Natural Resources* cluster represent a growing diverse employment and entrepreneurial opportunities. This includes careers that focus on growing, processing and storing foods. Agri-Science involves discovering and developing new food sources, as well as manufacturing and distributing farm supplies and equipment.

Careers in treating, raising and studying animals are also part of this cluster. Those who work with natural resources may be involved in mining, forestry, resource management, waste management and conservation, and energy research and exploration. Environmental workers examine the air, water and land and protect these resources from pollution and misuse.

ARE YOU INTERESTED IN?

- Being physically active?
- Working with your hands?
- Working with machines?
- Taking science classes?
- Working with plants?
- Working with animals?
- Working outdoors?
- The environment

EXTRA CURRICULA ACTIVITIES:

- Future Farmers of America (FFA)
- Scouting
- VI Agriculture Fair
- Horse Riding
- CTE Honor's Society
- Student Leadership/Government
- 4-H Club

SOME DIRECT ENTRY JOBS ARE:

Animal Caretaker	Animal Shelter Worker	Farm Equipment Operator
Fern Cutter	Fruit Picker	Grounds Keeper
Horticulture Worker	Landscaper	Logger
Miner	Sanitation Worker	Waste Plant Operator

TYPICAL PATHWAYS REQUIRING A 2-YEAR, 4-YEAR, OR HIGHER COLLEGE OR TECHNICAL DEGREE IN THIS CLUSTER INCLUDES:

Agriculture Educator	Agribusiness Manager	Aqua-Culturist
Bio-Technologist	Commercial Farmer	Fish and Wildlife Manager
Floriculturist	Forest Ranger	Landscape Architect
Marine Biologist	Oceanographer	Veterinarian
Waste Manager	Zoologist	

"Agriculture not only gives riches to a nation, but the only riches she can call her own."
- Samuel Johnson

ARCHITECTURE and CONSTRUCTION

Careers in the Architecture & Construction cluster support the growing building and trades industry locally, regionally, nationally and globally. The architecture cluster of instruction is designed to provide pre-college training for the profession of architecture. If you are interested in the design and creation of structures, such as homes and commercial buildings and/or community planning, this cluster will interest you.

The construction cluster of instruction is designed to provide job-specific training for entry level employment. The instruction includes blueprint reading, measuring, knowing the purpose and use of construction tools, construction joints, wood turning, bricklaying, sanding, mortising, air conditioning and electricity/electronics. In the Architecture & Construction cluster you will use computer-controlled production devices in rendering drawings and creating structures.

ARE YOU INTERESTED IN?

- Drawing buildings and other structure?
- Creating things out of woof?
- Using a computer to design structures?
- Working outside?
- Knowing how buildings are made and designed?
- Going to construction sites?
- Working with wood, cement or bricks?
- Taking carpentry classes?

EXTRA CURRICULA ACTIVITIES:

- Skills USA Competition
- St. Croix Wood Turning Society
- Career & Technical Education (CTE) Honor Society
- Math Club
- Student Government
- Habitat USA

SOME DIRECT ENTRY JOBS ARE:

A/C Mechanic	Brick Layer	Carpenter	Civil Engineering Technician
Construction Laborer	Electrician	Expediting Clerk	Floor Sander and Finisher
Glazier	Painter	Plasterer	Highway Maintenance Worker
Operating Engineer	Plumber	Mason	Mechanical Drafter
Real Estate Agent	Roofer	Steel Worker	Industry Sales Representative
Refrigerating Mechanic			Heavy Equipment Operator

TYPICAL PATHWAYS REQUIRING A 2-YEAR, 4-YEAR, OR HIGHER COLLEGE OR TECHNICAL DEGREE IN THIS CLUSTER INCLUDES:

Architect (Commercial and Home Design)	Computer and Information Systems Manager	
Civil Engineer	Construction Manager	Computer Programmer
Contractor	Electrical Engineer	Electrician Instructor
Environmental Engineer	Interior Designer	Plumbing Instructor
Urban and Regional Manager		

BUSINESS MANAGEMENT and ADMINISTRATION

The **Business Management and Administration Career Cluster** focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations of duties is very broad.

Some of the specialized business management skills employers desire when searching for employees include knowledge in:

- Administration
- Budget Management
- Business Management
- Conflict Management
- Delegation
- Interpretation of Financial Data
- Interpretation of Legal Statutes Relevant to Business
- Potential Process Improvements
- Understanding and Creating Financial Reports
- Understanding Financial Statements

Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.

- Business Management & Administration Career Cluster
- General Management Pathway.
- Business Information Management Pathway.
- Human Resources Management Pathway.
- Operations Management Pathway.

Business, Management, and Administration Career Cluster Overview

For as long as people have been exchanging goods and services for payment of some sort, business transactions have been a part of life. All businesses can be defined as organizations that provide customers with the goods and services they want. Most businesses attempt to make a profit, that is, make more money than it takes to run the business. Some businesses, however, attempt only to make enough money to cover their operating expenses. These businesses, which are often social service agencies, hospitals, foundations, or advocacy groups, are called nonprofits or not-for-profits.

The **six career pathways in this cluster** are administrative and information support, business analysis, business financial management and accounting, human resources, management, and marketing.

Some Direct Entry Jobs Are:

Account Coordinator	Bank Teller	Bookkeeper	Cashier
Data Entry Clerk	File Clerk	Office Manager	Payroll Clerk
Receptionist	Secretary	Sales Associate	

Typical Pathways Requiring a 2-Year, 4-Year, or Higher College or Technical Degree in This Cluster Includes:

Accountant	Auditor	Bank Marketer	Banker
Budget Analyst	Business Educator	Business Manager	Comptroller
Economist	Financial Analyst	Investment Broker	Office Manager

EDUCATION & TRAINING

Careers in the Education & Training Career Cluster.
 If you want to have a lifelong impact on others, then you will want to take a close look at the Education and Training Career Cluster. This family of classes and practical experiences develops the art of teaching, planning and administration in schools, colleges, technical institutes and businesses. Education is one of the basic rights of children in America, and states always need qualified teachers.
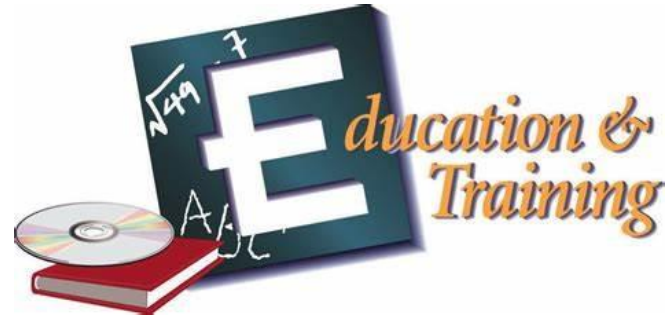
This career cluster is organized into three career pathways:
- Administration and administrative support
- Professional support services
- Teaching and training

The diverse Education and Training career cluster prepares learners for careers in planning, managing and providing education and training services as well as related learning support services.

In addition to be knowledgeable in their subject, teachers and trainers must have the ability to communicate, inspire trust and confidence, and motivate learners, as well as understand their educational and emotional needs. Teachers must be able to recognize and respond to individual differences in diverse learners, and employ different teaching/training methods that will result in higher learner achievement.

Sample occupations include:
- Preschool, Elementary and Secondary Teachers/Aides
- Special Education Teachers/Aides
- College/University Professors and Lecturers
- Management Development Trainer
- Human Resource Trainer
- Coach
- Child Care Director
- Child Life Specialist
- Clinical, Developmental and Social Psychologists
- Social Worker
- Parent Educator
- Counselor
- Speech-Language Pathologists and Audiologists

Working in this field requires a genuine love of learning and desire to help others. You must have strong communication skills, initiative, and the creativity to make lessons fresh and engaging, even though you may teach the same material many times over. Speak with your teachers and counselors at school. Ask why they decided to go into the education field and what sort of education and training they pursued to reach their goals.

> **"** *Teaching might even be the greatest of the arts since the medium is the human mind and spirit.''*
> *– John Steinbeck*

FINANCE

Are you good at math? Do you like to work with numbers? Finance workers keep track of money. You might work in financial planning, banking, or insurance. For example, you might provide financial services to a business or individual. Or, you could maintain financial records or give advice to business executives on how to operate their business.

The finance industry is a critical sector that employs millions of people. The **Finance Career Cluster** prepares students for careers in financial and investment planning, banking, insurance and business financial management. Finance career opportunities are available in every sector of the economy and require skill in organization, time management, customer service and communication.

This career cluster is organized into four career pathways:
- Banking and related services
- Business financial management
- Financial and investment planning
- Insurance services

Students in finance learn and practice skills that prepare them for diverse post-high school education and training opportunities, from apprenticeships and two-year college programs to four-year college and graduate programs.

CTE classes in this cluster will introduce you to a variety of interesting careers including:

- Accountant
- Auditor
- Development officer
- Financial analyst
- Treasurer
- Controller
- Economist
- Budget analyst
- Personal financial advisor

- Tax preparer
- Investment advisor
- Loan officer
- Debt counselor
- Actuary
- Underwriter
- Insurance appraiser
- Bank teller

The Finance cluster is about using your skills in math and statistics to prepare for well-paying careers in financial and investment planning, banking, insurance, and business financial management. Every part of the economy offers a career in this field, providing endless opportunities to work in a variety of areas. people are seeking the advice of financial advisers when opening personal retirement accounts.

The hiring of loan officers – workers responsible for evaluating, authorizing, or recommending approval of loan applications – is expected to increase. Applicants with lending, banking, or sales experience should have better job prospects in this field. More accountant and auditor positions also are likely to open up. Factors that may drive growth include stricter laws and regulations in the financial sector and continued globalization, which may drive demand for accounting services related to international trade and international mergers and acquisitions. The aging population is expected to increase the need for personal financial advisers. Since pensions are no longer the norm, many

"The desire of gold is not for gold. It is for the means of freedom and benefit."
~ Ralph Waldo Emerson ~

HEALTH SCIENCE

The **Health Science Career Cluster** has five career cluster pathways to guide students to their desired occupation in health science:

Therapeutic Services.

Diagnostic Services.

Health Informatics.

Support Services.

Biotechnology Research and Development.
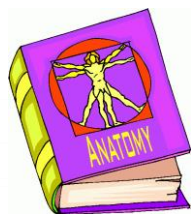
The *Health Science* field continues to be one of the most rapidly expanding industries. Advances in health care technology has created a need for people to communicate and educate the public.

ARE YOU INTERESTED IN?

- Helping people?
- Working with young, elder or ill people?
- Teaching others?
- Organizing parks and recreation activities?
- Relieving pain and suffering of others?
- Seeking answers to everyday questions?
- Working indoors?

*EXTRA CURRICULA ACTIVITIES***:**

- Home Economics Related Occupations
- Health Occupations Student Organizations
- Science Club
- Future Nurses of America
- Future Educators of America
- Foreign Language Club
- Career & Technical Education (CTE) Honor Society
- Student Leadership/Government

SOME DIRECT ENTRY JOBS ARE:

Ambulance Driver	Admitting Clerk	Cook
Food Service Manager	Home Health Aide	Teacher Assistant
Nursing Assistant	Orderly	Pharmacy Technician
Phlebotomist	Preschool Worker	Reservation Clerk
Waiter		

TYPICAL PATHWAYS REQUIRING A 2-YEAR, 4-YEAR, OR HIGHER COLLEGE OR TECHNICAL DEGREE IN THIS CLUSTER INCLUDES:

Child Care Worker	Child Development Worker	Cosmetologist
Culinary Artist (Chef)	Dental Technologist	Dietician
Educator	Fire Fighter	Food Service Manager
Health Information Manager	Health Occupation Worker	Interpreter
Nutritionist	Parks & Recreation Manager	Philosopher
Physician	Psychologist	Registered Nurse

HOSPITALITY and TOURISM

Hospitality and Tourism encompasses the management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services. This is a major industry for the Virgin Islands and re-emerging industry on the island of St. Croix. As ships return to St. Croix followed by hotel and resort development, there will be a greater demand for individuals in this industry.

To accommodate the rising growth of the travel industry, the hotel industry is set to witness unprecedented growth which is one of the key sectors of the hospitality industry. Hospitality is all about service and has a clear overlap with Tourism. Jobs in the hospitality and tourism industry covered almost each and every profession.

ARE YOU INTERESTED IN?

- Coming up with new ideas?
- Traveling to new places?
- Meeting strangers?
- Planning parties and other activities?
- Working with people?
- Learning a foreign language?
- Learning about different cultures?

EXTRA CURRICULA ACTIVITIES:

- Travel Clubs
- Debate Team
- Cultural Heritage Clubs
- Taste of St. Croix
- Future Educators of America
- Student Leadership/Government
- Career & Technical Education (CTE) Honor's Society

SOME DIRECT ENTRY JOBS ARE:

Fitness Instructor	Flight Attendant	Host/Hostess
Museum Technician	Travel Agent and Guide	Ticket Agent
Waiter/Waitress	Restaurant, Lounge and Coffee Shop Barista	

TYPICAL PATHWAYS REQUIRING A 2-YEAR, 4-YEAR, OR HIGHER COLLEGE OR TECHNICAL DEGREE IN THIS CLUSTER INCLUDES:

Advertising and Promotions Manager	Culinary Artist (Chef)
Food Services Manager	Gaming Officer
Government Service Officer	Hotel and Restaurant Manager/Owner
Interpreter and Translator	Production Manager
Travel and Tour Marketer	Museum Manager/Curator

"Great companies are built by people who never stop thinking about ways to improve the business."
- J. Willard "Bill" Marriott

HUMAN SERVICES

The **Human Services Cluster** has five career cluster pathways to guide students to their desired occupation in Human Services.

- Early Childhood Development and Services
- Counseling and Mental Health Services
- Family and Community Services
- Personal Care Services
- Consumer Services

Some examples of Human Services professionals include, but are not limited to:

- Nurses
- Child Life Specialist
- Licensed Clinical Social Workers
- Psychologist
- Marriage and Family Therapist
- Behavioral Management Aide
- Case Management Worker
- Child Advocate
- Community Economic Development Officer
- Community Outreach Worker
- Emergency Management Specialist
- Crises Intervention Counselor
- Public Health Educator
- Grief Counselor
- Human Services Worker
- School Social Worker
- Sociologist
- Youth Worker
- Rehabilitation Case Worker
- Disaster Relief Worker
- Substance Abuse Counselor

This is a very wide open and comprehensive field that includes a tremendous diversity of professions that all have at their core providing services to their fellow human beings.

In most cases, a Human Services worker is providing a service to a client who is experiencing some degree of hardship. Whether it is an acute or crisis situation or more of a chronic condition, the Human Services worker provides services that help to mitigate difficulties and provide relief for the individual undergoing the hardship. Usually this is done in such a way as to empower the client to make important lifestyle changes that will allow them to change their challenging situation into a more stable and healthier environment for themselves and their loved ones. While there are exceptions to this such as Hospice where the focus client is approaching death, most Human Services work is performed in such a way as to help the client to adjust to difficult situations in life and find improvement through self-sufficiency.

Regardless of their particular niche, most Human Services professionals have certain traits and skills that are universal throughout the field. Traits like compassion and empathy are extremely helpful if one wishes to maximize their potential in Human Services. Without a true internal drive to help one's fellow human beings, the job simply becomes a series of rote actions instead of its highest potential of helping to profoundly transform people's lives through strong rapport and understanding.

"The best way to find yourself is to lose yourself in the service of others."
- Mahatma Gandhi

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INFORMATION TECHNOLOGY

Information technology careers are available in every sector of the economy. Careers in IT involve the design, development, support and management of hardware, software, multimedia and systems integration services. The information technology industry is a dynamic and entrepreneurial field that continues to have a revolutionary impact on the economy and on the world.
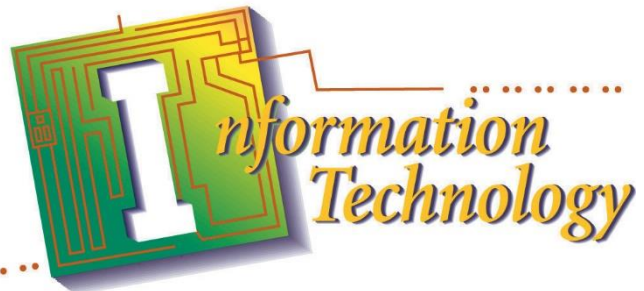
This career cluster is organized into four career pathways:
- Information support and services
- Interactive media
- Network systems
- Programming and software development

Students in information technology learn and practice skills that prepare them for diverse post-high school education and training opportunities, from apprenticeships and two-year college programs to four-year college and graduate programs. CTE classes in this cluster will introduce you to a variety of interesting careers including:

- Web designer or webmaster
- Network administrator or technician
- Telecommunications technician
- Data communications analyst
- Security or database administrator
- Application integrator

- Computer or game programmer
- Software applications architect
- 3D animator
- Virtual reality specialist
- Graphic artist
- Help desk specialist
- Technical writer

This Career Cluster® is focused on building linkages in information technology occupations for entry level, technical and professional careers related to the design, development, support and management of hardware, software, multimedia and systems integration services.

The Information Technology cluster uses your love of technology to learn how to design, develop and manage different types of software and hardware programs. Though this field requires a solid foundation in math and science as well as strong technical skills, there are careers in information technology in virtually every part of the economy.

Employment of computer and information research scientists is expected to increase. The demand for new and better technology will continue to grow, which will increase the employment of such workers. These professionals also will be needed to combat cyber-attacks, which are posing a larger threat to society. There should be a greater need for database administrators in the next decade. As companies store more data, these workers will be needed to manage the data so that analysts and stakeholders can understand it. Software developers also should see good job prospects . Mobile devices and tablets are becoming more popular, so software developers are increasingly needed to develop and upgrade mobile applications. Overall, more consumer products use software, which will drive the need for developers.

Law, Public Safety, Corrections & Security

Thousands of challenging educational and training opportunities are offered in the highly skilled Law, Public Safety, Corrections and Security Career Cluster. These opportunities continue to expand in the areas of corporate, industrial, homeland security and public safety.

This career cluster is organized into five career pathways:
- Emergency and fire management
- Security and protective services
- Law enforcement services
- Legal services
- Correction services

Students in law, public safety, corrections and security learn and practice skills that prepare them for diverse post-high school education and training opportunities, from apprenticeships and two-year college programs to four-year college and graduate programs.

CTE classes in this cluster will introduce you to a variety of interesting careers including:
- Judge
- Attorney
- Paralegal
- Court reporter
- Police officer
- Correctional officer
- Probation/parole officer
- Immigration and customs inspector
- Fire fighter
- Rescue worker (EMT, paramedic)
- Emergency dispatcher
- Loss prevention specialist
- Information systems security specialist
- Certified security officer
- Park ranger

The Law, Public Safety, Corrections and Security cluster uses your love of people and passion for your community to prepare for careers in law, public safety and security. Responsibilities may include protecting people from harm, crime or natural disasters. Job opportunities range from public safety officers to legal services.

Hiring of firefighters is expected to grow. Job prospects will be better for firefighters who have industry certifications and firefighter and paramedic training. The continued need for legal services will mean more lawyers will need to be hired in the next few years. Attorneys may not necessarily work at law firms. Corporations and the federal government sometimes choose to hire lawyers on staff to save money. Security guards will remain an important part of our workforce in the coming years to help protect people and property from criminals, vandalism, and terrorism.

MANUFACTURING

The **Manufacturing Career Cluster** is organized into eight career pathways:

- Production
- Manufacturing production process development
- Maintenance
- Installation and repair
- Quality assurance
- Logistics and inventory control
- Health
- Safety and environmental assurance
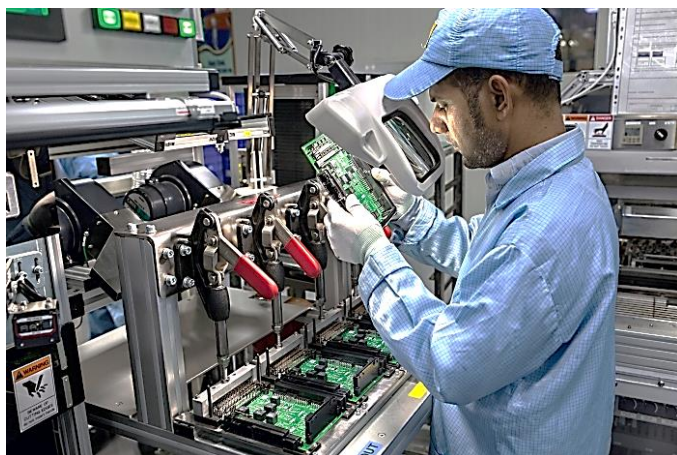
There are actually multiple types of processes a manufacturer uses, and those can be grouped into four main categories: casting and molding, machining, joining, and shearing and forming.

What are the different types of manufacturing industries?

- Food, Beverage, and Tobacco.
- Textiles, Leather, and Apparel.
- Wood, Paper, and Printing.
- Petroleum, Coal, Chemicals, Plastics and Rubber.
- Nonmetallic Mineral.
- Primary Metal, Fabricated Metal, and Machinery.
- Computer and Electronics.
- Electrical Equipment, Appliances, and Components.

Common Manufacturing Job Titles:

- Assembly
- Brazer/Welder
- Welders, Solderers, Cutters, and Brazers
- Machinist/Operator
- Production Manager
- Quality Control Inspector

Examples of major manufacturers in North America include General Motors Corporation, General Electric, Procter & Gamble, General Dynamics, Boeing, Pfizer, and Precision Castparts. Examples in Europe include Volkswagen Group, Siemens, FCA and Michelin.

Marketing

Are you friendly and outgoing? Do you enjoy public speaking? Can you be persuasive?

Marketing, sales, and service workers help businesses sell products. You might advertise and promote products so customers want to buy them. Or, you might sell products and services to customers. For example, you might develop a marketing plan for a small start-up company; sell furniture; or measure and fit lenses and frames for eyeglass customers.

The **Marketing cluster** flexes your creative skills for a career in advertising, public relations, sales, or planning. This Career Cluster will prepare you to work on projects such as promotional campaigns, event planning and new sales techniques.

Market research analysts are expected to have favorable job prospects. Businesses will need more data and market research to understand consumer behavior, which will drive higher employment for market research analysts. More marketing managers will continue to be needed to plan, direct, and coordinate promotional campaigns. Employment of public relations (PR) specialists also is expected to rise due to the increased use of social media. PR specialists can help clients use social media sites, like Twitter and Instagram, effectively.

Students in marketing learn and practice skills that prepare them for diverse post-high school education and training opportunities, from apprenticeships and two-year college programs to four-year college and graduate programs.

Most business communication is marketing communication. Marketing jobs represent nearly one in every four jobs in the U.S. economy. Marketing courses help you learn and experience how the marketing process seeks to establish and satisfy the needs and wants of individuals who buy goods, services and ideas.
Businesses of all types and sizes, including non-profit organizations, use marketing in their local, national and global operations to move products and services from their origin to the end-user.

This career cluster is organized into six career pathways:
- Buying and merchandising
- Distribution and logistics
- E-Marketing
- Management and entrepreneurship
- Marketing communications and promotion
- Marketing information management and research
- Professional sales and marketing

CTE classes in this cluster will introduce you to a variety of interesting careers including:
- Manager of sales or information
- Researcher
- Sales specialist
- Demonstrator or product promoter
- Wholesale or retail buyer
- Distributor
- Public relations manager or specialist
- Marketing communications or promotions manager or specialist
- Community relations manager or specialist
- E-marketer
- Marketing consultant
- Fashion or interior designer

"Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe is great work. And the only way to do great work is to love what you do."
- Steve Jobs

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS

STEM Education, at its core, simply means educating students in four specific disciplines, namely, **Science, Technology, Engineering, and Mathematics** (collectively shortened as STEM). Instead of training students in any one of these domains, STEM combines all four in an interdisciplinary and applied approach, so as to better equip students to have a career and considering real-world applications. Many career tech programs incorporate components of science, technology, engineering and mathematics (STEM), providing students with pathways into STEM careers; ultimately, by helping to bolster the STEM pipeline, CTE can help give the nation an advantage in addressing the STEM challenge and securing the nation's leadership in innovation.

What are STEM jobs?

A STEM job is any job in the fields of science, technology, engineering or math. With a foundation in these subjects, a STEM career allows you to solve problems, develop new ideas and conduct research. These professionals can work in a variety of settings, including in an office, laboratory, research facility, classroom or out in the field. In addition to field-specific technical skills, STEM jobs require soft skills, including:

- Advanced science, technology, engineering or math knowledge
- Analysis
- Attention to detail
- Problem-solving
- Critical thinking
- Communication
- Creativity
- Leadership
- Organization

ARE YOU INTERESTED IN?

- Solving difficult problems?
- Program, operate or design computers?
- Inventing and research?
- Working with machinery?
- Thinking logically?
- Tinkering with objects?
- Science and math?

"Strive for perfection in everything you do. Take the best that exist and make it better. When it does not exist, design it."   - *Sir Henry Royce*

TRANSPORTATION, DISTRIBUTION & LOGISTICS

The **Transportation, Distribution, and Logistics (TDL) Career Cluster®** focuses on careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance. It also includes related professional and technical services such as infrastructure planning and management, logistics, and maintenance of equipment and facilities.

Students in transportation, distribution and logistics learn and practice skills that prepare them for diverse post-high school education and training opportunities, from apprenticeships and two-year college programs to four-year college and graduate programs.

CTE classes in this cluster will introduce you to a variety of interesting careers including:

- Engineer: Aerospace, flight, railway, industrial health and safety, marine
- Transportation manager
- Air traffic controller
- Airline pilot
- Urban or regional planner
- Logistician
- Shipping and receiving supervisor
- Storage and distribution managers
- Operations technician
- Industrial equipment mechanic
- Electrician

- Fleet manager
- Auto or auto body mechanic
- Vehicle and system inspector
- Railroad safety inspector
- Longshore worker
- Ship, tugboat or ferry pilot
- Cargo and freight agent
- Health and safety manager
- Marketing manager
- Sales representative
- Flight attendant

This career cluster is organized into eight career pathways:
- Facility and mobile equipment maintenance
- Health, safety and environmental management
- Logistics planning and management services
- Sales and services
- Transportation operations
- Transportation systems and infrastructure
- Planning, management and regulation
- Warehousing and distribution center operations

Why Career & Technical Education?

A career and technology-based education will help you to be more than just an average student. Career and technology education can provide what's needed to succeed for life: technical skills, academic skills and employability skills. In addition, career and technical education helps students see how what they're learning applies to the needs of employers.

Regardless of whether students are headed for college or the workforce, this type of education will help them prepare for the future. In fact, college-bound students can get job experiences to help them define their career plans, identify an appropriate course of study and help pay for tuition.

Just think of the benefits received by gaining not only a solid foundation in academics, but also hands-on, technical experience and know-how. Add SkillsUSA to career and technology-based education, and you'll have further advantages!

SkillsUSA activities develop positive attitudes, build self-esteem and empower students to excel. They give students a head start in developing valuable professional skills such as communications, interpersonal abilities, time management, teamwork and more. Because SkillsUSA works hand-in-hand with business and industry, students get the skills employers want.
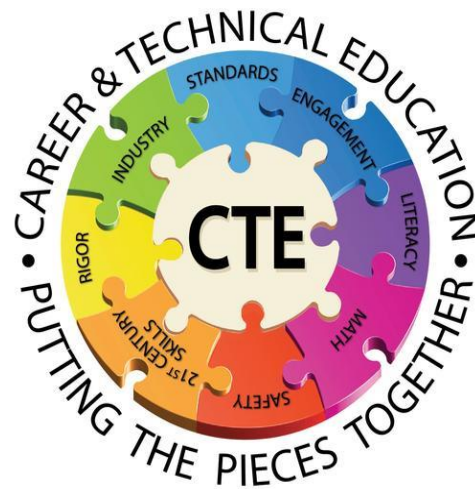
Career & Technical Student Organization (CTSO): SkillsUSA

SkillsUSA is a national membership association serving high school, college and middle school students who are preparing for careers in trade, technical and skilled service occupations, including health occupations, and for further education. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA helps each student excel.

SkillsUSA empowers its members to become world-class workers, leaders and responsible American citizens. SkillsUSA improves the quality of our nation's future skilled workforce through the development of Framework skills that include personal, workplace and technical skills grounded in academics.

SkillsUSA produces the most highly skilled workforce in the world, providing every member the opportunity for career success.

SkillsUSA Framework
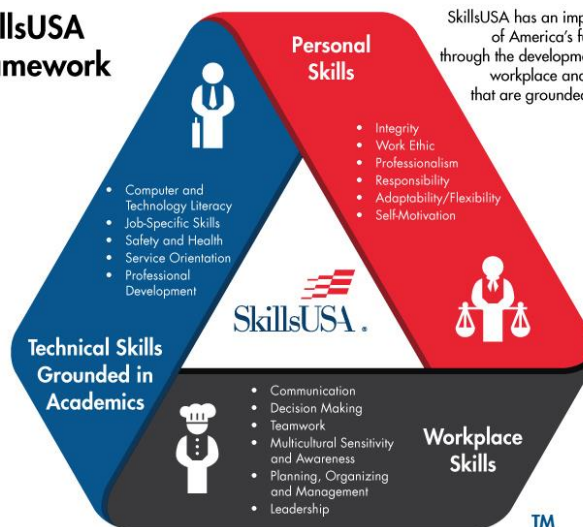
SkillsUSA has an impact on the lives of America's future workforce through the development of personal, workplace and technical skills that are grounded in academics.

Personal Skills
- Integrity
- Work Ethic
- Professionalism
- Responsibility
- Adaptability/Flexibility
- Self-Motivation

Technical Skills Grounded in Academics
- Computer and Technology Literacy
- Job-Specific Skills
- Safety and Health
- Service Orientation
- Professional Development

Workplace Skills
- Communication
- Decision Making
- Teamwork
- Multicultural Sensitivity and Awareness
- Planning, Organizing and Management
- Leadership

Common Core Technical Core

CTE — Learning that works for America

CCTC
Common Career Technical Core

The Common Career Technical Core (CCTC) is a state-led initiative to establish a set of rigorous, high-quality standards for Career Technical Education (CTE). The standards have been informed by state and industry standards and developed by a diverse group of teachers, business and industry experts, administrators and researchers. The development of the CCTC was a multi-step process that incorporated input from approximately 3,500 individuals representing K-12 education, business and industry and higher education from across the nation.

The process for developing the CCTC was informed by:
- High-quality state and industry standards;
- Input and guidance from educators, business and industry and state leaders; and
- Feedback from the public.

The CCTC includes a set of standards for each of the 16 Career Clusters® and their corresponding Career Pathways that define what students should know and be able to do after completing instruction in a program of study. The CCTC also includes an overarching set of Career Ready Practices that apply to all programs of study. The Career Ready Practices include 12 statements that address the knowledge, skills and dispositions that are important to becoming career ready.

For additional information on each Career Cluster, see: CCTC_Standards_Formatted_2014.pdf (careertech.org)

National Technical Honor Society (NTHS)

NTHS believes in CTE students, the heartbeat of today's workforce! NTHS celebrates the accomplishments of today's career and technical education students, empowering them to know the value and impact of their career paths and trades. Since 1984, NTHS has been honoring outstanding student achievement, providing scholarships and career development opportunities. NTHS is the Honor Society for your CTE students!

NTHS helps members to:
- Seek postsecondary education by awarding over $300,000 in scholarship annually.
- Position themselves ahead of competition in today's highly competitive workforce.
- Earn recognition for superior achievement in career and technical fields.
- Build career portfolios with professional letters of recommendation.
- Connect to global career and technical education networks.
- Discover opportunities with leading business and industry.
- Serve in leadership roles in communities and industries.

Future Business Leaders of America (FBLA)

What is Future Business Leaders of America (FBLA)?

FBLA, officially known as Future Business Leaders of America, is the high school division of a career and technical student organization (CTSO) **dedicated to preparing students for careers in business.**

The mission of FBLA is to "inspire and prepare students to become community-minded business leaders in a global society through relevant career preparation and leadership experiences."

Currently there are more than 196,950 members in 5,200 FBLA chapters across the US and other countries.

With a mission to help students become community-minded business leaders, FBLA built its programs to reach that goal. Overall, FBLA has six specific areas focused on helping students become successful business leaders:

- Leadership development
- Academic competitions
- Educational programs
- Membership benefits
- Community service
- Awards & recognition

Future Business Leaders of America-Phi Beta Lambda, Inc. (FBLA-PBL) is the largest business Career and Technical Student Organization in the world. Each year, FBLA-PBL helps over 230,000 members prepare for careers in business.

MISSION
FBLA-PBL inspires and prepares students to become community-minded business leaders in a global society through relevant career preparation and leadership experiences.

Future Farmers of America

FFA is a dynamic youth organization that changes lives and prepares members for premier leadership, personal growth and career success through agricultural education.

FFA develops members' potential and helps them discover their talent through hands-on experiences, which give members the tools to achieve real-world success.

FFA is not just for students who want to be production farmers; members are future chemists, veterinarians, government officials, entrepreneurs, bankers, international business leaders, teachers and premier professionals in many career fields.

FFA is an intra-curricular student organization for those interested in agriculture and leadership. It is one of the three components of agricultural education.

Today, the National FFA Organization remains committed to the individual student, providing a path to achievement in premier leadership, personal growth and career success through agricultural education. FFA continues to help the next generation rise up to meet those challenges by helping its members to develop their own unique talents and explore their interests in a broad range of agricultural career pathways.

INTRODUCTION TO PROGRAMS OF STUDY

Programs of Study at St. Croix Career and Technical Education (C-TECH):

The areas where we offer industry certifications are as follows:

Academy of Business and Finance with concentrations in:
* Accounting
* Business Management
* Finance

Academy of Hospitality and Tourism with concentrations in:
* Marketing
* Tourism

Academy of Health and Sciences
* Phlebotomy

Computer Engineering Academy with concentrations in:
* Cybersecurity
* Fiber Optics

Academy of Hospitality & Textile and Health & Related Services with concentrations in:
* Child Care Management
* Clothing Production
* Cosmetology
* Culinary Arts
* Adolescent Life Skills (Elective)

Building Trades with concentrations in:
* Construction Technology
* Electricity
* Millwright
* Welding
* Carpentry

Mechanical Trades with concentrations in:
* Agriculture Technology
* Auto Body Technology
* Aviation

Courses we are working on returning to C-TECH:

* Upholstery
* Automotive Technology
* Diesel Technology
* Outdoor Power Equipment
* Architectural Drafting
* Pipe Fitting
* Plumbing
* Electronics

Courses we are working on adding to the Academy of Health and Sciences:
* Pharmacy Technician
* Certified Medical Assistant
* EMT
* Dental Technician
* Dental Hygienist
* Dentistry
* Clinical Medical Assistant
* Medical Administrative Assistant
* Nursing Assistant
* LPN

Massage Therapy Alternative Care Program for post-secondary education students only with concentrations in:
* Reflexology
* Acupuncture
* Hydrotherapy
* Lymphatic
* Sports Massage
* Trigger Point
* Aromatherapy
* Geriatrics
* Structural Integration
* Myofascial

The core prerequisites are:
* Pathology
* Anatomy
* Swedish Massage
* Business Professional Development

*** New Academies we are working on creating at C-TECH:

Academy of Education with concentrations in:
* English as a Second Language (ESL)
* Special Education
* Math
* English
* Science
* Social Studies
* Reading

*** Academy of Law (under discussion)

*** Academy of Marine Industry (under discussion)

*** Academy of Performing Arts with concentrations in:
* Theater
* Music (voice proficiency), (instrumental proficiency)
* Interpretive Dance

*** Academy of Communicative Arts with concentrations in:
* Radio Broadcasting
* Television Production
* Journalism

Program Descriptions and Pathways

ACADEMY OF BUSINESS & FINANCE (A0BF)

The NAF Academy of Business & Finance (AOBF) connects high school students with the world of financial services and personal finance, offering a curriculum that covers banking and credit, financial planning, global finance, securities, insurance, accounting, and economics. This is a 3-Year program and there are (3) three concentrations under AOBF: Accounting, Business Management, and Finance. The Future Business Leaders of America (FBLA) Organization is a part of this Academy (FBLA Fee $25.00).

COURSES INCLUDES THE FOLLOWING:

PRINCIPALS OF ACCOUNTING: Covers all that is required to keep the books for a small business, in particular, a service business.

ACCOUNTING II: Goes into a partnership form of business, elements of a corporate form of business, and other advanced concepts of accounting, to include ethics in business and accounting. Accounting I and II can be done as an elective.

ACCOUNTING III: This course **is not recommended as an elective**. Accounting III covers more advanced concepts, along with exposure to Quick Books Accounting and preparation of personal income tax filing.

PRINCIPLES OF FINANCE: This is the first course students take in the Academy of Business & Finance and introduces students to the financial world. Students develop financial literacy as they learn about the function of finance in society. They study income and wealth; examine financial institutions; learn how businesses raise capital; and study key investment-related terms and concepts. They also research how innovations have changed the financial services field. Finally, students explore careers that exist in finance today.

BUSINESS ECONOMICS: This course introduces students to the key concepts of economics as they pertain to business. This course discusses the American economy and the factors that influence the success of businesses and products. It describes forms of business ownership, discusses the relationship of labor and business, and provides a broad overview of the global economy. Students also examine careers in business, both as employees and as business owners.

BUSINESS LAW: Introduce students to the laws that affect their lives! Topics covered are: The Foundations of Law, The Court System (Local and National), Criminal Law, Tort (Civil) Law, Contracts. Employment Law and Cyber Law.

FINANCIAL PLANNING: This course provides students with an overview of the job of a financial planner. Students learn to consider how all aspects of financial planning might affect a potential client, and learn about the importance of financial planning in helping people reach their life goals. This course includes lessons on saving, borrowing, credit, and all types of insurance, and covers various types of investments. Students also examine careers in financial planning.

AOBF, Accounting Concentration

- For students that have good: math skills, problem solving skills, and likes working on their own (independent)
- Possible Careers: Accountant, Treasurer, Bank Teller, Bookkeeper, Medical Biller

Prerequisites:
Intro to Computers (NAF) is a pre-requisite for Principles of Finance and Principles of Accounting.
Accounting I is a prerequisite of Accounting II.
Accounting I and Accounting II are prerequisites of Accounting III.

PATHWAYS

SEMESTER1	English 9	English 10	English 11	English 12
	Algebra	Geometry	Advanced Algebra	Statistics
	Physical Science	Biology I		Speech
	VI History /Caribbean History	Principals of Finance	Business Economics	Accounting III
SEMESTER 2	Physical Education	US History or World History	US History or World History	Elective
	Elective: Fine Arts	Foreign Language I	Foreign Language II	Elective
	Reading	Health	Elective	Internship
	Intro to Computer (NAF)	Principals of Accounting	Accounting II	Internship

AOBF, Business Management Concentration

- For students that have good: leadership skills, writing skills, and problem-solving skills
- Possible Careers: Manager, Business Owner, Director, Office Administrator, Human Resources Manager

Other possible Careers in this career cluster includes jobs from entry level sales' clerk and cashiers with minimal technical training to administrative and management positions including Chief Executive Officers (CEOs) of major corporations requiring advance college degrees. Where you want to start and end your career depends on your willingness and interest in continuing your education after high school and your desire to enter this competitive field.

Prerequisites:
Intro to Computers (NAF) is a pre-requisite for Principles of Finance and Principles of Accounting.
Principles of Finance is a pre-requisite for Business Economics.

PATHWAYS

	English 9	English 10	English 11	English 12
SEMESTER 1	Algebra	Geometry	Advanced Algebra	Statistics
	Physical Science	Biology I	Chemistry or Physics	Speech
	VI History /Caribbean History	Principals of Finance	Foundations of Marketing	Business Economics
SEMESTER 2	Physical Education	Health	US History or World History	Elective
	Elective: Fine Arts	Foreign Language I	Foreign Language II	Elective
	Reading	US History or World History	Elective	Internship
	Intro to Computer (NAF)	Principals of Accounting	Business Law	Internship

AOBF, Finance Concentration

- For students that have good: leadership skills, writing skills, problem solving skills, and math skills
- Possible Careers: Insurance Agent, Business Owner, Banker, Financial Planner, Stock Broker

Pre-requisites:
Intro to Computers (NAF) is a pre-requisite for Principles of Finance and Principles of Accounting.
Principles of Finance is a pre-requisite for Financial Planning and Business Economics.

PATHWAYS

	English 9	English 10	English 11	English 12
SEMESTER 1	Algebra	Geometry	Advanced Algebra	Statistics
	Physical Science	Biology I	Chemistry or Physics	Speech
	VI History /Caribbean History	Principals of Finance	Financial Planning	Business Economics
SEMESTER 2	Physical Education	Health	US History or World History	Elective
	Elective: Fine Arts	Foreign Language I	Foreign Language II	Elective
	Reading	US History or World History	Elective	Internship
	Intro to Computer (NAF)	Principals of Accounting	Business Law	Internship

Student Profile – Robert Phipps
Computer Information Systems (CIS), Class of 2013

Robert Phipps didn't take long to gain an interest in the computer field. He credits what began as a St. Croix Career & Technical Education Center (CTEC) student in Mr. Earl Jones' and Ms. Lordes Lockhart's computer classes as what later developed into a deeper quest to learn more about Information Technology. Learning to use Windows for the first times was fascinating and gaining hands-on knowledge on computers would be the beginning of a career journey.

Today, Robert is enjoying the fruits of his labor; gainfully employed, enjoying his hobbies exercising, spending time with friends and (after earning his pilot's license at the age of 19) flying planes whenever he chooses to.

High School Education:
June 2013 – St. Croix Educational Complex (SCEC), St. Croix, U.S. Virgin Islands
June 2013 – St. Croix Career & Technical Education Center (CTEC), St. Croix, U.S. Virgin Islands
Student Organization: Future Business Leaders of America (FBLA)
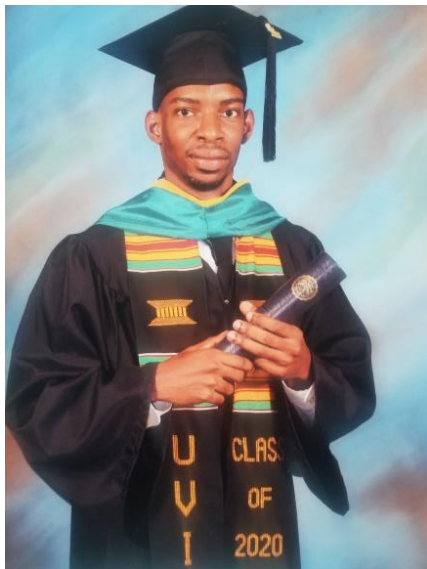
Post-secondary Education:
May 2018 – Associates of Arts Degree, Computer Information Systems, University of the Virgin Islands
May 2020 – Bachelor of Business Administration Degree, Information Systems Technology, University of the Virgin Islands

Current Employment:
Information Technology Specialist 1, University of the Virgin Islands

Career Goals:
❖ Excel in the field of Information Technology
❖ Comp CIA A+ Certification

CTEC FBLA Member   UVI IT Help Desk   Licensed Private Pilot

Program Descriptions and Pathways

ACADEMY OF HOSPITALITY & TOURISM (A0HT)

The NAF Academy of Hospitality & Tourism (AOHT) helps students chart career paths in one of the world's largest industries, from hotel and event management to sports and entertainment, and includes the study of geography, economics, and world cultures. This is a 3-Year program and there are (2) two concentrations under AOHT: Marketing and Tourism. The Future Business Leaders of America (FBLA) Organization is a part of this Academy (FBLA Fee $25.00).

COURSES INCLUDES THE FOLLOWING:

EVENT PLANNING: This course introduces students to the skills and knowledge required in the event planning profession. Topics include aligning events with client goals, budgeting and bidding, sustainable practices, venue selection and management, personnel considerations, marketing, and sports sponsorship. Students learn about sports and entertainment events as well as special and professional events. Students consider the role of events in the larger context of communities and society. They realize how important events are to the health or revitalization of regions around the world and how they are an integral component of tourism.

DELIVERING GREAT CUSTOMER SERVICE: This course introduces students to the concept of service as a critical component of a hospitality or tourism business. It combines current theory and practice with observations of customer service in action, role-play, and critical analysis of models. Topics include trends, the psychology of interactions between customers and providers, the phases of customer service, common mistakes, internal customer service, management, and customer feedback. Students begin to appreciate how the quality of customer service has wide-ranging implications for all professional endeavors.

PRINCIPLES OF HOSPITALITY & TOURISM: This course provides an overview of the current hospitality and tourism industry and serves as the foundation for the core courses offered by NAF's Academy of Hospitality & Tourism. Students take a brief look at the history of the industry to understand the degree to which it has changed in the past century. They learn about traveler motivation and consumer needs and how these factors affect current offerings in the lodging, transportation, food and beverage, and entertainment sectors. Students consider the economic and environmental impacts of the industry on the world today. They receive exposure to the wide array of domestic and international travel. Finally, students learn the basics of selling and marketing in tourism.

FOUNDATIONS OF MARKETING: Hospitality Marketing introduces students to the objectives, strategies, and tools that are important to marketing in the hospitality industry. This course exposes students to the wide range of marketing options that all marketing managers and business owners consider as they create marketing plans. Students explore many new concepts while expanding their understanding of several marketing topics that were introduced in Principles of Hospitality and Tourism.

Students become familiar with each phase of marketing and with strategies to build business and brand equity, for both large-scale operations (such as hotel chains) and smaller businesses (such as restaurants). They learn how to assess marketing niches, understand customer and consumer needs, and conduct basic market research. As students study the benefits and potential drawbacks of various marketing channels, they develop an integrated marketing campaign that uses a range of appropriate marketing channels. Finally, this course explores career opportunities in the field of hospitality marketing.

ADVERTISING: This course introduces students to the role of advertising in business and society and the relationship between advertising and marketing. Study the functional components of the advertising process. The study of the use and application of design, color, type, and layout styles that affect concept development in the creation of promotional materials. Group-based development, execution, and evaluation of an advertising campaign for a national and/or local client.

AOHT, Marketing Concentration

- For students that have good: writing skills, social skills (likes to interact with people). And creative
- Possible Careers: Jobs on TV and Radio, Magazine writer, create Commercials, write Newspaper articles; Entertainer/ Promoter; Fashion – Clothing; Retail

Pre-requisites:
Intro to Computers (NAF) is a pre-requisite for Principles of Hospitality & Tourism and Event Planning.
Principles of Hospitality & Tourism is a pre-requisite for Event Planning, Advertising and Business Economics.

PATHWAYS

SEMESTER 1	English 9	English 10	English 11	English 12
	Algebra	Geometry	Advanced Algebra	Statistics
	Physical Science	Biology I	Chemistry or Physics	Speech
	VI History /Caribbean History	Principals of Hospitality & Tourism	Foundations of Marketing	Business Economics
SEMESTER 2	Physical Education	Health	Elective	Elective
	Elective: Fine Arts	Foreign Language I	Foreign Language II	Elective
	Reading	US History or World History	US History or World History	Internship
	Intro to Computer (NAF)	Event Planning	Advertising	Internship

AOHT, Tourism Concentration

- For students that are: friendly, helpful, like to travel, and like to organize activities
- Possible Careers: Hotel Manager, Event Planner, Restaurant Manager, Flight Attendant,
- Travel Photographer/Writer, Spa Manager, Tour Operator

Pre-requisites:
Intro to Computers (NAF) is a pre-requisite for Principles of Hospitality & Tourism and Event Planning.
Principles of Hospitality & Tourism is a pre-requisite for Event Planning, Delivering Great Customer Service and Business Economics.

PATHWAYS

SEMESTER 1	English 9	English 10	English 11	English 12
	Algebra	Geometry	Advanced Algebra	Statistics
	Physical Science	Biology I	Chemistry or Physics	Speech
	VI History /Caribbean History	Principals of Hospitality & Tourism	Delivering Great Customer Service	Business Economics
SEMESTER 2	Physical Education	Health	Elective	Elective
	Reading	Foreign Language I	Foreign Language II	Elective
	Elective: Fine Arts	US History or World History	US History or World History	Internship
	Intro to Computer (NAF)	Event Planning	Principles of Accounting	Internship

Program Descriptions and Pathways

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ACADEMY OF HEALTH SCIENCE (AOHS)

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The NAF Academy of Health Sciences (AOHS) This 3-Year program develops a pipeline of students prepared to pursue health-related degrees and professions in one of the fastest growing sectors of the economy, including biotechnology, genetics, nursing, therapeutics, and diagnostics.

- For students that are: helpful, caring, good communicators, can multi-task, empathetic
- Possible Careers: Registered Nurse, Nurse Practitioner, Doctor, Veterinarian, Physical Therapist

STUDENTS ANNUAL FEES:
Lab Fee $50.00 (Yearly)
Skills USA Fee $25.00 (Yearly)
YEAR 3 FEES **ONLY** in addition to annual fees listed above**:**
Uniform (Scrubs) $80.00
Certified Phlebotomy Technician Test (CPT) $117.00
Basic Life Support for Medical Professions (BLS) $85.00

COURSES INCLUDES THE FOLLOWING:

HEALTH CAREERS EXPLORATION:
Health Careers Exploration is a survey course designed to introduce students to a broad spectrum of health careers. The course covers careers from the five pathways: Diagnostic Services, Therapeutic Services, Health Informatics, Support Services, and Biotechnology Research and Development. For each career they study, students examine the main tasks and challenges of professionals in that career, the treatments they administer, and the interaction those professionals have with other professionals. Students learn about the educational requirements and the employment and salary outlook for each career, and they evaluate how their own skills, abilities, and interests align with different careers. Where possible, students do authentic hands-on work that a professional would do, such as reviewing scans and MRIs, taking vital signs, treating a wound, and completing dental charts.

GLOBAL HEALTH:
Global Health introduces students to public health on a global scale. Students learn what disease is and investigate how it impacts world populations. By studying different societies, they learn about the relationship between health and socioeconomic development. Students learn how environmental, nutritional, and behavioral risk factors jeopardize health. And then they learn how communities, the government, and cooperative global efforts can intervene to improve health. Wherever possible, students first study each concept as it applies to their own community, and then look at it in a more global context. In many lessons students practice deciphering and interpreting the data they find in tables, charts, graphs, and maps. Students are exposed to working with information compiled by the foremost global health agencies, such as the World Health Organization, the Centers for Disease Control and Prevention, the World Bank, and UNICEF. At the conclusion of the course, students have a chance to explore what it would be like to have a career in global health.

ANATOMY & PHYSIOLOGY I
Anatomy and Physiology I is the first in a set of two semester-long lab courses that introduce students to basic anatomy and physiology. The first unit covers directional terminology and those aspects of chemistry and cellular biology that students must master in order to study anatomy and physiology. It also teaches students how to use lab equipment safely. Then students learn about the following body systems: integumentary, skeletal, muscular, nervous, and endocrine, with separate lessons on the brain and the senses. Students make connections to their personal health and the prevention of disease for each body system studied. As they conduct research, complete wet labs,

participate in a wide range of group activities, and take quizzes and exams, students develop the skills they need for college-level work and careers in the health professions.

ANATOMY AND PHYSIOLOGY II

Anatomy and Physiology II is the second in a set of two semester-long lab courses that introduce students to basic anatomy and physiology. It builds on the knowledge and skills students developed during the first semester as it teaches students about the following body systems: cardiovascular, respiratory, lymphatic system and immunity, digestive, urinary, and reproductive. This course uses a wide range of assessment products in addition to quizzes and exams to evaluate students' mastery of the material. For their course project, students use models and demonstrations to illustrate an anatomical or physiological function of the human body that they learned about in A&P I and II.

PHLEBOTOMY I & II:

Students take Phlebotomy I and II during the first semester in their senior year as a double period. They learn about phlebotomy and prepare to take the certification test of the National Health Career Association. As a phlebotomist, you are responsible for efficiently and accurately performing blood draws and transfusions on blood donors and patients, depending on their specific facility. Some of their typical daily duties include the following: preparing patients before drawing blood, explaining blood draw procedures to patients and answering any questions about the process, following all health and safety protocols and procedures to maintain sanitary work areas, gathering medical testing materials, including needles, sample vials, blood storage bags and test tubes, verifying patient information and labeling blood samples properly, accurately updating patient information in the organization's database, helping nervous or frightened patients remain calm during blood draws, and working with supervising physicians and following their directions at all times.

Pre-requisites:
Intro to Computers (NAF) is a pre-requisite for Health Careers and Global Health.
Health Careers and Global Health are pre-requisites for Anatomy & Physiology I & II.
Anatomy & Physiology I & II are pre-requisites for Phlebotomy I & II.

PATHWAYS

		English 9	English 10	English 11	English 12
SEMESTER 1		Algebra	Geometry	Advanced Algebra	Statistics
		Physical Science	Biology I	Chemistry I	Elective
		VI History /Caribbean History	Health Careers	Anatomy & Physiology I	Internship
SEMESTER 2		Physical Education	Foreign Language I	Foreign Language II	Internship
		Reading	Biology II	Health	Speech
		Elective: Fine Arts	US History or World History	US History or World History	Phlebotomy I
		Intro to Computer (NAF)	Global Health	Anatomy & Physiology I	Phlebotomy II

Student Profile - Sheniah Campbell
Nursing Tech Prep, Class of 2014

Sheniah Campbell knew that her dual enrollment in a traditional high school and a career & technical school would lead to far greater opportunities than she could have ever imagined as a young teenager. Her goal to enter into the healthcare industry began as a student in the Nursing Tech Prep program and with hard work, determination, and commitment, has brought her to a future in the Occupational Therapy medical field.

In her words:
CTEC opened my eyes to a variety of career fields other than nursing. Nursing provided the basic skills that I was able to transfer over to any healthcare setting, for example taking vital signs, basic wound care, patient care and safety in healthcare settings. I was able to learn a sense of comradery and teamwork; being able to work alongside my cohorts, as well as the ability to gain hands-on experiences and job readiness skills. I just completed my first clinical rotation at Comprehensive Orthopaedic Global Restore and I am about to start my last clinical rotation before graduation at JS Therapies, Virgin Islands.

High School Education:
June 2014 – St. Croix Educational Complex (SCEC), St. Croix, U.S. Virgin Islands
June 2014 – St. Croix Career & Technical Education Center (CTEC), St. Croix, U.S. Virgin Islands
Student Organizations: SkillsUSA, SCEC Varsity B Team, Youth Volleyball Club, USVI Jr. Volleyball Team

Post-secondary Education:
August 2017 – Bachelor of Science Degree in Therapeutic Recreation, Winston Salem State University, Winston-Salem, North Carolina
December 2021 (pending) – Masters of Science Degree in Occupational Therapy (MSOT), Winston Salem State University, Winston-Salem, North Carolina

Career Goals:
❖ Passing the National Board for Certification of Occupational Therapists Exam
❖ Acquire my Occupational Therapy license
❖ Employment in the public sector working for the VI Dept of Education, Juan F. Luis Hospital, or Human Services
❖ Long-Term Career goals include: Working as a Self-Contracted Occupational Therapist rendering services to different organizations in the Virgin Islands

Program Descriptions and Pathways

Computer Engineering Academy (CEA)

This (3) three-year Computer Engineering Academy (CEA) accepts students who are interested in technology careers and this program is partially supported by Viya and ESCO Software which are two local Virgin Islands technology-based companies. Students will develop critical thinking and teamwork skills to design and test programming and computer network solutions. Studentswill acquire the knowledge to take one or more national industry technology certifications to include; CompTIA A+, CompTIA Network +, CompTIA Cybersecurity, Java, Python, C, and Artificial Intelligence. The program is project-based and students will utilize tablets and other forms of technology (virtualization) in completing project-based assignments and no prerequisite is required.

CTEC COMPUTER ENGINEERING ACADEMY (9 Credits)

		YEAR 1	YEAR 2	YEAR 3	YEAR 4
SEMESTER 1		English 9	English 10	English 11	English 12
		Algebra	Geometry	Statistics	Advanced Algebra
		Physical Science	Biology I	**(10156) Programming II**	**(10105) CCNA-Cisco**
		VI History /Caribbean History	**(10152) Programming I**	Academic Assigned Course	**(10105) CCNA-Cisco**
SEMESTER 2		Physical Education	Health	Chemistry or Physics	Speech
		Communications or Digital Literacy	Foreign Language I	Foreign Language II	US History or World History
		Reading	US History or World History	**(10108) Cybersecurity**	**(10258) Internship**
		(89551) CompTIA A-Plus	**(10102) Network Systems**	Academic Assigned Course	**(10258) Internship**

(89551) CompTIA A-Plus (1 Credit):

CompTIA A-Plus course provides students with the knowledge and skills necessary to demonstrate baseline security skills for Information Technology support professionals. Configure device operating systems, including Windows, Linux, Chrome Operating System,and administer client-based as well as cloud-based Software as a Service (SaaS) software. Troubleshoot and problem solve core service and support challenges while applying best practices for documentation, change management, and scripting supports basic IT infrastructure and networking. Configure and support PC, mobile, and Internet of Things (IoT) device hardware and implement basic data backup and recovery methods and applydata storage and management best practices; and solutions that may help them obtain industry certification.

(10152) Programming I (1 Credit): Computer Programming courses provide students with the knowledge and skills necessary to construct computer programs in one or more languages. Computer coding and program structure are often introduced with the Java programming language. Initially, students learn tostructure, create,

document, and debug computer programs, and as they progress, more emphasis is placed on design, style, clarity, efficiency, and logic. Students may apply the skills they learn to relevant applications such as modeling, data management, and graphics.

(10156) Programming II (1 Credit):

Computer Programming—Other Language courses provide students with the opportunity to gain expertise in computer programs using languages other than those specified (such as Python or emerging programming languages). As with other computer programming courses, the emphasis is on how to structure and document computer programs, using problem-solvingtechniques, and logic. As students advance, they learn to capitalize on the features and strengths of the language being used.

(10108) Cybersecurity (1 Credit):

Network Security courses teach students how to design and implement security measures to reduce the risk of data vulnerability and loss. Course content usually includes typical security policies; firewall design, installation, and management; secure router design, configuration, andmaintenance; and security-specific technologies, products, and solutions that may help them obtain industry certification.

(10102) Network Systems (1 Credit):

Networking Systems courses are designed to provide students with the opportunity to understand and work with hubs, switches, and routers. Students develop an understanding of LAN (local area network), WAN (wide area network), wireless connectivity, and Internet-based communications with a strong emphasis on network function, design, and installation practices.
Students acquire skills in the design, installation, maintenance, and management of networksystems which may help them obtain network certification.

(10105) CCNA Cisco (2 Credits):

NetWare Routing courses introduce students to such topics as Virtual LANs (VLAN) and switched internetworking, comparing traditional shared local area network (LAN) configurations with switched LAN configurations, and they also discuss the benefits of using aswitched VLAN architecture. These courses also may cover routing protocols like RIP, EIGRP, OSPF, Access Control Lists (ACLs), and solutions that may help them obtain industry certification.

(10258) Internship (2 Credits):

Duties include installing and maintaining computer systems including software, hardware, switches, routers, network security, network scripting, cabling using desktops and laptops, resolving internet and network access issues (both wired and wireless), providing network support to provide one-on-one technical assistance as needed and or requested. In addition,students review and practice for one or more scheduled industry certification tests from CompTIA A+, CompTIA Network +, CompTIA Cybersecurity, Java, Python, C, and Artificial Intelligence.

Computer Engineering Academy (Contact Hours)
Year 1 = 180 hours
Year 2 = 360 hours
Year 3 = 360 hours
Year 4 = 720 hours
Cumulative Hours: 1,620

Program Descriptions and Pathways

AGRICULTURE TECHNOLOGY

Basic Agriculture Science

This 2-Year course follows the three circle Agricultural Education Model which includes classroom/laboratory instruction, National Future Farmers of America (FFA) Leadership, Career and Technical Student Organization (CTSO), and Supervised Agricultural Experience (SAE). It introduces students to the agriculture industry and the career pathways affiliated with it. The course aims to prepare students for entry level employment in the field of agriculture and to encourage them to pursue post-secondary agricultural education with the goal of seeking careers in the agriculture industry.

MATERIALS:
- Sturdy closed toed shoes (boots preferred)
- coveralls or garden aprons, garden gloves
- broad brimmed hat or visor
- sunglasses (optional only when in the field)

Fees: Participation in the FFA is a component of agricultural education. This includes annual dues of $20.00 and $55.00 for an FFA jacket which is official dress for this Career and Technical Student Organization (CTSO).

COURSE CONTENTS:

Year I Pt.1 - Agriculture and Society, Leadership in Agriculture, Agriculture as a Career

Year 1 Pt. 2 - Agricultural Safety, Agriculture Science, Agricultural Technology

Year 2 Pt. 1 - Agricultural Power and Engineering, Agricultural Mathematics, Environmental Systems Impacting Agriculture, Natural Resources and Recreation

Year 2 Pt. 2 - Soil and Water Management, Importance of Food, Plant Production, Forestry, Animal Production

PATHWAYS

		English 9	English 10	English 11	English 12
SEMESTER 1		Algebra	Geometry	Advanced Algebra	Statistics
		Physical Science	Biology	Chemistry or Physics	Agriculture II P1
		VI/Caribbean History	World History or US History	Agriculture I P	Agriculture II P2
SEMESTER 2		Physical Education	Health	Elective	Elective
		Communications or Digital Literacy	Elective	World History or US History	Speech
		Reading	Foreign Language I	Foreign Language II	Agriculture II P1
		Elective: Fine Arts	Elective	Agriculture I P2	Agriculture II STW

AUTO BODY TECHNOLOGY This 2-Year course emphasizes Auto Body Construction, Body Shop Hand Tools, Body Shop Power Tools and Equipment, Welding Practices, Simplified Metal Straightening, Simplified Metal Repairs, Simplified Plastic Repairs, Body and Structural Alignment, Replacing Panels-Hood-Doors and Fenders, Repairing and Replacing Miscellaneous Components, Glass Service and Replacement, Electrical and Electronics System Repairs, Refinishing Equipment, Surface Preparation, Applying Finish, Custom Painting and Body Designs, Estimating, Career Opportunities, and Repairing and Refinishing.

CONTENTS INCLUDES THE FOLLOWING:

Contents include: Body Shop Operations, Body Shop Safety Practices. The St. Croix Career and Technical Education "Certificate of Completion" is issued upon successful course completion. National Occupational Competency Testing Institute "Certificate of Completion" is issued upon attaining Auto Body Repairing and Refinishing Assessment National cut score.

YR 1: Semester 1
Body Shop Operations
Body Shop Safety Practices
Auto Body Construction
Body Shop Hand Tools
Body Shop Power Tools and Equipment

YR 1: Semester 2
Welding Practices
Simplified Metal Straightening
Simplified Metal Repairs
Simplified Plastic Repairs
Body and Structural Alignment

YR 2: Semester 1
Replacing Panels-Hood-Doors and Fenders
Repairing and Replacing Miscellaneous Components
Glass Service and Replacement
Electrical and Electronic System Repairs
Refinishing Equipment

YR 2: Semester 2
Surface Preparation
Applying Finish
Custom Painting and Body Designs
Estimating
Career Opportunities
Body Performance
ON-THE-JOB-TRAINING

COURSE REQUIREMENTS:

Insurance
Valid School ID
Student Data Sheet
Coverall (Dark Blue)
Safety Boots (Back or Brown)
Safety Glasses (Clear Lens)
Basic Hand Tools
Copy Book

Loose Leaf Papers
Folders
Pad Lock
Hand Cleaner
Shop Rags
Multi Meter (Second Year Students)
9" Sanding Block
Lab Fee (Yr. 1 $100 & Yr. 2 $100)

PATHWAYS

SEMESTER 1	English 9	English 10	English 11	English 12
	Algebra	Geometry	Advanced Algebra	Statistics
	Physical Science	Biology	Chemistry or Physics	Auto Body II P1
	VI/Caribbean History	World History or US History	Auto Body I P1	Auto Body II P2
SEMESTER 2	Physical Education	Health	Elective	Elective
	Communications or Digital Literacy	Foreign Language I	Foreign Language II	Speech
	Reading	Elective	World History or US History	Auto Body II P1
	Elective: Fine Arts	Elective	Auto Body I P2	Auto Body II STW

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AVIATION TECHNOLOGY

This 4-Year program academy's mission is to educate students in the field of aviation in a learning environment conducive to excellence in meeting the needs and challenges of the industry. This Academy is being developed to produce the most qualified graduates for employment in the aviation global industry and the military. Upon completion of the Academy, students will be eligible to sit the Federation Aviation Administration (FAA) Airmen Knowledge Certification exam.

COURSE DESCRIPTION

Listed below are the eight courses and their descriptions that students are eligible to take when they are selected for the academy:

Credit: 1 credit, Semester I   **Grade Level: 9**
I-A- Introduction to Aviation: This is an introductory aviation course that emphasizes basic of the principles of flight and aviation history. It will include: various types of aviation drawings; drawing practices; charts and graphs; weighting procedures; shifting the Center of Gravity (CG); and helicopter weight and balance.

Credit: 1 credit, Semester, II Prerequisite is I-A   **Grade Level: 9**
I-B Aviation Electricity/Electrical Generation: Students will study electricity from the standpoint of aviation. The student will understand the effect of resistance, capacitance, and inductance on an aircraft circuit (AC), and how a transformer works. Much emphasis is placed on safety and will include CPR training.

SUMMER FOLLOWING 9th GRADE:
Students will participate in FAA ACE Academy activities including: field trips to postsecondary aviation programs and aviation businesses; participation with national aviation organizations; and flight simulation.

Credit: 1 credit, Semester I, Prerequisites are I-A and I-B   **Grade Level: 10**
II-A- Mechanic Privileges: This course is designed to introduce students to aviation composites and materials for structure. Vocabulary, proper use of tools and identification, designs are a few of the skills developed in this course.

Credit: 1 credit, Semester II, Prerequisite is II-A   **Grade Level: 10**
II-B – Hand Tools and Measuring: This course is an in depth continuation of Aviation II-A. It is class heavy with hands-on activities, enhancing students understanding of aircraft structure and hardware; hand tools; mechanic privilege & limitations.

SUMMER FOLLOWING 10th Grade
Students will participate in FAA ACE Academy activities including: field trips to postsecondary aviation programs and aviation businesses; participation with national aviation organizations; and flight simulation.

Credit: 1 credit, Semester I, Prerequisites are II-A and II-B   **Grade Level: 11**
 III-A and III-B: Airframe General -Students will learn the basic terms, concepts, and procedures that serve as the foundation for the more complex lessons to come. Students will obtain an understanding of fluid lines and fittings; nondestructive testing; ground handling service; and servicing an aircraft. Students will obtain an understanding and hands on experience in mathematics, basic physics, mechanic privileges and limitations, maintenance publications, maintenance forms & records, and regulations. It will also include an introduction to airframe (hydraulic & pneumatics and aircraft landing gear systems) and position & warning systems (airframe fire protection, cabin atmosphere, assembly & rigging, and aircraft instrument electrical systems).

Credit: 1 credit, Semester II, Prerequisites are III-A   **Grade Level: 11**
III-C and III-D: Powerplant- This is a powerplant technician introductory course for aviation maintenance. Students will learn about: reciprocating engines and troubleshooting techniques; power plant systems; igniting and starting systems; and propellers. This powerplant technician course will provide in depth understanding of engine electrician, engine instrumentation, powerplant turbine, and engine fire protection.

During the 11th grade, students will be given guidance counselor assistance in identifying postsecondary institutions that will assist them in achieving their career aspiration.

SUMMER FOLLOWING 11th Grade

Students will participate in FAA ACE Academy activities including: field trips to postsecondary aviation programs and aviation businesses; participation with national aviation organizations; and flight simulation.

Credit: 2 credits, Semester I, Prerequisites are III-A and III-B   **Grade Level: 12**

IV-A and IV-B: Airmen Knowledge Course: This is the introductory course to prepare students to complete the FAA Airmen Knowledge Course written examination. This course covers: flight instruments; aerospace; aircraft performance; introduction to flight simulation; the aviation industry; basic aviation qualifications; general aviation requirements; flight planning; flight training I; airport markings; radio navigation; Federal Aviation Regulations part I; aviation qualification part II; and flight simulation I

Credit: 2 credits, Semester II, Prerequisites are IV-A and IV-B   **Grade Level: 12**

IV-C and IV-D: Airmen Knowledge Test: This is the part of an advance course to prepare students to complete the FAA Airmen Knowledge Course written examination. This course covers: flight training II; advance flight planning; Federal Aviation Regulations part II; Weather Theory, VFR charts; a continuation of aviation qualification part II; flight simulation II; flight training III; advance flight planning; Federal Aviation Regulations part III; Weather Theory, National Transportation Safety Board; aviation qualification part III; and flight simulation III.

Student Responsibilities:
- Fulfill requirements for Standard or Advanced Studies Diploma
- Fulfill Community Service Hours/Internship
- Maintain 75% in the CTE courses and 2.5 overall GPA
- Complete sequence of courses in Aviation Academy
- Participate in the Aviation CTSO
- Enrolled in the FAA Airmen Knowledge Exam
- Attend on-going annual aviation career education activities
- Maintain a positive attitude while pursuing his/her career goal

Students have the option to choose flight training or Aircraft technician. Fee associated are:

Aircraft Technician: Tool bag and tools ($600.00)
                        Personal protective equipment (200.00)
                        Online Airframe and Powerplant bundle ($495.00)

Pilot Ground School: Flight bag ($89.00)
                        VFR/IFR cockpit card ($6.95)
                        Pilot logbook (($9.95)
                        IFR view Limiting Device ($19.95)
                        Airspace and Communication cockpit card ($7.95)
                        E6B Computer / Plotter ($21.95)
                        Headset (400.00)
                        E-Book / Flight Program ($28.00)

PATHWAYS

SEMESTER 1	English 9	English 10	English 11	English 12
	Algebra	Geometry	Advanced Algebra	Statistics
	Physical Science	Biology	Chemistry or Physics	Aviation IV-A
	Aviation I-A	Aviation II-A	Aviation III-A	Aviation IV-B
SEMESTER 2	Physical Education	Elective: Fine Arts	Health	Speech
	Reading	Foreign Language I	Foreign Language II	Communications or Digital Literacy
	VI/Caribbean History	World History or US History	World History or US History	Aviation IV-C
	Aviation I-B	Aviation II-B	Aviation III-B	Aviation IV-D

Student Profile – Anthony Gilbert
Aviation Academy Program

My greatest memory as a young boy growing up, was receiving my first toy airplane on Christmas day. Since then, I've developed a deep passion for aviation. It has always amazed me at how small I was compared to some of the general aviation aircrafts I'd seen. Aviation is the career that motivated me to want to pursue my dream of becoming a commercial airline pilot.

After enrolling in the St. Croix Career & Technical Education Center's Aviation Academy in ninth grade, I soon learned about the Virgin Islands Chapter Tuskegee Airmen, Inc. (VICTAI) Youth Aviation Club (VYAC). Together, and with the support of the St. Croix Career & Technical Education Board (CTEB), I had several opportunities to attend off-island training academies that would introduce me to numerous opportunities in the field of aviation.
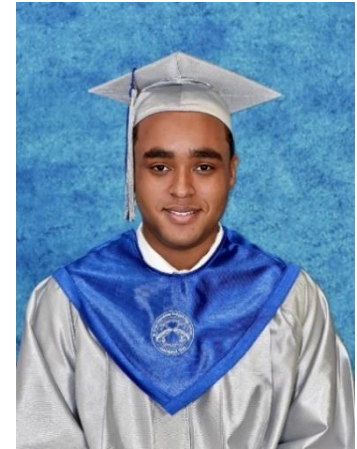
High School Education:
September 2017 – May 2021 – St. Croix Educational Complex (SCEC), St. Croix, U.S. Virgin Islands
September 2017 – May 2021 – St. Croix Career & Technical Education Center (CTEC), USVI

Accomplishments**:**
- ❖ July 2021 Luke Weathers Solo Flight Academy (LWSFA), Olive Branch, Mississippi
- ❖ April 2021 Yellow Breast Aviation, St. Croix; completed over 25 hours of private pilot training
- ❖ May 2019 Organization of Black Aerospace Professionals (OBAP) Aviation Career Education (ACE) Academy; Dover, Delaware
- ❖ July 2018 OBAP ACE Academy; Manassas, Virginia
- ❖ June 2017 OBAP ACE Academy; St. Croix, U.S. Virgin Islands

Post-secondary Education:
Currently enrolled in the RedTail Flight Academy (RTFA), based at the New York Stewart International Airport which will provide all required flight training towards becoming a Commercial Pilot. Recipient of $115,00 RTFA Scholarship Award. Flight training will be given towards the following certificates/ratings:
- ❖ Private Pilot Certificate
- ❖ Remote Pilot Certificate (drone operator license)
- ❖ Instrument Rating
- ❖ Commercial Pilot Certificate- Single engine land
- ❖ Multiengine rating (Commercial pilot certificate add-on)

Career Goals: Career as a Commercial Airline Pilot; pursue a degree in Aeronautical Science

Flight Simulator Training

Completing Solo Flight

Successful Landing!

CONSTRUCTION TECHNOLOGY

N.C.C.E.R. Construction Technology Curriculum

Course Overview

This 2-Year curriculum will ground the trainee in the basic knowledge and principles of carpentry, masonry, concrete finishing, electrical work, HVAC, and plumbing. He or she will become skilled in different phases of a project from start to finish. Once completing this course, the trainee will be able to interpret construction drawings; perform quality concrete and brickwork; frame walls, ceilings, and floors of a structure; and install the proper wiring and piping for electrical, and plumbing systems.

Mandatory requirements

Before a student can enter any N.C.C.E.R. Program they must meet the following requirements.
Candidates must be interviewed prior to being scheduled.
Lab fee must be paid in full or a signed contract for a plan of payment.
Candidates must have passed all core certified module exams.

Timeline

The Construction Technology Program is a Two-year program which offers students a national certification. Which means students would typically start training while in the 11th grade.

Personal Protective Equipment

Level 1 student lab attire: steel toe shoes, short sleeve cover-all.
Program students will be expected to wear the personal protective equipment (PPE) as required by the instructor. In some cases, PPE can be purchased. If students do not own PPE that is required while in the lab, Instructor and student can come to a rental agreement in which case a deposit will be necessary before student can participate in lab activities.

Lab Fee break down 1st Year Construction Tech	**Lab Fee break down 2nd Year Construction Tech**
Lab locker usage $10.00	Lab locker usage $10.00
Standard and Metric Digital Micrometer with 0 in. to 1 in. Range $40.00	
6 in. 3-Mode Digital Fractional Caliper $30.00	Skills USA member fee $25.00
Core dress Shirts $40.00	Core dress Shirts $40.00
Total Lab fee $105.00	**Total Lab fee $115.00**

Course Materials

This exceptionally produced trainee guide features a highly illustrated design, technical hints and tips from industry experts, review questions and a whole lot more! Key content includes: Site Layout One-Distance Measurement and Leveling, Introduction to Concrete, Reinforcing Materials, and Forms, Handling and Placing Concrete, Introduction to Masonry, Masonry Units and Installation Techniques, Floor Systems, Wall and Ceiling Framing, Roof Framing, Roofing Applications, Exterior Finishing, Basic Stair Layout, Electrical Safety, Residential Electrical Services, Introduction to HVAC, Introduction to Drain, Waste and Vent Systems, Plastic Pipe and Fittings, and Copper Pipe and Fittings.

Testing schedule
Module exams are administered after the completion of every module. Students can only be certified if all module exams are passed with a 70% or above! The performance exam is pass or fail; students must earn a pass rating before being able to certify at the end of each module.

4.8.0 Module Tests
A module test is an evaluation of a trainee's knowledge of the competencies covered in an NCCER curriculum module. Passing score on all module tests is a 70%. All module tests are the intellectual property of NCCER. Any use of any portion of the module tests without the written consent of NCCER is expressly prohibited. Violation of this provision may subject an individual or organization to penalties, including but not limited to revocation of accreditation, credentials and/or certifications, as well as legal liability for copyright infringement and/or all other applicable legal claims.

4.8.3 Retest Policy
NCCER has set a mandatory two-day retest period between each attempt on a module test. Pipeline modules have a mandatory one-day retest period between attempts. Additional retesting guidelines may be required by the ATS or another governing body such as a state department of education.

4.9.0 Performance Profiles
A performance profile is a hands-on examination that verifies the trainee's ability to perform the skills covered in an NCCER curriculum module. All performance profiles are the intellectual property of NCCER. Any use of any portion of the performance profile without the written consent of NCCER is expressly prohibited. Violation of this provision may subject an individual or organization to penalties, including but not limited to revocation of accreditation, credentials and/or certifications, as well as legal liability for copyright infringement and/or all other applicable legal claims.

4.1.0 Registration & Release Form
All trainees must complete a Registration & Release Form. If trainee is under the age of 18 a hard copy of the Registration & Release Form is required with legal guardian's signature. Completed Registration & Release Forms must be kept on file for a minimum of three years or until the ATS's audit is cleared (whichever is longer). If an individual chooses to activate their profile in the Registry System, the activation process requires completion an electronic Registration & Release Form. Completing the electronic form or scanning the paper form to an electronic storage location accessible during an audit relieves the ATS's requirement to maintain a hard copy of the form.

4.2.0 Special Needs/Accommodations
NCCER certified personnel, working with the Sponsor Representative, should ensure that appropriate requests for trainee special needs/accommodations are met. Any questions regarding whether a proposed trainee accommodation is permissible under these Guidelines should be referred to NCCER before any accommodation is granted. Registering of individuals, training, program administration, testing, credentialing, and release/reporting of information must be conducted without regard to race, color, religion, national origin, gender, age, veteran status, physical or mental disability, sexual orientation, or any other reason prohibited by local, state, federal or other applicable national regulations. To ensure NCCER standards and the integrity of credentials is maintained, changes to any NCCER module exam, including changing the number of possible answer choices, is prohibited. Any individual who completes a module exam that has been altered will not be eligible to earn an NCCER credential. Neither the lack of general reading ability, nor the lack of the ability to read English qualifies a participant for ADA accommodations. Interpretation or translation of a module exam into another language is NOT permitted. Any organization that is found to have interpreted or translated a module exam may face discipline or revocation of its accreditation. Any individual that is found to have interpreted or translated a module exam may face discipline or revocation of their NCCER credentials and/or certifications. All forms of interpretation and translation, including but not limited to in-person and electronic methods, are prohibited.

4.9.2 Retest Policy
Upon a failed attempt, the certified Instructor or Performance Evaluator determines when the trainee can retest.

4.9.3 Submissions

Performance profiles are submitted electronically in the NCCER Testing System. Performance profiles will not be accepted more than 2 years after the completion date. Completed performance profile sheets must be kept on file per the Recordkeeping section of these guidelines.

PATHWAYS

SEMESTER 1	English 9	English 10	English 11	English 12
	Algebra	Geometry	Advanced Algebra or Trigonometry	Statistics
	Physical Science	Biology	Construction Technology I P1	Construction Technology II P1
	VI/Caribbean History	NCCER (Pre-requisite)	Construction Technology I P2	Construction Technology II P2
SEMESTER 2	Physical Education	Communications or Digital Literacy	Chemistry or Physics	Health
	Foreign Language I	Foreign Language II	World History or US History	Speech
	Reading	World History or US History	Construction Technology I P3	Construction Technology II P1
	Elective: Basic Art	NCCER CORE (Pre-requisite)	Construction Technology I P4	Construction Technology II STW

ELECTRICITY

N.C.C.E.R. Electricity Curriculum Level 1&2

Course Overview

This 2-Year program is geared towards skilled people in the electrical field being essential to maintain electrical systems and equipment in residential, commercial, and industrial settings. This module describes the various career paths in the electrical industry. It also covers the apprenticeship requirements for electricians and discusses employer/employee responsibilities.

Mandatory requirements

Before a student can enter any N.C.C.E.R. Program they must meet the following requirements.

Candidates must be interviewed prior to being scheduled.

Lab fee must be paid in full or a signed contract for a plan of payment.

Candidates must have passed all core certified module exams and performance profile exams.

Personal Protective Equipment

Level 1 student lab attire: steel toe shoes, short sleeve cover-all.

Program students will be expected to wear the personal protective equipment (PPE) as required by the instructor. In some cases, PPE can be purchased. If students do not own PPE that is required while in the lab, Instructor and student can come to a rental agreement in which case a deposit will be necessary before student can participate in lab activities.

Timeline

The Electrical Program is a two-year program which offers students a national certification for levels 1 and 2. Both levels have a full school year duration. Which means students would typically start training while in the 11th grade.

Lab Fee break down 1st Year Electrical
Lab locker usage $10.00
Skills USA member fee $25.00
Electrical Tool Set $100.00
Electrical Tool tester $50.00
Gloves $ 2.00
Googles $ 15.00
Core dress Shirts $40.00
Total Lab fee $242.00

Lab Fee break down 2nd Year Electrical
Lab locker usage $10.00
Skills USA member fee $25.00
Core dress Shirts $40.00
Total Lab fee $115.00

Course Materials

This exceptionally produced trainee guide features a highly illustrated design, technical hints and tips from industry experts, review questions and a whole lot more! Key content includes: Orientation to the Electrical Trade, Electrical Safety, Introduction to Electrical Circuits, Electrical Theory, Introduction to the National Electrical Code, Device Boxes, Hand Bending, Raceways and Fittings, Conductors and Cables, Basic Electrical Construction Drawings, Residential Electrical Services, and Electrical Test Equipment.

Testing schedule
Module exams are administered after the completion of every module. Students can only be certified if all module exams are passed with a 70% or above! The performance exam is pass or fail; students must earn a pass rating before being able to certify at the end of each module.

4.8.0 Module Tests
A module test is an evaluation of a trainee's knowledge of the competencies covered in an NCCER curriculum module. Passing score on all module tests is a 70%. All module tests are the intellectual property of NCCER. Any use of any portion of the module tests without the written consent of NCCER is expressly prohibited. Violation of this provision may subject an individual or organization to penalties, including but not limited to revocation of accreditation, credentials and/or certifications, as well as legal liability for copyright infringement and/or all other applicable legal claims.

4.8.3 Retest Policy
NCCER has set a mandatory two-day retest period between each attempt on a module test. Pipeline modules have a mandatory one-day retest period between attempts. Additional retesting guidelines may be required by the ATS or another governing body such as a state department of education.

4.9.0 Performance Profiles
A performance profile is a hands-on examination that verifies the trainee's ability to perform the skills covered in an NCCER curriculum module. All performance profiles are the intellectual property of NCCER. Any use of any portion of the performance profile without the written consent of NCCER is expressly prohibited. Violation of this provision may subject an individual or organization to penalties, including but not limited to revocation of accreditation, credentials and/or certifications, as well as legal liability for copyright infringement and/or all other applicable legal claims.

4.1.0 Registration & Release Form

All trainees must complete a Registration & Release Form. If trainee is under the age of 18 a hard copy of the Registration & Release Form is required with legal guardian's signature. Completed Registration & Release Forms must be kept on file for a minimum of three years or until the ATS's audit is cleared (whichever is longer). If an individual chooses to activate their profile in the Registry System, the activation process requires completion an electronic Registration & Release Form. Completing the electronic form or scanning the paper form to an electronic storage location accessible during an audit relieves the ATS's requirement to maintain a hard copy of the form.

4.2.0 Special Needs/Accommodations

NCCER certified personnel, working with the Sponsor Representative, should ensure that appropriate requests for trainee special needs/accommodations are met. Any questions regarding whether a proposed trainee accommodation is permissible under these Guidelines should be referred to NCCER before any accommodation is granted. Registering of individuals, training, program administration, testing, credentialing, and release/reporting of information must be conducted without regard to race, color, religion, national origin, gender, age, veteran status, physical or mental disability, sexual orientation, or any other reason prohibited by local, state, federal or other applicable national regulations. To ensure NCCER standards and the integrity of credentials is maintained, changes to any NCCER module exam, including changing the number of possible answer choices, is prohibited. Any individual who completes a module exam that has been altered will not be eligible to earn an NCCER credential. Neither the lack of general reading ability, nor the lack of the ability to read English qualifies a participant for ADA accommodations. Interpretation or translation of a module exam into another language is NOT permitted. Any organization that is found to have interpreted or translated a module exam may face discipline or revocation of its accreditation. Any individual that is found to have interpreted or translated a module exam may face discipline or revocation of their NCCER credentials and/or certifications. All forms of interpretation and translation, including but not limited to in-person and electronic methods, are prohibited.

4.9.2 Retest Policy

Upon a failed attempt, the certified Instructor or Performance Evaluator determines when the trainee can retest.

4.9.3 Submissions

Performance profiles are submitted electronically in the NCCER Testing System. Performance profiles will not be accepted more than 2 years after the completion date. Completed performance profile sheets must be kept on file per the Recordkeeping section of these guidelines.

PATHWAYS

SEMESTER 1	English 9	English 10	English 11	English 12
	Algebra	Geometry	Advanced Algebra or Trigonometry	Statistics
	Physical Science	Biology	Chemistry or Physics	Electricity II P1
	VI/Caribbean History	NCCER (Pre-requisite)	Electricity I P1	Electricity II P2
SEMESTER 2	Physical Education	Communications or Digital Literacy	Health	Elective
	Foreign Language I	Foreign Language II	Elective	Speech
	Reading	World History or US History	World History or US History	Electricity II P1
	Career Cluster: Basic Art	NCCER CORE (Pre-requisite)	Electricity I P2	Electricity II STW

N.C.C.E.R. Millwright Curriculum Level 1&2

Course Overview
This 2-Year program begins with its humble beginnings in the construction of wood mills, the Millwright trade has expanded to include work in metal and machinery of ever-increasing technology and precision. Millwrights install, align, and troubleshoot machinery in factories, power plants (particularly the precision machinery required in nuclear power plants), and other industrial sites. They install conveyor systems, connect machinery to power supplies and piping, direct hoisting and setting of machines, and adjust the moving and stationary parts of machines to certain specifications. Millwrights must be extremely skilled at mathematics and interpreting blueprints and specifications to set machines at perfect measurements, sometimes working with clearances no bigger than thousandths of an inch.

Mandatory requirements
Before a student can enter any N.C.C.E.R. Program they must meet the following requirements.

Candidates must be interviewed prior to being scheduled.
Lab fee must be paid in full or a signed contract for a plan of payment.
Candidates must have passed all core certified module exams and performance profile exams.

Personal Protective Equipment
Level 1 student lab attire: steel toe shoes, short sleeve cover-all. Program students will be expected to wear the personal protective equipment (PPE) as required by the instructor. In some cases, PPE can be purchased. If students do not own PPE that is required while in the lab, Instructor and student can come to a rental agreement in which case a deposit will be necessary before student can participate in lab activities.

Timeline
The Millwright Program is a two-year program which offers students a national certification for levels 1 and 2. Both levels have a full school year duration. Which means students would typically start training while in the 11th grade.

Lab Fee break down 1st Year Millwright
Lab locker usage $10.00
Skills USA member fee $25.00
Standard and Metric Digital Micrometer with 0 in. to 1 in. Range $40.00
Core dress Shirts $40.00
Total Lab fee $105.00

Lab Fee break down 2nd Year Millwright
Lab locker usage $10.00
Skills USA member fee $25.00
Core dress Shirts $40.00
Total Lab fee $115.00

Course Materials
This exceptionally produced trainee guide features a highly illustrated design, technical hints and tips from industry experts, review questions and a whole lot more! Key content includes Orientation to the Trade, Millwright Hand Tools, Fasteners and Anchors, Basic Layout, Gaskets and O-Rings and Oxyfuel Cutting

4.8.0 Module Tests

A module test is an evaluation of a trainee's knowledge of the competencies covered in an NCCER curriculum module. Passing score on all module tests is a 70%. All module tests are the intellectual property of NCCER. Any use of any portion of the module tests without the written consent of NCCER is expressly prohibited. Violation of this provision may subject an individual or organization to penalties, including but not limited to revocation of accreditation, credentials and/or certifications, as well as legal liability for copyright infringement and/or all other applicable legal claims.

4.8.3 Retest Policy

NCCER has set a mandatory two-day retest period between each attempt on a module test. Pipeline modules have a mandatory one-day retest period between attempts. Additional retesting guidelines may be required by the ATS or another governing body such as a state department of education.

4.9.0 Performance Profiles

A performance profile is a hands-on examination that verifies the trainee's ability to perform the skills covered in an NCCER curriculum module. All performance profiles are the intellectual property of NCCER. Any use of any portion of the performance profile without the written consent of NCCER is expressly prohibited. Violation of this provision may subject an individual or organization to penalties, including but not limited to revocation of accreditation, credentials and/or certifications, as well as legal liability for copyright infringement and/or all other applicable legal claims.

4.1.0 Registration & Release Form

All trainees must complete a Registration & Release Form. If trainee is under the age of 18 a hard copy of the Registration & Release Form is required with legal guardian's signature. Completed Registration & Release Forms must be kept on file for a minimum of three years or until the ATS's audit is cleared (whichever is longer). If an individual chooses to activate their profile in the Registry System, the activation process requires completion an electronic Registration & Release Form. Completing the electronic form or scanning the paper form to an electronic storage location accessible during an audit relieves the ATS's requirement to maintain a hard copy of the form.

4.2.0 Special Needs/Accommodations

NCCER certified personnel, working with the Sponsor Representative, should ensure that appropriate requests for trainee special needs/accommodations are met. Any questions regarding whether a proposed trainee accommodation is permissible under these Guidelines should be referred to NCCER before any accommodation is granted. Registering of individuals, training, program administration, testing, credentialing, and release/reporting of information must be conducted without regard to race, color, religion, national origin, gender, age, veteran status, physical or mental disability, sexual orientation, or any other reason prohibited by local, state, federal or other applicable national regulations. To ensure NCCER standards and the integrity of credentials is maintained, changes to any NCCER module exam, including changing the number of possible answer choices, is prohibited. Any individual who completes a module exam that has been altered will not be eligible to earn an NCCER credential. Neither the lack of general reading ability, nor the lack of the ability to read English qualifies a participant for ADA accommodations. Interpretation or translation of a module exam into another language is NOT permitted. Any organization that is found to have interpreted or translated a module exam may face discipline or revocation of its accreditation. Any individual that is found to have interpreted or translated a module exam may face discipline or revocation of their NCCER credentials and/or certifications. All forms of interpretation and translation, including but not limited to in-person and electronic methods, are prohibited.

4.9.2 Retest Policy

Upon a failed attempt, the certified Instructor or Performance Evaluator determines when the trainee can retest.

4.9.3 Submissions

Performance profiles are submitted electronically in the NCCER Testing System. Performance profiles will not be accepted more than 2 years after the completion date. Completed performance profile sheets must be kept on file per the Recordkeeping section of these guidelines.

SEMESTER 1	English 9	English 10	English 11	English 12
	Algebra	Geometry	Advanced Algebra or Trigonometry	Statistics
	Physical Science	Biology	Chemistry or Physics	Millwright II P1
	VI/Caribbean History	NCCER (Pre-requisite)	Millwright I	Millwright II P2
SEMESTER 2	Physical Education	Communications or Digital Literacy	Health	Elective
	Foreign Language I	Foreign Language II	Electives	Speech
	Reading	World History or US History	P1World History or US History	Millwright II P3
	Career Cluster: Basic Art	NCCER CORE (Pre-requisite)	Millwright I P2	Millwright II STW

WELDING

N.C.C.E.R. Welding Technology Curriculum Level 1

Course Overview

This 2-Year exceptionally produced trainee guide features a highly illustrated design, technical hints and tips from industry experts, review questions and a whole lot more! Key content includes Welding Safety, Oxyfuel Cutting, Plasma Arc Cutting, Air Carbon Arc Cutting and Gouging, Base Metal Preparation, Weld Quality, SMAW – Equipment and Safety, Shielded Metal Arc Electrodes, SMAW – Beads and Fillet Welds, Joint Fit-Up and Alignment, SMAW – Groove Welds and Backing, and SMAW – Open V-Groove Welds. Completing this curriculum gives the trainee the basic skills needed to continue education in any craft area he or she chooses.

Mandatory requirements

Before a student can enter any N.C.C.E.R. Program they must meet the following requirements.
Candidates must be interviewed prior to being scheduled.
Lab fee must be paid in full or a signed contract for a plan of payment.
Candidates must have passed all core certified module exams.

Timeline

The Welding Technology Program is a Two-year program which offers students a national certification for levels 1 and 2. Which means students would typically start training while in the 10th grade.

Personal Protective Equipment

Level 1 student lab attire: steel toe shoes, short sleeve welding jacket and Black jeans.
Program students will be expected to wear the PPE as required by the instructor.
In some cases, personal protective equipment can be purchased. If students do not own PPE that is required while in the lab, Instructor and student can come to a rental agreement in which case a deposit will be necessary before student can participate in lab activities.

Lab Fee break down 1st Year Welding

Lab locker usage $10.00

Lab Fee break down 2nd Year Welding

Lab locker usage $10.00

Skills USA member fee $25.00
Measuring tape $30.00
Safety glasses $10.00
Welding Jacket $80.00
Welding Mask $100.00
Core dress Shirts $40.00
Total Lab fee $295.00

Skills USA member fee $25.00
Core dress Shirts $40.00
Total Lab fee $75.00

Course Materials

This exceptionally produced trainee guide features a highly illustrated design, technical hints and tips from industry experts, review questions and a whole lot more! Key content includes: Basic Safety, Introduction to Construction Math, Introduction to Hand Tools, Introduction to Power Tools, Construction Drawings, Basic Rigging, Basic Communication Skills, and Basic Employability Skills. A new module titled Introduction to Materials Handling has also been added!

PATHWAYS

<table>
<tr><td rowspan="4">SEMESTER 1</td><td>English 9</td><td>English 10</td><td>English 11</td><td>English 12</td></tr>
<tr><td>Algebra</td><td>Geometry</td><td>Advanced Algebra or Trigonometry</td><td>Statistics</td></tr>
<tr><td>Physical Science</td><td>Biology</td><td>Welding I P1</td><td>Welding II P1</td></tr>
<tr><td>VI/Caribbean History</td><td>NCCER (Pre-requisite)</td><td>Welding I P2</td><td>Welding II P2</td></tr>
<tr><td rowspan="4">SEMESTER 2</td><td>Physical Education</td><td>Communications or Digital Literacy</td><td>Chemistry or Physics</td><td>Health</td></tr>
<tr><td>Foreign Language I</td><td>Foreign Language II</td><td>World History or US History</td><td>Speech</td></tr>
<tr><td>Reading</td><td>World History or US History</td><td>Welding I P3</td><td>Welding II P1</td></tr>
<tr><td>Elective: Basic Art</td><td>NCCER CORE (Pre-requisite)</td><td>Welding I P4</td><td>Welding II STW</td></tr>
</table>

N.C.C.E.R. Carpentry Curriculum Level 1&2

Course Overview

This curriculum will ground the trainee in the basic knowledge and principles of carpentry, masonry, concrete finishing, electrical work, HVAC, and plumbing. He or she will become skilled in different phases of a project from start to finish. Once completing this course, the trainee will be able to interpret construction drawings; perform quality concrete and brickwork; frame walls, ceilings, and floors of a structure; and install the proper wiring and piping for electrical, and plumbing systems.

Mandatory requirements

Before a student can enter any N.C.C.E.R. Program they must meet the following requirements.
Candidates must be interviewed prior to being scheduled.
Lab fee must be paid in full or a signed contract for a plan of payment.
Candidates must have passed all core certified module exams.

Personal Protective Equipment

Level 1 student lab attire: steel toe shoes, short sleeve cover-all.
Program students will be expected to wear the PPE as required by the instructor.

In some cases, personal protective equipment can be purchased. If students do not own PPE that is required while in the lab, Instructor and student can come to a rental agreement in which case a deposit will be necessary before student can participate in lab activities.

Timeline

The Carpentry Program is a two-year program which offers students a national certification for levels 1 and 2. Both levels have a full school year duration. Which means students would typically start training while in the 11th grade.

Lab Fee break down 1st Year Carpentry

Lab locker usage $10.00
Skills USA member fee $25.00
Hammer $32.00
Measuring tape $33.00
Torpedo Level $20.00
Core dress Shirts $40.00
Rafter Square $20.00
Total Lab fee $180.00

Lab Fee break down 2nd Year Carpentry

Lab locker usage $10.00
Skills USA member fee $25.00
Core dress Shirts $40.00
Total Lab fee $75.00

Course Materials

This exceptionally produced trainee guide features a highly illustrated design, technical hints and tips from industry experts, review questions and a whole lot more! Key content includes: Site Layout One-Distance Measurement and Leveling, Introduction to Concrete, Reinforcing Materials, and Forms, Handling and Placing Concrete, Introduction to Masonry, Masonry Units and Installation Techniques, Floor Systems, Wall and Ceiling Framing, Roof Framing, Roofing Applications, Exterior Finishing, Basic Stair Layout, Electrical Safety, Residential Electrical Services, Introduction to HVAC, Introduction to Drain, Waste and Vent Systems, Plastic Pipe and Fittings, and Copper Pipe and Fittings.

Course Schedule for Level 1 Carpentry

Hours	Module	Lab Time
2.5 hours	Orientation to the Trade	0 hrs.
7.5 hours	Building Materials, Fasteners, and Adhesives	7.5 + hrs.
10 hours	Hand and Power Tools	10 + hrs.
20 hours	Reading Plans and Elevations	20 + hrs.
25 hours	Floor Systems	25 + hrs.
20 hours	Wall and Ceiling Framing	20 + hrs.
37.5 hours	Roof Framing	37.5 + hrs.
10 hours	Introduction to Concrete, Reinforcing Materials, and Forms	10 + hrs.
12.5	Windows and Exterior Doors	12.5 + hrs.
12.5	Basic Stair Layout	12.5 + hrs.

Testing schedule

Module exams are administered after the completion of every module. Students can only be certified if all module exams are passed with a 70% or above! The performance exam is pass or fail; students must earn a pass rating before being able to certify at the end of each module.

Course Schedule for Level 2nd Carpentry

Hours	Module	Lab Time
25 hours	Commercial Drawings	25 + hrs.
25 hours	Roofing Applications	25 + hrs.
7.5 hours	Thermal and Moisture Protection	7.5 + hrs.
35 hours	Exterior Finishing	35 + hrs.
15 hours	Cold-Formed Steel Framing	15 + hrs.
12.5 hours	Drywall Installation	12.5 + hrs.
15 hours	Drywall Finishing	15 + hrs.
20 hours	Doors and Door Hardware	20 + hrs.
15 hours	Suspended Ceilings	15 + hrs.
25 hours	Window, Door, Floor, and Ceiling Trim	25 + hrs.
10 hours	Cabinet Installation	10 + hrs.
10 hours	Cabinet Fabrication	10 + hrs.

4.8.0 Module Tests

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4.8.3 Retest Policy

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4.9.2 Retest Policy

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4.9.3 Submissions

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Program Descriptions and Pathways

HOSPITALITY & TEXTILE AND HEALTH & RELATED SERVICES

FOOD MANAGEMENT PRODUCTION & SERVICES

The CTE Culinary Arts program is a two-year adventure that provides fundamental skills needed for employment in the food service industry at entry level. Instructional components include but not limited to safety and sanitation, use of small equipment and kitchen tools, recipe interpretation, nutrition, basic food identification and preparation. Students apply skills through catering and onsite lunches.

Immersed in the culinary world, students master the use of food preparation equipment and tools, menu planning principles, effective communication, math calculations, safety and sanitation, workflow between dining room and kitchen operations, and more.

Student Fees:
- $10 per year for Skills USA (this fee may be higher when not in Covid19)
- $50 per semester Lab fees ($100 per year due to Covid19 scheduling)
- $60 per Uniform required in Lab (Chef Coat, Pants, and Hat)
- $20-$60 Non-slip Closed-toe Shoes (Recommended) must have closed-toe shoe on in lab.
- $100 Professional Knife Set (Recommended)

PATHWAYS

<table>
<tr><td rowspan="4">SEMESTER 1</td><td>English 9</td><td>English 10</td><td>English 11</td><td>English 12</td></tr>
<tr><td>Algebra</td><td>Geometry</td><td>Advanced Algebra</td><td>Statistics</td></tr>
<tr><td>Physical Science</td><td>Biology</td><td>Chemistry or Physics</td><td>Food Management II P1</td></tr>
<tr><td>VI/Caribbean History</td><td>World History or US History</td><td>Food Management I P1</td><td>Food Management II P2</td></tr>
<tr><td rowspan="4">SEMESTER 2</td><td>Physical Education</td><td>Health</td><td>Elective</td><td>Speech</td></tr>
<tr><td>Communications or Digital Literacy</td><td>Foreign Language I</td><td>Foreign Language II</td><td>Elective</td></tr>
<tr><td>Reading</td><td>Elective</td><td>World History or US History</td><td>Food Management II P1</td></tr>
<tr><td>Elective: Basic Art</td><td>Elective</td><td>Food Management I P2</td><td>Food Management II STW</td></tr>
</table>

CHILDCARE MANAGEMENT & SERVICES

Child Care Management Services is a two-years, program of study that includes parenting, child development

and child care management. The program is designed to prepare students to enter a number of fields related to the early guidance and social, emotional, physical and intellectual development of child.

The program is an excellent precursor for students who wish to continue post-secondary education in: Child Care Management, Elementary Education, Physical, Recreational and Occupational Therapy, Social Work, Child Psychology, Pediatric Medicine, Nursing and Gerontology.

The program prepares students to take the National Child Development Associate Certification Exam (CDA).

Student Fees:
- The Child Care Program annual fees when in person is $100.00, additional fees are as follows:
- SkillsUSA - annual membership fee 1st year students $25.00

Students in the 2nd year of the program the following is required for Certification:
- SkillsUSA - annual membership fee 2nd year students $25.00
- Pediatric CPR and First Aid certification is value for 2 years $130.00
- Fire Extinguisher Training Certification fee $10.00
- Scrubs top with the program logo and student's name printing cost $15.00
- Food Handler's Card $60.00

All fees have a due date throughout the school year.

PATHWAYS

	English 9	English 10	English 11	English 12
SEMESTER 1	Algebra	Geometry	Advanced Algebra	Statistics
	Physical Science	Biology	Chemistry or Physics	Childcare Management II P1
	VI/Caribbean History	World History or US History	Childcare Management I P1	Childcare Management II P2
SEMESTER 2	Physical Education	Elective	Health	Speech
	Foreign Language I	Foreign Language II	Elective	Elective
	Reading	Communications or Digital Literacy	World History or US History	Childcare Management II P1
	Elective: Basic Art	Elective	Childcare Management I P2	Childcare Management II STW

CLOTHING MANAGEMENT CONSTRUCTION & SERVICES

The CTEC Sewing Program is a two-year course where students become certified after mastering a series of skills. During the semester of the first year, students begin the course learning the theory portion of the course, by the second semester, we quickly get into sewing samples of seams and seam finishes, applying zippers, buttonholes, darts, etc., all done on muslin fabric. This method of teaching has always proven to be successful with students that have an interest in the course, and those students that remain focused.

After the mastery of skills, we move onto creating garments that are intended to be worn. By the time students get to the second year of the course, they are expected to have sewn items such as short pants, skirts, spaghetti strap dresses, lined clothing, skirts, jackets, baby clothing, sewing for toddlers and older children, men and women, hats, bags, and swimwear, clothing alterations, etc. During the course of the second year, students are to complete a school-to-work program within the community for at least two months. Time spent in any CTEC Program is computed as such, much like going to work in the real world. By the end of the course, a total of 810 hours of instruction is possible depending on students' attendance: 270 hours within year one, in which students meet for one class period, and 540 hours within year two, where students meet for two consecutive periods.

PATHWAYS

SEMESTER 1	English 9	English 10	English 11	English 12
	Algebra	Elective	Advanced Algebra	Statistics
	Physical Science	Biology	Chemistry or Physics	Custom Sewing II P1
	VI/Caribbean History	World History or US History	Clothing Management I P1	Custom Sewing II P2
SEMESTER 2	Physical Education	Elective	Health	Speech
	Communications or Digital Literacy	Foreign Language I	Foreign Language II	Elective
	Reading	Geometry	World History or US History	Custom Sewing II P1
	Elective: Basic Art	Elective	Clothing Management I P2	Custom Sewing II STW

COSMETOLOGY

The cosmetology curriculum is a two-year program that is an industry-based curriculum that prepares students to pass the local and national State Board Licensure Examination. The student's talents, interests, and abilities are the major concern in designing and implementing a competency-based course of study. Community resources, technological advancements, and simulation of the workplace will be utilized to prepare students for careers in cosmetology and related fields.

The curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The Cosmetologist offers a wide range of beauty services, such as shampooing, cutting, coloring, and styling of hair. They may advise clients on how to care for their hair at home. In addition, cosmetologists are trained to give manicures, pedicures, and scalp and facial treatments; provide makeup analysis; and clean and style wigs and hairpieces.

The program is a 1,500 clock hour certificate program which includes instruction in hair design, chemical processes, skin care, nail care, multi-cultural practices, business principles/computer principles, product knowledge, soft skills, and other selected topic.

COURSES INCLUDES THE FOLLOWING:
Biology I
Chemistry I
Speech/Communication
Accounting I
Business Elective
Cosmetology I
Cosmetology II

STUDENT FEES:
Cosmetology kit - $225.00.
The kit includes the tools and implements for the haircare section of the class.
Skills USA - $25.00 Annually

In addition, the students are required to buy their uniforms, nail supplies, and make-up supplies. Students are allowed to get the nails and make-up supplies on their own; some of the students already have some of the items needed. However, if students need assistance in finding the supplies, the Instructor will assist them.

PATHWAYS

SEMESTER 1	English 9	English 10	English 11	English 12
	Algebra	Geometry	Cosmetology I P1	Cosmetology II P1
	Physical Science	Biology I	Chemistry	Cosmetology II P2
	VI/Caribbean History	World History or US History	World History or US History	Elective
SEMESTER 2	Physical Education	Foreign Language I	Foreign Language II	Statistics
	Communications or Digital Literacy	Elective: Principles of Accounting	Business Elective	Speech
	Reading	Health	Advanced Algebra	Cosmetology II P1
	Elective: Basic	Elective	Cosmetology	Cosmetology

Student Profile – Moesha Martin
Child Care Management (CCM), Class of 2018

Moesha Martin's pursuit for a career in the Child Care industry has been an uphill and rewarding climb from first attending the St. Croix Career & Technical Education Center (CTEC) Child Care Management & Services certification program [a two-year program of study that includes parenting, child development and child care management] to her current position as a Teacher's Assistant.

Providing for young impressionable children is no easy task. They require lots of attention, often attempt to wander off and need nurturing throughout the day. It takes a very special person to meet those needs; to ensure that they are always in eye-sight and continually receiving the care and education that will establish the foundation for learning and positive interaction with other children.

"I want to make children feel safe, secure and supported, and I want to encourage them to become strong in their social and emotional well-being. My career goal is to continue my studies and one day to own my day care center."

High School Education:
June 2018 – St. Croix Educational Complex (SCEC), St. Croix, U.S. Virgin Islands
June 2017 – St. Croix Career & Technical Education Center (CTEC), USVI

Post-secondary Education:
June 2021 – Child Development Associate (CDA) Credential; CDA National Credentialing Program

Place of Employment:
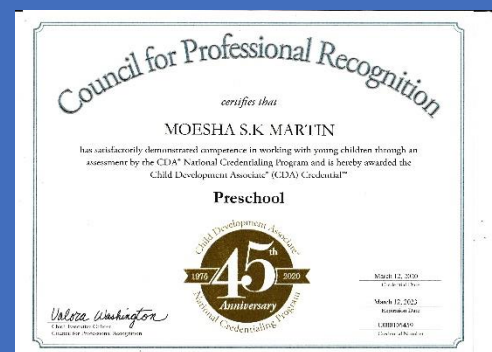St. Croix Early Head Start, Teacher's Assistant

"At the Early Head Start I provide a safe and healthy environment, assist with group time, small group activities, and outdoor time, in addition to providing breakfast, lunch and snacks."

Early Head Start

CTEC Child Care Management &
Services Certification

Child Development Associate
(CDA) Credential

"As we work towards re-accreditation as both a postsecondary and secondary career and technology institution, let us enhance (further improve the quality, value, and extent) our thoughts, attitudes, words, and actions which reveal our character and determines our destiny. Enhancing and rebranding C-TECH begins with our enhancing and rebranding ourselves."

- Vincent H. A. Gordon, Jr., Ph.D., Principal

Child Care Management & Services

Millwright Technology

Food Production, Management & Services

Computer Engineering

Welding Technology

Auto Body Technology

Cosmetology

Aviation Academy

C-TECH Course Catalog
C-TECH Program Photos, Graphics
and Layout Designs by
Cenita C. Heywood
Instructor - Audio/Visual Media

Electricity Technology

CTEC Registration

St. Croix Career and Technical Education Center Post-secondary Education Spring Semester Evening Courses for Adult Learners

Phlebotomy

Child Care Management

Cosmetology

Culinary Arts

Location: St. Croix Career and Technical Education Center

(340) 778-2216

Monday – Thursday;
Time: 5:30 p.m. - 8:30 p.m.

**Start and End Date:
Monday, March 14, 2022 to
Thursday, May 26, 2022**

The spring cohort will break for summer and resume in the fall with the same course and end in November.

**Registration Date:
February 28, 2022 – March 18, 2022**

Late registration will be from
Monday, March 14th- Friday, March 18th, 2022.

Registration Cost: $250.00

Contact the CTEC office to inquire about the cost of tuition for the individual courses.

nccer

NATIONAL CENTER FOR
CONSTRUCTION EDUCATION
AND RESEARCH

Welding Technology

Auto Body Technology

Electricity I

Information Technology

CTEC Registration Requirements

St. Croix Career and Technical Post–secondary Education Evening Courses for Adult Learners

Contact the C-TECH office for additional information: (340) 778-2216

Child Care Management

Food Management

Information Technology

Electricity I

Auto Body Technology

Phlebotomy

Requirements for Registration:

Copy of High School Diploma

Completed Application Form

Valid Picture I.D. (Driver's License, Passport, Voter's I.D.)

Welding Technology

Dual enrollment for the GED at Day Adult Education Center (located behind the Juanita Gardine K-8 School) is available in order to participate in the St. Croix Career and Technical Post-secondary Education evening courses for those adult learners without a high school diploma. Contact Day Adult Education Center at 340-713-9118.

Adult learners interested in Electricity I and Welding will have to take the NCCER course first which is the prerequisite of the Building Trades courses.

NATIONAL CENTER FOR CONSTRUCTION EDUCATION AND RESEARCH

Cosmetology has five areas of concentrations:
* Cosmetology I - (Theory and Basic Level) - 1 Year
* Cosmetology II - (Hands-on Practical Level 2) - 1 Year
* Esthetics-Skincare - 6-9 Months
* Hair Braiding - 6 Months
* Nail technology - 6 Months