

# CCTI



## CARBON CAREER & TECHNICAL INSTITUTE



## COURSE HANDBOOK

# Table of Contents

Mission Statement, Slogan, Contact Info, and Introduction . . . . .	1
Career and Job Trends . . . . .	2
Occupation Growth . . . . .	3
Frequently Asked Questions . . . . .	4
Career or College . . . . .	5
Key Practices . . . . .	5
Career & Technical Education (CTE) Facts . . . . .	6
Admissions Policy and Information . . . . .	7
Course Descriptions – Career and Technical . . . . .	10
Course Descriptions – Academics . . . . .	26
Health & Wellness and Special Programs . . . . .	31
Graduation Requirements . . . . .	32
Student Organizations . . . . .	33
Student Support Service . . . . .	35
Cooperative Education Employers . . . . .	36
Employer Comments . . . . .	37
Post-Secondary Opportunities . . . . .	39
CCTI College/Dual Enrollment Classes . . . . .	39
Industry Certification . . . . .	40

\*Student Application included



## **Mission Statement**

Carbon Career & Technical Institute provides unique opportunities for students to build a better future.

## **Slogan**

“Real training, real results, real careers!”

## **Contact Info**

150 West 13th Street • Jim Thorpe, PA 18229  
Phone 570-325-3682 • Fax 570-325-3737  
Website: [www.carboncti.org](http://www.carboncti.org)

## **Introduction**

Carbon Career & Technical Institute is a comprehensive career and technical high school, providing both academic and career education for students in grades 9, 10, 11, and 12. CCTI is also a shared high school for those districts that wish to send their students for a half-day of career and technical training and remain in their home schools to meet their academic requirements.

CCTI is comprised of students from five sending districts: Jim Thorpe Area, Lehigh Area, Palmerton Area, Panther Valley and Weatherly Area. While enrolled at CCTI, students will learn the technical and academic skills necessary to be successful in their chosen career. Our goal is to provide first-rate career and technical training, valuable academics, and hands-on experience that will offer the first steps to a rewarding career.

## Career and Job Trends

The United States has experienced massive economic restructuring over the past thirty years. One result of this has been the loss of many high wage, low skill jobs; it has appeared that the earnings of all, except college graduates, have dropped. Today young people and their parents are not really certain what the future holds; however, they do know that, on average, a four-year college graduate will earn more than someone without a degree. This well publicized information is really a half-truth and has led to labor market confusion and even some myths.

- Currently, only about 21% of all jobs in the U.S. economy actually require a four-year college degree. These jobs are primarily professional and managerial. This proportion has been consistent since the 1950's.
- Many high-skilled, high-wage jobs in the future will be in technical fields that do not require a four-year college degree. These skills can be acquired in high school or one or two-year post-secondary school programs.
- The largest and fastest growing segment of the emerging technical workforce is in occupations that do not require a four-year college degree.
- College graduates will not automatically displace workers who have obtained specialized technical skills,
- In the labor market, scarce occupational skills are rewarded with above-average wages,
- Higher education has many values in and of itself, but a college degree does not automatically guarantee a higher income.
- The U.S. Bureau of Labor Statistics forecasts that currently, one in three four-year college graduates will not find college-level employment.

### Occupations with the Most Job Growth 2016-2026

Occupations with the Most Job Growth 2016-2026		Employment		Change, 2016–26		Annual Wage
that You Can Receive Training for at CCTI		2016	2026	Number	Percent	2017
Total, all occupations	00-0000	156,063.8	167,582.3	11,518.6	7.4	\$37,690
Personal care aides	39-9021	2,016.1	2,793.8	777.6	38.6	\$23,100
Combined food preparation and serving workers, including fast food	35-3021	3,452.2	4,032.1	579.9	16.8	\$20,180
Registered nurses	29-1141	2,955.2	3,393.2	438.1	14.8	\$70,000
Home health aides	31-1011	911.5	1,342.7	431.2	47.3	\$23,210
Software developers, applications	15-1132	831.3	1,086.6	255.4	30.7	\$101,790
General and operations managers	11-1021	2,263.1	2,468.3	205.2	9.1	\$100,410
Laborers and freight, stock, and material movers, hand	53-7062	2,628.4	2,828.1	199.7	7.6	\$27,040
Medical assistants	31-9092	634.4	818.4	183.9	29.0	\$32,480
Waiters and waitresses	35-3031	2,600.5	2,783.0	182.5	7.0	\$20,820
Nursing assistants	31-1014	1,510.3	1,683.7	173.4	11.5	\$27,520
Construction laborers	47-2061	1,216.7	1,367.1	150.4	12.4	\$34,530
Cooks, restaurant	35-2014	1,231.9	1,377.2	145.3	11.8	\$25,180
Market research analysts and marketing specialists	13-1161	595.4	733.7	138.3	23.2	\$63,230
Customer service representatives	43-4051	2,784.5	2,920.8	136.3	4.9	\$32,890
Medical secretaries	43-6013	574.2	703.2	129.0	22.5	\$34,610
Management analysts	13-1111	806.4	921.6	115.2	14.3	\$82,450
Maintenance and repair workers, general	49-9071	1,432.6	1,545.1	112.5	7.9	\$37,670
Stock clerks and order fillers	43-5081	2,008.6	2,109.6	100.9	5.0	\$24,470
Receptionists and information clerks	43-4171	1,053.7	1,149.2	95.5	9.1	\$28,390
Sales representatives, services, all other	41-3099	983.0	1,077.9	94.9	9.7	\$52,510
Licensed practical and licensed vocational nurses	29-2061	724.5	813.4	88.9	12.3	\$45,030

Footnotes:

(1) Data are from the Occupational Employment Statistics program, U.S. Bureau of Labor Statistics. Wage data cover non-farm wage and salary workers and do not cover the self-employed, owners and partners in unincorporated firms, or household workers.

Source: Employment Projections program, U.S. Bureau of Labor Statistics

# Occupation Growth

*Top Fastest Growing US Occupations by 2018 you can receive training for at CCTI\*\*\*:*

- Network Systems Communication Analysts
- Home Health Aide
- Home Care Aide
- Skin Care Specialists
- Computer Applications Software Engineers
- Medical Assistants

*Occupations with the Most Job Growth (source U.S. Bureau of Labor Statistics) you can receive training for at CCTI;*

- Personal care aides
- Registered nurses
- Home health aides
- Combined food preparation and serving workers, including fast food
- Retail salespersons
- Nursing assistants
- Customer service representatives
- Cooks, restaurant
- General and operations managers
- Construction laborers
- Medical assistants
- Janitors and cleaners, except maids and housekeeping cleaners
- Software developers, applications
- Laborers and freight, stock, and material movers, hand
- First-line supervisors of office and administrative support workers
- Computer systems analysts
- Licensed practical and licensed vocational nurses
- Medical secretaries
- Receptionists and information clerks
- Office clerks, general
- Sales representatives, wholesale and manufacturing, except technical and scientific products
- Stock clerks and order fillers
- Market research analysts and marketing specialists
- First-line supervisors of food preparation and serving workers
- Electricians
- Maintenance and repair workers, general

*Fast-Growing Pennsylvania Occupations through 2022 (source [www.paworkstats.state.pa.us](http://www.paworkstats.state.pa.us)) that you can receive training for at CCTI\*:*

1. Retail Salespersons
2. Cashiers
3. Combined Food Preparation & Serving Workers
4. Registered Nurses
5. Waiters & Waitresses
6. Laborers & Freight, Stock & Materials Movers
7. Customer Service Representatives
8. Office Clerks, General
9. Home Health Aides
10. Janitors & Cleaners

*List of six-digit figure paying jobs that do not require a college degree that you can receive training for at CCTI\*:*

- Small business owner
- Construction Manager
- Plumber
- IT Manager
- Executive Chef
- List

*List of several jobs that pay an average of \$60k without a degree that you can receive training for at CCTI\*\*:*

- Oil pumper
- Retail Manager
- Millwright
- Engineers
- LPN, RN, Lab Tech
- Welder
- HVAC Contractor
- Construction Supervisor
- Plumber
- Draftsman

\* Money Crashers

\*\*Monster.com

\*\*\*Boston.com

## **Frequently Asked Questions**

### **Who may attend CCTI?**

Students in grades 9, 10, 11, and 12 who live in any of the five Carbon County districts may attend CCTI. You will get to meet other students who want to prepare for their future and make lifelong friends. Opportunities are available for a limited number of 9<sup>th</sup> grade students per each district.

### **How will CCTI help me?**

The education you receive at CCTI will open doors for you. All programs provide students with the entry-level skills to immediately gain employment. You will learn skills that are valued by employers and experience real-life work situations in your chosen career field. For students who qualify, cooperative education is available during the senior year. In addition, you will be introduced to multiple options for education after high school.

### **May I participate in activities at my district high school?**

Yes. You are encouraged to participate in athletics and all extra-curricular activities. In addition, you will have opportunities to make new friends and exercise your leadership abilities in the career and technical student organizations and other activities at CCTI.

### **Is college an option after CCTI?**

Absolutely! Many CCTI graduates continue their education at colleges, technical schools, apprenticeships, or business and medical schools. You can even earn college credit (Articulation Credit) for some of the coursework you complete at CCTI, (refer to page 39).

### **What is an articulation agreement?**

This is an agreement between CCTI and a post high school institution, which attempts to simplify the college transition. CCTI has partnered with post-secondary institutions, agreeing to provide articulation credits (college credit). While in high school, CCTI students may earn free college credits when they attend a partnered post-secondary institution (refer to page 39).

## Career or College?

Career and technical education has changed significantly in recent years. Students no longer need to choose between attending a career and technical school or preparing for college. Significantly, many of today's/tomorrow's jobs will not require a four-year college degree, but rather, a set of skills that are in demand by business and industry. The goal of a career and technical school is to provide students with the necessary training and experiences so that upon graduation students have choices, they may enter the workforce or continue into post-secondary education. Programs are organized so that students may enter into one or more of a variety of post-secondary options, including technical or business schools, medical training, apprenticeship opportunities, community college, four-year college program or the military.

## CCTI Key Practices in Education

- **High Expectations** – we set high expectations and vigorously work hard to get students to meet them.
- **Extra Help** – CCTI provides a structured system of extra help. This is an extension of our tutoring program. It enables students to review with our teachers any work they are struggling with in order to meet our higher expectation and be successful.
- **Career and Technical Studies** – increasing access to intellectually challenging career and technical studies, with a major emphasis on using high-level mathematics, science, language arts and problem-solving skills in the modern workplace and in preparation for continued learning.
- **Academic Studies** – increasing access to academic studies that teach the essential concepts from the college preparation curriculum by encouraging students to use academic content and skills to address real-world projects and problems.
- **Program of Study** – having students complete a challenging program of study with an upgraded academic core and a major.
- **Work-Based Learning** – we provide students with a system that integrates school-based and work-based learning, including exploratory experiences, job shadowing, internships, and cooperative education.
- **Teachers Working Together** – CCTI provides academic and technical teachers the time to plan and deliver integrated instruction aimed at teaching high-level academic and technical content.
- **Students Actively Engaged** – our aim is to get every student involved in rigorous and challenging learning.
- **Guidance** – CCTI involves each student and his or her parents in a guidance and advising system that ensures the completion of a program of study with an in-depth career and technical major.
- **Keeping Score** – we use student assessment and program evaluation data to continuously improve the school climate, organization, management, curricula, and instruction to advance student learning and to recognize students who are successful.

## Career & Technical Education (CTE) Facts

What is Career and Technical Education?

- Encompasses 94% of high school students and 12 million postsecondary students.
- Includes high schools, career centers, community and technical colleges, four-year universities etc.
- Educates students for a range of career options through career clusters/pathways
- Integrates with academics in a rigorous and relevant curriculum.
- Features high school and postsecondary partnerships, enabling clear pathways to certifications and degrees.
- Fulfills employer needs in high-skill, high-wage, high-demand areas.
- Prepares students to be college and career ready by providing core academic skills, employability skills and technical, job-specific skills.

CTE Works for High School Students

- High school students involved in CTE are more engaged, perform better and graduate at higher rates.
- 81% of dropouts say relevant, real-world learning opportunities would have kept them in high school.
- The average high school graduation rate for students concentrating in CTE programs is 90.18%, compared to an average national freshman graduation rate of 74.9%.
- Over 70% of secondary CTE concentrators pursued postsecondary education shortly after high school.

CTE Works for College Students and Adults

- Postsecondary CTE fosters postsecondary completion and prepares students and adults for in-demand careers.
- 4 out of 5 secondary CTE graduates who pursued postsecondary education after high school earned a credential or were still enrolled two years later.
- A person with a CTE-related associate degree/credential will earn on average between \$4,000 and \$19,000 more a year than a person with a humanities associate degree.
- 27% of people with less than an associate degree, including licenses and certificates, earn more than the average bachelor degree recipient.

CTE Works for the Economy

- Investing in CTE yields big returns for state economies
- CTE addresses the needs of high-growth industries and helps close the skills gap.
- Skilled trades are the hardest jobs to fill in the US, with recent data citing 645,000 jobs open in the trade, transportation and utilities sector and 253,000 jobs open in manufacturing.
- Health care occupations, many of which require an associate degree or less, make up 8 of the 20 fastest growing occupations.
- STEM occupations such as environmental engineering and science technicians require an associate degree and will experience faster than average job growth.
- Middle-skill jobs, jobs that require education and training beyond high school but less than a bachelor degree, are a significant part of the economy.
- Of the 46.8 million job openings created by 2018, 30 percent will require some college or a two-year associate degree

## Admissions Policy

Juniors and sophomores will be admitted only if they:

- 1.) have successfully achieved sophomore or junior standing according to the criteria of their home school and
- 2.) have successfully completed all previous high school level(s) of English, Science, Social Studies, and an Algebra course (the latter in some fashion).

Freshmen will be admitted only if they:

- 1.) have successfully achieved 9<sup>th</sup> grade status according to the criteria of their home school district and
- 2.) passed 8<sup>th</sup> grade English, Mathematics, Social Studies, and Science (English and math with a B average or better).
- 3.) Freshmen candidates who have previously completed 6<sup>th</sup>, 7<sup>th</sup>, or 8<sup>th</sup> grade Career Academy Camp and/or similar exploratory program, and meet the above criteria will be given priority.

Based on a review of attendance and disciplinary records, students and parents/guardians at any level may be asked to sign behavioral/attendance agreements to ensure their commitment to their chosen field of study.

All requests by students to transition from half-time to full-time status are subject to a review of records to determine eligibility.

## Admissions Information

Each student must complete the required Student Application form, including the required signatures. Forms are available in each home school guidance office, or students may tear out the enrollment application found in the back of this booklet. These must be completed and submitted to the home school guidance office. A completed application will include the form itself, attendance and discipline reports, report card at time of application, report card or transcript for grade(s) completed prior to current year, Keystone exam(s) score report(s), grade 8 PSSA Score report, and a fully completed application form/checklist.

Every effort will be made to honor all student requests. When a program has full enrollment, students will be offered another program. However, students will be kept on a waiting list for programs that are filled. Applications are processed when received. Processing starts in March.

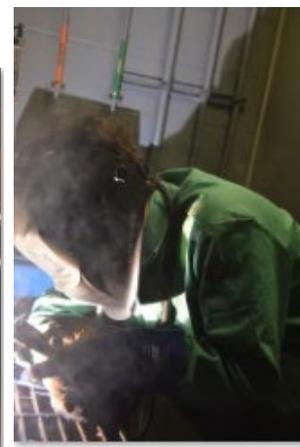
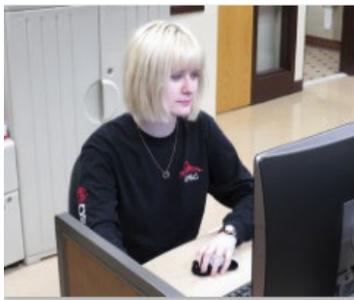
All career and technical programs may require students to purchase some type of safety equipment, tools, or uniforms. Students entering Health Medical will be required to have physicals, FBI clearances and tuberculin tests.

## **Professional Development Program**

PDP provides the tools to strengthen school-based learning, work-based learning and connecting activities. Skills lessons include self-assessments to communications skills, ethics, conflict resolution, government awareness, time management skills, career research, and more. Use of the PDP is integrated into the existing curriculum. Students are recognized for individual achievement as they develop their professional and occupational skills. Students in grades 9-12 will complete PDP, Career Essentials, and Today's Class in their technical areas for professional development.

### **PDP Student Benefits:**

- Delivers skills employers want
- Builds a portfolio
- Teaches job search skills
- Teaches workplace values
- Puts students in touch with business and industry
- Enables students to direct their own learning process



# Career and Technical Areas

## Auto Collision Repair

47.0603

### Objective of Technical Education-

- Upon successful completion of this program, students will be prepared for an entry level position in the field of auto body repairing.
- Students are offered the opportunity to acquire the technical knowledge and skills in examining, estimating, removing, repairing, replacing damaged vehicles parts and accessories.
- Use of hand & power tools, welding equipment, sanding, bonding, priming and painting processes are also included in the instruction.
- Students learn required safety practices and procedures.
- Students are provided instruction on types and uses of automobile lifts, measuring, and use of computer programs.



### PROGRAM SAFETY REQUIREMENTS

- DEMONSTRATE SELF-DISCIPLINE TO REMAIN IN WORK LOCATION FOR EXTENDED PERIODS OF TIME
- SELF-CONTROL, IMPULSE CONTROL AND SAFETY AWARENESS IS REQUIRED FOR THE SAFETY OF ALL STUDENTS, TEACHERS AND SELF TO USE BLOW TORCHES, HAND TOOLS, POWER TOOLS, WELDING & SANDING EQUIPMENT, CHEMICALS, PAINTS
- REMEMBER & APPLY SAFETY REGULATIONS (ex- wearing safety equipment, exposure to chemicals, spills, leakages, lifts)

### ACADEMIC SKILLS:

- TEXT BOOK READING LEVEL 10-12th GRADE
- TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS AND RESOURCES ARE USED
- WRITING SKILLS
- AUTO MATH: ARITHMETIC, GEOMETRY, ALGEBRA, CALCULATE & APPLY MATH SKILLS SUCH AS MEASURING LIQUID OUNCES, GEOMETRY MEASUREMENTS OF ANGLES
- UNDERSTANDING OF BASIC MATH CALCULATION SKILLS; SOME CALCULUS AND STATISTICS
- DEMONSTRATE PROBLEM SOLVING SKILLS
- AUTO SCIENCE: APPLYING PRINCIPLES, TECHNIQUES, PROCEDURES, AND EQUIPMENT TO THE DESIGN OF VARIOUS MAKES AND MODELS)
- READING COMPREHENSION SKILLS

### EMPLOYMENT OUTLOOK & PROJECTED SALARY

- MEDIAN ANNUAL WAGE- \$47, 270- \$76, 220
- MEDIAN HOURLY- \$22. 73/HOUR



### SOFT SKILLS:

- PROVIDE RESPECTFUL CUSTOMER SERVICE
- LISTEN TO OTHERS, DON'T INTERRUPT, AND ASK GOOD QUESTIONS
- DEPENDABILITY
- PAY ATTENTION TO DETAILS
- COOPERATE & COMMUNICATE WITH OTHER TRADESMEN
- ABILITY TO WORK WITH OTHERS TO SHARE IDEAS AND SOLVE PROBLEMS TOGETHER
- ABILITY TO WORK INDEPENDENTLY
- USE TIME WISELY
- CONDUCT ONESELF MATURELY
- ACCEPT and FOLLOW DIRECTIVES & CONSTRUCTIVE CRITICISM
- FOLLOW VERBAL AND WRITTEN INSTRUCTIONS AND SEQUENTIAL STEPS



### INDUSTRY CERTIFICATIONS

- OSHA Certification
- NOCTI
- CAREER SAFE

### PROGRAM UNIFORM/COSTS/MATERIALS

- STEEL TOE BOOTS/HIGH LEATHER BOOT- \$50-\$125
- SAFETY GLASSES (1 PAIR PROVIDED)
- WORK SHIRT (1 PROVIDED; ADDITIONAL SHIRTS= \$20)
- JEANS OR WORK PANTS- \$20+

## Auto Service Technician 47.0604

### Objective of Technical Education-

- Upon successful completion of this program, students will be prepared for an entry level position in the field of Auto Servicing or the field of auto mechanics.
- Students are offered the opportunity to acquire the technical knowledge and skills in servicing troubleshooting, repairing modern automobiles and light trucks.
- Use of common automotive terms and phrases commonly encountered in the automotive industry is also included in the instruction.
- Students learn required safety practices and procedures & are required to earn a passing safety exam grade prior to working in the garage.
- This program is designed as a competency based program.



### PROGRAM SAFETY REQUIREMENTS

- DEMONSTRATE SELF-DISCIPLINE TO REMAIN IN WORK LOCATION FOR EXTENDED PERIODS OF TIME
- SELF-CONTROL AND SAFETY AWARENESS IS REQUIRED FOR THE SAFETY OF ALL STUDENTS, TEACHERS AND SELF TO USE HAND TOOLS, POWER TOOLS, AUTOMOBILE LIFT EQUIPMENT, CHEMICALS
- REMEMBER & APPLY SAFETY REGULATIONS (ex- exposure to chemicals, spills, leakages)

### EMPLOYMENT OUTLOOK & PROJECTED SALARY

- PENNSYLVANIA MEDIAN ANNUAL WAGE- \$46, 490- \$62, 410

### ACADEMIC SKILLS

- TEXT BOOK READING LEVELS 10TH-12TH GRADES
- TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS AND RESOURCES ARE USED
- WRITING SKILLS
- AUTO MATH: CALCULATE & APPLY ALGEBRA MATH SKILLS & CALCULATIONS
- READING COMPREHENSION (READING AUTO MANUALS)
- DEMONSTRATE PROBLEM SOLVING SKILLS
- AUTO SCIENCE: APPLYING PRINCIPLES, TECHNIQUES, PROCEDURES, AND EQUIPMENT TO THE DESIGN OF VARIOUS MAKES AND MODELS)

### CLASSROOM ASSIGNMENTS, ASSESSMENTS & TASKS

- CLASSWORK
- TRAINING SHEETS
- HANDS ON PROJECTS (IN THE GARAGE)
- NOTEBOOK CHECKS
- DAILY TIME SHEETS
- TASK SHEETS
- ONLINE TRAINING MODULES FOLLOWED BY UNIT CHECK ASSESSMENTS
- NOCTI (END OF 12<sup>TH</sup> GRADE BENCHMARK ASSESSMENTS (PRE-NOCTI)
- TASK LIST- PROGRAM OF STUDY
- VIRTUAL DAY ASSIGNMENTS/ATTENDANCE (IF SCHOOL IS CLOSED)



### PROGRAM UNIFORM/COSTS/MATERIALS

- HIGH TOP LEATHER WORK BOOTS (STEEL TOE SUGGESTED)- \$50-\$125
- SAFETY GLASSES (1 PAIR PROVIDED)
- DARK BLUE DICKIES LONG SLEEVE WORK SHIRT – App. \$20
- DARK BLUE DICKIES WORK PANTS- App. \$25

# Carpentry

## 46.0201

### Objective of Technical Education-

- Upon successful completion of this program, students will be prepared for an entry level position in the field of Carpentry, which includes- framing, construction, measuring, estimating, blueprint reading, and finishing techniques.
- Students are offered the opportunity to acquire the technical knowledge and apply skills to lay out, fabricate, erect, install and repair structures and fixtures using hand, power tools, levels and planes.
- Students learn required safety practices and procedures in the theory classroom first, and apply in the Carpentry lab.
- Some projects involve- making and installing doors, floors, frames, furniture, cabinetry, shelves, roofs, and building modular homes for customers.



### PROGRAM SAFETY REQUIREMENTS

- FOLLOW ESTABLISHED SAFETY RULES, REGULATIONS AND PROCEDURES
- MAINTAIN SAFE AND CLEAN WORKSPACE
- INSPECTING EQUIPMENT TO IDENTIFY DEFECTS
- LADDER AND SCAFFOLD SAFETY
- OSHA CERTIFICATION PRIOR TO ENTERING THE HANDS-ON LAB

### EMPLOYMENT OUTLOOK & PROJECTED SALARY

- EMPLOYMENT OPPORTUNITIES: CABINET MAKER, CARPENTER, SCAFFOLD BUILDER, FRAMER, HANDYMAN, FORM CARPENTER

PA MEDIUM WAGES= \$23.20 hourly, \$48,260 annually

### ACADEMIC SKILLS

- TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS AND RESOURCES ARE USED
- WRITING SKILLS
- CALCULATE & APPLY MATH SKILLS RELATED TO MEASURING, SQUARE FOOTAGE, AREA, PERIMETER, DIAMETER, CIRCUMFERENCE, STANDARD AND METRIC UNITS OF MEASURE, ARITHMETIC, ALGEBRA, GEOMETRY, CALCULUS, STATISTICS AND THEIR APPLICATIONS, MULTIPLICATION, DIVISION, DECIMALS, FRACTIONS
- ENGINEERING SCIENCE AND TECHNOLOGY CONCEPTS AND PRINCIPLES
- ESTIMATE COSTS
- DEMONSTRATE PROBLEM SOLVING SKILLS
- BLUE PRINT READING AND SPECIFICATIONS
- PHYSICAL DISABILITIES SPECIFICATIONS AND REGULATIONS
- ABILITY TO FOLLOW STEP BY STEP WRITTEN INSTRUCTIONS TO ASSEMBLE OBJECTS, STRUCTURES

### CLASSROOM ASSIGNMENTS, ASSESSMENTS & TASKS

- CLASSWORK/HOMEWORK
- TEACHER MADE TESTS AND QUIZZES
- GOOGLE CLASSROOM ASSIGNMENTS
- PROJECTS
- WORK PERFORMANCE AND ETHIC GRADES
- MATH ASSIGNMENTS
- NOCTI (END OF 12<sup>TH</sup> GRADE)
- BENCHMARK ASSESSMENTS (PRE-NOCTI)
- TASK LIST- PROGRAM OF STUDY

### PROGRAM UNIFORM/COSTS/MATERIALS

- SAFETY GLASSES (1 PAIR PROVIDED)
- WORK SHIRT (1 PROVIDED; ADDITIONAL SHIRTS= \$20)
- JEANS OR WORK PANTS- \$20+



# Engineering Technology

## 15.9999

### Objective of Technical Education-

- The Engineering Technology program of study is designed to develop student interests and skills for a career in the dynamic and rapidly evolving engineering field.
- It offers hands-on, practical, and project-based engineering technology experiences to prepare students for further engineering education at a technical school, two-year or four-year college.
- Additionally, students completing the program will have developed the necessary technical, hands-on skills to pursue entry-level technician positions.
- Instruction includes but is not limited to, safety, ethics, teamwork, problem-solving and design, engineering graphics, automated systems and programming, materials, power, fundamental electronics and mechatronics, robotics, and manufacturing systems as well as adhering to the Science, Technology, Engineering, and Mathematics (STEM) initiative.



### PROGRAM SAFETY REQUIREMENTS

- FOLLOW CCTI'S ACCEPTABLE USE COMPUTER POLICY
- DEVELOP, IMPLEMENT, AND FOLLOW ENGINEERING AND ELECTRICAL SAFETY PLANS
- COMPLETE 10-HOUR OSHA TRAINING/CERTIFICATION

### ESSENTIAL ACADEMIC SKILLS

- 8TH GRADE LEVEL READING, READING COMPREHENSION, AND WRITING SKILLS
- PRE-ALGEBRA MATH SKILLS
- READ AND INTERPRET TECHNICAL MATERIAL AT GRADE LEVEL

### CLASSROOM ASSIGNMENTS, ASSESSMENTS & TASKS

- FOUNDATIONAL THEORY LESSONS
- HANDS-ON EXERCISES & PROJECTS
- CLASS, TEAM DISCUSSIONS, PARTICIPATION
- AUTHENTIC, REAL-WORLD PROJECTS
- PROFESSIONAL DEVELOPMENT PROGRAM
- NOCTI (END OF 12TH GRADE, BENCHMARK END OF 11TH GRADE)
- 15.9999 TASK LIST- PROGRAM OF STUDY



### DEVELOP SOFT SKILLS

- PROBLEM-SOLVING
- 21ST CENTURY SKILLS (COLLABORATION, COMMUNICATION, CREATIVITY, CRITICAL THINKING)
- TEAMWORK
- PROFESSIONALISM
- COMMUNICATION (VERBAL, NON-VERBAL, WRITTEN, VISUAL)
- FEEDBACK
- MOTIVATION
- CONFLICT RESOLUTION

# Cosmetology

## 12.0401

### Objective of Technical Education-

- Upon successful completion of this program, students will be prepared for an entry level position in the field of Cosmetology.
- Students are offered the opportunity to acquire the technical knowledge and skills related to a variety of beauty treatments including the care and beautification of the hair, complexion and hands.
- Instruction includes training in giving shampoos, rinses, and scalp treatments; hair styling, setting, cutting, hair coloring, tinting, and bleaching; permanent waving; facials; manicuring; and hand and arm massaging.
- Students learn required safety practices and procedures.
- Bacteriology, anatomy, hygiene, sanitation, salon management including record keeping and customer relations are also emphasized.
- Instruction is designed to qualify pupils for the licensing examination.



### PROGRAM SAFETY REQUIREMENTS

- SAFETY AWARENESS IS REQUIRED FOR THE SAFETY OF CUSTOMERS, STUDENTS, TEACHERS, SELF
- SAFETY VIDEO AND MANUAL COMPLETED PRIOR TO WORK
- STERILIZE WORK AREA, TOOLS, AND EQUIPMENT
- APPLY SAFE HANDLING & APPLICATION OF CHEMICALS, THERAPEUTIC AND COSMETIC SOLUTIONS
- EXAMINE CLIENTS' SKIN AND SCALP TO EVALUATE SKIN CONDITION AND APPEARANCE.
- BE ABLE TO RECOGNIZE & INFORM CLIENT OF SKIN AND SCALP CONDITIONS

### ACADEMIC SKILLS

- TEXTBOOK READING LEVEL – COLLEGE LEVEL
- TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS, AND RESOURCES ARE USED
- WRITING SKILLS
- BASIC KNOWLEDGE OF MEASURING & MONEY CONCEPTS
- UNDERSTANDING OF CHEMISTRY, ELECTRICITY, AND FORMULATIONS
- DEMONSTRATE PROBLEM-SOLVING SKILLS
- HUMANANATOMYY, HISTOLOGY, AND PHYSIOLOGY

### CLASSROOM ASSIGNMENTS, ASSESSMENTS & TASKS

- CLASSWORK/HOMEWORK
- TEACHER-MADE TESTS AND QUIZZES
- PERFORMANCE EVALUATIONS and RUBRICS
- TASK ASSESSMENTS AND CRITERIA
- JOURNALS/ DAILY SCHEDULES
- NOCTI (END OF 12<sup>TH</sup> GRADE)
- BENCHMARK ASSESSMENTS (PRE-NOCTI)
- TASK LIST- PROGRAM OF STUDY



### SOFT SKILLS

- ACTIVE LISTENER
- ABILITY TO BE SOCIAL WITH OTHERS
- ABILITY TO SHARE IDEAS & INFORMATION EFFECTIVELY
- CRITICAL THINKING SKILLS- OFFER SOLUTIONS/SOLVE PROBLEMS TOGETHER
- USE TIME WISELY
- CONDUCT ONESELF MATURELY
- ACCEPT DIRECTIVES & CONSTRUCTIVE CRITICISM



### PROGRAM UNIFORM/COSTS/MATERIALS

- COSMETOLOGY KIT- \$495
- BLACK PANTS (\$20+)
- WORK APRON (1 provided)
- WHITE/BLACK SHOES WITH FLAT RUBBER BOTTOMS (\$20+)

## Culinary Arts 12.0508

### Objective of Technical Education-

- Upon successful completion of this program, students will be prepared for an entry level position in the field of the food industry (serving, preparing), and to go on to secondary training school.
- Students are offered the opportunity to acquire the technical knowledge and skills in nutrition, food preparation, restaurant service industry.
- Use of and measurement concepts related to cooking/baking processes are also included in the instruction.
- Students learn required safety practices and procedures.
- Students are provided instruction on safety and sanitization precautions.



### PROGRAM SAFETY REQUIREMENTS

- REMEMBER & APPLY PUBLIC SAFETY REGULATIONS
- REMEMBER & APPLY SAFETY PROCEDURES INVOLVING HANDLING AND USING KNIVES, OVENS, GRILLS, MIXERS, AND OTHER KITCHEN EQUIPMENT
- MAINTAIN SANITARY ENVIRONMENT
- WEAR & MAINTAIN A CLEAN UNIFORM



### ACADEMIC SKILLS

- TEXT BOOK READING LEVEL 11-12TH GRADE
- TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS AND WORK SHEET RESOURCES ARE USED
- WRITING SKILLS (DAILY JOURNAL WRITING)
- CALCULATE & APPLY MATH SKILLS SUCH AS, CONVERTING STANDARD TO METRIC UNITS OF MEASURE; MULTIPLYING & ADDING FRACTIONS; ADDING & MULTIPLYING DECIMAL NUMBERS
- UNDERSTANDING OF KITCHEN TERMINOLOGY AND PHRASES
- DEMONSTRATE PROBLEM SOLVING SKILLS
- USE OF TECHNOLOGY- EXCEL, QUIZLET, ELECTRONIC RECIPES, ONLINE TEXTS, CALCULATOR
- VOCABULARY & CULINARY TERMS AND PHRASES (CULINARY LINGO)

### EMPLOYMENT OUTLOOK & PROJECTED SALARY

- MEDIAN ANNUAL \$28,780-\$38,060



### SOFT SKILLS

- LISTEN TO OTHERS WITHOUT INTERRUPTING
- COOPERATE & COMMUNICATE WITH OTHERS
- ABILITY TO WORK WITH OTHERS TO SHARE IDEAS AND SOLVE PROBLEMS TOGETHER
- USE TIME WISELY
- FLEXIBILITY (ABLE TO WORK IN ONE AREA AND SWITCH TO ANOTHER AT A MOMENTS NOTICE)
- CONDUCT ONESELF MATURELY
- ACCEPT DIRECTIVES & CONSTRUCTIVE CRITICISM
- LOOK FOR WAYS TO HELP OTHERS



### CLASSROOM ASSIGNMENTS, ASSESSMENTS & TASKS

- CLASSWORK/HOMEWORK
- TEACHER MADE TESTS & QUIZZES
- PUBLISHER TESTS
- WORK ETHIC & PRODUCTION
- PROJECTS
- REPORTS AND ESSAYS
- MENU DESIGN
- KITCHEN MATH (EX'S- READING RECIPES AND CALCULATE SERVINGS; CALCULATING COSTS FOR ORDERING FOOD ITEMS)
- DAILY JOURNALS & TIME CARDS
- NOCTI (END OF 12<sup>TH</sup> GRADE)
- TASK LIST- PROGRAM OF STUDY
- CAREER SAFE ONLINE ASSESSMENTS

# DRAFTING & DESIGN TECHNOLOGY

## CIP 15.1301

### Objective of Technical Education-

- Upon successful completion of this program, students will be prepared for an entry level technician positions or to advance their technical education. Employment opportunities include Architectural, Mechanical, Electrical or Civil Drafter, CAD Designer, CADD Technician, and CADD Operator.
- Students will be expected to apply technical skills and advanced computer software and hardware to create working drawings, graphic representations, and computer simulations for mechanical and industrial designs.
- Students are offered the opportunity to learn the essential tasks involved in the field such as, translating data or specifications including basic aspects of planning, preparing, and interpreting drawings and sketches used in various engineering fields.
- Projects may include but are not limited to, Architectural Floor Plans, Rapid Prototyping, Mechanical Part Design, Interior Design Layouts, Town Planning, and Assembly Drawings.
- Students learn required industry related safety practices and procedures.
- Students will learn how to read blueprints & structural dimensions in order to determine material requirements.

### PROGRAM SAFETY REQUIREMENTS

- FOLLOW CCTI'S ACCEPTABLE USE COMPUTER POLICY
- FOLLOW INDUSTRY REGULATIONS AND STANDARDS
- COMPLETE 10 HOUR OSHATRaining/CERTIFICATION



### ACADEMIC SKILLS

- TEXT BOOK READING LEVEL 12<sup>th</sup> GRADE
- TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS AND RESOURCES ARE USED
- HIGH SCHOOL LEVEL MATHEMATICS- ex's- CALCULATE AND MEASURE DIMENSIONS & SQUARE FOOTAGE; ADD, SUBTRACT, MULTIPLY, DIVIDE; GEOMETRY; CALCULUS OR STATISTICS; PHYSICS
- HIGH SCHOOL LEVEL SCIENCE
- HIGH SCHOOL LEVEL COMPUTER TECHNOLOGY SKILLS
- DEMONSTRATE PROBLEM SOLVING SKILLS
- DEMONSTRATE CRITICAL THINKING SKILLS
- DEMONSTRATE PROBLEM SOLVING SKILLS

### SOFT SKILLS

- SPEAKING PUBLICLY AT TIMES
- MUST BE COMFORTABLE DEALING WITH CUSTOMERS
- COOPERATE & COMMUNICATE WITH OTHERS
- ABILITY TO WORK WITH OTHERS TO SHARE IDEAS AND SOLVE PROBLEMS TOGETHER
- USE TIME WISELY/TIME MANAGEMENT
- ACCEPT DIRECTIVES & CONSTRUCTIVE CRITICISM FROM INSTRUCTOR/CUSTOMERS/EMPLOYERS
- DEPENDABILITY

### CLASSROOM ASSIGNMENTS, ASSESSMENTS & TASKS

- TEXTBOOK READING & APPLICATION
- GOOGLE CLASSROOM ASSIGNMENTS
- INDUSTRY STANDARD QUIZZES/TESTS
- CLASSWORK
- WORKSHEETS
- TEACHER MADE TESTS AND QUIZZES
- PROJECTS
- NOCTI (END OF 12<sup>th</sup> GRADE)
- BENCHMARK ASSESSMENTS (PRE-NOCTI)
- TASK LIST- PROGRAM OF STUDY

### ARTICULATION AGREEMENT

- LCCC



# Electrical Distribution and Automation (EDA) (Electrician)

**46.0399**

**Objective of Technical Education-**

- Upon successful completion of this program, students will be prepared for an entry level Electrical Technician position.
- Students are offered the opportunity to acquire the technical knowledge and skills related to installing, operating, maintain and repair electrically energized residential systems, bending conduit, pulling wires, AC/DC motors, controls, installing electrical services, and electrical distribution panels.
- Students learn required safety practices and procedures in accordance to relevant codes.
- Students will receive instruction on: preparing sketches, follow blueprints to determine the location of wiring or equipment, bending and placing conduit, pipes, or tubing inside designated walls, pull insulated wires or cables through the conduit to complete circuits between boxes, and will work from ladders, scaffolds, or roofs to install, maintain, or repair electrical wiring, equipment, or fixtures.

**PROGRAM SAFETY REQUIREMENTS**

- APPLY SAFETY PROCESSES AND PROCEDURES RELATED TO ELECTRICITY
- LADDER SAFETY
- LOCAL AND STATE POLICIES AND PROCEDURES
- MAINTAIN A CLUTTER FREE, ORGANIZED WORK AREA
- ABILITY TO PAY ATTENTION AND MAINTAIN FOCUS WITHOUT BEING DISTRACTED



**ACADEMIC SKILLS**

- TEXT BOOK READING LEVEL 11<sup>th</sup> GRADE
- TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS AND RESOURCES ARE USED
- WRITING SKILLS
- DEMONSTRATE PROBLEM SOLVING SKILLS
- BASIC READING SKILLS, COMPREHENSION SKILLS
- MATH SKILLS: CALCULATE AND APPLY ALGEBRA, CALCULUS, GEOMETRY, STATISTICS, ARITHMETIC AND THEIR APPLICATIONS
- SCIENCE
- BLUEPRINT AND ELECTRICAL CODE READING; SKETCHING SKILLS

**SOFT SKILLS**

- COOPERATE & COMMUNICATE WITH OTHERS
- ABILITY TO WORK WITH OTHERS TO SHARE IDEAS AND SOLVE PROBLEMS TOGETHER
- USE TIME WISELY
- CONDUCT ONESELF MATURELY
- ACCEPT DIRECTIVES & CONSTRUCTIVE CRITICISM

**CLASSROOM ASSIGNMENTS, ASSESSMENT & TASKS**

- CLASSWORK/HOMEWORK
- BELL RINGER ASSIGNMENTS
- TEACHER MADE TESTS AND QUIZZES
- WHOLE GROUP READING AND COMPREHENSION CHECKS (VERBAL AND WRITTEN)
- GOOGLE CLASSROOM ASSIGNMENTS
- PROJECTS
- TRAINER STATION WORK COMPLETION
- COMPLETION OF LEARNING GUIDES
- NOCTI (END OF 12<sup>th</sup> GRADE)
- BENCHMARK ASSESSMENTS (PRE-NOCTI)
- TASK LIST- PROGRAM OF STUDY
- REFERENCE NATIONAL ELECTRICAL CODE BOOK

**PROGRAM**

**UNIFORM/COSTS/MATERIALS**

- SAFETY GLASSES (1 PAIR PROVIDED)
- WORK SHIRT (1 PROVIDED; ADDITIONAL SHIRTS= \$20)
- JEANS OR WORK PANTS- \$20+



## Graphic Design 50.0402

### Objective of Technical Education-

Upon successfully completing the Graphic Design program, students will be prepared for an entry level position as a Graphic Designer.

We use digital software programs to communicate ideas and information.

Techniques include page layout, illustration, photo editing, vinyl printing, engraving, sublimation, drawing, painting, collage, and computer graphics. We also use color, type, illustration, photography, animation, and various print and layout techniques. Graphic designers develop magazine ads, newspapers ads, journals, flyers, bulletin boards, and other publications. We also produce package designs, t-shirt designs, promotional displays, marketing brochures, logos, vehicle wrap designs, and business signage.

### PROGRAM SAFETY REQUIREMENTS

- Must adhere to CCTI's Computer Acceptable Use Policy



### ACADEMIC SKILLS

- English: Students must be able to write grammatically correct.
- Writing is required in many of our projects.
- Math: Students should also be able to accurately read a ruler to the 16th inch and will be taught.
- This is not a drawing class.

### SOFT SKILLS

- **MUST BE ABLE TO ACCEPT CONSTRUCTIVE CRITICISM-**Students will receive constructive criticism of their projects from their peers and are required to give others the same in a group setting.
- **REQUIRED-**Students are required to be photographed and video recorded frequently.
- Students are also expected to verbally present their work in front of an audience.

### PROGRAM UNIFORM/COSTS/MATERIALS

- Home computer with Adobe Suite (not required)  
Uniform Requirements: Follow the school dress code policy. We take outdoor walks twice a day in all types of weather, so please wear comfortable walking shoes not high heels or backless shoes and bring a coat or warm sweater.

### CLASSROOM ASSIGNMENTS, ASSESSMENTS & TASKS

- Grades: Grades are based on following directions, including details, and creating aesthetically professional pleasing projects in a timely manner.
- Participation: All students will be called upon in the theory lesson. Participation includes speaking in front of the class and giving your opinion in a respectful professional manner.
- Student projects will be displayed in a variety of manners throughout the school. We will create YouTube videos, professional websites, and social media accounts to show off your work as well as a hard copy portfolio by your senior year.
- Live work (project requests from businesses outside our school) are typical and will be assigned to all students

### EMPLOYMENT OUTLOOK & PROJECTED SALARY

- \$53,380 per year  
\$25.66 per hour



## Health Medical Assistant/Aide (51.0899)

### Objective of Technical Education-

- Upon successful completion of this program, students will be prepared for an entry level position in the health field.
- Students are provided learning opportunities using a combination of subject matter and experiences (clinical).
- Students are under the supervision of a licensed health care professional.
- Students learn required safety practices and procedures.
- The core curriculum consists of introduction of health careers, basic anatomy and physiology, medical terminology, legal and ethical aspects of health care and communications, and at least three planned courses for the knowledge and skills for the occupational area such as medical assisting, ward clerk, nursing assisting

### EMPLOYMENT OUTLOOK & PROJECTED SALARY

- AVERAGE ANNUAL STARTING SALARY- \$27, 800-\$33,500



### PROGRAM REQUIREMENTS

- SAFETY GLASSES (1 PAIR PROVIDED)
- MEDICAL SHIRT & PANTS (1 PROVIDED; ADDITIONAL SHIRT/PANTS= \$20 EACH)
- 5 PANEL URINE DRUG SCREEN- Free with insurance
- INFLUENZA VACCINATION-Free with insurance
- FBI FINGERPRINT-BASED CRIMINAL HISTORY- \$23.85
- CRIMINAL HISTORY REPORT- \$22
- CHILD ABUSE HISTORY CLEARANCE- \$10

### APTITUDES, ABILITIES, SKILLS

- COMMUNICATE WITH OTHERS
- ABILITY TO HEAR
- ABILITY TO LISTEN & PERFORM MULTI-STEP INSTRUCTIONS
- ABILITY CONVEY INFORMATION TO OTHERS
- COOPERATE WITH OTHERS
- WELL-GROOMED
- COURTEOUS AND PLEASANT MANNERS
- RESPECTFUL
- ABILITY TO MULTI-TASK
- HAVE GOOD ORGANIZATION SKILLS
- WORK AT A FAST PACE
- LONG TERM MEMORY SKILLS
- PROVIDE TOTAL PATIENT CARE (EX- COMPLETE BED BATH TO AN ELDERLY FEMALE AND MALE)



### ACADEMIC SKILLS

- TEXT BOOK READING LEVEL 12<sup>th</sup> GRADE +
- TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS AND RESOURCES ARE USED
- READING COMPREHENSION SKILLS
- WRITING SKILLS
- VOCABULARY SKILLS
- APPLY MATH SKILLS TO CALCULATE MEDICINE DOSES & MEASUREMENTS (FRACTIONS, DECIMALS)
- DEMONSTRATE PROBLEM SOLVING SKILLS
- ABILITY TO READ AND UNDERSTAND MEASUREMENTS
- BASIC ANATOMY & PHYSIOLOGY

# HVAC 47.0201

## Objective of Technical Education-

- Upon successful completion of this program, students will be prepared for an entry level HVAC technician position AND to advance their technical education.
- Students are offered the opportunity to acquire the technical knowledge and skills involved in installing, repairing, trouble shooting, and maintaining heating, ventilation, and refrigeration systems, including oil burners, hot-air furnaces, and heating stoves.
- Students are offered the opportunity to learn pipe threading, A/C charging, boiler/piping installation, gas installation, blue print reading, AND how to use technical manuals.
- Students are instructed on how to connect heating or air conditioning equipment to fuel, water, or refrigerant source to form a complete circuit.
- Students are taught the required safety practices and procedures, AND can earn certifications.

### PROGRAM SAFETY REQUIREMENTS

- LADDER SAFETY
- IMPULSE CONTROL/SELF-CONTROL
- ABILITY TO REMAIN IN WORK AREA & WITH WORK PARTNER
- CHEMICAL SAFETY
- MAINTENANCE OF CLEAN, ORGANIZED, CLUTTER-FREE WORK AREA.
- SAFETY SHOES, HARD HATS, SAFETY GLASSES, HEAVY WORK BOOTS, SAFETY GLOVES

### PROGRAM UNIFORM/COSTS/MATERIALS

- SAFETY GLASSES (1 PAIR PROVIDED)
- WORK SHIRT (1 PROVIDED; ADDITIONAL SHIRTS= \$20)
- JEANS OR WORK PANTS- \$20+
- HIGH TOP STEEL TOE WORK BOOTS (\$50+)



### ACADEMIC SKILLS

- TEXT BOOK READING LEVEL 11<sup>th</sup> GRADE
- GOOD READING COMPREHENSION SKILLS
- TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS AND RESOURCES ARE USED
- WRITING SKILLS
- CALCULATE & ESTIMATE COSTS
- UNIT OF MEASUREMENT CONVERSIONS
- UNDERSTANDING OF ALGEBRA I CONCEPTS
- DEMONSTRATE PROBLEM SOLVING SKILLS
- READING/STUDYING BLUEPRINTS
- UNDERSTANDING OF WORD PROCESSING SOFTWARE
- PHYSICS
- CHEMISTRY

### EMPLOYMENT OUTLOOK & PROJECTED SALARY

- OPPORTUNITIES: HVAC MECHANIC, REFRIGERATION MECHANIC, PIPE FITTER, CONSTRUCTION LABORERS, SERVICE TECHNICIAN
- (40-hour work week minimum= \$48, 630 (annual average medium)
- Overtime and irregular hours should be expected.

### SOFT SKILLS

- COOPERATE & COMMUNICATE WITH OTHERS
- ABILITY TO WORK WITH OTHERS TO SHARE IDEAS AND SOLVE PROBLEMS TOGETHER
- USE TIME WISELY
- CONDUCT ONESELF MATURELY
- ACCEPT DIRECTIVES & CONSTRUCTIVE CRITICISM

### CLASSROOM ASSIGNMENTS, ASSESSMENTS & TASKS

- CLASSWORK/HOMEWORK
- TEACHER MADE TESTS/QUIZZES
- PROJECTS
- LAB TASK COMPLETION
- WORK ETHIC/PERFORMANCE
- TIME CARDS/JOURNALS
- UNIT CHECKS (VERBAL AND WRITTEN)
- CERTIFICATION MODULES COMPLETION AND ATTAINMENT
- NOCTI (END OF 12<sup>th</sup> GRADE)
- BENCHMARK ASSESSMENTS (PRE-NOCTI)
- TASK LIST- PROGRAM OF STUDY

## Digital Marketing & Business Fundamentals

**52.1801**

### Objective of Technical Education-

- Upon successful completion of this program, students will be prepared for an entry level position in the field of marketing. Students are offered the opportunity to acquire the technical knowledge and skills in social media marketing, social media influencing, sports and entertainment marketing, hotel and lodging marketing, entrepreneurship, real estate, retail marketing, and more.
- Students will learn marketing and business fundamentals, pricing & retail math, career development, technology applications, marketing communications, marketing information management & market planning, business management & administration, selling goods & services, advertising & promoting, customer service, channel management, economics, product/service management, and social media.

#### CLASSROOM ASSIGNMENTS, ASSESSMENTS & TASKS

- CLASSWORK/HOMEWORK
- TESTS
- PROJECTS
- DISCUSSIONS
- FIELD TRIPS



#### ACADEMIC SKILLS

- TEXT BOOK & EBOOK READING LEVEL 12<sup>th</sup> GRADE
- EXCELLENT WRITING SKILLS
- CALCULATE & APPLY PERCENTAGES, PROFICIENT RETAIL MATH
- CALCULATE AND MEASURE DIMENSIONS & MEASUREMENTS
- DEMONSTRATE CRITICAL THINKING SKILLS
- DEMONSTRATE PROBLEM SOLVING SKILLS
- ABILITY TO READ/WRITE PROFICIENTLY
- READ & CALCULATE FRACTIONS
- READ & CALCULATE DECIMALS
- PUBLIC SPEAKING SKILLS

#### PROGRAM UNIFORM

- PROFESSIONAL ATTIRE (EX. BUSINESS PANT, BUTTON DOWN SHIRTS, POLOS, BLOUSES, BLAZERS)



#### SOFT SKILLS

- MUST BE COMFORTABLE WITH PUBLIC SPEAKING
- MUST BE COMFORTABLE POSITIVELY DEALING WITH CUSTOMERS
- COOPERATE & COMMUNICATE WITH OTHER CLASSMATES AND CUSTOMERS
- ABILITY TO WORK WITH OTHERS TO SHARE IDEAS AND SOLVE PROBLEMS TOGETHER, LOTS OF GROUP WORK IN MARKETING!
- USE TIME WISELY/TIME MANAGEMENT
- CONDUCT ONESELF MATURELY AND PROFESSIONALLY
- ACCEPT DIRECTIVES & CONSTRUCTIVE CRITICISM FROM INSTRUCTORS

#### ARTICULATION AGREEMENTS

- LCCC

#### EMPLOYMENT OUTLOOK & PROJECTED SALARY

- ENTRY LEVEL MARKETING POSITION - STARTING AT \$40,000
- ENTRY LEVEL MARKETING POSITION - STARTING AT \$40,000
- AFTER BACHELOR DEGREE OBTAINED - STARTING AT \$50,000+ EXTREME GROWTH AFTER HISTORY OF LONGER WORK EXPERIENCE

## Precision Machine Technology (PMT)

**48.0501**

### Objective of Technical Education-

- Upon successful completion of this program, students will be prepared for an entry level position in the field of machining.
- Students are offered the opportunity to acquire the technical knowledge and skills related to shaping metal parts.
- Students learn required safety practices and procedures.
- Students will be offered instruction pertaining using machinery and tools; reading/monitoring gauges and dials; raw materials, production processes, quality control and costs; and the design, repair and maintenance of machinery and tools.
- Students will fabricate and modify parts, or make and repair machine tools.

### PROGRAM SAFETY REQUIREMENTS

- SAFETY GLASSES (1 pair provided)
- HIGH TOP WORK BOOTS
- DICKIES WORK PANTS AND SHIRT (DARK-COLOR) (\$20+ EACH)
- WORK GLOVES (1 pair provided)
- IMPULSE/SELF-CONTROL
- ABILITY TO REMAIN IN WORK SPACE
- ABLE TO USE MACHINERY SAFELY

### EMPLOYMENT OUTLOOK & SALARY

- EMPLOYMENT OPPORTUNITIES: MANUFACTURING, COMPUTER NUMERICALLY CONTROL TOOL OPERATOR, LATHE AND TURNING MACHINE TOOL SETTER, MILLING AND PLANING MACHINE SETTERS, OPERATORS, AND TENDERS METAL AND PLASTIC, MULTIPLE MACHINE TOOL SETTERS, OPERATORS AND TENDERS, TOOL AND DIE MAKERS
- MEDIAN PA WAGES= \$22.95 hourly, \$47,730 annual

### PROGRAM

#### UNIFORM/COSTS/MATERIALS

- HIGH TOP WORK BOOTS
- DICKIES (or jeans and t shirt) WORK PANTS AND SHIRT (DARK COLOR) (\$20+ EACH)
- WORK GLOVES (1 pair provided)
- SAFETY GLASSES (1 PAIR PROVIDED)

### ACADEMIC SKILLS

- TEXT BOOK READING LEVEL \_\_\_ GRADE
- TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS AND RESOURCES ARE USED
- MATH SKILLS- CALCULATING AND COMPUTING DECIMALS AND FRACTIONS (BY PENCIL/PAPER) TO IDENTIFY DIMENSIONS, TUNING AND SPEEDS OF MACHINES.
- DEMONSTRATE PROBLEM SOLVING SKILLS
- GEOMETRY
- CALCULATE COSTS
- LONG HAND DECIMAL DIVISION, ADDITION, MULTIPLICATION AND SUBTRACTION
- NOTE TAKING WRITING SKILLS
- ARITHMETIC, ALGEBRA, GEOMETRY, CALCULUS, STATISTICS, AND THEIR APPLICATIONS

### ARTICULATION AGREEMENTS

- LCCC

# WELDING

48.0508

## Objective of Technical Education-

- Upon successful completion of this program, students will be prepared for an entry level position in the field of welding. Students are offered the opportunity to acquire the technical knowledge and skills in SMAW, GMAW, FCAW, GTHW, OXY FULE CUTTING, CAC-A PLASMA CUTTING
- Use of manual, semiautomatic welding processes are also included in the instruction.
- Students learn required safety practices and procedures.
- Students are provided instruction on types and uses of electrodes and welding rods; properties of metals; blueprint reading; electrical principles; welding symbols and mechanical drawing; use of equipment for testing welds and non-destructive testing; use of manuals and specification charts; use of portable grinders; positioning and clamping; and welding standards established by the American Welding Society, American Society of Mechanical Engineers and American Bureau of Ships.

## EMPLOYMENT OUTLOOK

- WELDER- STARTING AT \$45,000.00/year with H.S. diploma
- \$22.00/hr. w/H.S. diploma

## SOFT SKILLS

- COOPERATE & COMMUNICATE WITH OTHER TRADESMEN
- ABILITY TO WORK WITH OTHERS TO SHARE IDEAS AND SOLVE PROBLEMS TOGETHER
- USE TIME WISELY/TIME MANAGEMENT
- CONDUCT ONESELF MATURELY
- ACCEPT DIRECTIVES & CONSTRUCTIVE CRITICISM FROM TEACHERS



## ACADEMIC SKILLS

- TEXT BOOK READING LEVEL 11<sup>th</sup> GRADE- TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS AND RESOURCES ARE USED
- WRITING SKILLS
- CALCULATE & APPLY ARITHMETIC, GEOMETRY, ALGEBRA, MULTIPLICATION
- CALCULATE DIMENSIONS & MEASUREMENTS
- UNDERSTANDING OF GEOMETRIC SHAPES
- DEMONSTRATE PROBLEM SOLVING SKILLS
- BLUEPRINT & DIAGRAM READING SKILLS
- READ & CALCULATE FRACTIONS
- READ & CALCULATE DECIMALS
- APPLY LINEAR MEASUREMENTS IN STANDARD UNITS

## ARTICULATION AGREEMENTS

- NCC
- PA COLLEGE OF TECHNOLOGY
- THADEUS STEVENS

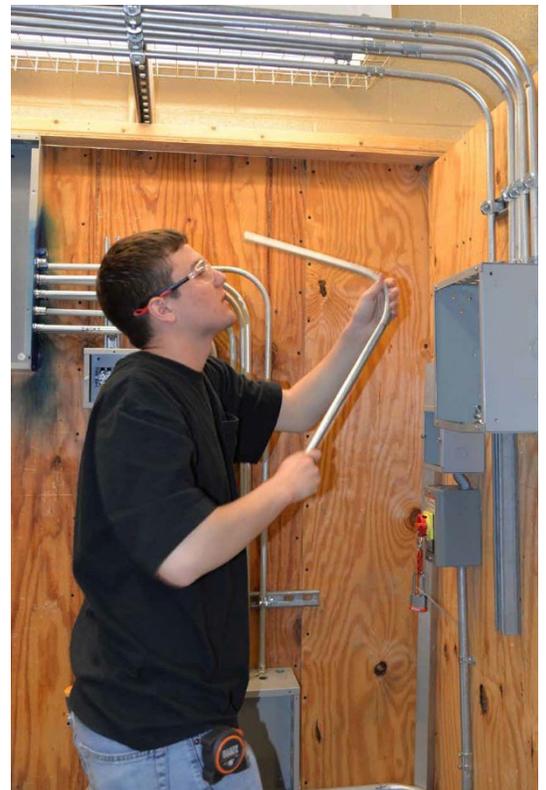
## CLASSROOM ASSIGNMENTS, ASSESSMENTS & TASKS

- CLASSWORK/HOMEWORK
- TEACHER MADE TESTS
- PROJECTS
- WELD JOURNALS/TIME CARDS
- NOCTI (END OF 12<sup>TH</sup> GRADE)
- BENCHMARK ASSESSMENTS (PRE-NOCTI)
- TASK LIST- PROGRAM OF STUDY



## PROGRAM UNIFORM/COSTS/MATERIALS

- STEEL TOE BOOTS/HIGH LEATHER BOOT- \$50-\$125
- LEATHER GLOVES (PROVIDED, UNLESS WANT TO PROVIDE OWN)
- HELMET (PROVIDED, UNLESS WANT TO PURCHASE OWN)
- SAFETY GLASSES (1 PAIR PROVIDED)
- WORK SHIRT (1 PROVIDED; ADDITIONAL SHIRTS= \$20)
- JEANS OR WORK PANTS- \$20+



# Academic Course Descriptions

## English

---

### *English 9* – 1 credit

In this course, students will enhance their reading comprehension, vocabulary and writing skills in literature, content, and technical materials. Writing using the five-paragraph essay model will be expected. Technical communication, speaking, and listening skills are developed throughout the year in a variety of activities. All lessons are carefully aligned to the PA Academic Standards in Reading, Writing, Speaking and Listening. The PDE recommended reading anchors are reflected in the lessons.

### *English 10 Literature* – 1 credit

This course is heavily aligned to the Common Core and PA Academic Standards in reading, writing, and speaking. The class covers literary terminology, vocabulary building, test taking strategies, and several literary genres. A large portion of focus for this class is Keystone Exam preparation, where students will study the tools and acquire the skills to make them successful on the exams. Students will also synthesize reading materials, utilize various types of technology, and organize a professional portfolio.

### *English 11* – 1 credit

This course focuses on developing and expanding the individual student's ability to read with critical awareness the various works of American and World literature. Genres include poetry, prose, drama, and nonfiction. Various forms of writing will be studied. The course is aligned to the Common Core and PA Academic Standards in reading, writing, and speaking. It will include a study of the language arts and communication skills necessary for the matriculation student's or entry level worker's success. Written and oral skills vital to continuing education or joining the work force are emphasized.

### *English 12* – 1 credit

The English 12 curriculum includes a comprehensive study of written and oral communication skills necessary for entry level employment and/or college/technical school matriculation. It includes a study of the following areas: literature analysis and evaluation, various writing, and oral communication. The course is heavily aligned to the PA Academic Standards.

### *Advanced English 11* – 1 credit

This course is heavily aligned to the PA Academic Standards and Anchors in both reading and Writing. It will also include those language arts and written communication skills necessary for post high school and/or entry level worker's success. Added reading and writing assignments, including a classical and modern novel selection, as well as in-depth literary analysis, evaluation, and criticism will be emphasized. In addition to the PA standards for writing informative and persuasive essays, students will also write descriptive and compare/contrast essays. Vocabulary skills will be enhanced through word etymology and study of Greek and Latin root words. Research assignments relating to topics discussed in literary works will also be utilized.

### *AP English Literature & Composition* – 1 credit

This AP English Literature course is designed to teach beginning-college writing and literature through the fundamentals literary analysis. It follows the curricular requirements described in the AP English Course Description. We will talk essentially every day about some vital aspect of writing, including invention and the rhetorical appeals, structure, and style (diction, syntax, figurative language, mechanics). We will do so through use of poetry and prose, as well as critical essays and dramas. There is also a large amount of writing involved in this course and students should expect weekly writing assignments. These assignments may vary from journals to research papers to creative writing assignments. Writings are mostly critical, and ask students to evaluate a literary piece as far as its effectiveness and use of devices. We will revise these works a good deal and work throughout the year to create a writing portfolio. In the process of these workshops, students will be exposed to conscious choice of diction and the appropriate use of words, ability to create varied and effective syntactic structures, capacity for coherence and logical organization, ability to balance generalizations with specific and illustrative details, and, overall, ability to combine rhetorical processes into an effective whole.

The course will cover genres such as poetry, drama, novels and essays. Furthermore, thematic units including all of these within a single course of study will be employed to follow a theme through several types of literature, as well as essays comparing the genres and forms. Students will qualify for this course upon teacher recommendation and a course grade of B or better.

## **Social Studies**

---

### *American Historical Studies* – 1 credit

This course provides the students at CCTI with a cast of historical personalities, major events, and various conflicts that have shaped the United States as we know it today. Instruction begins at the original population of the Americas, and continues to what is roughly considered to be the dawn of the Modern Era (WWII). Students will be exposed to different texts, small and large group instructional activities, selected primary source readings, and project based learning. Homework assignments will be given, and students will be expected to achieve a progressive level of competency in the field of History. This course is aligned to all required State and National Academic Standards.

### *Civics & Government* – 1 credit

Civics is the study of civilization, and what it means to be a citizen. Here at CCTI, this means students' learning will consist of units on how the Government works, as well as how Economics and World Affairs shape the workings thereof. The purpose of this course is for students to recognize and understand ideas about civic life, politics, and government, so that they can make informed

judgments and decisions. Specifically, we will focus on Local, State and Federal Government's roles, responsibilities, and procedures. The course includes reading and writing in the context of history and civics. On each level (Local, State and National), government studies will allow students to understand the purpose, structure and function of government, from local school district, municipal, and county affairs, to national and global concerns. Students will be expected to identify the citizen's role (rights and responsibilities) within each of those levels. Finally, the students will learn to recognize and understand what it means to function as a responsible citizen in the global society as we study world affairs. In each of these units, reading writing skills will be applied as they relate to the reading of primary sources, as well as historical and governmental documents. This course is aligned to all required State and National Academic Standards.

### *Modern World* – 1 credit

This course provides a study of the United States and world history beginning with the causes of World War I, and continuing to the present day. Students enrolled in this course will be actively engaged in the research and analysis of the historical events of the 20th Century. Formal presentations are a part of this course, as are informal, student-generated discussions. This course offers students an opportunity to develop a better understanding of the people, events, and forces which have shaped the United States as it exists today, as well as how these forces continue to shape our lives and nation. This course is aligned to all required State and National Academic Standards.

## **Mathematics**

---

### *Algebra 1* – 1 credit

This course emphasizes fundamental operations, variables, linear and quadratic equations, radicals, inequalities, polynomials, exponents, powers, and exponential growth. Students learn through reading, problem solving, use of technology and hands-on projects. This course highlights applications and integrates statistics, probability and geometry. It is aligned to the PA Academic Standards.

### *Transitional Algebra* – 1 credit (prerequisite Algebra 1)

This course is designed for those students who have difficulty with Algebra I and need reinforcement of the Algebraic concepts before taking Algebra II and/or Geometry. This course reviews basic Algebra, and will continue with topics necessary to be successful in Algebra II and/or Geometry. It is aligned to the PA Academic Standards and Common Core Standards. This course is a remediation course for the Keystone Exams.

### *Algebra 2* – 1 credit (prerequisite Algebra 1)

This course emphasizes facility with Algebraic expressions and forms, including linear and quadratic forms, powers and roots, matrices and systems, logarithmic, trigonometric, polynomial and other functions, series and combinations. All concepts are examined as tools for modeling “real world” situations. Graphing is emphasized and geometry is applied. The course is aligned to the PA Academic Standards.

### *Geometry* – 1 credit (prerequisite Algebra 1)

This course explores the properties and relationships of lines, rays, angles, triangles, circles, quadrilaterals and other polygons. Deductive and inductive reasoning, as well as algebraic techniques, will be used to solve problems. The focus of the course will be on practical applications of these principles, although geometric proofs will be introduced. The course is aligned to the PA Academic Standards.

### *Probability and Statistics* — (prerequisite Algebra 2 and Geometry)

The main focus of the course will be exploring data, planning a study, producing models using probability theory, and making statistical inferences. Students will work with statistical measures of centrality and spread, probability, methods of data collection, methods of determining probability, binomial and normal distributions, hypothesis testing, confidence intervals, and technological tools, graphs, and models to analyze statistics.

### *Pre-Calculus* – 1 credit (prerequisite Algebra 2 and Geometry)

This course emphasizes number systems, polynomial arithmetic, synthetic division, zeroes of polynomials, systems of linear equations, matrices with matrix multiplication, trigonometric functions, exponents and radicals, linear and quadratic functions, polynomials and factoring, algebraic fractions and their operations, rational functions, logarithms, and probability. This course is aligned to the PA Academic Standards.

### *Advanced Placement (AP) Calculus* – 1 credit (prerequisite Pre-Calculus)

This is a college-level course in introductory Calculus. The AP Calculus course is equivalent to one-semester of a first year course in college Calculus. Students must take the Advanced Placement Calculus AB Exam to earn the college credit. The course is designed to develop student understanding of Calculus concepts providing experience with methods and applications. The course emphasizes a multi-representational approach to Calculus with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. It is imperative that both students and parents understand that this course will be taught and graded as a college course due to the heavy emphasis on mathematical concepts and theories. Instruction will focus on the major topics of Calculus in the following areas: Limits and Continuity, Derivatives, Derivative Applications, Definite Integrals, Differential Equations and Applications of Definite Integrals.

## **Science**

---

### *Environmental Science* – 1 credit

This course emphasizes a conceptual understanding of natural systems and the three foundations of environmental education: relevance of ecology and biology to occupational areas and students' everyday lives, respect for the environment in which they live, and responsibility to make decisions that will help protect the Earth for themselves and future generations. Content covered includes basic principles of ecological and biological science, living and non-living environmental factors, habitats, and population dynamics. The course is aligned with the PA Academic Standards.

### *Biology I* – 1 credit

This course is in preparation for the Standardized Biology Keystone exam administered to all Pennsylvania high school students. It is a requirement for graduation. Students will focus on learning about the biology of organisms and cells. According to the PA Department of Education,

Biology “concerns living things, their appearance, different types of life, the scope of their similarities and differences, where they live and how they live. Living things are made of the same components as all other matter, involve the same kinds of transformation of energy and move using the same basic kinds of forces as described in chemistry and physics. Through the study of the diversity of life, students learn how life has evolved. This great variety of life forms continues to change even today as genetic instructions within cells are passed from generation to generation, yet the amazing integrity of most species remain.”

### *Anatomy & Physiology* – 1 credit (prerequisite Biology 1)

This course is designed for remediation, and is intended to provide additional instructional time to review the topics for the Biology Keystone Exam, required for graduation. Concepts will be taught to prepare for the winter retest and a spring retest if necessary. Additional topics will include an organismal approach through the human body systems in the second half of the course. Students who are successful in this course will demonstrate a thorough conceptual understanding of science content and the application of skills and processes related to biological concepts.

### *Chemistry 1* – 1 credit

An important part of the Chemistry curriculum is its relevance for both science and technical areas. Thinking skills and problem solving techniques are reinforced along with topics such as measurement, the properties of matter, atomic structure, periodicity, the mole and chemical bonding, chemical relationships and reactions, and the behavior of gases. The students are expected to solve related mathematic, geometric, algebraic, and graphical problems throughout the year. Laboratory investigations and reports will help students with chemistry applications in future endeavors. Safety instruction is integrated into all activities. The course is aligned with PA Academic Standards.

### *Chemistry 2* – 1 credit (prerequisite Chemistry 1)

In Chemistry 2, the students continue the study of concepts from Chemistry 1 in greater depth, and explore new areas such as acids and bases, equilibrium, nuclear energy, nanotechnology, organic chemistry, and biochemistry. An effort is made to help the student relate chemical knowledge to problems and issues of modern society in regards to their technical area. In class demonstrations, along with traditional and virtual labs, are used to emphasize the experimental nature of chemistry. Safety instruction is integrated into all activities. The course is aligned with PA Academic Standards. *Qualified students may be eligible to take the Lehigh Carbon Community College’s Entrance Chemistry Exam at CCTI.*

### *Physics & Technology* – 1 credit

This course is an introduction to the basic science that underscores all other sciences and technology. It focuses on forces, matter, and energy from an engineering and design perspective. After this course students will understand that there is order and regularity to how objects behave because of the laws of mechanics. The objective is to begin to see the world from a different perspective. The coursework is guided by questions like: How does that work? Why does that happen? And what happens if we change this?

### *Field Biology* – 1 credit

This upper level biology course emphasizes the interrelationships between humans and their environments. The main units of study include Forestry, Soil Science, Wildlife Science and Aquatic Biology. Additionally, the state provides a major unit for the course which changes

annually and gives students a chance to investigate a topic in greater depth. The course is defined by the Common Core and Next Generation Science Standards and content focuses on the ecosystems found in Pennsylvania, as well as local ecological concerns. Students who successfully complete this course will be able to make informed decisions as homeowners and landowners, hunters, fishermen, and voters in the state of Pennsylvania. There are five main units: Forestry, Soils and Land Use, Wildlife Science, Aquatic Ecology, Pennsylvania Concerns.

## **Health and Wellness and Special Programs**

---

### *Wellness Education/ Physical Education* – 1 credit

The program goal is to teach health and fitness concepts and principles, which will enable students to adopt favorable health behavior patterns, meet their own health needs intelligently, and utilize health resources that are available to them.

### *Imbedded Safety* – 1 credit

Each student will receive a 1/4 credit per year for safety instruction in grades 10 and 11 delivered as a part of their career and technical studies. This allows students to focus on issues of safety unique to their program of study.

### *Cooperative Education*

This program offers students the opportunity to work at a career occupation during part of their school day. It is a unique plan of education designed to integrate theoretical classroom and technical studies with supervised practical experience in selected educational assignments. This employment experience will assist students in establishing and achieving goals appropriate to their employment needs.

Area employers who participate have the opportunity to train highly motivated students. This in turn establishes a pool of potential permanent employees who have demonstrated their abilities. Ultimately, this school-to-work method of education provides the community with a more mature and experienced graduate to consider for permanent employment.

At CCTI, all qualified school students are eligible for and expected to participate in the Capstone program. Capstone students receive a cooperative education experience through a community employer in their area of study. Through cooperative education, these students “cap-off” their experiences at a school-approved station.

### *Alternative High School Diploma Program*

This program serves young adults ages 16-20 of Carbon County who have dropped out of high school or have documented family or personal situations which makes traditional high school attendance infeasible. Residents ages 21 and older must pay tuition in order to attend the program. The program design allows a chance for individuals to earn a high school diploma at their own pace, at a time convenient for them. Students may enter at any time of the year, attend classes on a flexible schedule while holding a job (minimum 15 hours per week), and graduate when they have met the requirements. Employment is required under the Diversified Occupations Program.

## **Graduation Requirements**

A student must attain a minimum of twenty-five (25) credits in order to graduate from CCTI. In addition, senior students must successfully complete a graduation project. Students failing to meet these requirements will not be eligible for graduation.

Graduation requirements will reflect Chapter 4 regulations. The requirements at the present time are:

- 6 credits of Career and Technical Education
- 4 credits of English
- 4 credits of Math
- 4 credits of Science
- 3 credits of Social Studies
- 2 credits of Arts & Humanities/CTE
- 2 credits of Wellness/Physical Education/Safety

## **Student Clubs**

CCTI recognizes the educational values inherent in student participation in student clubs and supports the concept of student clubs for such purposes as building sound social relationships, developing interests in a specific area, and gaining an understanding of the elements and responsibilities of good citizenship.

CCTI clubs include, but not limited to, Tech-Talk Podcast Club, Newspaper Club, and E-Sports Club. Students and club advisors will meet on most Thursdays from 2:10 – 3:30 PM. Students are provided transportation home.

## Student Organizations

Aavidum – Aavidum is a student organization whose goal is to create positive mental health environments where all students feel accepted, appreciated, acknowledged, and cared for in schools and communities across the nation. The word Aavidum, which means “I’ve got your back,” was created by students in 2004 after their classmate died by suicide. The Aavidum message is delivered creatively through a series of student-generated materials, interactive displays, high energy assemblies, community events, music, artwork, stories, PSAs, etc. At the core of Aavidum is an educational philosophy that empowers students to take responsibility to make a difference. Aavidum students are encouraged to use their gifts and talents and to recognize the gifts and talents of their peers to create cultures of care and advocacy in their schools and communities.

Class Officers – Upon entering CCTI, sophomores are given the opportunity to run for a class office. The students who are interested will obtain the signatures of their teachers, and their names will be placed on a ballot. Members of the sophomore class will then vote for their officers. These officers will remain in office for the next three years. Class officers are responsible for providing leadership, participation in student negotiations, representing their respective class in any issues of concern, and overseeing the financial affairs of the class.

DECA – Distributive Education Clubs of America is an international association of Marketing students open to high school, CTE, and college students who have an interest in business marketing, management, and entrepreneurship, as well as management related careers. The mission of DECA is to enhance the co-curricular education of students with interest in marketing, management, and entrepreneurship. Students who avidly participate will be eligible to apply for DECA scholarships through PA DECA and various colleges. Through leadership conferences and competitions, students will put their skills and knowledge to the test as they compete against students in our district and across PA. This organization is available to all students attending CCTI.

HOSA – Health Occupations Students of America is a national student organization that provides a unique program of leadership development, motivation and recognition exclusively for secondary, post-secondary, collegiate, and adult students enrolled in health occupations education courses or instructional programs. HOSA is an integral part of approved health occupation programs. Health Occupations Education (HOE) students who become active members in a local HOSA chapter are eligible for membership in state and national HOSA.

Interact Rotary Club – CCTI Interact Rotary Club is a student organization open to all CCTI students, who want to connect with others in their community or school. Objectives are based on Rotary International, which is a worldwide organization. The main objective of Rotary is “Service Above Self”. Interact club members have fun while carrying out service projects and learning about the world. The Interact club organizes at least two service projects a year: one that benefits their community and one that encourages international understanding. While Interact clubs receive guidance from individual Rotary clubs, they govern and support themselves.

National Technical Honor Society – The purpose of this organization shall be to promote the ideals of honesty, service, leadership, career development, and skilled workmanship among the career and technical students of America, to reward meritorious achievement in career and technical education, to encourage and assist career and technical students in their pursuit of educational and career goals, to develop awareness within the American business, industry, and service communities about the talents and abilities of students engaged in career and technical education, and to provide career and technical students with a greater awareness of the world of work.

Students Against Destructive Decisions (SADD) – This club is available to all students attending our school who believe that “friends do not allow friends to drink and drive.” Members must sign a “S.A.D.D. Contract for Life” in which they agree to not allow anyone to drive while intoxicated. Parents of the participating students’ co-sign the contract and agree that they will escort said drivers home without questions. Various activities are planned to help the students to become extremely aware of the dangers of substance abuse and its effects, not only on driving, but also in their everyday lives. The support gained as a charter member will help these students to share this vital information with their family and friends.

Skills USA – Skills USA is a national organization serving high school and college students and instructors who are enrolled in training programs in technical, skilled, and service occupations, including health occupations. It provides quality education experiences for students in leadership, teamwork, citizenship, and character development. It builds and reinforces self-confidence, work attitude, and communication skills. It emphasizes total quality at work: high ethical standards, superior work skills, life-long education, and pride in the dignity of work. It also promotes understanding of the free enterprise system and involvement in community service. By becoming a member of this organization, a student has the opportunity to represent his/her technical area in district competition against other career and technical schools in the region. A student also has the opportunity to represent the school in state and national competitions, where scholarships and awards are presented. This organization is available to all students attending CCTI.

Student Council – This organization sponsors a wide variety of services and activities throughout the year to promote citizenship, leadership, human relations, and cultural values. Student Council consists of two representatives from each career and technical area. Every year a president, vice-president, secretary, treasurer and publicity agent are elected by the teachers.

Yearbook – The school produces its own yearbook, The Craftsman. The Yearbook Staff is open to all students who wish to gain valuable experience in art, photography, journalism, advertising and sales while helping to develop this publication. Through the years our Yearbook staff and its advisors have developed a yearbook of high quality and provided it at a very moderate price. We encourage you to join the Yearbook Staff and to purchase a copy when they are available.

## **Student Support Services**

SAP (Student Assistance Program) - The SAP team consists of CCTI personnel who systematically work with students and their families to assist them in the removal of barriers which enable them to become a school success. It is a school-based program that does not engage in diagnosis or treatment. Students may be referred to SAP by fellow students, teachers, support staff, parents, or through self-referral. Oversight for SAP is an approved program provided by the PA Department of Education, Health, and Public Welfare.

Transition Team – The team, consisting of various staff members, meets on a regular basis to:

- monitor the progress of students in CTE and academic subjects, as well as school adjustment
- identify students experiencing difficulty of any kind, gather relevant data and information, and team each student
- make appropriate interventions of a wide variety as needed

The team will also meet with parents of specific students if deemed necessary.

## **Extra Help and Tutoring**

In order to ensure the success of every student to the fullest possible extent, CCTI utilizes and Extra Help program throughout the year. The Extra Help program is offered to all CCTI students and is held after school on most Mondays and some Thursdays from 2:10-3:30 PM. Students are recommended to the program by their teachers, parents and the CCTI Transition Team, as well as requesting the help on their own. Its purpose is to increase student achievement and increase the level of success within their academic and vocational classes. Staff members work with the students in their areas of need. Students are provided transportation home.

In addition to the Extra Help program, CCTI offers tutoring to all of its students. The students are tutored by staff members and certified tutors, in their academic and vocational programs. In addition to tutoring for their academic and vocational programs, the tutoring services focus strongly on student progress with key exams, such as the Keystone, NOCTI, NIMS, industry certification exams, AP, ASVAB, PSAT and SAT preparation, and other postsecondary and employment related exams.

## Cooperative Education

The purpose of the Cooperative Education experience in career and technical programs is to provide the student with an opportunity to perform the duties of a particular occupation, understand its challenges, and be paid as an employee. The Cooperative Education experience is not obligatory on the part of the school program but rather a privilege extended to enhance employability. Students interested in the Cooperative Education Program need to meet specific criteria to be eligible for the experience. Guidelines may be obtained from the Cooperative Program Coordinator.



## Cooperative Education Employers

AG Equipment Specialties  
American True Value Hardware  
Andreas Plumbing & Heating  
Frank Arieta Plumbing Heating & Fuel  
Beers Tooling & Machining Inc.  
Blue Mountain Machine  
Blue Ridge Pressure Casting  
Brader's Woodcraft, Inc.  
Bulldog Fire Apparatus  
Burger King  
Burkholder HVAC  
C.F. Martin & Co. Inc.  
Carquest Auto Parts  
Celebrations Hair & Tanning Salon  
Country Junction  
Dalla's Machine  
Dunkin' Donuts  
Eckley Miner s' Village  
Four Season Climate Control Frable & Son  
George J. Hayden Electric, Inc.  
George's Plumbing & Heating  
Great Clips  
Great Western Service s Inc.  
Hair Mechanics  
Hair Patterns  
Heritage Sign & Display  
Highwood USA  
Holiday Hair  
Hydra Tech Pumps  
Iron Tree Data Networking  
K & K Oil  
Keystone Harley-Davidson  
Kislan's Auto Repair  
Kovatch Collision Center  
Kresge Services  
L & S Electrical  
Lehighton Kia  
Livengood Excavating  
Lowe & Moyer  
Mauch Chunk 5 & 10  
Mahoning Valley Nursing & Rehab  
McAdoo Machine  
McDonald's  
Mauser Brothers Homes by Wasy  
Nansteel Machine & Fabrication  
New England Motor Freight  
Pencor Services Inc.  
Penn Forest Garage Quality Coll.  
Radocha & Sons  
R.F. Ohl  
R. A. Fritz Plumbing & Heating Inc.  
R.E.M. C.O. Inc.  
Rentschler Chevrolet  
Rumors Beauty Salon  
Sheehan Plumbing Heating & Air Cond.  
SK Machine  
Smart Style Hair Salon  
SMF Inc.  
Spears Manufacturing  
Split Rock Resort  
Switchback Medical Center  
Tactical Construction & Landscaping  
Tamaqua Truck & Trailer  
Terry's Decks  
TN Printing  
Tobyhanna Army Depot  
TPEI  
Troxells Auto Repair  
Valley Athletic Supply  
Volkert Electric  
Wayne K. Smith General Contractor  
WB Electric Inc.  
Wentz Auto Body  
Yusella Plumbing & Heating



## Post-Secondary Opportunities

Students can earn **FREE** college credits while attending CCTI. CCTI has partnered with post-secondary institutions, providing articulation credits (college credits).

### Articulation Credit

An articulation credit allows high school students to receive college credit for technical courses they completed while in high school. The articulation process eliminates the need for duplication of courses at the college level, so that students can seamlessly continue their education in a related program at a postsecondary institution. Our technical programs are organized so that students may choose from a variety of post-secondary options, including technical or business schools, community college, or a four-year college program. Having earned articulation credits will save time and money. Articulation credit is absolutely **FREE**.

Articulation Credits are received through an agreement between CCTI and a post-secondary institution. CCTI currently has Articulation Agreements with: Lehigh Carbon Community College (LCCC), Northampton Community College, Pennsylvania College of Technology, Johnson & Wales University, Universal Technical Institute, and many more.

We encourage you to examine the following websites relating to articulation credits and career resources: [PATrac.org](http://PATrac.org), [PACareerStandards.com](http://PACareerStandards.com), [PACareerZone.org](http://PACareerZone.org), [GettingThemThere.com](http://GettingThemThere.com) and [PACollegeTransfer.com](http://PACollegeTransfer.com).

### CCTI College/Dual Enrollment Classes

Students attending CCTI have the opportunity to take college level courses for half the college tuition price. The dual enrollment program is provided through Lehigh Carbon Community College (LCCC). This opportunity provides an insight into the college atmosphere, while still being supported in the high school environment. Students learn, gain knowledge and expectations for post-secondary education. Full college credit is earned at a substantial savings. An additional benefit is that CCTI students have the opportunity to add these credits to their earned articulation credits.

Any and all expenses (1/2 price tuition & books) are the responsibility of the student/parent. Transportation for these classes is also the responsibility of the student/parent. The fees for these courses are set by LCCC.

**Industry Certification** – All of CCTI’s technical programs are Industry Certified. Students can earn certifications in their approved career technical education (CTE) programs.

***Autobody/Collision and Repair Technology/Technician***

- S/P2 – Automotive

***Auto Service and Technology***

- Automotive Service Excellence Certificate - NATEF
- PA State Certified Safety Inspector, Cat 1
- MACS 609

***Computer Engineering Technology***

- A+
- Network +
- Security+
- Customer Service Specialist (CSS)
- Computer Service Technician (CST)
- Computer Network Systems Technician (CNST)
- IC3 - Internet & Computing Core Certification
- Microsoft - MTA Networking Fundamentals
  - MTA Windows Operating System Fundamentals
  - MTA Server Administration Fundamentals
  - MTA Security Fundamentals
  - Microsoft Office Specialist
  - Microsoft Certified Professional (MCP)
  - CompTIA IT Fundamentals
  - CompTIA IT Server+

***Cosmetology***

- PA State Board Cosmetologist License

***Culinary Arts/Quantity Foods***

- PA Food Employee Certified
- American Culinary Certification
  - National Restaurant Association

***Drafting & Design Technology***

- Autodesk Certified User
  - Certified Drafter

***Electrical Dist. & Automation/ Electrician***

- National Center for Construction Education Registry (NCCER)
- OSHA 10 Hr. Certification
- High School Technical Program
- Certification for Residential Electric
  - Residential Construction Academy (RCA) National Registry

***Electronics***

- Student Electronics Technician (SET)
- Certified Electronics Technician Associate (CETA)
- Certified Electronics Technician Journeyman (CET)
- Customer Service Specialist (CSS)
- Computer Service Technician (CST)
- CompTIA IT Fundamentals
- MTA: Operating System Fundamentals
- MTA: Networking Fundamentals
- MTA Internet and Computing Core Certification (IC3)
- Residential Systems Integrator (RESI)
  - EM1 – C Basics
  - EM2 – AC Basics
  - EM4 – Digital Basics
  - Strata

***Graphic Design***

- Adobe Certified Associate- Visual Communication

***Health/Medical Assistant/Aide***

- BLS Healthcare Provider
- Nurse Aide Registry
  - Heartsaver AED
  - Heartsaver CPR
  - Heartsaver First Aid
  - Personal Care Home Direct Care Staff

***Heating, Air Conditioning, Ventilation & Refrigeration Maintenance***

- EPA 608 Certification
- Industry Competency Exam
  - Residential Air Conditioning & Heating
  - NORA (Oil Heat)
  - OSHA Certification

***Marketing/Distributive***

- A\*S\*K Certification
- National Retail Federation Foundation

***Precision Machine Technology***

- National Institute for Metalworking Skills, Inc. (NIMS)
  - Level 1 – CNC Milling, Manual Milling, Manual
  - Level 1 - Turning, Manual Drill Press Operations, Measurement, Materials & Safety, Planning Benchwork Layout
  - Level 1 – Entry Welder
  - Level 11 – Advanced Welder

***Welding Technology/Welder***

- American Welding Society – Level 1 – Entry Welder
- American Welding Society – Level 11– Advanced Welder

Application for Admission - complete form, sign, date and return to your sending school guidance counselor.

Technical Program: We will attempt to place each new student in his/her first choice of a technical program; however, due to state requirements, some of our program areas are limited in the number of students allowed into the program. Please indicate a first, second and third choice.

First Choice: \_\_\_\_\_ Second Choice: \_\_\_\_\_

Third Choice: \_\_\_\_\_ FLEX: \_\_\_\_\_

Student Information: (please print all information legibly)

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_ MI: \_\_\_\_\_

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_ Social Security #: \_\_\_\_-\_\_\_\_-\_\_\_\_ Grade entering CCTI: \_\_\_\_\_

Gender: \_\_\_\_\_ Race: \_\_\_\_\_ School District: \_\_\_\_\_

Current Program: \_\_\_Regular Ed. \_\_\_Special Ed. Home Phone: \_\_\_\_\_

Phone number for automated calling system if other than the home phone number: \_\_\_\_\_  
List only one phone number

Student lives with: \_\_\_Both Parents \_\_\_Mother \_\_\_Father \_\_\_Foster \_\_\_Custodial Agency

\_\_\_Other – please specify: \_\_\_\_\_

Home Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

Mailing Address – if different than above: \_\_\_\_\_

Student Email: \_\_\_\_\_

Parent/Guardian Information: Relationship: \_\_\_\_\_

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Address - If different than the student's address above:  
\_\_\_\_\_

Place of Employment: \_\_\_\_\_ Work Phone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Parent/Guardian Information: Relationship: \_\_\_\_\_

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Address - If different than student's address above:  
\_\_\_\_\_

Place of Employment: \_\_\_\_\_ Work Phone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_ Email: \_\_\_\_\_

If not living with parent/guardian: Relationship: \_\_\_\_\_

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Place of Employment \_\_\_\_\_ Work Phone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_ Email: \_\_\_\_\_

If you lived outside of PA, what was your entry date into PA: \_\_\_\_\_

Have you ever been previously enrolled at Carbon Career & Technical Institute? \_\_\_\_\_ If so what Year? \_\_\_\_\_

Parents/Guardians: Read and Sign

For Health and Safety purposes safety shoes and glasses (provided by CCTI) will be required in the industrial program areas of the Carbon Career & Technical Institute. Other programs may require a uniform and the purchase of a tool kit.

All information contained in the CCTI student files is strictly confidential; however, if at any time you wish to review the information about your son/daughter, the guidance counselor will meet with you to do so. Some information we request is personal, but it is vitally important as we care for and assist your son/daughter in realizing their career goals.

I have examined the information on this application and agree to the selections my son/daughter has made. I certify that I am a bona fide resident of the (circle one) Jim Thorpe / Lehighton / Palmerton / Panther Valley / Weatherly School District and that I am the natural parent or legal guardian of the student making application to the Carbon Career & Technical Institute. I understand that my residency in district is necessary for my son/daughter to attend CCTI.

\_\_\_\_\_  
Parent/Guardian Signature

Release of Information:

I authorize \_\_\_\_\_ to release grades, PSSA and Keystone Exam scores for my son/daughter to CCTI.

Name of sending school

\_\_\_\_\_  
Parent/Guardian Signature

It is the policy of the Carbon Career & Technical Institute not to discriminate in its educational programs, activities or employment practices based on race, color, national origin, gender, sexual orientation, disability, age, religion, ancestry, union membership, or any other legally protected classification. Assurance is given that services, activities and facilities are accessible to and usable by disabled persons. As per Federal Funding Guidelines a "Perkins Act Appeals Procedure" has been developed.

For information regarding civil rights and grievance procedures, contact the Principal, Title IX and Section 504 Coordinator at the Carbon Career & Technical Institute, 150 West 13<sup>th</sup> Street, Jim Thorpe, PA, 18229. Telephone: 570-325-3682. Fax: 570-325-3737. Revised 2/24/04

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**PLEASE COMPLETE ENTIRE FORM**  
Sending School Counselor Section

Sending School Counselor Section:

PA 9<sup>th</sup> Grade Entry Date: \_\_\_\_\_ PA Secure ID Number: \_\_\_\_\_

Non Resident: \_\_\_\_\_

Check-off List - application packet to include the following:

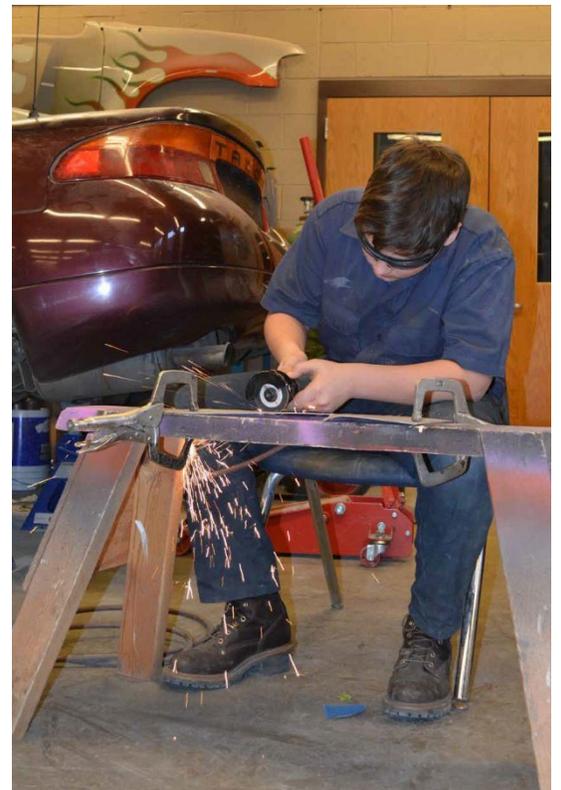
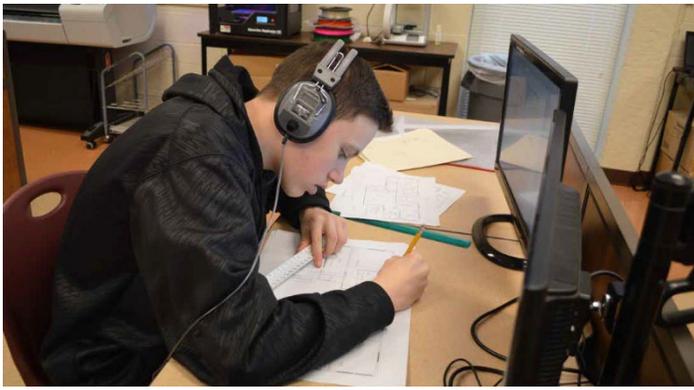
1. \_\_\_\_\_ Attendance report
2. \_\_\_\_\_ Discipline report
3. \_\_\_\_\_ Report card at time of application
4. \_\_\_\_\_ Report card or transcript for grade(s) completed prior to current year
5. \_\_\_\_\_ Grade 8 PSSA Score report
6. \_\_\_\_\_ Keystone exam(s) score report(s)
7. \_\_\_\_\_ IEP
8. \_\_\_\_\_ ER
9. \_\_\_\_\_ 504
8. \_\_\_\_\_ ELL      \_\_\_\_\_ Other placement: \_\_\_\_\_
9. \_\_\_\_\_ Completed immunization record and health records
10. \_\_\_\_\_ Parent Registration Statement (transfers only)
11. \_\_\_\_\_ Act 26 report included (if applicable)
12. \_\_\_\_\_ Guidance Counselor Review of application completed

**\*NOTE: SEND FINAL REPORT CARD FOR CURRENT YEAR AT END OF YEAR.**

**High School Counselor Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_







# Notes

---

## **Non-Discrimination Policy**

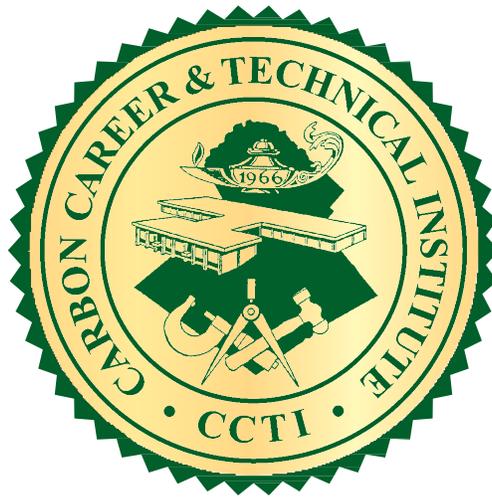
It is the policy of the Carbon Career & Technical Institute not to discriminate in its educational program, activities, or employment practices, based on race, color, national origin, sex, sexual orientation, disability, age, religion, ancestry, union membership, or any other legally protected classification.

Announcement of this policy is in accordance with state and federal laws, including Title VI of the Civil Rights Act of Amendments of 1972, Title IX of the Educational Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Immigration Reform and Control Act of 1986, and the Americans with Disabilities Act of 1990.

Assurance is given that services, activities and facilities are accessible to and usable by disabled persons.

As per Federal Funding Guidelines, a “Perkins Act Appeals Procedure” has been developed.

For information regarding civil rights and grievance procedures, contact the Principal, Title IX and Section 504 Coordinator; at the CCTI, 150 West 13<sup>th</sup> Street, Jim Thorpe, PA, 18229, telephone 570-325-3682, fax 570-325-3737.



**150 West 13th Street  
Jim Thorpe, PA 18229  
Phone 570-325-3682  
Fax 570-325-3737  
Web site [www.carboncti.org](http://www.carboncti.org)**