# 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:

**ACCOUNTING I:** 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.

**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.

**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

| | | | | |
|---|---|---|---|---|
| **SEMESTER 1** | English 9 | English 10 | English 11 | English 12 |
| | Algebra | Geometry | Advanced Algebra | 4th Math |
| | Biology I | Biology II | 3rd Science | 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

| | | | | |
|---|---|---|---|---|
| **SEMESTER 1** | English 9 | English 10 | English 11 | English 12 |
| | Algebra | Geometry | Advanced Algebra | 4th Math |
| | Biology I | Biology II | 3rd Science | 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

| | | | | |
|---|---|---|---|---|
| **SEMESTER 1** | English 9 | English 10 | English 11 | English 12 |
| | Algebra | Geometry | Advanced Algebra | 4th Math |
| | Biology I | Biology II | 3rd Science | 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 |

# AOCAHT Academy of Culinary Arts, Hospitality and Tourism

The NAF Academy of Culinary Arts, Hospitality & Tourism (AOCAHT) helps students chart career paths in one of the world's largest industries: restaurant management, catering, hotel and event management, sports and entertainment, and includes the study of geography, economics, and world cultures. This is a 3-Year program and there are (3) three concentrations under AOCAHT: Culinary Arts, Marketing and Tourism. The Future Business Leaders of America (FBLA) and SkillsUSA organizations are a part of this Academy (FBLA Fee $25) and SkillsUSA ($45).

## COURSES INCLUDES THE FOLLOWING:

**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.

**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 Culinary Arts, 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.

## ***AOCAHT, 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.

**Student Fees**:

- The Future Business Leaders of America (FBLA is part of this Academy (FBLA Fee $25)

## PATHWAYS

| | | | | |
|---|---|---|---|---|
| **SEMESTER 1** | English 9 | English 10 | English 11 | English 12 |
| | Algebra | Geometry | Advanced Algebra | 4th Math |
| | Biology I | Biology II | 3rd Science | 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 |

## ***AOCAHT, 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.

**Student Fees**:

- The Future Business Leaders of America (FBLA is part of this Academy (FBLA Fee $25)

## PATHWAYS

| | | | | |
|---|---|---|---|---|
| **SEMESTER 1** | English 9 | English 10 | English 11 | English 12 |
| | Algebra | Geometry | Advanced Algebra | 4th Math |
| | Biology I | Biology II | 3rd Science | 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 |

## ***A0CAHT, Culinary Arts Concentration***

- For students that are creative, likes to cook and/or bake, starting their own business
- Possible Careers: chef, caterer, food & beverage manager, restaurant owner

The NAF Culinary Arts program is a 2.5-year program that provides fundamental skills needed for employment in the food service industry at entry level. Students will begin the program with a foundational course that covers all areas of the tourism industry, then they will complete the culinary component. Culinary Instructional components include but are 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 on site 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.

**Pre-requisites:**
Principles of Hospitality & Tourism is a pre-requisite for Food I and Food II.

**Student Fees**:

- $10 per year for Skills USA (this fee may differ when not in COVID and be higher) + $35 per year for SkillsUSA Career Essentials pre-test, course and post-test)
- $50 per semester Lab fees

## PATHWAYS

| | | | | |
|---|---|---|---|---|
| **SEMESTER 1** | English 9 | English 10 | English 11 | English 12 |
| | Algebra | Geometry | Advanced Algebra | 4th math |
| | Biology | Food Management II P1 | Biology II | 3rd Science |
| | Food Management I P1 | Food Management II P2 | Elective | Speech |
| **SEMESTER 2** | Physical Education | VI/Caribbean History | World History or US History | World History or US History |
| | Reading | Foreign Language I | Foreign Language II | Elective |
| | Principals of Hospitality & Tourism | Food Management II P2 | Elective: Basic Art | Elective |
| | Food Management I P2 | Food Management II STW | Communications or Digital Literacy | Health |

# ACADEMY OF HEALTH SCIENCES (AOHS)

***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
Cardiopulmonary Resuscitation (CPR) Class $25.00

**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

| | | | | |
|---|---|---|---|---|
| **SEMESTER 1** | English 9 | English 10 | English 11 | English 12 |
| | Algebra | Geometry | Advanced Algebra | 4th Math |
| | Biology I | Biology II | Chemistry I | Elective |
| | VI History /Caribbean History | Health Careers | Anatomy & Physiology I | Phlebotomy |
| **SEMESTER 2** | Physical Education | Foreign Language I | Foreign Language II | Phlebotomy |
| | Reading | Elective | Health | Speech |
| | Elective: Fine Arts | US History or World History | US History or World History | Internship |
| | Intro to Computer (NAF) | Global Health | Anatomy & Physiology II | Internship |

# COMPUTER ENGINEERING ACADEMY (CEA)

## ***Computer Engineering Academy***

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. Students will 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

**Pre-requisites:**

CompTIA is a pre-requisite for Programming I and Network Systems.
Programming I is a pre-requisite for Programming II.

## PATHWAYS

| | | | | |
|---|---|---|---|---|
| **SEMESTER 1** | English 9 | English 10 | English 11 | English 12 |
| | Algebra | Geometry | Advanced Algebra | 4th Math |
| | Biology I | Biology II | 3rd Science | CCNT-Cisco |
| | VI History /Caribbean History | Programming I | Programming II | CCNT-Cisco |
| **SEMESTER 2** | Physical Education | Health | Elective | Speech |
| | Communications or Digital Literacy | Foreign Language I | Foreign Language II | US History or World History |
| | Reading | US History or World History | Elective | Internship |
| | CompTIA Network Plus | Network Systems | Cyber Security | Internship |

# MECHANICAL TRADES

## ***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

| | | | | |
|---|---|---|---|---|
| SEMESTER 1 | English 9 | English 10 | English 11 | English 12 |
| | Algebra | Geometry | Advanced Algebra | 4th Math |
| | Biology I | Biology II | 3rd Science | Agriculture II P1 |
| | VI/Caribbean History | World History or US History | Agriculture I P | Agriculture II P1 |
| 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 P2 |
| | 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 | 4th Math |
| | Biology I | Biology II | 3rd Science | Auto Body II P1 |
| | VI/Caribbean History | World History or US History | Auto Body I P1 | Auto Body II P1 |
| **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 P2 |
| | Elective: Fine Arts | Elective | Auto Body I P2 | Auto Body II STW |

## ***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-B** **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: 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-B: 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 | 4th Math |
| | Biology I | Biology II | 3rd Science | 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 |

# BUILDING TRADES

## ***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 locker usage $10.00
Skills USA member fee $25.00

6 in. 3-Mode Digital Fractional Caliper $30.00
Core dress Shirts $40.00
**Total Lab fee $105.00**

**Lab Fee break down 2nd Year Construction Tech**
Lab locker usage $10.00
Standard and Metric Digital Micrometer with 0 in. to 1 in. Range $40.00
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: 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 | 4th Math |
| | Biology I | Biology II | Elective | Construction Technology II P1 |
| | VI/Caribbean History | NCCER (Pre-requisite) | Construction Technology I P1 | Construction Technology II P2 |
| **SEMESTER 2** | Physical Education | Communications or Digital Literacy | Elective | Health |
| | Foreign Language I | Foreign Language II | World History or US History | Speech |
| | Reading | World History or US History | 3rd Science | Construction Technology II P3 |
| | Elective: Basic Art | NCCER CORE (Pre-requisite) | Construction Technology I P2 | 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**
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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 | 4th Math |
| | Biology I | Biology II | 3rd Science | 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 P3 |
| | Career Cluster: Basic Art | NCCER CORE (Pre-requisite) | Electricity I P2 | Electricity II STW |

## ***MILLWRIGHT***

## 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
6 in. 3-Mode Digital Fractional Caliper $30.00
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
Standard and Metric Digital Micrometer with 0 in. to 1 in. Range $40.00
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**

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### 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 | 4th Math |
| | Biology I | Biology II | 3rd Science | Millwright II P1 |
| | VI/Caribbean History | NCCER (Pre-requisite) | Millwright I P1 | 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 | World 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
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**

### Lab Fee break down 2nd Year Welding

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: 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

| | | | | |
|---|---|---|---|---|
| SEMESTER 1 | English 9 | English 10 | English 11 | English 12 |
| | Algebra | Geometry | Advanced Algebra or Trigonometry | 4th Math |
| | Biology I | Biology II | Elective | Welding II P1 |
| | VI/Caribbean History | NCCER (Pre-requisite) | Welding I P1 | Welding II P2 |
| SEMESTER 2 | Physical Education | Communications or Digital Literacy | 3rd Science | Health |
| | Foreign Language I | Foreign Language II | World History or US History | Speech |
| | Reading | World History or US History | Elective | Welding II P3 |
| | Elective: Basic Art | NCCER CORE (Pre-requisite) | Welding I P2 | Welding II STW |

## ***CARPENTRY***

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

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.

## 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 Fitting.

**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**
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**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.

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**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 | 4th Math |
| | Biology I | Biology II | 3rd Science | Carpentry II P1 |
| | VI/Caribbean History | NCCER (Pre-requisite) | Carpentry I P1 | Carpentry II P2 |
| **SEMESTER 2** | Foreign Language I | World History or US History | World History or US History | Physics |
| | Physical Education | Health | Communications or Digital Literacy | Speech |
| | Reading | Foreign Language II | Elective | Carpentry II P3 |
| | Career Cluster: Basic Art | NCCER CORE (Pre-requisite) | Carpentry I P2 | Carpentry II STW |

# HOSPITALITY & TEXTILE TRADES and HEALTH & RELATED SERVICES

## *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*

| | | | | |
|---|---|---|---|---|
| SEMESTER 1 | English 9 | English 10 | English 11 | English 12 |
| | Algebra | Geometry | Advanced Algebra | 4th Math |
| | Biology I | Childcare Management II P1 | Biology II | 3rd Science |
| | Childcare Management I P1 | Childcare Management II P2 | Foreign Language I | Elective |
| SEMESTER 2 | Physical Education | Elective | Health | Speech |
| | Career Cluster: Basic Art | VI/Caribbean History | World History or US History | World History or US History |
| | Reading | Childcare Management II P3 | Communications or Digital Literacy | Foreign Language II |
| | Childcare Management I P2 | Childcare Management II P4 | Elective | Elective |

## ***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 | 4th Math |
| | Biology I | Biology II | 3rd Science | 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 |

## ***COMETOLOGY***

The cosmetology curriculum is a two-years 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 |
| | Biology I | Biology II | 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 | 4th Math |
| | Communications or Digital Literacy | Elective: Principles of Accounting | Business Elective | Speech |
| | Reading | Health | Advanced Algebra | Cosmetology II P1 |
| | Elective: Basic Art | Elective | Cosmetology I P2 | Cosmetology II STW |