

2021  
2022

# Program of Studies GUIDE



**Berks  
Career & Technology  
Center**



[www.BerksCareer.com](http://www.BerksCareer.com)

# Berks Career & Technology Center

## OUR VISION

is to provide a safe learning environment where each student is valued and prepared to succeed.

## OUR MISSION

is to prepare all students for successful careers and higher education through a highly acclaimed, integrated academic and technical education experience.



GO FROM  
LEARNING  
TO EARNING.  
FAST!



BCTC.CE



berkscareerandtech



BerksCareer

## Focusing on Quality



Berks Career and Technology Center is registered as an ISO 9001 Quality Management System (QMS) organization for its commitment to providing high quality career and technical education to its customers. ISO 9001 is an international quality standard for business and education that demonstrates commitment to producing a quality product or service and providing customer satisfaction.



Berks Career and Technology Center is accredited by the Middle States Association Commission on Secondary Schools.

BCTC offers career and technical education with the support of the following sponsoring School Districts:

Antietam	Hamburg Area
Boyertown Area	Kutztown Area
Brandywine Heights Area	Oley Valley
Conrad Weiser Area	Schuylkill Valley
Daniel Boone Area	Tulpehocken Area
Exeter Township	Twin Valley
Fleetwood Area	Wilson
Governor Mifflin	Wyomissing Area



**Berks Career & Technology Center consists of two campuses:**

East Campus | 3307 Friedensburg Road | Oley, PA 19547 | 610-374-4073

West Campus | 1057 County Road | Leesport, PA 19533 | 610-374-4073

[www.BerksCareer.com](http://www.BerksCareer.com)

# TABLE of CONTENTS

About Our School . . . . .	2
Application and Admission Requirements . . . . .	3
Tuition and Program Costs . . . . .	4
Schedule . . . . .	4
Industry Licensing and Certifications . . . . .	5
Certificates of Competency . . . . .	5
Links to College . . . . .	6
Student Services . . . . .	6
Student Organizations . . . . .	8
Program Information and Safety . . . . .	9

## The Educational Programs - Career Clusters & Programs

<b>Technical Academy</b> . . . . .	<b>10</b>
<b>Teacher Academy + PC Now!</b> . . . . .	<b>11</b>
<b>Business &amp; Information Technology</b> . . . . .	<b>13</b>
Business Management & Entrepreneurship (W)	14
Computer Systems Networking & Security (E)	15
IT Programming (W)	16
<b>Communications</b> . . . . .	<b>17</b>
Advertising Art & Design Technology (W)	18
Video & Media Content Production (W)	19

<b>Construction</b> . . . . .	<b>20</b>
Building Construction Occupations (E)	21
Cabinetry & Wood Technology (E)	22
Carpentry (E)	23
Electrical Occupations (B)	24
Heavy Equipment Operations (E)	25
Horticulture (E)	26
HVAC/Refrigeration (E)	27
Masonry (E)	28
Painting & Decorating (E)	29
Plumbing & Heating (E)	30
<b>Engineering &amp; Manufacturing Technology</b> . . . . .	<b>31</b>
Drafting Design Technology (W)	32
Engineering Technology Career Pathways	33
Engineering Technologies (W)	34
Precision/Computerized	
Machining Technology (W)	35
Welding Technology (W)	36
<b>Healthcare</b> . . . . .	<b>37</b>
Dental Occupations (E)	38
Health Occupations (W)	39
Medical Health Professions (W)	40
Sports Medicine & Rehabilitative Therapy (E)	41
<b>Services</b> . . . . .	<b>42</b>
Cosmetology (B)	43
Culinary Arts (B)	44
Early Childhood Education (B)	45
Protective Services - Homeland Security (E)	46
Protective Services - Law Enforcement (E)	47
Service Occupations (E)	48
<b>Transportation</b> . . . . .	<b>49</b>
Automotive Collision Repair Technology (B)	50
Automotive Technology (B)	51
Diesel Technology (E)	52
Heavy Equipment Technology (E)	53
Recreational & Power	
Equipment Technology (W)	54
<b>9th Grade Early-Admissions &amp; 12th Grade Future Ready (B)</b> . . . . .	<b>55</b>
<b>Continuing Education (B)</b> . . . . .	<b>57</b>
<b>Instructor Profiles</b> . . . . .	<b>60</b>

For more information about our programs, visit [www.BerksCareer.com](http://www.BerksCareer.com)

**Students at BCTC can choose from nearly 40 programs of study. BCTC graduates are well-prepared to enter the job market or go on to post-secondary education.**

**Note:** (B) indicates the program is offered at both campuses.  
 (E) indicates the program is offered only at the East Campus in Oley.  
 (W) indicates the program is offered only at the West Campus in Leesport.



# ABOUT OUR SCHOOL

**BCTC is regarded as one of the premier career and technical education facilities in Pennsylvania, largely due to the outstanding performance and success of our students.**

## **Our Background**

The Berks Career and Technology Center (BCTC) was founded in 1968 and is regarded as one of the premier career and technical education facilities in the Commonwealth of Pennsylvania, largely due to the outstanding performance and success of our students. BCTC operates two campuses, each situated on more than 23 picturesque acres in Berks County.

BCTC provides high-quality technical education and career preparation to meet the needs of today's high school students and adults. The school serves 16 public school districts, numerous nonpublic schools, and the citizens and businesses of the Berks County area. BCTC is governed by a Joint Operating Committee comprised of School Board Directors from each of the 16 sponsoring school districts. With campuses located in Leesport and Oley, we are conveniently located to serve our students.

## **Our Educational Approach**

BCTC operates as a school of choice, designed for students who are seeking to enhance their educational program with a highly relevant career and technical experience that is connected directly to business and industry. More than 400 business and industry advisors review and update the school's educational program annually. The BCTC experience provides students with a blend of classroom theory, technical applications in state-of-the-art laboratories, and actual off-campus work-based experiences. Students learn technical skills and earn nationally recognized industry certifications. They apply reading, writing, mathematics, science, communications, and technology in a way that has personal meaning and career relevance. BCTC's instructors are experienced professionals with practical experience in their occupational specialties

and have the ability to teach, inspire, and motivate students. The staff consists of approximately 60 professional educators and 25 instructional support personnel. Instruction is designed to meet the needs of all students.

## **Our Programs**

BCTC offers seven career clusters representing nearly 40 programs. Career clusters include: Business & Information Technology, Communications, Construction, Engineering & Manufacturing Technology, Healthcare, Services, and Transportation. Additionally, each BCTC program connects to Career Pathways laid out by Career Ready Berks, leading to careers in a variety of fields.

Each year approximately 1,800 secondary and 500 adult students attend BCTC to acquire the knowledge and skills they need to be successful in a highly competitive workplace and further their education. Students can earn advanced credits through articulation and dual enrollment agreements with post-secondary institutions. All students learn advanced technical skills and earn industry recognized credentials.

State-of-the-art learning laboratories, a highly skilled faculty, and a curriculum delivered to industry and state academic standards combine to distinguish BCTC as a leading provider of career and technical education. BCTC prepares today's students for tomorrow's emerging technologies and provides them with the competitive edge needed to compete in the global marketplace.





## APPLICATION & ADMISSION REQUIREMENTS

### Who May Apply to BCTC

Students in grades 10, 11, and 12 who reside in any of the 16 participating school districts may attend BCTC. Students must complete the BCTC application process to be considered for admission. They may obtain an application from the school counselors at their school, or by contacting the BCTC Student Services Office at either campus. Students must complete the application and return it to their counselor as a first step in the application process. Please refer to the “Application Deadline” section below.

### How Admission is Granted

Enrollment at BCTC is limited, therefore, each applicant is evaluated based on the information provided in the application with the most qualified applicants granted admission until all openings in that program are filled. The remaining applicants are then placed on a waiting list for potential placement as openings occur in those programs. A grade report and 8th grade PSSA scores (if applicable) and/or Keystone scores must be submitted with the application package to be considered for admission.

Applications from students with exceptionalities or disabilities will be received, processed, and responded to in the same manner as all other applications. Final selection of all students is contingent upon the final approval of the participating sending school district.

### If You Don't Attend Public School

Students who live in Berks County and attend parochial or private schools or are home-schooled are also welcome to attend BCTC. These students need to contact the superintendent's office of the school district in which they reside to obtain enrollment procedures. With authorization from their Cyber or Charter School, high school students who attend these schools may apply to BCTC. Those students should contact the Business Manager at BCTC to start that process.

### Application Deadline

Because there are a limited number of openings each year, students should have their application on file at a BCTC campus by December 15 to be considered for our first round selection process for the following school year. Rolling applications will be considered based on available space.



---

## TUITION & PROGRAM COSTS

---

**Tuition-free public education is provided to high school students through the tax support of each of the 16 school districts.**

Tuition-free public education is provided to high school students through the tax support of citizens and businesses from each of the 16 Berks County school districts. Adult students are required to pay tuition based on an annually approved tuition rate. Students are required to purchase uniforms, books/workbooks, tools and personal protective equipment, and may be required to pay for certification testing fees and college dual enrollment courses. Please see the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs) for a breakdown of the costs for each program.

---

## SCHEDULE

---

**Students can attend for one, two, or three years, and most students enter as 10th graders and stay for three years.**

Generally, the school day is divided into two sessions. The morning (AM) session operates from 7:45 a.m. to 11:00 a.m. and the afternoon session (PM) operates from 11:45 a.m. to 3:00 p.m. These times will vary based on district transportation schedules and other scheduling variables. Every attempt is made to accommodate the scheduling needs of all students who attend BCTC.

Session assignment is based on a student's overall schedule, the district in which he/she resides, and available openings. Therefore, students will attend either the AM or PM session at BCTC and the other half day at their high school.

Students can attend for one, two, or three years; however, most students enter in 10th grade and stay for three years. A 9th Grade Early Admissions option is available for students with an Individualized Education Plan (IEP). A three-year program provides the best opportunity for students to complete the curriculum, acquire advanced credit at a post-secondary institution, and obtain industry-recognized licenses or certifications.

Several Industry Certifications offered through BCTC career and technical education programs have mandatory hour requirements. Most students who attend BCTC for a minimum of 2.5 hours per day and have very good attendance will be able to meet the industry certification hours requirements; however, since sending district schedules vary, students are encouraged to discuss their district BCTC schedule with their counselor to determine whether or not sufficient hours will be attainable to meet the program specific industry certifications.



## INDUSTRY LICENSING AND CERTIFICATIONS

The workplace of today requires a highly skilled and competent workforce. In order to ensure quality, many industries have developed nationally recognized standards of performance. These standards are measured by licensing examinations or certification testing programs that can lead to nationally recognized credentials. Most of the career and technical programs at BCTC have undergone a rigorous accreditation review process and now offer industry recognized certifications for students. These certifications/credentials are portable and recognized nationally by industry. They provide a

competitive edge when applying for employment and are recognized by many colleges for awarding advanced credit.

Please refer to the “industry certification” heading under each program description for a complete listing of industry certifications that a student is required, expected or may have an option to earn. State regulations require all students completing an approved career and technical program to earn industry recognized certificates or licenses.

## CERTIFICATES OF COMPETENCY

### **BCTC Certificate of Achievement**

Students earn a school-issued certificate of achievement when they successfully complete the program’s task list and the end of program assessment.

Together these documents are valuable credentials that students present to post-secondary education institutions and prospective employers as evidence of their knowledge and skills. Employers and education institutions recognize the certificate of achievement and task grid as reliable indicators of an applicant’s readiness for work or continued learning.

### **Pennsylvania Skills Certificate**

The Pennsylvania Department of Education requires students to take a final exam for their chosen program as a senior. The National Occupational Competency Testing Institute (NOCTI) test or an equivalent exam will be administered in the spring of the senior year. Students will be provided with copies of their test scores and those who score at the advanced level will be awarded a Pennsylvania Skills Certificate recognizing their achievement. All students receive their high school diploma from their resident school districts.

## LINKS TO COLLEGE

College is an option for BCTC students. In fact, a large percentage of BCTC students continue their education at two and four year colleges/universities, apprenticeship programs and other post-secondary schools. BCTC participates in the Statewide SOAR (Students Occupationally and Academically Ready) program with the Pennsylvania Department of Education and state colleges/universities. The mission of SOAR is to prepare students for college and careers in a diverse, high-performing workforce.

SOAR is a career and technical educational plan that articulates the secondary career and technical programs to postsecondary degree, diploma, or certificate programs. SOAR programs lead students into a pathway that align the secondary courses to a post-secondary program to

complete a degree or certificate. Many colleges and universities give college credits for BCTC learning experiences.

SOAR is built on a course of study which incorporates secondary education and post-secondary education elements and includes coherent and rigorous content aligned with challenging academic standards and relevant career and technical content. These career and technical programs of study include a statewide articulation agreement partnership between secondary schools and post-secondary institutions.

To find out more about participating schools and credit opportunities, please visit [www.PAcollegetransfer.com](http://www.PAcollegetransfer.com).



## STUDENT SERVICES

The Student Services department at Berks Career and Technology Center cooperates with participating school district counselors to coordinate school counseling and support services for students. The following services are available to students and provided by BCTC staff:

- Career Counseling
- Instructional Support
- Work-Based Learning
- Medical/Emergency Services

### CAREER COUNSELING

The purpose of counseling services is to assist students in becoming successful students in school, at work, and in their communities. Individual and group counseling is available to help students plan their career paths, prepare for employment, or plan for post-secondary education. Information concerning educational and occupational opportunities is available in the Counseling Office at both campuses. BCTC strives to promote opportunities to all student regardless of gender-identity.

### INSTRUCTIONAL SUPPORT

A team of instructional support professionals and paraprofessionals provide assistance to students who require additional support to satisfy the curriculum requirements. BCTC staff also teaches and reinforces academic content within the technical curriculum.

A Learning Resource Center (LRC) at each campus is provided for students to work in small learning groups and to utilize computer-assisted instruction. The goal of instructional support is to assist students to be successful in their career and technical program.



## STUDENT SERVICES CONTINUED

### CAREER EXPERIENCE OPPORTUNITIES

Each of these opportunities enables students to learn in an actual employment setting:

—**Cooperative Education (Co-Op) and Capstone** is designed to be a Capstone or culminating skill development program option. It is a unique plan of education that integrates classroom learning with supervised work experience in the business community. Eligible students apply for part-time employment in areas related to their chosen fields of study. Students work at approved training sites with written training plans. Eligibility to participate in co-op is determined based on grades, completion of all required industry certifications related to their program of study, attendance, and a recommendation from the BCTC instructor. Co-op provides an excellent transition from high school to the world-of-work.

—**Internships** are available during the summer months and school year at selected approved sites. These short-term experiences provide opportunities for students to practice skills and learn about the requirements of the workplace. They may be paid or unpaid experiences, depending on the site.

—**Clinical experiences** are available to students enrolled in the Cosmetology, Dental Occupations, Health Occupations, Medical Health Professions, Early Childhood Education, and Protective Services programs. They are intended to provide valuable hands-on experiences and observation of professionals. Clinical experience takes students into the actual workplace for a short period of time, whereby they perform day-to-day operations and job functions. Students must meet eligibility requirements to participate.

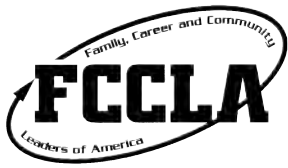
—**Job shadowing** is a short-term observation experience whereby students accompany workers as they go about their day performing duties in their everyday work environment. Students benefit from seeing work as it is performed in actual employment situations and enjoy learning firsthand from adults who have careers in a variety of occupational fields. The program is designed to give students a better understanding of their career focus and help them in making career decisions.

—**Volunteer work** experience may be provided to students to supplement their CTE program. Students may receive credit for this experience toward their course grade.

### MEDICAL/EMERGENCY SERVICES

Each campus has a nurse on staff to provide medical and First Aid services for students requiring medical assistance. More serious health-related issues are referred to the student's participating school district nurse, family physician, or a community agency. Students' medical health plans are communicated from the students' sending school to the BCTC nurse.





## STUDENT ORGANIZATIONS

High school students are encouraged to participate in athletics and extra-curricular activities at their participating high schools. In addition, students attending BCTC will have opportunities to make new friends and exercise leadership abilities in the career and technical student organizations, including the National Technical Honor Society.

Participation in student organizations and activities at BCTC fosters leadership, community service, and cooperative interaction among students and faculty. Students enjoy a broad spectrum of activities, including: skill competitions, career and technology fairs, trips, service projects, special events and social activities.

BCTC offers the following student organizations as co-curricular programs. All students are encouraged to participate in SkillsUSA and/or one of the other career specific organizations:

**FCCLA (Family, Career and Community Leaders of America)** is open to students enrolled in the Early Childhood Education, Culinary Arts, and Service Occupations programs. Emphasis is on promoting personal growth and leadership development through family and consumer science education, focusing on the multiple roles of family members, wage earners, and community leaders. Students participate in leadership training events, competitions, and state and national conferences.

**FFA (Future Farmers of America)** Is open to students enrolled in the Horticulture and Heavy Equipment Technology programs. This co-curricular experience assists students by developing their potential for leadership, personal growth, and career success. Students participate in community service and competitions.

**HOSA (Health Occupations Students of America)** is open to students enrolled in the Healthcare and Protective Service programs. Activities focus on training, developing skills, and serving others. The school's members enjoy a winning tradition of competing at annual state and national HOSA conferences.

**NTHS (National Technical Honor Society)** is open to 11th and 12th grade students that meet certain requirements. NTHS encourages higher scholastic achievement, cultivates a desire for personal excellence, and helps top students find success in today's highly competitive workplace. NTHS is committed to the recognition of excellence in every arena of career and technical education – student achievement, community service, outstanding chapters, and contributions from business, industry, and educational professionals.

**PBA (Pennsylvania Builders Association)** is a student chapter affiliation of the Pennsylvania Builder's Association and the National Association of Home Builder's (NAHB) and is open to students enrolled in construction programs. The goal of this student organization is to promote a greater understanding of the construction trades; exposure to innovative products and processes, industry field trips, guest speakers, leadership, competition to showcase skill development, and service.

**SkillsUSA** emphasizes respect for the dignity of work, high standards and trade ethics, workmanship, scholarship, safety, and partnership with business. Students may participate in district, state, and national competitions as well as leadership opportunities and community service. All students are eligible to participate in SkillsUSA and/or one of the other career specific organizations.

## THE EDUCATIONAL PROGRAM

The educational program at Berks Career and Technology Center is organized around seven career clusters encompassing nearly 40 career programs. Typically, a student enrolls in one career program as his or her major field of study that includes a core set of competencies common to the career cluster and technical competencies related to his or her specific career program. Students may continue their program of study at the post-secondary level as they advance beyond the standard secondary curriculum.

The curriculum and instruction are designed to meet the educational needs of the students. Learning guides serve as the primary instructional tool. Technical content is taught using a “hands-on” project-based approach combined with theory, classwork, and homework. Academic content is taught in the context of the technical curriculum using applications methodology. Through this instructional approach BCTC attempts to accommodate and ensure the success of all learners.



## SAFETY IS OUR FIRST PRIORITY

All career and technical education instructors at BCTC implement a safety program within their particular program areas. To supplement that safety program, every student enrolled in an approved career and technical education program at BCTC must complete an OSHA 10-Hour General Industry, Health, or Construction Industry course. This course is web-based and can be completed online whenever and wherever internet service is provided.

Upon successful completion of the course, students earn and receive an OSHA credential from the Federal Occupational Safety and Health Administration (OSHA) Training Institute. This course is designed to teach entry level workers how to stay safe in the workplace and begin to prepare them for a safe and prosperous future in their chosen careers. By

providing our students with fundamental safety knowledge needed in the workplace, we place safety as our first priority. Students must successfully complete the online 10-hour safety course or a remedial BCTC safety course to continue in their CTE program at BCTC the following year.

By completing the appropriate CareerSafe Online Course, students will:

- Develop a safety mind set and learn valuable skills for their futures.
- Earn an OSHA safety credential; an OSHA wallet card that demonstrates to employers that they have received basic safety training needed in the workplace.
- Become employable, gaining a competitive advantage in the job market.

# DUAL ENROLLMENT OPPORTUNITIES

## BUSINESS & INFORMATION TECHNOLOGY CLUSTER

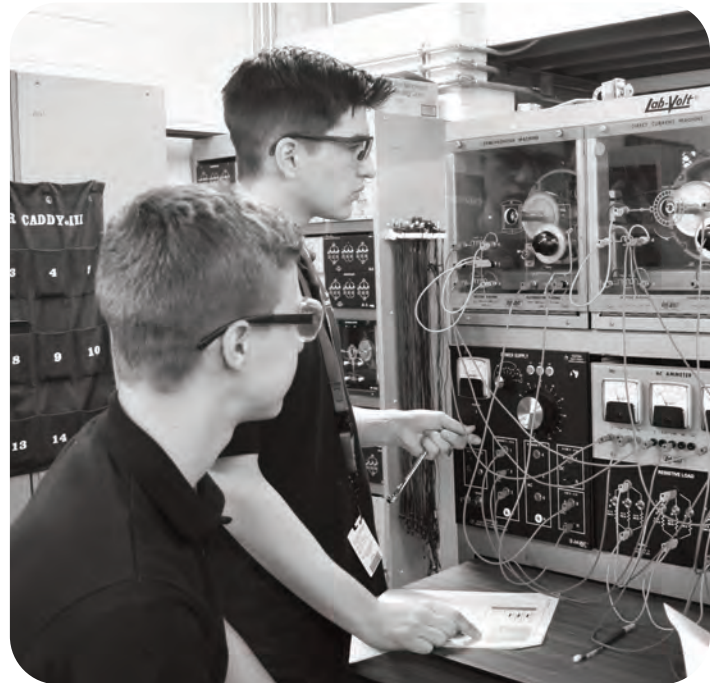
- Business Management & Entrepreneurship
- Computer Systems Networking & Security
- IT Programming

## ENGINEERING TECHNOLOGY CLUSTER

- Engineering Technologies

## SERVICES CLUSTER

- Teacher Academy



## PARTNERSHIP PROGRAMS



**Pennsylvania  
College of Technology**

A Penn State Affiliate

*Berks  
Career & Technology  
Center*



Careers start here.



# BERKS COUNTY'S TECHNICAL ACADEMY

Berks Career & Technology Center, Reading Area Community College (RACC), and Bloomsburg University have partnered to create the Technical Academy.

The Technical Academy provides college-bound students with the opportunity to develop advanced technical skills and earn college credit toward an associate and/or bachelor's degree while still in high school. Students in the Technical Academy are expected to continue their study through an associate degree at RACC.

After completing an associate degree, academy students may earn a Bachelor's of Applied Science in Technical Leadership from Bloomsburg University by taking courses at the RACC Campus at a fraction of the total cost of a 4-year degree program.

## THE ACADEMY PROVIDES:

- A pathway for developing advanced skills toward an associate and/or bachelor's degree.
- The opportunity to earn college credits toward a degree while still in high school.
- Highly selective programs that have strict entrance criteria.

## ACADEMY STUDENTS:

- Are enrolled at BCTC and RACC while in high school.
- Can enter the workforce at multiple points prior to earning a degree.
- Will earn recognized industry certifications.
- Will prepare for jobs that are in high demand.



## BUSINESS & INFORMATION TECHNOLOGY CLUSTER

- Business Management & Entrepreneurship
- Computer Systems Networking & Security
- IT Programming

## ENGINEERING TECHNOLOGY CLUSTER

- Engineering Technologies

## GET A JUMP ON COLLEGE!

- Earn college credits toward an associate and/or bachelor's degree while still in high school.
- Depending on the program selected, students may complete up to six college courses at BCTC during the first and second year of the program, earning up to 18 college credits. **The credits earned while at BCTC will be tuition free. Students will be expected to purchase textbooks and all other course materials.**
- In the third year of the program, students may take an additional three courses on the RACC Campus, earning up to an additional 12 college credits while in high school (depending on the program selected).
- Tuition for the final courses taken on the RACC campus (while students are still in high school) will be the responsibility of the student/parent. Costs may be subsidized by BCTC depending on state, federal, and alternative funding sources.\*

\* Please talk to your school counselor about specific financial responsibility for Technical Academy courses. Let your counselor know if there is a question of financial hardship.

## ENTRANCE REQUIREMENTS:

- Students must be in Grades 10 or 11 to begin a program in the Technical Academy.
  - 3.0 overall GPA\*
  - Math Proficiency
  - Reading Proficiency
  - To remain in the program, students must complete a college prep academic sequence throughout high school.
  - A signed Letter of Understanding to attend RACC to earn an associate degree.
  - Students transitioning to RACC after graduation and completion of the Technical Academy courses will be required to complete RACC's placement assessment.
- \* With special permission a student may be accepted on a provisional basis with a 2.5 GPA or higher.



The Teacher Academy is a college-credit career pathway where students will be able to begin their Associate of Applied Science in Early Childhood Education (ECE) while still in high school. The classes are taught at the Berks Career and Technology Center and Reading Muhlenberg Career and Technology Center. Students may be able to complete their AAS in Early Childhood Teaching in about

a year after graduating from high school before seamlessly transitioning to Kutztown University’s BSED (PreK-4 Certification) program offered right at RACC’s campus.

RACC’s Early Childhood Teaching (PreK-Grade 4) program is designed to prepare graduates for immediate employment in the ECE field as well as provide the first 61

credits of the bachelor’s degree leading to PreK-Grade 4 Teacher certification. Graduates of this program may seek employment opportunities with Head Start and early childhood programs serving infants, toddlers, preschoolers, and school aged children. In addition, graduates may also seek employment as educational assistants or para-educators in public and private schools.

**NEW TO BCTC**  
**PENN COLLEGE**  
**NOW**

Penn College NOW provides the opportunity for high school students who attend BCTC to earn free Penn College credits.

Courses are taught during the school day at BCTC by our teachers with no tuition cost to you or your family.

**PC NOW BENEFITS:**

Save money! The more Penn College NOW courses you take, the less money you spend once it’s time to earn a degree after high school.

Save time! You’ll spend less time earning a degree if you have already earned credits through Penn College NOW.

Connect to “the college experience.” Through Penn College NOW, you’ll have the chance to visit Penn College, see its facilities, meet college faculty, and become familiar with college resources like Career Services and the Academic Success Center.

Build confidence in your abilities, no matter your strengths. No matter what you plan to do after graduation, if you have already shown success in college courses, you will be more competitive in both the job market and the college admissions process. Success in challenging coursework builds confidence as well as skills!

Increase your odds of success in college. Regardless of degree or major, students who graduate high school with college credits are more likely to enroll in college, stay in college after their first year, and complete their chosen degrees.

Please check individual program pages for PC Now availability.

# BUSINESS & INFORMATION TECHNOLOGY



**Business Management  
& Entrepreneurship**

**Computer Systems  
Networking & Security**

**IT Programming**

From very small firms to large global corporations, computers play a critical role in an organization's ongoing success and innovation. Computers and networking systems are integral to all phases of an organization. At BCTC, students can select from three programs that will position them in a field that is constantly changing and seeking individuals who are knowledgeable and skilled.

**Careers start here.**



# Business Management & Entrepreneurship

Instructor TBD | West Campus | CIP Code 52.0701

**Creating a generation of young people with the skills, knowledge, and drive to become business leaders and entrepreneurs...**

The Business Management & Entrepreneurship program places an emphasis on college and career readiness. The program offers students interested in business a competitive edge through project-based, collaborative learning and the development of 21st Century skills including business management, entrepreneurship, financial literacy, technology, global awareness, problem solving, and communication. Students learn business by doing business with coaching from industry professionals.

The program at BCTC is part of Virtual Enterprises International (VEI). VEI is a live, in-school global business simulation and entrepreneurship program that is part of a global network of student-run businesses in over 40 countries. VEI replicates all the functions of real businesses in both structure and practice and brings the workplace into the classroom. The program transforms high school students into independent-thinking business professionals and their classrooms into offices that become an incubator environment. Under the guidance of a teacher-facilitator and local business mentors, students create and manage their virtual businesses; learning all aspects from market research, business planning, product development, production and distribution to marketing, sales, human resources, accounting/finance and web design.

Guided by a task-based curriculum rather than a textbook, students produce the key deliverables that are required in a real business. The virtual companies the students create engage in international trade with other student-run companies on a continuous basis, participating in a global economy of over 5,000 firms across 40 countries. The simulation environment encourages risk-taking and continuous cycles of improvement and innovation based on successes and failures. Local Berks County business partners play an integral role in helping shape students' experience by providing their expertise, skills, and knowledge inside and outside the classroom.

During their senior year, students will utilize their learned management skills to operate a BCTC online store. Students will develop and maintain this real e-commerce site and be responsible for developing marketing strategies, sourcing products to sell online (both within the BCTC School and beyond), collaborating with students from other BCTC programs, forecasting sales, managing the profit/loss statement, expediting orders, and implementing both social and ethical business practices.

The program closes the skills gap, engages students in their learning, and prepares them for college and career success by providing them with relevant, hands-on opportunities to develop, test, and apply academic, business, financial, and entrepreneurial skills.

## CAREER PATHWAYS:

- Marketing Specialist
- Human Resource Specialist
- Bookkeeper
- Accountant
- Management Analyst
- New Accounts Clerk
- Purchasing Manager



Qualified students are encouraged to apply as a Technical Academy student for this program. See page 11 for additional information.

### Industry Certifications:

OSHA/CareerSafe 10-Hour Certification

### College Advanced Credits:

Berks Technical Institute . . . . . Up to 52 quarter credits  
 Lehigh Carbon Community College . . . . . Up to 3 credits  
 Pennsylvania College of Technology . . . . . Up to 6 credits  
 Pittsburgh Technical Institute . . . . . Up to 3 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading proficiency
- Math proficiency
- Writing proficiency
- Ability to work independently and in a team
- Creative problem solver
- Ability to lead



# Computer Systems Networking & Security

Instructor **Christopher Nappi** | East Campus | CIP Code **11.0901**

Computer Systems Networking & Security is a professional course that prepares students with industry standard credentials and technical certifications to aid in their understanding of computers and the inter-working of them. While working in BCTC's state-of-the-art lab, students will use concepts introduced in theory and reinforced through a hands-on curriculum to build and repair computer systems and understand and configure components of a computer networking infrastructure.

The instruction focuses on A+ fundamentals, Operating System Fundamentals, Networking Fundamentals, Server Administration, Network Security Fundamentals, Alternate Operating Systems, and Advanced Concepts of Networking. The curriculum is reviewed annually for relevancy and updated as industry standards dictate.

Upon completion of the course, students are prepared for a variety of certification exams including the Test Out Network Pro Exam.

Graduates of this program are well prepared for entry level employment. Additional education can lead to more opportunities in networking and information technology.



**CAREER PATHWAYS:**  
 Computer User Support Specialist  
 Network & Computer Administrator  
 Network & Computer Technician  
 Computer Network Support Specialist

## CAREER PATHWAYS CAN LEAD TO:\*

Chief Information Officer  
 MIS Manager  
 Network Engineer  
 Teledata Communications Engineer

\*Requires post-secondary training.

### Industry Certifications:

- |  |                              |
|--|------------------------------|
| OSHA 10-Hour Certification                                 | MTA Security Fundamentals    |
| TestOut Routing Pro Certification                          | MTA Network Fundamentals     |
| TestOut Switching Pro Certification                        | Add Optional Certifications: |
| TestOut Server 2016 Installation and Storage Certification | CompTIA Network+             |
|  | Cisco CCNA                   |

### College Advanced Credits:

- |  |                          |
|--|--------------------------|
| Berks Technical Institute  | Up to 46 quarter credits |
| Harrisburg Area Community College - Harrisburg                     | Up to 12 credits         |
| Lehigh Carbon Community College                                    | Up to 9.5 credits        |
| Lincoln Technical Institute - Allentown                            | Up to 20 credits         |
| Northampton County Community College                               | Up to 10 credits         |
| Pittsburgh Technical Institute                                     | Up to 7 credits          |
| Reading Area Community College (Depending on RACC Course of Study) | Up to 18 credits         |
| Thaddeus Stevens College of Technology                             | Up to 9 credits          |

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude

Qualified students are encouraged to apply as a Technical Academy student for this program. See page 11 for additional information.



# IT Programming

Instructor **Denise Paulson** | West Campus | CIP Code **52.1201**



Management Information Systems (MIS)/Information Technology (IT) Programming is a series of methods of collecting, compiling, and analyzing large quantities of data to satisfy our society's ever-increasing need for information. With increasing frequency it is apparent that an understanding of IT is a necessary part of general education for students who live and work in our technological society.

The curriculum is designed to provide instruction that prepares students to apply technical knowledge and skills to support problem solving and the design and development of software applications. Students acquire the skills to analyze, design, implement, test, and document an application solution. The students utilize a state-of-the-art network computer system and its associated peripheral equipment to work on live problems, utilizing business software and object-oriented integrated development environments. Concepts delivered provide the basis of understanding in the area of computer programming and are applicable to business applications, mobile applications, and video gaming.

The course provides instruction in Visual Basic.NET, C++, HTML, Java, JavaScript, Database Administration/Programming, Android Mobile Application Development, and Microsoft Office Suite. Students also receive instruction in office procedures and customer service communications, business law and ethics, and basic computer maintenance and troubleshooting.

Graduates of this program are well-prepared for continued higher education towards an associate and bachelor's degree in such areas as: Computer Programming, Management Information Systems, Database Administration, Web Developer, or Software Development.

## CAREER PATHWAYS:

Computer Programmer  
Computer User Support Specialist  
Web Developer

### CAREER PATHWAYS CAN LEAD TO:\*

- Senior Programmer
- Programming Manager
- Systems Analyst, EDP
- Computer Center Manager

\*Requires post-secondary training.

### Industry Certifications:

- Internet and Computing Core Certification (IC3)
- OSHA/CareerSafe 10-Hour Certification

### College Advanced Credits:

- Berks Technical Institute . . . . . Up to 46 quarter credits
- Harrisburg Area Community College . . . . . Up to 10 credits
- Lehigh Carbon Community College . . . . . Up to 3 credits
- Pennsylvania College of Technology . . . . . Up to 3 credits
- Pittsburgh Technical Institute . . . . . Up to 11 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination



Qualified students are encouraged to apply as a Technical Academy student for this program. See page 11 for additional information.

# COMMUNICATIONS



**Advertising Art &  
Design Technology**

**Video & Media Content  
Production\***

\*Formally Communication Media  
Technology & Photo Imaging  
Technology

Advances in technology have taken the field of communications to new and exciting levels. The Communications Cluster offers students opportunities to become immersed in many facets of communication technology. Students are given the opportunity to use their creative talents on “live” projects from inception to completion.

**Careers start here.**

# Advertising Art & Design Technology

Instructor **Elizabeth Ireland** | West Campus | CIP Code **50.0402**



Graphic designers find the most effective way to visually communicate messages across advertising mediums, including print, electronic, and digital media. A variety of strategies are used to problem solve for a designer's clients that include color, typography, illustration, photography, and various print and layout techniques.

The coursework is designed to provide students with a strong foundation in the principles of design through a variety of projects, including logo and stationery design, editorial layout, movie posters, magazine, newspaper, and social media advertising. Students will learn to use industry-specific software for photo manipulation, page layout, and illustration in a state-of-the-art design studio.

This program covers the following topics: fundamentals of computerized design technology, principles of typography, principles of color, product production procedures, principles of basic photography, fundamentals of graphic design, fundamentals of illustration, electronic illustration, image manipulation, page layout, project production management, and employability skills. Students will learn from each teacher in the Communications Cluster and participate in learning experiences with students from Video & Media Content Production.

Students will leave the program with a portfolio and resume preparing them both for entry into a design-focused major at a post-secondary institution and internship opportunities within the graphic design and commercial art fields.

## CAREER PATHWAYS:

- Graphic Designer
- Desktop Publishing Specialist
- Illustrator

### CAREER PATHWAYS CAN LEAD TO:\*

- Art/Creative Director
- Display Designer
- Package Designer
- Multimedia Artist
- Web Designer

\*Requires post-secondary training.

#### Industry Certifications:

- Adobe Certified Associate - Visual Communication
- Adobe Certified Associate - Graphic Design & Illustration
- Adobe Certified Associate - Print & Design Media Publication
- OSHA/CareerSafe 10-Hour Certification

#### College Advanced Credits:

- Central Pennsylvania College . . . . . Up to 12 credits
- Pennsylvania College of Art & Design . . . . . Up to 3 credits
- Pennsylvania College of Technology . . . . . Up to 9 credits
- Pittsburgh Technical Institute. . . . . Up to 4 credits
- Reading Area Community College . . . . . Up to 9 credits
- The Art Institute of Philadelphia . . . . . Up to 9 credits

#### Program Requirements/Costs

There are specific costs for text-books, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Artistic ability/creativity



# Video & Media Content Production

Instructors **James Del Conte** | **Lauren Little** | **West Campus**  
CIP Code **50.0602**

**(Formally Communication Media Technology & Photo Imaging Technology)**

This combined program will introduce students to the art and science of digital media technology. Through two tracks of study, Video and Photography, students will develop an understanding of the various technology and techniques used in today’s communication, media, film and streaming industries. Students will have the opportunity to gain hands-on experiences and develop technical understanding by producing digital media and content for various platforms using industry standard software, hardware and camera equipment in both studio and field environments.

The core curriculum, in which all students will participate, includes training in creative development, the production cycle, TV/video/film production, photography, lighting, project management, budgeting, audio production, photo and video editing, 360-degree/VR and drone technology, distribution and streaming media. In addition, students will be educated in graphic and visual design through clustered learning experiences.

After completing the core curriculum, students will have the opportunity to specialize in either photography or video/TV, for further and more intense study in the selected discipline.

The Adobe Creative Suite, including Photoshop, Illustrator, Premiere, After Effects, and Audition, will be taught throughout the program.

This program will enhance students’ writing and communication, creative abilities, problem solving, and technical/computer skills in preparation for college and employment.



## CAREER PATHWAYS:

- Audio/Video Equipment Technician
- Commercial / Industrial Photographer
- Photographic Process Worker
- Portrait / Wedding Photographer
- Production Assistant
- Video Camera Operator
- Video Editor
- Video Producer / Director

### CAREER PATHWAYS CAN LEAD TO:\*

- Audio Technician
- Cinematographer
- Communications Manager
- Forensic Photographer
- Media Specialist
- Production Manager
- Technical Director

\*Requires post-secondary training.

**Industry Certifications:**

- Adobe Certified Associate - Visual Communication
- Adobe Certified Associate - Video Communication

**College Advanced Credits:**

Berks Technical Institute . . . . . Up to 58 quarter credits  
This program will have additional articulation agreements with selected colleges and universities to provide advanced credit toward post-secondary degrees.

**Program Requirements/Costs**

There are specific costs for text-books, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

**Program Entrance Recommendations:**

- Read and interpret technical material at grade level
- Completion of Algebra 1
- Intermediate computer skills
- Creative/artistic ability
- Ability to work independently and in a team
- Effective communication skills
- Strong depth and color perception
- Physical stamina
- Manual dexterity

# CONSTRUCTION

**Building Construction  
Occupations**

**Cabinetry &  
Wood Technology**

**Carpentry**

**Electrical Occupations**

**Heavy Equipment  
Operations**

**Horticulture**

**HVAC/Refrigeration**

**Masonry**

**Painting & Decorating**

**Plumbing & Heating**



Construction and construction-related careers offer students the opportunity to take pride in creating and building a new environment or modifying an existing one. The Construction Cluster at BCTC prepares students for all of the high-demand careers in various construction and building-related industries.

**Careers start here.**

# Building Construction Occupations

Instructor **Kevin Crawford** | East Campus | CIP Code **46.9999**

The Building Construction Occupations program is accredited by the National Center for Construction Education and Research (NCCER) through the Associated Builders and Contractors (ABC) and provides participants with defined career paths in the construction industry. The Building Construction Occupations program provides instruction in a number of the construction trades and is focused on the building and installation of all systems in a physical structure.

Classroom and lab experiences involve the basics of several building trades including carpentry, metal fabrication, interior finishes, masonry, plumbing, and electricity. As a student in Building Construction Occupations, you will also learn to use various hand tools and power tools.

Students at the East Campus will have the opportunity to apply their skills and knowledge with the construction of a custom-built home under the direction of their instructors. The local housing market has come to know the BCTC student-built homes as a model of quality and craftsmanship.

Graduates of this program are prepared for employment in the construction fields or may pursue more specialized training through an apprenticeship and/or post-secondary education.



## CAREER PATHWAYS:

- Building Maintenance Repairer
- Brick Mason/Block Mason
- Plumber
- Carpenter
- Welder
- Electrician

### CAREER PATHWAYS CAN LEAD TO:\*

- Construction and Building Inspector
- Building Supervisor
- Building Trades Instructor
- Construction Supervisor
- Maintenance Supervisor

\*Requires post-secondary training.

#### NCCER – National Center for Construction Education and Research

The Building Construction Occupations program participates in NCCER. This curricula and training process is supported by trade associations, contractors, schools, construction and maintenance users, pipeline operators, manufacturers, and third-party training providers. Visit [www.nccer.org](http://www.nccer.org) for further information.

#### PBA – Pennsylvania Builder's Association

The program is a PBA endorsed program, which allows students who complete the program at the competent and above level to earn a PBA Certification. Visit [www.pbuilders.org](http://www.pbuilders.org) for more information.

#### Industry Certifications:

- NCCER Core
- OSHA/CareerSafe 10-Hour Certification
- Pennsylvania Builders Association Skills Certificate (based on NOCTI)

#### College Advanced Credits:

- Harrisburg Area Community College . . . . . Up to 3 credits
- Triangle Tech – Bethlehem . . . . . Up to 8.5 credits

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude



# Cabinetry & Wood Technology

Instructor **Gerald Galczynski** | East Campus | CIP Code **48.0703**



The Cabinetry & Wood Technology program is accredited by the National Center for Construction Education and Research (NCCER) through the Associated Builders and Contractors (ABC) and provides participants with defined career paths in cabinetmaking. The instructional program combines classroom, laboratory, and live work experiences to help the students develop their craftsmanship skills.

Cabinetry is a specialized branch of woodworking and students will learn to fashion wood into objects of usefulness and beauty, such as home and office furniture and cabinets. Instruction is given in reading blueprints and planning the sequence of cutting operations to use the materials resulting in the least amount of waste. Students must develop skills in the use of many hand and power tools. The Cabinetry student will train with the technology for CNC design, programming, and operations. These machinery skills have become commonplace at most manufacturing and mill shops.

Students will receive training in precision cutting, shaping, and assembling of parts through the use of hand tools, power tools, and woodworking machines. Instruction will also be provided in design and layout, assembly, hardware, finishes, and installation.

As a participant in this program at the East Campus, students participate in the construction of the student-built house project. Its countywide reputation for quality makes this an exceptional “live work” opportunity that will instill confidence and pride as students prepare to enter the workforce, apply for apprenticeships or continue in a technical program.

## CAREER PATHWAYS:

- Cabinetmaker & Bench Carpenter
- Woodworking Machine Setter, & Setup Operator
- Patternmaker/Wood Furniture Finisher

### CAREER PATHWAYS CAN LEAD TO:\*

- Assemblers & Fabricators
- Sawing Machine Setter, Operator, & Tender, Wood
- Kitchen Salesperson
- Mill/Plant Supervisor
- Cabinetmaker Instructor
- Furniture Designer
- Cabinetry Shop Owner
- Finish Carpenter

\*Requires post-secondary training.



#### NCCER – National Center for Construction Education and Research

The Cabinetry & Wood Technology program participates in NCCER. This curricula and training process is supported by trade associations, contractors, schools, construction and maintenance users, pipeline operators, manufacturers, and third-party training providers. Visit [www.nccer.org](http://www.nccer.org) for further information.

#### PBA – Pennsylvania Builder’s Association

The program is a PBA endorsed program, which allows students who complete the program at the competent and above level to earn a PBA Certification. Visit [www.pabuilders.org](http://www.pabuilders.org) for more information.

#### Industry Certifications:

- NCCER Core
- OSHA/CareerSafe 10-Hour Certification
- Pennsylvania Builders Association Skills Certificate (based on NOCTI)

#### College Advanced Credits:

Triangle Tech – Bethlehem . . . . . Up to 3 credits

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude



# Carpentry

Instructor **Jeffrey Miller** | **East Campus** | CIP Code **46.0201**

The Carpentry program is accredited by the National Center for Construction Education and Research (NCCER) through the Associated Builders and Contractors (ABC) and provides participants with defined career paths in carpentry. This program prepares students in all phases of residential and light commercial carpentry through a combination of classroom, laboratory, and live work experiences to help the students develop their skills.

The instructional program covers both types of carpentry work: rough and finish. Rough carpentry includes foundations, framing, exterior finishes, and lumber. Finish carpentry includes the installation of finished flooring, stairwork, trim, wallboards, windows and hardware.

Students in this program will also learn estimating, material identification, and the basics of both rough and finish carpentry related to residential construction, including such areas as blueprint reading, the use of power and hand tools, framing techniques, roofing, siding, and the installation of trim and hardware.

As a participant in this program, students at the East Campus participate in the construction of the student-built house project. Its county-wide reputation for quality makes this an exceptional “live work” opportunity that will help hone skills as students prepare to enter the workforce, apply for apprenticeships or continue in a post-secondary program.



## CAREER PATHWAYS:

- Rough Carpenter
- Construction Carpenter (Residential)
- Roofer
- Carpenter Assembler & Repairer – Sider

### CAREER PATHWAYS CAN LEAD TO:\*

- Lumber Products Store Manager
- Construction Supervisor
- Carpentry/Millwork Instructor

\*Requires post-secondary training.

#### NCCER – National Center for Construction Education and Research

The Carpentry program participates in NCCER. This curricula and training process is supported by trade associations, contractors, schools, construction and maintenance users, pipeline operators, manufacturers, and third-party training providers. Visit [www.nccer.org](http://www.nccer.org) for further information.

#### PBA – Pennsylvania Builder’s Association

The Carpentry program is a PBA endorsed program, which allows students who complete the program at the competent and above level to earn a PBA Certification. Visit [www.pabuilders.org](http://www.pabuilders.org) for more information.

#### Industry Certifications:

- NCCER Core
- OSHA/CareerSafe 10-Hour Certification
- Pennsylvania Builders Association Skills Certificate (based on NOCTI)

#### College Advanced Credits:

- Harrisburg Area Community College - Harrisburg . . . . . Up to 15 credits
- Thaddeus Stevens College of Technology . . . . . Up to 9 credits
- Triangle Tech – Bethlehem . . . . . Up to 8 credits

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude



# Electrical Occupations

Instructor **Michael DeCarlo** | East Campus | CIP Code **46.0399**  
 Instructor **Theodore Semanchick** | West Campus



The Electrical Occupations program is accredited by the National Center for Construction Education and Research (NCCER) through the Associated Builders and Contractors (ABC) and provides participants with defined career paths in the electrical occupations industry. Through a combination of classroom, laboratory, and live work experiences students are well prepared for employment or have a strong foundation to pursue further education.

This comprehensive program provides students with the skills to become both construction and maintenance electricians. Construction electricians lay out, assemble, install, and test electrical fixtures and wiring used in electrical systems on construction sites. Maintenance electricians maintain and keep many different types of electrical equipment in good working order principally by detecting and repairing defective equipment before a breakdown occurs.

The curriculum covers many areas, including: residential wiring and service, wiring alterations, installation of electrical environmental circuits, commercial and industrial wiring, electrical maintenance, planning and site work on commercial/industrial jobs and services, power distribution transformers, single-phase transformers and AC machines, electrical motors and controls, three-phase transformers and AC machines, PLCs, electrical aspects of HVAC and related facilities, and emergency power systems. Instruction is also provided in the installation of electrical distribution systems both overhead and underground.

Students at the East Campus will have the opportunity to apply their skills and knowledge by helping with the construction of a custom built home under the direction of their instructors.

## CAREER PATHWAYS:

- Electrician
- Commercial & Industrial Equipment Repairer
- Sales Engineer – Electrical Products

### CAREER PATHWAYS CAN LEAD TO:\*

- Electrical Engineer
- Electrical Contractor
- Maintenance Supervisor
- Superintendent (Construction)
- Electrician Technician - Plant
- Electrical Contractor- Residential

\*Requires post-secondary training.

#### NCCER – National Center for Construction Education and Research

The Electrical Occupations program participates in NCCER. This curricula and training process is supported by trade associations, contractors, schools, construction and maintenance users, pipeline operators, manufacturers, and third-party training providers. Visit [www.nccer.org](http://www.nccer.org) for further information.

#### PBA – Pennsylvania Builder's Association

The Electrical Occupations program is a PBA endorsed program, which allows students who complete the program at the competent and above level to earn a PBA Certification. Visit [www.pabuilders.org](http://www.pabuilders.org) for more information.

#### Industry Certifications:

- NCCER Core
- OSHA/CareerSafe 10-Hour Certification
- Pennsylvania Builders Association Skills Certificate (based on NOCTI)

#### College Advanced Credits:

- Harrisburg Area Community College - Harrisburg . . . . . Up to 8 credits
- Pennsylvania College of Technology . . . . . Up to 2 credits
- Triangle Tech – Bethlehem . . . . . Up to 8 credits

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical Aptitude
- Ability to distinguish color



# Heavy Equipment Operations

Instructor **Michael Rowe** | East Campus | CIP Code **49.0202**

The Heavy Equipment Operations Program is designed to provide students with the theory and hands-on skills relevant to the fundamentals of operation and preventive maintenance of various types of heavy equipment. Specialized classroom and lab experiences are designed to provide instruction in operation and preventive maintenance of mobile machinery used by heavy equipment operators.

Included in the course of study is an introduction to the diverse job opportunities available to heavy equipment operators. Instruction begins with job site safety, blueprint reading, equipment rigging, and other fundamentals before advancing to activities like building a pad, backfilling a trench, and slot dozing.

Students will be instructed in the proper use of equipment, basic maintenance of the machines, and will receive extensive field practice in earth moving, site-preparation, construction site layout, excavation, and backfilling of building sites. In addition, students will learn to use a transit and hand levels, oxyacetylene and other welding equipment, blueprint reading, and will become familiar with OSHA rules. Heavy Equipment Operators are employed in a variety of occupations in the construction industry, road construction, and mining.

Exercises on virtual equipment simulators are followed by plenty of practice with the real thing on an exquisite outdoor training course. Students gain real-world experience by applying the knowledge learned at an off-campus quarry site, supervised by their instructor.



## CAREER PATHWAYS:

Paving, Surfacing, and Tamping Equipment Operators  
Operating Engineers and Other Construction Equipment Operators  
Highway Maintenance Workers

### CAREER PATHWAYS CAN LEAD TO:\*

Agricultural Equipment Operator  
Construction Equipment Operator  
Highway Maintenance Works  
Equipment Operators  
Foreman  
Engineer

#### Industry Certifications:

OSHA 10-Hour  
OSHA Forklift Certification (National Safety Council)  
Penn-Dot Flagger Certification

#### College Advanced Credits:

A statewide articulation agreement known as SOAR allows students to earn college credit for their work in the Heavy Equipment Operations & Preventive Maintenance Program

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude





Horticulture offers students an opportunity to pursue a career interest in any one or combination of the major areas of horticulture: turfgrass establishment and maintenance, landscape design, construction and maintenance; greenhouse crop production; and floral design. In addition, all students will become members of FFA and have an opportunity to benefit from leadership activities and competitions.

**Turfgrass Establishment and Maintenance** involves the study of turf-grasses; soil identification and amendments; seasonal lawn maintenance and installation tasks; pest control and the establishment of lawns. This discipline also includes the operation of lawn equipment and small engine repair, preventative maintenance, tune-up procedures, blade sharpening and equipment overhaul. **Landscape Design, Construction and Maintenance** includes the principles of landscape design; the study and maintenance of ornamental shrubs and trees, perennials, annuals, bulbs, and fruit trees; corrective and seasonal pruning; propagation; the installation of segmental walls, walk-ways, patios, low voltage lighting and water features; garden installation and equipment operation. **Greenhouse Crop Production** includes the study of greenhouse structures and operation; soils; fertilization; propagation; watering; pest control; inventory; crop scheduling and greenhouse crop care and sales. **Floral Design** includes the study of floral shop practices; fresh, silk, and dried floral arranging; holiday and special occasion designs, wedding design work, houseplant care, and trends in the floral industry.

The Horticulture Program features an **Aquaponics System**. Aquaponics blends together the technology of hydroponics and fish rearing methods of aquaculture. Based upon the nitrogen cycle, the fish produce essential nutrients for the plants, and in return, the plants filter the water. This sustainable technology allows for organic growing of crops like lettuce, radishes, tomatoes, peppers, eggplant, and carrots. Horticulture students work closely with Culinary students to plan menus and schedule the crops for proper harvest. This cross collaboration helps build networking skills while implementing a 21st century business model.

Students in the Horticulture program gain invaluable experience by landscaping the grounds of the student built house project, maintaining portions of the campus, creating seasonal floral arrangements for customers, working on community service projects, and engaging in the production and sale of bedding plants each spring.

Students in this program should be proficient in the following math skills: calculating with fraction operations, computing linear measurements, computing liquid measurements, computing square feet and cubic dimensions, solving ratio problems, and using basic geometry.

## CAREER PATHWAYS:

- Nursery Worker
- Floral Designer
- Landscaping and Groundskeeping Worker
- Horticulture & Nursery Sales
- Horticulture Grower/Greenhouse

## CAREER PATHWAYS CAN LEAD TO:\*

- Nursery & Greenhouse Manager
- Golf Course Superintendent
- Landscape Designer
- Garden Center Manager
- Arborist
- Aquaponics
- Environmental Resource Management
- Sustainable Technology

\*Requires post-secondary training.



### Industry Certifications:

PA Certified Horticulturist (PCH), PA Pesticide Applicator Certification, OSHA/CareerSafe 10-Hour Certification

### College Advanced Credits:

Harrisburg Area Community College - Harrisburg . . . . . Up to 11 credits  
 Pennsylvania College of Technology . . . . . Up to 10 credits  
 An agreement with Delaware Valley College is planned.

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude



# HVAC/Refrigeration

Instructor **Thomas Danner** | East Campus | CIP Code **47.0201**

This program is accredited by HVAC Excellence and provides participants with defined career paths in the industry. The program uses project-based methods and national performance standards to teach students the knowledge and skills needed for a successful future in this field.

Instruction in this course includes the theory and application of the basic principles involved in the conditioning of air, cooling, heating, filtering and controlling of humidity. Students develop skills in assembling and installing tubes and pipes, motors, compressors, control devices, valves and thermostats, and gain an understanding

of blueprints and schematics related to equipment and systems. Students must be able to diagnose equipment malfunctions and be able to read and understand technical reference manuals. Energy management control technology is taught as it relates to domestic, commercial and industrial air systems, heat pumps, forced air conditioning systems and microcomputer systems control.

Graduates of this program have excellent opportunities for entry level employment, to pursue an apprenticeship, or continue their education in a technical post-secondary program.



**HVAC Excellence:** This program is accredited through HVAC Excellence to assure that the curriculum taught meets or exceeds the National Skill Standards. Having this accreditation enables BCTC to more easily articulate credits with other institutions and apply for public and private funds. Visit [www.hvacexcellence.org](http://www.hvacexcellence.org) for further information.

### NCCER – National Center for Construction Education and Research

The HVAC/R program participates in NCCER. This curricula and training process is supported by trade associations, contractors, schools, construction and maintenance users, pipeline operators, manufacturers, and third-party training providers. Visit [www.nccer.org](http://www.nccer.org) for further information.

### PBA – Pennsylvania Builder’s Association

The program is a PBA endorsed program, which allows students who complete the program at the competent and above level to earn a PBA Certification. Visit [www.pabuilders.org](http://www.pabuilders.org) for more information.

### Industry Certifications:

Student Outcome Assessment (HVAC Excellence), EPA 608 Certification, NCCER Core, Section 609 Certification for Refrigerant Recycling and Recovery, OSHA/CareerSafe 10-Hour Certification, OSHA 30-hour Certification, Pennsylvania Builders Association Skills Certificate (based on NOCTI)

### College Advanced Credits:

Harrisburg Area Community College-Harrisburg . . . . . Up to 9 credits  
 Lehigh Carbon Community College . . . . . Up to 9 credits  
 Northampton County Area Community College . . . . . Up to 11 credits  
 Pennsylvania College of Technology . . . . . Up to 10 credits  
 Thaddeus Stevens College of Technology . . . . . Up to 10 credits  
 Triangle Tech – Pittsburgh. . . . . Up to 36 credits  
 University of Northwestern Ohio . . . . . Up to 6 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading at grade level
- Mathematics: see note at left
- Problem-solving/ troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude

## CAREER PATHWAYS:

- Refrigeration Mechanic and Installer
- Heating & Air Conditioning Mechanic
- Sheet Metal Worker
- Energy Auditor

### CAREER PATHWAYS CAN LEAD TO:\*

- Air Conditioning and Heating Engineer
- Refrigeration Engineer
- Energy Management Control Engineer
- Factory Service Representative
- Estimator
- Stationary Engineer
- HVAC Contractor

\*Requires post-secondary training.



**Mathematics** - HVAC technicians are increasingly required to perform complex mathematical operations and calculations when performing work in the field. Therefore, it is highly recommended that students enter the program with a strong foundation in Algebra I and Geometry. In addition, students are advised to complete Algebra II, Trigonometry and Physics during high school to have the necessary academic and technical skills to successfully enter the workforce and/or post-secondary education.



## CAREER PATHWAYS:

Brick Mason/Block Mason  
Tile and Marble Setter

### CAREER PATHWAYS CAN LEAD TO:\*

Contractor  
Masonry Instructor  
Estimator  
Bricklayer  
Cement Mason

\*Requires post-secondary training.



This program is accredited by the National Center for Construction Education and Research (NCCER) through the Associated Builders and Contractors (ABC) and provides participants with defined career paths in the industry. This hands-on program provides many opportunities to do live work and outside projects that test and refine the student's skills.

Bricklayers or brick masons are craftspeople who construct and repair walls, partitions, arches, fireplaces, chimneys, and other structures from brick, block, concrete, and glazed tile. They must be able to lay out jobs, read blueprints, and estimate materials and cost. Instruction in this trade includes learning skills involved in the cutting, chipping and laying of brick and concrete block, the mixing and spreading of mortar and other bonding agents, and the cutting and laying of ceramic tiles. Students will learn to use tools, such as trowels, jointers, hammers, levels, gauge line, and squares. Knowledge of mortar, cement, and other bonding agents is important to workers in this skilled trade.

Students have the opportunity to apply their skills and knowledge by helping with the construction of a custom built home under the direction of their instructors. The local housing market has come to know the BCTC student-built homes as a model of quality and craftsmanship.

Graduates of this program are prepared to seek employment in the masonry field or may choose to pursue more specialized training through an apprenticeship and/or post-secondary education.

#### NCCER – National Center for Construction Education and Research

The Masonry program participates in NCCER. This curricula and training process is supported by trade associations, contractors, schools, construction and maintenance users, pipeline operators, manufacturers, and third-party training providers. Visit [www.nccer.org](http://www.nccer.org) for further information.

#### PBA – Pennsylvania Builder's Association

The program is a PBA endorsed program, which allows students who complete the program at the competent and above level to earn a PBA Certification. Visit [www.pabuilders.org](http://www.pabuilders.org) for more information.

#### Industry Certifications:

NCCER Core  
OSHA/CareerSafe 10-Hour Certification  
Pennsylvania Builders Association Skills Certificate (based on NOCTI)

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude

# Painting & Decorating

Instructor **Rachel Kline** | East Campus | CIP Code **46.0408**

This program is accredited by the National Center for Construction Education and Research (NCCER) through the Associated Builders and Contractors (ABC) and provides participants with defined career paths in the industry. The hands-on-approach to the training gives students ample opportunity to hone their skills and fine-tune their talents.

In this program students are given instruction and practical experience in all aspects of painting, staining, finishing, and wall- paper hanging. Students also learn surface stripping and preparation, brush and spray painting skills, paper hanging, cost estimation, furniture refinishing, color coordinating, interior decorating, tile setting, faux finishing, care and use of equipment, and safety practices.

Upon graduation, students may seek employment in several areas or with further training and education may pursue more advanced career options, such as interior design and decorating.



## CAREER PATHWAYS:

- Residential Painter
- Paper Hanger
- Furniture Finisher
- Drywall Taper

### NCCER – National Center for Construction Education and Research

The Painting and Decorating program participates in NCCER. This curricula and training process is supported by trade associations, contractors, schools, construction and maintenance users, pipeline operators, manufacturers, and third-party training providers. Visit [www.nccer.org](http://www.nccer.org) for further information.

### PBA – Pennsylvania Builder's Association

The program is a PBA endorsed program, which allows students who complete the program at the competent and above level to earn a PBA Certification. Visit [www.pabuilders.org](http://www.pabuilders.org) for more information.

### Industry Certifications:

- NCCER Core
- OSHA/CareerSafe 10-Hour Certification
- Pennsylvania Builders Association Skills Certificate (based on NOCTI)

### College Advanced Credits:

Pennsylvania College of Technology . . . . . Up to 4 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading at grade level
- Ability to read tape measure and ruler
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude
- Ability to add, subtract, and multiply fractions

## CAREER PATHWAYS CAN LEAD TO:\*

- Interior Designer
- Interior Decorator
- Painter (Maintenance)
- Paint Crew Foreman
- Commercial Painter
- Industrial Painter
- Structural Steel Painter
- Bridge Painter
- Furniture Finisher
- Retail Associate

\*Requires post-secondary training.



# Plumbing & Heating

Instructor **Michael Wentling** | East Campus | CIP Code **46.0503**



This program is accredited by the National Center for Construction Education and Research (NCCER) through the Associated Builders and Contractors (ABC) and provides participants with defined career paths in the industry. Students in this program are involved in classroom and practical learning experiences designed to help them develop the necessary skills to be successful in the industry.

Plumbers and pipe fitters assemble, install, alter, and repair pipes and pipe systems that carry water, steam, air, or other liquids and gasses for sanitation, industrial and other uses. They also install plumbing fixtures, appliances, and heating systems. Safe and proper mechanical practices are essential components as they help to protect the health and well-being of the nation.

The hands-on approach to training will cover layout, assembly, installation and repair of pipes, fittings, and fixtures of heating, water and drainage systems according to manuals, specifications and plumbing codes. Also included are the installing, repairing, operating and testing of various types of residential and commercial heating equipment and the controls necessary for their operation.

Graduates of this program are prepared for entry level work, apprenticeship opportunities, and post-secondary education.

## CAREER PATHWAYS:

- Plumber (Construction)
- Pipelayer, Pipefitter or Steamfitter
- Plumber Apprentice
- Oil Burner Service & Installer

### CAREER PATHWAYS CAN LEAD TO:\*

- Job Estimator
- Master Plumber
- Heating Engineer
- Plumbing Inspector
- HVAC Technician

\*Requires post-secondary training.

#### NCCER – National Center for Construction Education and Research

The Plumbing and Heating program participates in NCCER. This curricula and training process is supported by trade associations, contractors, schools, construction and maintenance users, pipeline operators, manufacturers, and third-party training providers. Visit [www.nccer.org](http://www.nccer.org) for further information.

#### PBA – Pennsylvania Builder's Association

The program is a PBA endorsed program, which allows students who complete the program at the competent and above level to earn a PBA Certification. Visit [www.pabuilders.org](http://www.pabuilders.org) for more information.

#### Industry Certifications:

- NCCER Core
- OSHA/CareerSafe 10-Hour Certification
- Pennsylvania Builders Association Skills Certificate (based on NOCTI)

#### College Advanced Credits:

- Harrisburg Area Community College . . . . . Up to 6 credits
- Pennsylvania College of Technology. . . . . Up to 5 credits

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude





# ENGINEERING & MANUFACTURING TECHNOLOGY



**Drafting Design  
Technology**

**Engineering  
Technologies**

**Precision/  
Computerized  
Machining Technology**

**Welding Technology**

The Engineering & Manufacturing Technology Cluster offers programs that examine the elements of design, production, and repair. The programs utilize the latest equipment, computers, and technology to teach students the exacting skills to solve problems and transform ideas into products. The equipment and software has been recommended by local business and industry leaders to keep the programs on the leading edge of today's workplace.

**Careers start here.**

# Drafting Design Technology

Instructor **Loretta Sterner** | West Campus | CIP Code **15.1301**



The central activity of drafting and design technicians is to help convert an idea in a designer's mind to precise working specifications from which a product can be made. Drafting design technicians assist engineers and architects in the design and drafting of electrical circuits, machine structures, weldments and architectural plans. Graduates of this program will be well-prepared to enter the workforce as draftspersons in the mechanical, architectural, or civil fields. Students will learn how to prepare engineering plans, layouts, detailed drawings, create mass and volume studies. They will also work on many interesting in-class projects that will challenge their abilities and capture their imagination.

Drafting design technicians are specialists who use many methods of communication. The instruction during this program will focus on developing the following skills: CAD, architectural, mechanical, and civil drafting.

Students learn the basics of CAD while learning the fundamentals of drafting on a computer. The curriculum includes the use of a state-of-the-art 3D printer to print student project models. Each student develops a professional portfolio of work completed during the course. This program provides the skills and foundation for a successful career in the drafting field.

## CAREER PATHWAYS:

- Mechanical Drafter
- Architectural Drafter
- Civil Drafter
- Drafter
- Electronic Drafter (CAD Technician)

### CAREER PATHWAYS CAN LEAD TO:\*

- Architect
- Civil Engineer
- Mechanical Engineer
- Electrical Engineer
- Chief Design Drafter
- Aeronautical Engineer
- Designer
- Facility Manager
- Urban Planner
- Surveyor

\*Requires post-secondary training.



**ADDA**— This program is accredited by and conforms to the American Design Drafting Association (ADDA) curriculum. These guidelines were designed in conjunction with the Department of Education and the Department of Labor to assure the level of training and industry requirements are met. Visit [www.adda.org](http://www.adda.org) for further information.

#### Industry Certifications:

Certified Drafter (ADDA), Autodesk Certified User  
OSHA/CareerSafe 10-Hour Certification

#### College Advanced Credits:

Berks Technical Institute . . . . . Up to 61 quarter credits  
Lehigh Carbon Community College. . . . . Up to 3 credits  
Pennsylvania College of Technology . . . . . Up to 3 credits  
Pittsburgh Technical Institute . . . . . Up to 12 credits  
Thaddeus Stevens College of Technology. . . . . Up to 9 credits  
Triangle Tech – Pittsburgh . . . . . Up to 36 credits

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude
- Artistic ability/creativity

# Engineering Technology Career Pathways - Overview

The Engineering Technology career pathway provides students with a number of career pathways to post-secondary education and industry work. Students who pursue a program in the Engineering Technology field will complete core courses and earn an OSHA certification during their first year. Upon completing the Level I curriculum students will select a career pathway in the field of Robotics and Automation Technology and/or Mechatronics Engineering Technology.

## Level I Core Curriculum

All Level I students, regardless of their career pathway, will complete the same core content their first year in the program. Students must earn the OSHA 10-Hour Safety Certification. Additionally, students will complete the content required in the core course MET 130 - Industrial Electrical Systems. Students enrolled in the Technical Academy (mechatronics) can earn dual enrollment credits for their work.

## Level II and II Career Pathways Curriculum

The level II students will continue to complete the content required in the core course MET 120 - Industrial Mechanical Systems. During Level II and Level III of the program students will continue to specialize and complete the competencies related to their chosen career pathway.

Students will also be expected to earn recognized industry certifications in their chosen program area. These pathways are considered “high priority occupations” by the Pennsylvania Department of Labor for Berks County. Successful students will find excellent job opportunities available in the region.

Students are expected to supplement their technical education program at BCTC with a “college prep” academic program at their participating high school. This is critical to being able to successfully complete the highly technical coursework in Engineering Technology. It will also enable students to pass college academic placement tests and earn advanced credits.

The Engineering Technology curriculum provides a relatively seamless transition to postsecondary education. Through articulation and partnership agreements, successful students will earn advanced credits with Reading Area Community College, Lehigh Carbon Community College, Pennsylvania College of Technology, and Pittsburgh Technical Institute.

ENGINEERING TECHNOLOGY - SECONDARY LEVEL		
LEVEL I		
	OSHA/CareerSafe Certification	= 10 hrs
	MET 130 Industrial Electrical Systems - 27 Tasks	= 250 hrs, 4 credits
	Level I - 10 Tasks	= 100 hrs
	Total Hours	= 360 hrs
LEVEL II		
ROBOTICS & AUTOMATION	MECHATRONICS	
	RACC	BCTC
Level II – 40 Tasks	MET 120 Industrial Mechanics - 5 credits MET 140A Intro. to PLC Part I - 2 credits MET 101 Intro. To Shop Machinery - 3 credits	MET 120 Industrial Mechanics - 33 Tasks = 200 hrs. MET 140A Intro. to PLC Part I - 16 Tasks = 100 hrs. MET 101 Intro. To Shop Machinery - 21 Tasks = 60 hrs.
Approx. 360 hrs	Approx. 360 hrs. Total Credits - 10	Approx. 360 hrs.
LEVEL III		
ROBOTICS & AUTOMATION	MECHATRONICS	
	RACC	BCTC
Level III – 29 Tasks	Attends RACC and BCTC MET 140B Introduction to PLC Part II - 2 credits MET 150 Industrial Mechanics II - 6 credits MET 160 Rotating Electrical Machines - 4 credits	Level III – 29 Tasks
Approx. 360 hrs	Approx. 360 hrs. Total Credits - 12	Approx. 360 hrs.

# Engineering Technologies

Instructors **Alan Blackburn** | **Dr. Charles Stricker**  
 CIP Code **15.0403** | **West Campus**



## ENGINEERING TECHNOLOGY CAREER PATHWAY

Students will earn an OSHA Safety certification as part of the Level I curriculum. This industry certification is highly recognized in the field and is portable. Some of the topics in the Level I and Level II curricula include: DC and AC circuits, various electrical components including: power supplies, switches, resistors, capacitors, inductors, motors, transformers, solenoids, fuses, circuit breakers and rheostats. Students will combine electric motors, electro-pneumatic, and electro-hydraulic control components with relays, timers, and counters to create logic and sequential control circuits.

Students will construct and evaluate mechanical systems based on calculated speed, torque, power, pitch, ratios, and mechanical efficiencies. Also, students will install, maintain, and troubleshoot V-belt drive systems, chain drive systems, and hydraulic and pneumatic systems. A variety of control systems are used to integrate the various electro-mechanical components to create functional operating systems.

The Level III curriculum will provide more in-depth instruction in robotics and automation. Students will complete coursework related to the following topics: pneumatics, hydraulics, basic mechanical power, electrical motors and controls, digital circuit, semiconductors, programmable logic controls, and robotics.

The Engineering Technologies Program integrates mechatronics, robotics, and electronics content to provide a robust foundation for students who are considering engineering, robotics, mechatronics, or automation as a career. This field continues to evolve creating an increasing demand for engineers, engineering technicians, electronic designers and robotic installation, maintenance and repair. The Engineering Technologies program prepares students for post-secondary education or immediate work in industry, based on the career aspirations of the individual student.

The Robotics and Automation Technology program provides students the opportunity to work with robotic and automation technologies. This field continues to evolve creating an increasing demand for engineers, engineering technicians, electronic designers and robotic installation, maintenance and repair.

## CAREER PATHWAYS:

Commercial & Industrial  
 Equipment Technician  
 Electro-Mechanical Technician  
 Installation, Maintenance &  
 Repair Technician

## CAREER PATHWAYS CAN LEAD TO:\*

Electrical Engineer  
 Mechanical Engineer  
 Instrument Technician

\*Requires post-secondary training.

### Industry Certifications:

OSHA/CareerSafe 10-Hour Certification  
 Planned – AMIST Certification (Advanced Manufacturing Integrated Systems Technology)

### College Advanced Credits:

Pennsylvania College of Technology . . . . . Up to 2 credits  
 Pittsburgh Technical Institute . . . . . Up to 14 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude



Qualified students are encouraged to apply as a Technical Academy student for this program. See page 11 for additional information.



# Precision/Computerized Machining Technology

Instructors **Eric Hopewell** | **Peter Hoffman**  
 CIP Code **48.0501** | **West Campus**

The machining industry utilizes precision tools and equipment to transform engineers' and designers' visions into finished products. The training in the Precision/Computerized Machining Technology program focuses on in-demand skills for the local and national job market. These are the skills required by the high-tech, modern manufacturing businesses such as aerospace, medical instrumentation, defense, and many more.

Students in the program learn the use of hand tools, conventional machine tools, and Computer Numerical Control (CNC) machine tools to cut metals within 1/10,000th of an inch. Curriculum topics include conventional and CNC milling, conventional and CNC turning, Electrical Discharge Machining (EDM), and precision grinding.

Students also learn interpretation of engineering drawings to gain understanding of machining industry specifications. Training also includes precision inspection using sophisticated measuring equipment including a coordinate measuring machine, a machinist microscope, and an optical comparator within the metrology lab, where quality assurance is emphasized.

The PMT/CMT program at BCTC has been recognized and awarded the National Institute for Metalworking Skills (NIMS) test site accreditation. This accreditation represents the industry's mark of approval and recognition of the training program. Students will have the opportunity to earn nationally recognized certifications that show their competency in different skill areas.

**NIMS**— This program is accredited through the National Institute for Metalworking Skills, Inc. (NIMS) to assure training to industry standards and to meet NIMS quality requirements. Students can earn certifications that give formal recognition of those standards and requirements. Visit [www.nims-skills.org](http://www.nims-skills.org) for further information.

## Industry Certifications:

National Institute for Metalworking Skills (NIMS)  
 Level I Machining (various certifications)  
 Level II Machining (various certifications)  
 OSHA/CareerSafe 10-Hour Certification

## College Advanced Credits:

Pennsylvania College of Technology . . . . . Up to 11 credits  
 Reading Area Community College . . . . . Up to 11 credits  
 Thaddeus Stevens College of Technology . . . . . Up to 10 credits

## Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

## Program Entrance Recommendations:

- Reading at grade level
- Completion of Algebra I
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude
- Attention to detail



## CAREER PATHWAYS:

- Computer-Controlled Machine Tool Operator
- Machinist
- Computer Numerically-Controlled Machine Tool Programmer
- Multiple Machine Tool Setter, Operator and Tender
- Conventional EDM Operator/Programmer
- Wire EDM Operator/Programmer
- Milling & Planing Machine Setter/Operator/Tender
- Lathe & Turning Machine Tool Setter/Operator/Tender

## CAREER PATHWAYS CAN LEAD TO:\*

- Materials Inspector
- Mechanical Engineer
- CNC Programmer/Technician
- Metrologist
- Quality Assurance Manager/Technician
- Industrial Designer
- Tool & Die Maker
- Machine Shop Supervisor
- Moldmaker

\*Requires post-secondary training.



# Welding Technology

Instructors **Dale Roberts** | **Michael Kline** | **West Campus** | CIP Code **48.0508**



## CAREER PATHWAYS:

- Structural Metal Fabricator & Fitter
- Welder Cutter & Fitter
- Production Workers

### CAREER PATHWAYS CAN LEAD TO:\*

- Certified Welding Inspector
- Welding Engineer
- Welding Instructor
- Quality Control/Quality Assurance Technician

\*Requires post-secondary training.



Welding is a profession that is needed from on top of the world's tallest buildings to the depths of the ocean floor. Welding is used in many industries including construction, manufacturing, aerospace, petroleum, agriculture, and the military. This makes welding an important part of the U.S. economy, and employers have a strong need for skilled welders.

Students in the Welding program learn the welding standards established by the American Welding Society (AWS), using the latest equipment in a state-of-the-art lab. Welding at BCTC is also an AWS SENSE (School Excelling through National skill Standards Education) program.

Students will learn to fabricate or repair metal using electric arc welding. Students also receive training in shielded metal arc welding, gas metal arc welding and gas tungsten arc welding, as well as oxyacetylene cutting/welding. Students will also have hands-on experience using pulse welding technology and a CNC controlled plasma table to create projects.

Emphasis is placed on the related skills of blueprint and welding symbol reading, as well as fabrication and layout procedures. Students use AWS blueprints to layout and fabricate modules to achieve an AWS SENSE certification.

Graduates of this program can work in several areas of the welding field. Welding employment opportunities are very diverse and skilled welders may be able to choose from a variety of job prospects both nationally and internationally.

Students may also pursue advanced studies at the post-secondary level in fields such as metallurgy, welding engineering technology, quality control and inspection.

### Industry Certifications:

- Certified Welder (AWS)
- Level I - Entry Welder (AWS)
- NCCER Core
- OSHA/CareerSafe 10-Hour Certification

### College Advanced Credits:

- Harrisburg Area Community College - Harrisburg . . . . .Up to 11 credits
- Northampton County Area Community College . . . . .Up to 9 credits
- Pennsylvania College of Technology . . . . .Up to 12 credits
- Thaddeus Stevens College of Technology . . . . .Up to 9 credits
- Triangle Tech – Bethlehem . . . . .Up to 14 credits

### Program Requirements/Costs

There are specific costs for text-books, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude

# HEALTHCARE



**Dental Occupations**

**Health Occupations**

**Medical Health  
Professions**

**Sports Medicine &  
Rehabilitative Therapy**

The healthcare industry offers both demanding and very rewarding professions. Advances in medicine and medical technology have aided a growing and aging population, who are living longer and healthier lives. The result is a surge in the demand for skilled professionals in all areas of healthcare.

**Careers start here.**

# Dental Occupations

Instructor **Theresa DeCarlo** | East Campus | CIP Code **51.0601**



The Dental Occupations program integrates lectures, demonstrations, and hands-on experiences to teach students a variety of dental related subjects. The program provides leading-edge training for a career as a dental assistant and also prepares students interested in attending a post-secondary institution to become a dental hygienist, expanded-function dental assistant or a dentist.

The curriculum covers an introduction to healthcare, infection control, safety and emergency procedures, ethical/legal responsibilities, anatomy and physiology related to dentistry, patient care and procedures, office procedures, dental pain and anxiety control, radiology, operative dentistry, dental materials, dental laboratory procedures, basics of oral surgery, periodontics, and prosthodontics.

By completing this program, students are well-prepared for their chosen careers. As dental assistants, they assist dentists during examination and treatment of patients. Students learn to prepare patients for treatment, sterilize instruments, prepare materials and make study models from impressions, expose and process x-ray film, use digital imaging, and provide chairside assistance for the dentist.

## CAREER PATHWAYS:

- Dental Assistant
- Sterilization Assistant
- Dental Laboratory Technician Assistant

### CAREER PATHWAYS CAN LEAD TO:\*

- Dental Hygienist
- Dental Assistant Instructor
- Dentist
- Certified Laboratory Technician
- Expanded Function Dental Assistant
- Certified Dental Practice Management Administrator

\*Requires post-secondary training.

#### Industry Certifications:

- BLS Healthcare Provider
- Radiation Health & Safety (RHS)
- OSHA/CareerSafe 10-Hour Certification
- Anatomy, Morphology and Physiology (AMP)
  - Infection Control Examination (ICE)
  - Radiation Health and Safety (RHS)

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Emotionally mature



# Health Occupations

Instructors **Kathy Bailey (RN)**  
**Alexa Breslin (RN)** | **Therese Matthew (RN)**  
 CIP Code **51.0899** | **West Campus**

The Health Occupations program is a three-year course intended to develop necessary skills knowledge and attitudes for safe, competent performance as an entry-level worker in the healthcare field, such as a nurse's aide or a home health aide. Classroom and laboratory instruction are combined with field trips and clinical experiences to expose students to a variety of health career choices. The core curriculum material is based on the requirements of the Pennsylvania Department of Education and the Pennsylvania Nurse Aide Training and Competency Evaluation Program. Students in this program are prepared to take the test for the Pennsylvania Nurse Aide Registry.

The core curriculum includes an introduction to health care, infection control, safety and emergency procedures, ethical and legal responsibilities, nutrition, normal body functions and common diseases, patient care, human growth and development, rehabilitation and office procedures.

All students are encouraged to maintain eligibility to participate in the Nurse Aide Training Program. Eligibility requirements are based on academic grades, attendance and discipline record while enrolled at BCTC.



## CAREER PATHWAYS:

- Medical Assistant
- Home Health Aide
- Nursing Assistant
- Personal Care Aide

### CAREER PATHWAYS CAN LEAD TO:\*

- Registered Nurse
- Licensed Practical Nurse
- Nurse Aide
- Physician's Assistant

\*Requires post-secondary training.



#### Industry Certifications:

- Nurse Aide Registry
- BLS Healthcare Provider
- Heartsaver First Aid
- Personal Care Home Direct Care Staff Certificate
- OSHA/CareerSafe 10-Hour Certification

#### College Advanced Credits:

- Berks Technical Institute . . . . . Up to 50 quarter credits
- Central Pennsylvania College. . . . . Up to 12 credits
- Harrisburg Area Community College . . . . . Up to 4 credits
- Lehigh Carbon Community College . . . . . Up to 2 credits
- Lincoln Technical Institute - Allentown . . . . . Up to 8 credits
- Pennsylvania Institute of Technology . . . . . Up to 12 credits
- Pittsburgh Technical Institute . . . . . Up to 9 credits

#### Program Requirements/Costs

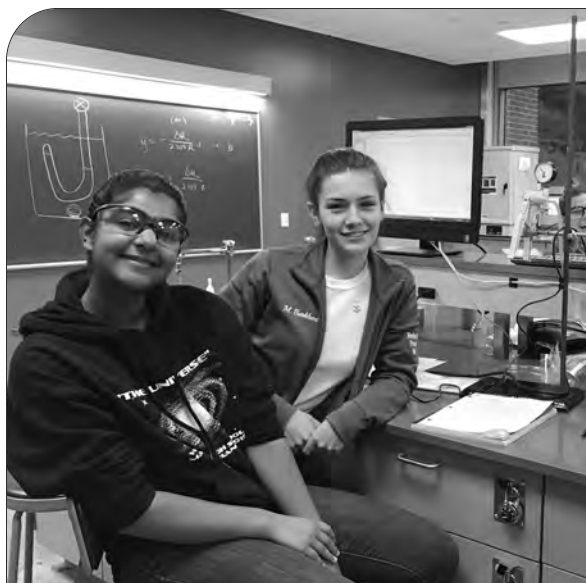
There are specific costs for text-books, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude

## For High School Seniors Medical Health Professions

Instructor **Kelly Ruth (RN)** | CIP Code **51.0899**



BCTC, Penn State Berks, and Tower Health are collaborating to offer an exciting Medical Health Professions Program for high school seniors. The program combines high level academics with the opportunity to shadow healthcare professionals and earn college credits.

The program exposes high school seniors to various healthcare professions so they can make more informed decisions about their future education. Students will be enrolled at both Penn State Berks and BCTC for one year. Students will take dual enrollment college courses at Penn State Berks two days a week, attend classes on medical-related theory two days a week at the Reading Hospital School of Health Sciences, and shadow healthcare providers at the hospital one day a week. Students will be able to earn up to seven transcriptive college credits through the program. Students will be expected to pay the equivalent to the Reading Area Community College dual enrollment cost per course credit toward the PSU courses, including PSU student fees; however, BCTC may assist the student with the tuition cost as funding is available.

BCTC provides education in the areas of healthcare, trends, professions, anatomy, physiology, and diseases. Tower Health provides job shadowing opportunities in which students will gain an understanding of the healthcare system by observing professionals in a real-world hospital environment. Admission to the program is competitive and students must meet strict admission guidelines.

**BCTC, Penn State Berks, and Tower Health have collaborated to offer this exciting program for high school seniors.**

## CAREER PATHWAYS:

- Physician
- Nurse
- Therapist
- Radiologist
- Pharmacist
- Physician's Assistant
- Lab Technician
- Nurse Practitioner
- Surgeon



### Industry Certifications:

- BLS Healthcare Provider
- Heartsaver First Aid

### College Advanced Credits:

Pennsylvania State University . . . . . Up to 7 credits\*

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Requirements:

- College Prep chemistry and biology, with minimum 3.0 GPA
- College Prep Algebra II, with minimum 3.0 GPA
- Honors or AP Science or Math Courses Preferred
- Advanced or Proficiency in Reading and Math
- PSAT or SAT scores
- Medical History & Physical
- Criminal and child abuse clearances
- TB test/immunizations
- Recommendations:
  - Guidance Counselor
  - Science Teacher

\* Please talk to your school counselor about specific financial responsibility for Penn State credits. If there is a question of financial hardship, please speak with your counselor.

# Sports Medicine & Rehabilitative Therapy

Instructors **Scott Cote** | **Jennifer Maryniak**  
CIP Code **51.2604** | **East Campus**

Sports Medicine and Rehabilitative Therapy (SMaRT) is designed to prepare students for a number of technical fields in kinesiology.

Instruction will include theory and applications related to: strength training and high intensity training, weight management, nutrition, resistance training, exercise programming, exercise physiology, mental health and wellness, anatomy and physiology, pathophysiology, athletic training, injury recognition and management, rehabilitation and restorative care, and medical terminology.

Students will learn to design safe and effective exercise prescriptions, conduct individual exercise programs, and fitness testing. Students will be prepared to assist in rehabilitative services under the supervision of physical therapists, occupational therapists, speech-language pathologists, athletic trainers and other therapeutic professionals, and to perform routine functions in support of rehabilitation.

Students may seek employment in a wide variety of settings that include fitness clubs, hospitals, corporate wellness programs, strength and conditioning, and clinical rehabilitation programs. In addition, the program will serve as a strong foundation for students wishing to pursue degrees in the fields of exercise science, athletic training, physical therapy, or occupational therapy.

Graduates of this program are well prepared for entry level employment in rehabilitative services or continued higher education. Students therefore will be required to schedule and maintain strong academic coursework along with the CTE curriculum. Internship opportunities and dual program college coursework will be developed to support the program.



## CAREER PATHWAYS:

Rehabilitation Aide  
Physical Therapy Assistant & Therapist  
Occupational Therapy Assistant & Therapist  
Fitness Instructor  
Athletic Trainer  
Coach  
Fitness/Personal Trainer

### CAREER PATHWAYS CAN LEAD TO:\*

Nutritionist  
Physical Education Teacher

\*Requires post-secondary training.

#### Industry Certifications:

NASM (National Academy of Sports Medicine) - Certified Personal Trainer  
AMCA (American Medical Certification Association) - Physical Therapy Aide Certification  
CPR/First Aid/AED  
OSHA CareerSafe 10-Hour Certification

#### College Advanced Credits:

Under Development

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude



# SERVICES

**Cosmetology**

**Culinary Arts**

**Early Childhood  
Education**

**Protective Services**  
- Homeland Security  
- Law Enforcement

**Service Occupations**



At BCTC, the programs in the Services Cluster focus strongly on customer service and helping individuals in a variety of professions.

The programs are reviewed annually by local business and industry leaders to stay on the leading edge of today's workplace. Students are well prepared for entry level employment or for further education.

**Careers start here.**



# Cosmetology

Instructors **Tracey Sholl** | **Donna Noecker** | **East Campus**  
Instructors **Nancy Quick** | **Stacey Andersson** | **West Campus**  
CIP Code **12.0401**



This program is designed in compliance with the rules, regulations and state-mandated curriculum of the Pennsylvania State Board of Cosmetology. Cosmetologists practice the art and science of improving beauty through the care and treatment of skin, hair, and nails. Graduates of this program are well-prepared cosmetologists with excellent employment prospects.

The curriculum provides hands-on training in bacteriology/sterilization, manicuring, artificial nails, draping of clients, shampoo, scalp treatment, hair-styling, haircolor, permanent wave/chemical relaxers, haircutting, facials/make-up, wigs, receptionist duties, salon management, electricity, anatomy/physiology and ethnic hair care. If students finish the required 1,250 hours of the core program, students may elect to receive training to become a cosmetology instructor and participate in a student teaching program.

BCTC students, under the supervision of licensed instructors, hold cosmetology clinics that are open to the public. The clinics provide students with real world experience by performing basic salon services for customers such as haircutting, styling, permanent waves, various color services, manicuring, and facials. The clinics provide students with invaluable experience that helps further prepare them for the workplace.

The Cosmetology program is regulated and licensed through the Pennsylvania State Board of Cosmetology. To complete the approved curriculum, students must document 1,250 hours of instruction in the program. BCTC offers two instructional sessions each day, with each session scheduled for a maximum of three hours of instruction each day. This provides more than sufficient time to earn the required 1,250 hours. However, some participating school districts may follow a schedule that will not meet the 1,250 hour requirement. Therefore, some students may need to complete additional hours after graduation to complete the program and be eligible to take their state board exams for their Cosmetology license. Students who fail to meet the minimum hour requirement prior to graduation may enroll after graduation at BCTC as a tuition paying adult or at a local private school to complete the hour requirement.

Instruction of 1,250 hours qualifies the student for the Pennsylvania State Board of Cosmetology licensing examination. Upon successful completion of the examination, the student then becomes a licensed cosmetologist or nail technician in the Commonwealth of Pennsylvania and is qualified for employment in a full service salon or advanced licensing in teaching.

## Industry Certifications:

Cosmetologist, Manicurist, Cosmetology Teacher, OSHA/CareerSafe 10-Hour Certification

## College Advanced Credits:

Pennsylvania College of Technology . . . . . Up to 3 credits

## Program Requirements/Costs

There are specific costs for text-books, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

## Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination, depth and color perception
- Artistic ability/creativity

## CAREER PATHWAYS:

Cosmetologist  
Nail Technician

### CAREER PATHWAYS CAN LEAD TO:\*

- Cosmetic Company Representative
- Electrologist
- Cosmetology Instructor – Post Secondary
- Platform Artist
- Artistic Director
- Theatrical Make-up Artist
- Salon Owner/Manager
- Esthetician

Cosmetology students can earn up to 555 hours towards a barber certification.

\*Requires post-secondary training.



Instructors **Eric Lynch** | **Mary Jo Kuhwald** | **East Campus**  
 Instructors **W. Clarke Hammond** | **Albert DeNault** | **West Campus**  
 CIP Code **12.0508**

The Culinary Arts program is accredited by the American Culinary Federation and prepares students for the hospitality industry, one of the largest industries in America today.

Specialized learning units include theory and work experience in the major areas of cooking and baking. Experience is also gained in front-of-house skills including waiting on tables and cashiering. Care and use of kitchen equipment, nutrition, food purchasing, and sanitation in food handling in a commercial and institutional setting are emphasized throughout the program. Specific topics covered include performing steward duties; preparing baked goods; preparing breakfast items; preparing stocks, soups and sauces; preparing salads and dressings; preparing hot and cold sandwiches; preparing fruits, vegetables, farinaceous products and tubers; fabricating and cooking poultry, meat and fish; preparing specialty/cold items, and performing supervisory/management skills.

Practical experience is a major part of the program through the operation and management of a complete restaurant and catering service housed within each campus location. The restaurants are open to the public for lunch on select days of the week and provide aspiring young chefs invaluable experience in food preparation, customer service, and restaurant management. Graduates of this program are well prepared for either entry level opportunities in the food industry or for further training and/or education in a university program or at a culinary institute.

## CAREER PATHWAYS:

- Restaurant Cook/Chef Apprentice
- Cook, Cafeteria and Institutional
- Food Preparation Worker
- Dishwasher/Kitchen Worker
- Waiter/Waitress

### CAREER PATHWAYS CAN LEAD TO:\*

- Caterer
- Dietitian
- Executive Chef
- Cuisine Specialty Chef
- Certified Cook
- Culinary Arts Instructor
- Hotel and Restaurant Manager
- Food Service Director/  
Assistant Director
- Food Sales

\*Requires post-secondary training.



**ACFEF** – This program has been accredited by the American Culinary Federation Education Foundation (ACFEF) Secondary Certification Committee. This certification indicates a commitment to excellence by meeting industry established standards, required knowledge and competencies. Visit [www.acfchefs.org](http://www.acfchefs.org) for further information.

#### Industry Certifications:

Certified Fundamentals Cook (CFC) (based on NOCTI), Secondary Culinary Graduate (SCG) (based on NOCTI), ServSafe/Manager Food Safety Certification, OSHA/CareerSafe 10-Hour Certification

#### College Advanced Credits:

Culinary Institute of America . . . . . Up to 1.5 credits  
 Harrisburg Area Community College - Harrisburg . . . . . Up to 7 credits  
 Lehigh Carbon Community College. . . . . Up to 6 credits  
 Lincoln Culinary Institute . . . . . Up to 4.5 credits  
 Stratford University . . . . . Up to 18 credits  
 The Art Institute of Philadelphia . . . . . Up to 9 credits

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/pro-](http://www.BerksCareer.com/pro-)

#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Artistic ability/creativity
- Desire to work in the culinary profession
- Ability to accept constructive feedback

ServSafe® is a registered trademark of the National Restaurant Education Foundation.

# Early Childhood Education

Instructor **Cody Gey** | **East Campus**

Instructor **Karla Gibson** | **West Campus**

CIP Code **19.0708**

The Early Childhood Education program is designed to train and prepare students for employment in the early learning field and provides the foundation for study in higher education. Students in this program gain daily practical experience in the on-site child care school.

Students study all phases of child development: physical, social, emotional and intellectual. The curriculum focuses on the following topics: establishing and maintaining a safe, healthy learning environment; advancing physical and intellectual competence; supporting social and emotional development and providing positive guidance; establishing positive and productive relationships with families; ensuring a well-run, purposeful program responsive to children's needs; and maintaining professionalism. Each student works independently with a combination of learning strategies used to enhance the student's growth.

Graduates of this program are well prepared for a variety of careers working with children including employment in day care centers, nursery schools, elementary schools, Head Start classes, playgrounds, recreation centers and early childhood education centers. A student graduating in this program can qualify as an assistant group supervisor in child day care centers throughout Pennsylvania.

Through agreements with various area colleges and universities, our graduates may qualify for advanced credit in early childhood education programs.



## CAREER PATHWAYS:

- Preschool Teacher (except Special Education)
- Child Care Worker
- Elementary Teacher Preparation
- Teacher's Assistant
- Assistant Group Supervisor
- Personal & Home Care Aide
- Recreation Worker

### CAREER PATHWAYS CAN LEAD TO:\*

- Education Administrator – Preschool & Childcare Center Program
- Elementary School Teacher

\*Requires post-secondary training.

### The Teacher Academy

The Teacher Academy will prepare Early Childhood Education students for a pathway to an Associate of Applied Science in Early Childhood Teaching and then to a Bachelor's of Science in Education through an agreement with Kutztown University (Pre-K-4 teacher certification). The program prepares teacher candidates for certification as teachers in infants, toddlers, preschool, kindergarten, and grades one through four in the elementary school.



### Industry Certifications:

Child Development Associate (CDA)-Ready Certificate, First Aid, Infant and Child CPR, Mandated Reporting Certification, OSHA/CareerSafe 10-Hour Certification

### College Advanced Credits:

Berks Technical Institute . . . . . Up to 50 quarter credits  
Harrisburg Area Community College - Harrisburg . . . . . Up to 9 credits  
Pennsylvania College of Technology . . . . . Up to 3 credits  
Reading Area Community College . . . . . Up to 9 credits  
(Depending on RACC Course of Study)

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Emotional Maturity - Students will be working directly with preschool age children and must demonstrate respect and self control at all times.
- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Artistic ability/creativity





# Protective Services Homeland Security

Instructor **Ernest Powell** | East Campus | CIP Code **43.9999**

The Protective Services – Homeland Security program provides students with a comprehensive public safety education. The curriculum is designed to prepare students for careers in firefighting and emergency medical response, fire protection, emergency health services, and emergency management. More specifically, students will study: fire science, including prevention, firefighting, rescue techniques, and hazardous materials; emergency medical services including first responder techniques EMT and dispatch; and emergency management.

Students will apply and refine their communication and computer skills through report writing, research, and information retrieval. The curriculum will include discussions and case studies on professionalism, ethics, cultural diversity, and conflict resolution. The program combines lecture, practical application, and clinical experiences. Fire certification courses will be taught in partnership with Bucks County Community College. BCTC will provide both EMR and EMT certification coursework. These certification courses will be tuition free. Supervised field trips and clinical experiences will include fire and emergency services departments. This program provides an excellent foundation from which to pursue college and ultimately a career in public safety.

## CAREER PATHWAYS:

- Emergency Medical Responder
- Emergency Medical Technician
- Firefighter & Prevention Worker
- Police & Sheriff Patrol Officer
- Dispatcher: Police, Fire & Ambulance



### Industry Certifications:

EMR (Emergency Medical Responder) EMT (Emergency Medical Technician), Exterior Evolutions Firefighting, Interior Evolutions Firefighting, Firefighting I, Hazardous Materials Awareness, Hazardous Materials Operations, Core, PPE, Product Control, NIMS IS 100, 200, 700, 800, CareerSafe – OSHA – Health

### College Advanced Credits:

Berks Technical Institute . . . . . Up to 53 quarter credits  
 Central Pennsylvania College . . . . . Up to 12 credits  
 Harrisburg Area Community College - Harrisburg . . . . . Up to 9 credits  
 Pennsylvania College of Technology . . . . . Up to 3 credits  
 Pittsburgh Technical Institute . . . . . Up to 4 credits  
 Reading Area Community College . . . . . Up to 9 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs)

### Program Entrance Recommendations:

- Reading proficiency is critical
- Algebra I or Geometry
- Must demonstrate high level of emotional maturity
- Disciplinary record must be outstanding
- Must demonstrate a pattern of respect and self control at all times
- Integrity & honesty
- Problem-solving/critical thinking skills
- Ability to work independently and in a team
- Effective written/verbal communication skills
- Physical & mental fitness – self discipline
- Hand-eye coordination



# Protective Services Law Enforcement

Instructor **Todd Heckman** | **East Campus** | CIP Code **43.0107**

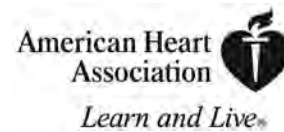
The Protective Services – Law Enforcement program provides students with a comprehensive public safety education. The curriculum is designed to prepare students for careers in law enforcement, criminal justice, and emergency management. More specifically, students will study: criminal justice system, including juvenile justice and delinquency, corrections, and judiciary; law enforcement/police science including PA crimes and vehicle codes, criminal behavior, investigations and evidence/forensics, patrol, traffic and crowd control procedures; physical and mental fitness including self-discipline, defensive and arrest techniques and the use of force continuum; and emergency management.

Students will apply and refine their communication and computer skills through report writing, research, and information retrieval. The curriculum will include discussions and case studies on professionalism, ethics, cultural diversity, and conflict resolution. The program combines lecture, practical application, and clinical experiences. Supervised field trips and clinical experiences will include: municipal police, crime laboratories, county jails, detention and rehabilitation centers, and courthouses. This program provides an excellent foundation from which to pursue college and ultimately a career in public safety.



## CAREER PATHWAYS:

- Safety Inspector / Specialist
- Police & Sheriff Patrol Officer
- Security Officer
- Dispatcher: Police, Fire, & Ambulance



### Industry Certifications:

EMT (Emergency Medical Technician), Hazardous Materials Awareness, Hazardous Materials Operations, Core, PPE, Product Control, NIMS IS 100, 200, 700, 800, OSHA-CareerSafe (10-Hour) – Health, Monadhock Expandable Baton (MEB), Oleoresin Capsicum Aerosol Training (OCAT), Practical & Tactical Handcuffing (PATH), CPR / AED

### College Advanced Credits:

Berks Technical Institute . . . . . Up to 53 quarter credits  
 Central Pennsylvania College . . . . . Up to 12 credits  
 Harrisburg Area Community College - Harrisburg . . . . . Up to 9 credits  
 Pennsylvania College of Technology . . . . . Up to 3 credits  
 Pittsburgh Technical Institute . . . . . Up to 4 credits  
 Reading Area Community College . . . . . Up to 9 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs)

### Program Entrance Recommendations:

- Reading proficiency is critical
- Algebra I or Geometry
- Must demonstrate high level of emotional maturity
- Disciplinary record must be outstanding
- Must demonstrate a pattern of respect and self control at all times
- Integrity & honesty
- Problem-solving / critical thinking skills
- Ability to work independently and in a team
- Effective written / verbal communication skills
- Physical & mental fitness – self discipline
- Hand-eye coordination

# Service Occupations

Instructors **April Lenhart** | **Kathi Shaffer**  
CIP Code **19.9999** | **East Campus**



## CAREER PATHWAYS:

- Food Preparation Helper
- Dishwasher/Kitchen Worker
- Landscaping & Groundskeeping Worker
- Laundry & Dry Cleaning Worker
- Building Cleaning Workers
- Maids & Housekeeping Cleaners
- Stock Clerks/Sales Floor

Service Occupations is an innovative program of study focusing on the training of students in a diverse array of skill sets in service related employment areas. Students learn in an environment that fosters a good work ethic, competitive time on task and appropriate work skills for each identified career area. Individual needs and abilities of students are addressed in order to foster personal accountability and pride in a job done well done. The Service Occupations facility includes two laboratories where instruction is provided by two instructors and reinforced by instructional assistants. The two instructors each teach defined skills in order for each student to become skilled in a variety of areas. Group instruction is frequently utilized and team building activities are often incorporated.

The Service Occupations curriculum encompasses the areas of work place safety, grounds maintenance, cleaning practices, housekeeping, custodial and retail stock, as well as, kitchen safety, cooking and baking, food preparation, dining room services, commercial dishwashing, pot washing, and commercial laundry services. All areas are instructed with the intent of achieving a level of competency commensurate with competitive employment. This is achieved by involving “live work experiences” whenever possible to provide the students with training that approximates what would be found in the work environment. Toward that end,

students are involved in clinical experiences involving janitorial cleaning, maintenance, grounds keeping, laundry and dishwashing around the school. Students take pride in their work, knowing that the school depends on them doing a “professional job” in order to function efficiently. Toward that end goal, students are supported through a variety of services provided by BCTC and the Reading Office of Vocational Rehabilitation (OVR) Work Partners. These services may include a variety of work-based experiences including job shadowing, internships, and paid co-op jobs, job placement and on-the-job coaching, mobility training, benefits and work incentive counseling, job seeking and keeping skills, and more. BCTC and OVR work collaboratively to ensure the successful transition of students from school-to- work. BCTC’s Service Occupations program has the ultimate goal of a seamless transition to gainful employment or further education.

Because of the uniqueness of this program, interested students and their parent/guardian are expected to schedule a visit to the program prior to making application to BCTC by contacting the Student Services Office or by contacting the student’s sending school Special Education representative. This will prevent the processing of the application from being delayed, since there is limited enrollment in this popular program.

### Certifications:

AED/Heartsaver First Aid, OSHA/CareerSafe 10-Hour Certification, Ladder Safety

### College Advanced Credits:

Commonwealth Technical Institute at the Hiram G. Andrews Center . . . . . Up to 4 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Ability to read and follow directions
- Basic math skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude
- Must be OVR Eligible

# TRANSPORTATION



**Automotive Collision  
Repair Technology**

**Automotive Technology**

**Diesel Technology**

**Heavy Equipment  
Technology**

**Recreational & Power  
Equipment Technology**

Motorized vehicles play a vital role in everyday life. The Transportation programs at BCTC train specialists for employment and further education in the transportation field. Students in these programs do “live” work for customers and gain experience in all aspects of their chosen fields.

**Careers start here.**



# Auto Collision Repair Technology

Instructor **John Leinbach** | East Campus

Instructor **Barry Edwards** | West Campus

CIP Code **47.0603**

This program utilizes the industry standard I-CAR enhanced technical curriculum. Generally, students learn to reconstruct damaged automotive vehicles and light trucks. Students learn to examine damaged vehicles and estimate cost of repairs; remove, repair and replace body panels, accessories, grills, trim and automotive glass, and straighten unibody and conventional structures using state-of-the-art equipment and precision measuring systems. Refinishing processes and spray-painting techniques are taught in a controlled atmosphere downdraft spray booth according to industry standards. Students learn the proper use of power and hand tools, welding processes and techniques, and safety.

Students are prepared to enter the auto body and collision industry as entry level technicians. Management, service and business ownership are career paths that many graduates successfully pursue. The program was awarded a grant from the National Collectors Foundation to introduce students to careers in antique car restoration and customization.

## CAREER PATHWAYS:

- Automotive Body Technician
- Transportation Equipment Painter
- Insurance Appraiser, Auto Damage
- Detailers (Cleaners of vehicles)

### CAREER PATHWAYS CAN LEAD TO:\*

- Auto Body Designer
- Auto Body Instructor
- Auto Body Shop Supervisor
- Insurance Adjuster
- Paint Products Representative
- Collision Technician
- Refinisher/Painter
- Frame Straightener
- Windshield/Glass Installer
- Auto Body Shop Proprietor

\*Requires post-secondary training.



### Industry Certifications:

- I-CAR Certification(s)
- S/P2, Section 609 Certificate for Refrigerant Recycling and Recovery
- Certified Emissions Inspector
- Certified Safety Inspector – Cat I\*
- OSHA/CareerSafe 10-Hour Certification

\*A student may take the test for Certified Safety Inspector – Cat I test; however, PennDOT holds the certificate until the student is 18 years old.

### College Advanced Credits:

- Pennsylvania College of Technology . . . . . Up to 10 credits
- Thaddeus Stevens College of Technology . . . . . Up to 12 credits
- University of Northwestern Ohio . . . . . Up to 12 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude



# Automotive Technology

Instructors **Gayle Leinbach** | **Keith Nichols** | **East Campus**  
 Instructor **Jose Gonzalez** | **West Campus**  
 CIP Code **47.0604**

The Automotive Technology program is nationally recognized and accredited by the National Automotive Training Education Foundation (NATEF). The program prepares students to engage in diagnosis, servicing, and maintenance of all types of automobiles. Students perform live work and gain invaluable skills in all aspects of automotive technology.

Students begin with the fundamentals and learn to identify and properly use tools and fasteners as well as general auto reconditioning skills. Students learn to inspect, repair and replace components of the suspension/chassis, brake, engine, cooling, fuel, ignition, electrical, exhaust, emissions, air conditioning systems, and drive lines according to the student's chosen career objective. Welding processes and safety techniques are also taught. Students are taught to use technical service information systems and are prepared to obtain the Pennsylvania State Inspection and/or Emission certification.

Graduates are well qualified to enter the automotive field as entry-level service technicians and mechanics. Students who pursue advanced technical training at the post-secondary level will find an array of opportunities in service, management, and entrepreneurship.



## CAREER PATHWAYS:

- Automotive Master Mechanic/Technician
- Automotive Specialty Technician
- Service Technician & Mechanic
- Automotive & Watercraft Attendant
- Detailer (Cleaner of Vehicles)
- Tire Repairer & Changer
- Transportation Vehicle, Equipment & System Inspector

### Industry Certifications:

- S/P2
- OSHA/CareerSafe 10-Hour Certification
- Certified Emissions Inspector
- Certified Safety Inspector – Cat I

\*A student may take the test for certified Safety Inspector – Cat I test; however PennDOT holds the certificate until the student is 18 years old.

### College Advanced Credits:

- Harrisburg Area Community College . . . . . Up to 16 credits
- Northampton County Community College . . . . . Up to 9 credits
- Pennsylvania College of Technology . . . . . Up to 9 credits
- Thaddeus Stevens College of Technology . . . . . Up to 10 credits
- University of Northwestern Ohio . . . . . Up to 12 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude

### CAREER PATHWAYS CAN LEAD TO:\*

- Automotive Technology Instructor
- Service Manager
- Parts Manager
- Service Advisor
- After-market Automotive Marketing/Sales
- Equipment Salesperson
- New/Used Car Salesperson
- Racing Crew

\*Requires post-secondary training.





# Diesel Technology

Instructor **Kevin Heimbach** | **East Campus** | CIP Code **47.0613**

Diesel engines are found in trucks, trains, buses, construction and agricultural equipment and many other types of transportation vehicles. As the diesel equipment industry continues to expand, the demand for mechanics and technicians to repair and maintain diesel equipment grows.

Using state-of-the-art classroom and lab experiences, the program prepares students to engage in diagnosis, servicing, and maintenance of diesel trucks. Students begin with the fundamentals and learn to identify and properly use tools, fasteners, and general reconditioning skills. Students learn to inspect, repair and replace components of the suspension, fifth wheel, steering, brake, engine, cooling, fuel, electrical/electronic, air intake and exhaust, clutches, transmissions, air conditioning systems, as well as drive lines and rear axles. Welding processes and safety techniques are also taught.

Students are taught to use service and technical manuals and are also prepared to obtain Pennsylvania State Inspection certification.

Graduates of this program are well-prepared to enter the workforce as bus and truck mechanics, diesel engine specialists, and heavy truck mechanics. Additional education after high school can lead to many opportunities in service management, training, and advanced diesel principles.

## CAREER PATHWAYS:

- Bus, Truck Mechanic & Diesel Engine Specialist
- Heavy Truck Mechanic/Maintenance Repairer
- Maintenance Lubrication Mechanic
- Diesel Engine Assembly Specialist

### CAREER PATHWAYS CAN LEAD TO:

- Service Manager
- Mechanic Apprentice
- Service Technician
- Diesel Mechanic
- Instructor



### Industry Certifications:

- Outdoor Power Equipment Technician Certificate S/P2
- Section 609 Certificate for Refrigerant Recycling & Recovery
- CDL License (at reduced student cost and student must be 18 years old to take the CDL class)
- Daimler Trucks North America Get Ahead Certification
- OSHA/CareerSafe 10-hour Certification

\*A student may take the Certified Safety Inspector – Cat I &/or Cat III test; however, PennDot holds the certificate until the student is 18 years old

### College Advanced Credits:

- Pennsylvania College of Technology . . . . . Up to 2 credits
- University of Northwestern Ohio . . . . . Up to 12 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude

# Heavy Equipment Technology

Instructor **James Mack** | **East Campus** | CIP Code **47.0302**

The Heavy Equipment Technology Program is designed to provide students with the theory and hands-on skills relevant to repair fundamentals and maintenance of various types of heavy equipment found on construction sites. Specialized classroom and lab experiences are designed to provide instruction in systems and components of heavy equipment. This program is recognized by the Association of Equipment Dealers Foundation (AED).

Students begin with safety, tools/fasteners and preventive maintenance basics. Students also learn to inspect, repair and replace components of the suspension, steering, brake, engine, cooling, fuel, electrical/electronic, air intake and exhaust, clutches, transmissions, air conditioning systems, hydraulics/hydrostatics as well as drive lines/rear axles/final drives, and drive motors. Welding processes and safety techniques are also taught. Students will be taught computer diagnostic skills as a tool to troubleshoot electronic problems. Students may achieve certification in air conditioning and/or Pennsylvania Safety Inspection. In their final year, students also learn the safe basic operation of trucks, tractors, skid steers, backhoes, dozers and excavators.

Graduates of this program are well prepared and find exciting careers as diesel engine specialists, heavy equipment mechanics and apprentice technicians.



## CAREER PATHWAYS:

- Diesel Engine Specialist
- Field Service/Lube Technician
- Mobile Heavy Equipment Mechanic
- Heavy Equipment Mechanic – Maintenance Repairer
- Industrial Machinery Mechanic
- Farm Equipment Mechanic & Service Technician

## CAREER PATHWAYS CAN LEAD TO:\*

- Field Service Advisor
- Instructor
- Mechanic Apprentice
- Service Manager
- Service Technician
- Stand-by Power Technician

\*Requires post-secondary training.

### Industry Certifications:

- Section 609 Certificate for Refrigerant Recycling & Recovery S/P2
- OSHA/CareerSafe 10-hour certification
- Outdoor Power Equipment Technician Certificate
- Certified Safety Inspector – Cat I
- Certified Safety Inspector – Cat III

\*A student may take the Certified Safety Inspector Cat I &/or Cat III test; however, PennDot holds the certificate until the student is 18 years old; CDL License (at reduced student cost; student must be 18 years old to take the CDL class)

### College Advanced Credits:

- Pennsylvania College of Technology . . . . . Up to 2 credits
- SUNY Cobleskill . . . . . Up to 3 credits

### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude



# Recreational & Power Equipment Technology

Instructor **Melvin Johnson** | West Campus | CIP Code **47.0699**



The Recreational & Power Equipment Technology Program course has earned national technician certification from the Equipment and Engine Training Council (EETC). BCTC is one of only a few technical facilities in Pennsylvania to achieve this standard making it a premier training program for students in Berks County.

The program is designed to teach skills in the service, sales, operation and repair of lawn and garden equipment, chain saws, outboard motors, portable generators, pumps, farm equipment, motorcycles, industrial equipment and snowmobiles. Students perform “live work” for customers, which gives them invaluable experience in estimating, parts ordering, repair, and customer service. Students study measuring tools, ordering and record keeping, small engine design and components, fuel systems, lubrication systems, starting/electrical systems, troubleshooting, overhaul, drivelines, and welding. In addition, repair and service of lawn and garden equipment, chain saws, outboard motors, snowmobiles and motorcycles is taught.

By completing the course, the students are prepared to obtain EETC certification in 2- and 4-cycle gas engines, hydraulic systems, electrical systems, transmissions and drives. Students are qualified to pursue careers as farm equipment, motorcycle, motorboat mechanics, or small engine mechanics.

## CAREER PATHWAYS:

- Farm Equipment Mechanic & Service Technician
- Motorcycle Mechanic
- Motorboat Mechanic & Service Technician
- Outdoor Power Equipment & Small Engine Mechanic (Lawn & Garden)

### CAREER PATHWAYS CAN LEAD TO:\*

- Service Manager
- Recreational & Power Equipment Instructor
- Parts Manager
- Motorcycle Dealer

\*Requires post-secondary training.

**EETC - Equipment & Engine Training Council** - This program is accredited through EETC to provide students an opportunity to gain technical proficiency in six areas of outdoor power equipment. Visit [www.eetc.org](http://www.eetc.org) for further information.

#### Industry Certifications:

- Outdoor Power Equipment Technician Certificate S/P2
- Certified Safety Inspector
- Cat I
- OSHA/CareerSafe 10-Hour Certification

#### Program Requirements/Costs

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay upon acceptance. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

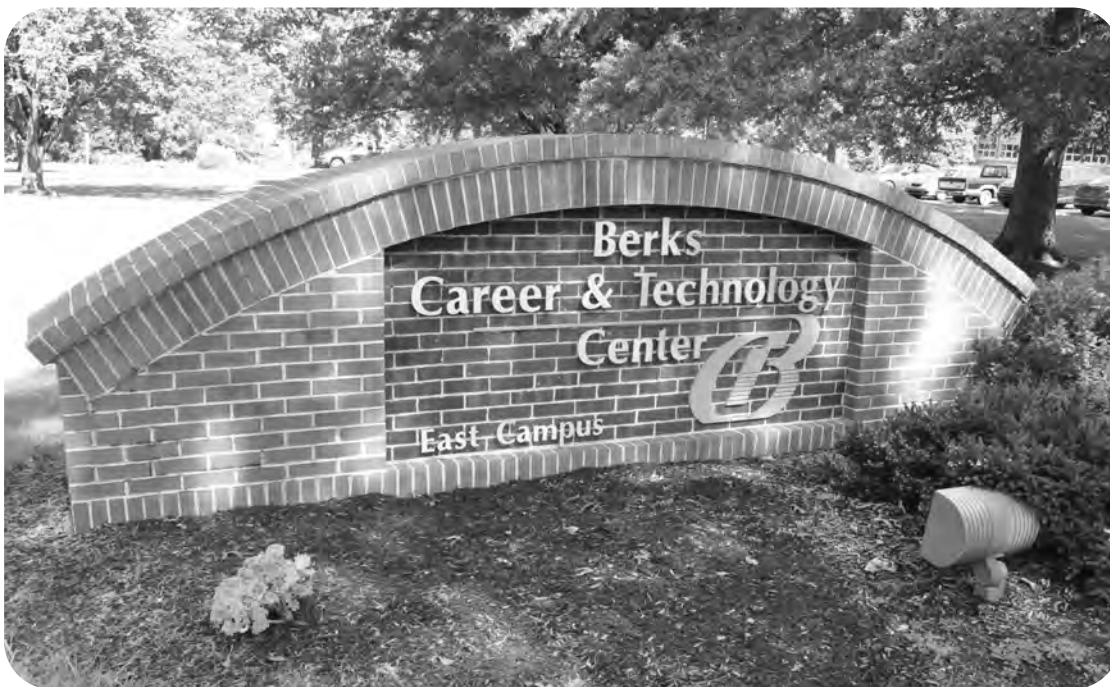
#### Program Entrance Recommendations:

- Reading at grade level
- Algebra I or Geometry
- Problem-solving/troubleshooting skills
- Ability to work independently and in a team
- Hand-eye coordination
- Mechanical aptitude





# 9TH GRADE EARLY ADMISSIONS & 12<sup>TH</sup> GRADE FUTURE READY



9th Grade Early Admissions is available to a limited number of 9th grade students who have an Individualized Education Plan (IEP). This allows students to get a jumpstart on a career pathway to better meet their learning needs.

The Future Ready program is available to students entering their senior year. The program is designed to provide training and certifications opportunities for students in one of the many programs offered at BCTC.

## Careers start here.

## 9th Grade Early Admissions

Educational Facilitators **Tamzen Davis** | **Heather Wargo** | **East Campus**  
Educational Facilitators **John Forry** | **Christine Twiford** | **West Campus**

All of BCTC's approved career and technical education programs are designed to be completed in three years. However, students with an IEP and having the school district's recommendation may be considered for enrollment in the 9th Grade Early Admissions.

The 9th Grade Early Admissions program provides a customized career development experience for 9th grade students with an IEP who can benefit from getting a head start in developing core career and technical skills early in their high school career. Students will be provided the opportunity to enter their program of choice at the beginning of their 9th grade year. This will provide them with extra time in a more concentrated area of study.

BCTC educational facilitators will monitor students throughout the first quarter to ensure the appropriateness of the program for students. During this first year, if a student determines this is not their true program of interest, other program options may be explored. All program experiences shall be based on interest, aptitude and ability; however, if students opt not to remain in their initial program they must reapply for the new program for their 10th grade year. Each 9th grade student's career and technical education experience shall be customized to his/her individual needs within the established parameters of the Early Admissions program.

Please note, the 9th Grade Early Admission program is a very unique and customized opportunity for 9th grade students, therefore it is limited to a specific number of programs from year to year.

### Program Entrance Requirements:

- ❑ Program based on space availability
- ❑ 9th grade students with an IEP
- ❑ Student placement based on IEP or district recommendation

### Program Entrance Recommendations:

- Ability to read, write and apply math at or near grade level
- Self-disciplined and able to follow directions and established rules
- Ability to work independently and stay "on task"
- Ability to get along with others and work as a team member
- Ability to adapt to new learning experiences

### Required Costs:

There are specific costs for textbooks, tools, supplies, uniforms, certifications; and for some programs, medical and criminal clearances that students are obligated to pay. These costs change annually and are detailed on the BCTC website at [www.BerksCareer.com/programs](http://www.BerksCareer.com/programs).

## Future Ready – Program Options for Students Entering Their Senior Year

Future Ready provides training and certifications for students in one of the many programs offered at Berks Career and Technology Center. Students are expected to complete the OSHA 10-hour, on-line certification the summer before entering BCTC. All BCTC programs start on the first day of the student's senior year in the AM or PM session, unless otherwise determined by school district and BCTC. Incoming seniors can choose from three Future Ready options:

1. **Specialized training** – students will learn program specific skills at Berks Career and Technology Center during the first part of the year. Students may qualify for supervised work experience toward the end of the school year.
2. **Level 1 training** – students will begin one of the programs offered at Berks Career and Technology Center. Students would have the option to complete the program training as an adult in BCTC's Continuing Education (Please note, there is tuition for Continuing Education classes).
3. **Evening classes** – students will participate in evening classes several times a week at Berks Career and Technology Center. Available classes include Welding and Trade Preparation for Plumbing, HVAC, and Electrical (Please note, there is tuition for evening classes).

Programs may be limited due to space availability. Applications can be obtained at your high school counselor's office.

### Program Entrance Requirements:

- ❑ Transportation required for all work experience
- ❑ Full-Day BCTC sessions are only available if the student has met all high school graduation requirements and has been approved by their school district and BCTC

### Program Entrance Recommendations:

- OSHA 10-hour, on-line OSHA certification completed the summer before entering BCTC
- Self-disciplined and able to follow directions and established rules
- Able to work as an individual or team setting

# CONTINUING EDUCATION



**Adult Day School**

**Apprenticeship Programs**

**Certification Courses**

**Commercial Driver's License Training**

**Customized Training Programs**

**Evening Courses**

**Online Courses**

For more than 30 years BCTC has been providing career training options designed to help adult students meet their career objectives. Whether they are new to the workforce or looking for a career change, with a BCTC certificate of competency adults can go from learning to earning fast. BCTC offers adult students:

- Day, evening, CDL and online programs
- Two convenient locations
- Flexible scheduling
- Competitively priced tuition
- Industry trained and experienced instructors
- State-of-the-art labs and equipment
- Course content that is continuously updated with input from area employers

**GO FROM  
LEARNING  
TO EARNING.  
FAST!**

**Careers start here.**

**WEST CAMPUS: 610-743-7630  
EAST CAMPUS: 610-987-2706**

# CONTINUING EDUCATION



## Adult Day School

BCTC offers adult students the same rigorous, competency-based curriculum as secondary students in more than 30 programs of study. Adult students receive hands-on career training taught by expert instructors in exceptionally well-equipped labs. In less than two years, adult students can earn nationally recognized industry certifications and a BCTC certificate of competency - credentials needed in today's competitive job market. Financial Aid is available to qualified students. Complete the Free Application for Federal Student Aid (FAFSA) at [www.fafsa.ed.gov](http://www.fafsa.ed.gov) and enter BCTC School Code – 040413. Refer to the Educational Programs section for a complete description or call (610) 743-7630 for more information or to schedule an appointment to tour a Day School Program.

In addition to Federal Financial Aid, BCTC Scholarships and the Pennsylvania Targeted Industry Program (PA-TIP) Scholarships are available for qualified students in eligible programs of study. Please contact the Continuing Education Administrator for a current list of scholarship opportunities.

## Apprenticeship Programs

BCTC is Berks County's most comprehensive source for related classroom training for apprentices. The curriculum is planned and reviewed annually in cooperation with co-sponsoring trade organizations and the Bureau of Apprenticeship and Training – U.S. Department of Labor.

### Apprenticeships offered in:

- Electrical
- Heating, Ventilation & Air Conditioning (HVAC)
- Industrial Maintenance Repair
- Plumbing

## Certification Courses

BCTC offers courses that prepare adult students for state or federal certification exams in various fields, such as refrigerant recovery (EPA), auto safety inspection and emission:

- PA Safety Emissions Inspector Certification
- PA Safety Inspection Mechanic Certification
- PA Enhanced Safety Inspection Certification
- Refrigerant Transition & Recovery

## Commercial Driver's License Training

Commercial Driver's License Training (CDL) at BCTC offers a professional tractor-trailer driver training program that prepares students seeking careers in the motor carrier field to obtain their Commercial Driver's License. The program is designed to provide professional tractor-trailer driver training to students (who are at least 18 years old) with or without prior truck driving experience.

### CDL Training includes:

- Driver skill development
- Applied safety regulations & procedures
- Basic equipment maintenance
- Proper loading techniques
- Intra- & inter-state regulations

The 160-hour course includes 114 hours of classroom theory, 44 hours of one-on-one instruction behind-the-wheel on the range and on the road, and a two-hour final skills exam. Students are prepared to pass the Class A Commercial Driver's License (CDL/A) written and road test required for entry-level tractor-trailer driving positions. Day and evening classes are available.

### CDL Class B

This course will prepare the student for the state written and skills test. All driver training is one-on-one. Upon successful completion of the course and exam, students will receive a CDL/B license and a BCTC certificate of completion.

New classes are scheduled to start each month. Please call 610-743-7630 for more information about CDL registration.





### Customized Training Programs

Customized Training Programs for business and industry can be provided upon request. BCTC staff will work on location at local businesses or in BCTC's state-of-the-art labs. Industry input into the curriculum means that adults who attend BCTC will be prepared to meet current industry demands. A partial list of popular business and industry training topics include:

- Industrial Maintenance & Electromechanical Technologies
- Welding
- Electronics
- Computerized Machining Technology & Precision Machining Technology
- Heating, Ventilation, Air Conditioning/Refrigeration

Please call us to help design a training program that is unique to your business and that will help your employees succeed at their job. We can tailor the curriculum to meet your needs.

### Evening Courses

Evening courses provide a cost-effective way to learn new skills on a part-time basis. Classes include theory and hands-on learning opportunities with experienced trainers in a casual atmosphere. Evening courses are generally shorter in length and are offered during the Fall and Spring semesters. A listing of all courses may be found online at [www.BerksCareer.com/CE](http://www.BerksCareer.com/CE)

### Online Courses

BCTC's Continuing Education Department offers more than 300 course offerings through our partner ed2go.

Visit our website at [www.ed2go.com/bctc](http://www.ed2go.com/bctc) and take online courses from the comfort of your home or office.

Each ed2go course comes equipped with an instructor, lively discussions with your fellow students, and plenty of practical information that you can put to immediate use. All courses run for six weeks (with a two-week grace period at the end). Courses are project-oriented and include lessons, quizzes, hands-on assignments, discussion areas, supplementary links, and more.

### Affordable, convenient, and geared just for you!

Adult Day School students may be eligible for Federal Financial Aid, BCTC Scholarships and the Pennsylvania Targeted Industry Program (PA-TIP) Scholarships. Other sources of tuition assistance for all students, Day, Evening and CDL students include CareerLink, TRA/TAA, the Office of Vocational Rehabilitation, and the Veteran's Administration.

Visit us on Facebook at:  
[www.facebook.com/bctc.ce](http://www.facebook.com/bctc.ce)

## ed2go.com/bctc

### How to Get Started:

- 1 Visit our Online Instruction Center: [www.ed2go.com/bctc](http://www.ed2go.com/bctc)
- 2 Click the Courses link, choose the department and course title you are interested in and select the Enroll Now button. Then follow the instructions to enroll and pay for your course, it's fast, secure and convenient to pay online using a major credit card. You will choose a username and password that grants you access to the Classroom.
- 3 When your course starts, return to our Online Instruction Center and click the Classroom link. To begin your studies, simply log in with the username and password you selected during enrollment.

# BCTC Instructors

## **Stacey Andersson**

**Instructor: Cosmetology (West)**

B.S. in Education, Penn State University; Work Based Learning Certification, Temple University; licensed cosmetology teacher; volunteer with the "Look Good Feel Better" program of the American Cancer Society; member of Career & Technical Teachers Educating in Cosmetology; member National Cosmetology Association. Experience in the cosmetology and teaching professions.

## **Alan Blackburn**

**Instructor: Electro-Mechanical Engineering Technology (West)**

Bachelor of Science, Electrical Engineering, The Pennsylvania State University, University Park, PA. Bachelors of Science, Physics, West Chester University, West Chester, PA. Experience in industrial maintenance, equipment installation and engineering/project management.

## **Alexa Breslin**

**Instructor: Health Occupations (West)**

B.S., Nursing, Chamberlain University. Nursing diploma from the Reading Health System. Graduate of McCann School of Business and Technology for Medical Assisting. American Heart association BLS for Healthcare Providers (CPR & AED) certified. Volunteer for Meals on Wheels through Berks Encore and the "Be the Match" Bone Marrow Drive at St. Joseph's Medical Center. Registered Nurse with extensive experience in the medical field.

## **Stacey Campbell, LPC**

**Campus Counselor (East)**

Master of Education, Educational Psychology, University of Washington, Seattle, WA. Bachelor of Arts, Psychology, Whitman College, Walla Walla, WA. Experienced professional in many aspects of student and family counseling.

## **Scott Cote**

**Instructor: Sports Medicine & Rehabilitative Therapy (East)**

Bachelor of Science, Kinesiology, West Chester University. Associates of Science, Physical Therapist Assistant, Pennsylvania State University – Hazelton Campus. Licensing / Certifications: Physical Therapist Assistant, Pennsylvania State Board of Physical Therapy. National Academy of Sports Medicine Certified Personal Trainer – NASM-CPT. American Heart Association - BLS Instructor. Certified Kinesiotaping Practitioner.

## **Kevin Crawford**

**Instructor: Building Construction Occupations (East)**

Bachelor of Arts, Lycoming College, Williamsport, PA. Career & Technical Education, Temple University, Philadelphia, PA. Extensive teaching and professional experience in many aspects of the construction industry including residential, commercial and industrial carpentry, electricity, plumbing, and masonry.

## **Thomas Danner**

**Instructor: HVAC (East)**

B.S. in Secondary Education, Kutztown University; Certification in math. Licensed electrician. Extensive experience in installation and service of HVAC equipment.

## **Tamzen Davis**

**Educational Facilitator (East)**

B.S. in Special Education and Elementary Education, Kutztown University; Certifications in Special Education/Mental and Physical Handicaps, Elementary Education. Extensive experience in the Special Education field.

## **Michael DeCarlo**

**Instructor: Electrical Occupations (East)**

PA Instructional Teaching Certification, Albright College. Bachelor of Arts Degree, Albright College. Experience in commercial and residential electrical work. Special focus on new home construction and high end retro work.

## **Theresa DeCarlo**

**Instructor: Dental Occupations (East)**

Vocational Instructional I Certification, Temple University. Certified Dental Assistant. Certified Restorative Functions Dental Assistant. Licensed Expanded Function Dental Assistant. American Dental Assistant Association member. American Heart Association Basic Life Support Trainer.

## **James Del Conte**

**Instructor: Video & Media Content Production (West)**

B.S. in Electronic Media, Kutztown University & An M.S. in Classroom Technology from Wilkes University. Teacher Certification Program, Temple University, PA Vocational II. Vocational Supervisor Certification, Temple University. Adobe Photoshop Certification. Adobe Premiere Certification. Award-Winning media production manager & producer with expertise in producing, directing & editing various media content including live broadcast, web, video, streaming and interactive media for an international client base. Detailed knowledge of all aspects of media production from pre-production through post production. In addition to his industry & educational experience, Mr. Del Conte has also produced and directed several independent documentaries.

## **Albert DeNault**

**Instructor: Culinary Arts (West)**

Certified Culinary Instructor (CCE)-American Culinary Federation, B.S. in Social and Behavioral Sciences-Keystone College. A.A.S. in Culinary Arts-Pennsylvania College of Technology, Teacher Certification Program-Temple University, Vocational I, Food Service Management Professional (FMP)-National Restaurant Association, ServSafe Manager Certified, Certified Instructor and Proctor-ServSafe Manager, OSHA Certified, Heartsaver First Aid and CPR Certified. 17+ years industry experience.

# BCTC Instructors

## **Barry Edwards**

### **Instructor: Automotive Collision Repair Technology (West)**

Vocational I Teaching Certification. ASE certified Master Collision and Refinishing Technician, Temple University Automotive Body and Fender Repairer Certification. ASE certifications in structural & non-structural analysis and repair. PPG waterborne and specialty coatings training. PPG Gold level certification for Environbase Waterborne Refinishing, PPG Bronze level certification for Environbase Waterborne color matching, PPG Gold level certification for Deltron Solvent Refinishing, PPG Gold level certification for Deltron Solvent color matching, ASE Master Collision Repair Technician Certification, ASE Estimator Certification. 3M adhesives and Mequires detailing training. Extensive experience in all aspects of automotive collision repair.

## **John Forry**

### **Educational Facilitator (West)**

B.S. in Social Studies and Secondary Education 7-12, Alvernia College, Reading PA. Certified Special Education Teacher K-12 with primary focus on Emotional and Autistic Support services. Pennsylvania Instructional II, Special Education and Social Studies. Highly qualified in the area of Reading, English, Mathematics and Social Studies. Experience and training in development and implementation of services as well as de-escalation and behavior strategies through completion of Safety- Care Certification Program. Extensive classroom teaching experience.

## **Gerald Galczynski**

### **Instructor: Cabinetry and Wood Technology (East)**

Teacher Certification Program, Temple University; Certified Cabinetmaking and Millwork Teacher; Reading Muhlenberg CTC-Cabinetmaking Graduate; OSHA Certified Construction Outreach Trainer; Solid Surface Certified; CPR/First Aid/AED certified. NCCER Certified Teacher (National Center for Construction Education and Research). BCTC Skills USA Advisor. Eighteen years of trade experience. Ten years of teaching experience at Lehigh Career and 10 years at BCTC.

## **Cody Gey**

### **Instructor: Early Childhood Education (East)**

Bachelors of Science from Kutztown University in Elementary K-6 and Early Childhood Education. PA Teaching Certification. Family and Consumer Science certification. Experienced Early Childhood Education teacher. Director at Creative Care Childcare, with Director's Credential certification from Northampton Community College

## **Karla Gibson**

### **Instructor: Early Childhood Education (West)**

Master of Science, Education, Shenandoah University, Winchester, VA. Bachelor of Science, Elementary Education, Millersville University. Instructional II Certificate; Certified in Early Childhood Education, Elementary Education, Family and Consumer Sciences, and Spanish. Experienced ESL and elementary school teacher.

## **Jose Gonzalez**

### **Instructor: Automotive Technology (West)**

Teacher Certification Program-Temple University, Vocational I. Bachelor's Degree, Business Administration, Strayer University, PA. AAS Degree, Automotive Technology, Northampton Community College, PA. ASE Certifications: Master, Undercar Specialist, Service Consultant, Medium/Heavy Truck Technician, and Advanced Level Certifications. Licensures: PA State Safety Mechanic, State Emissions Inspector, and Repair Technician. Teaching Certifications: ATC Instructor Training Program. Experienced Automotive Technician and Automotive Training Instructor.

## **W. Clarke Hammond**

### **Instructor: Culinary Arts (West)**

Graduate of the Culinary Institute of America, Hyde Park, NY; Teacher Certification Program— Vocational Education II, Temple University. OSHA Certified, Certified ServSafe Instructor and Proctor, ServSafe Certified, Food Management Professional (FMP) Certification, National Restaurant Association and FMP Proctor. Member of the PA Restaurant and Lodging Association and American Culinary Federation (ACF). ACF's Northeast Secondary Education Commissioner. Temple University Occupational Competency Assessment Proctor. Extensive experience in many aspects of culinary careers and services.

## **Philip Harris**

### **Work-Based Education Coordinator (East & West)**

Cooperative Education/Diversified Occupation Education Certifications, Temple University. Teacher Certification Program, Temple University; Enrolled in B.S. degree program in Education at Temple University; graduate Reading-Muhlenberg CTC, Graphic Communications program. Occupational Competency Certification in Graphic Communications; National PrintEd certification in nine graphic areas; Career-Safe certification; First Aid/CPR certification; Safety- Care Certification Program. Robert Gettis Award (2 times). Extensive experience (30 years) in the printing field.

## **Todd Heckman**

### **Instructor: Protective Services (East)**

Teacher Certification Program, Temple University; certified Police Officer in Pennsylvania (ACT 120) and recipient of several line of duty decorations; certified instructor in handcuffing, police baton and pepper spray; professional rescuer CPR certification; VASCAR certified; intoxilizer certified; weights and measures certified; accident triangulation; and D.A.R.E teacher. In depth experience in law enforcement (23 years). Served as Chief of Police for 12 years.

## **Elizabeth Heffner**

### **Campus Counselor (West)**

Master of Education in Secondary School Counseling with Licensure, Kutztown University; Bachelor of Science in Psychology, Clinical Counseling, Kutztown University. Pennsylvania Licensed Professional Counselor (LPC). Member of Berks Area School Counseling Association. Experienced counselor and career & student service advisor.

# BCTC Instructors

## **Kevin Heimbach**

**Instructor: Diesel Technology (East)**

Associates in Applied Science degree in Machine Tool Technology, RACC; Teacher Certification Program, Certificates of Competency in Diesel Technology and Machinist Toolmaker, Temple University; ASE Certified in Master Medium/Heavy Truck Technician and Advanced Level Electronics Specialist; PA Safety Inspection Mechanic Teacher, MACS Air Conditioning certification and other manufacturer schools certifications. Broad experience in the diesel technology and teaching fields. Associates in Applied Science Degree in Safety, CCAF.

## **Peter Hoffman**

**Instructor: Precision / Computerized Machining Technology (West)**

Pennsylvania College of Technology, A.S. in Toolmaking Technology, Certificate in Motorsports Technology; Teacher Certification Program – Vocational Education II, Temple University; graduate of BCTC (West) Machinist /Toolmaker program. Post-secondary SkillsUSA Precision Machining Technology National Gold Medalist. Certifications in NIMS Level Two CNC Milling, NIMS Level Two CNC Turning; NIMS Level Two Manual Milling, NIMS Level Two Manual Turning, NIMS Level Two Wire EDM and NIMS Level One Grinding. Co-author of the NIMS endorsed Precision Machining Technology Textbook- Delmar Cengage Publishers. Broad range of experience in the machining, manufacturing, and teaching fields.

## **Eric Hopewell**

**Instructor: Precision / Computerized Machining Technology (West)**

Master of Education, Temple University, Philadelphia, PA. B.S. in Business Administration, Albright College, Reading, PA. Associate Degree, Machine Tool Technology, Pennsylvania College of Technology, Williamsport, PA. Vocational Instructional II Certification, Temple University, Philadelphia, PA. Certifications in NIMS Level I Measurement, Materials, & Safety; Level I Job Planning, Benchmark, & Layout; Drill Press; Turning Between Centers; Turning Chucking; Manual Milling, Grinding; CNC Milling. PA Dept. of Labor Tool and Die Maker/Moldmaker. Extensive experience in industry as a moldmaker, machinist, toolmaker, and CAM/CNC programmer. Co-author of NIMS endorsed textbook Precision Machining Technology.

## **Elizabeth Ireland**

**Instructor: Advertising Art & Design Technology (West)**

Vocational One Certificate, Temple University Intern Program. A.S. Graphic Design, Berks Technical Institute, Wyomissing, PA. A.S. Equine Studies/Journalism, Johnson & Wales University, Providence, Rhode Island. Extensive design, marketing, and social media experience. Berks Arts Council Committee Member.

## **Melvin Johnson**

**Instructor: Recreational and Power Equipment Technology (West)**

Teacher Certification Program, Temple University; factory trained OEM certified-Gravelly, Lawn Boy, Briggs & Stratton, Tecumseh, STIHL, Kohler, Mtd, Snapper, Homelite, John Deere, and Green Machine. MST Certification in all areas. Balder electric motor control system certification, Pincore electric control and SCR drive systems certification, Lincoln Welding equipment repair certification, and Miller Welding equipment repair certification. Extensive work and teaching experience in all aspects of the field.

## **Michael Kern**

**Instructor: Masonry (East)**

Teacher Certification Program, Temple University; owner/operator of PA Licensed construction firm; extensive experience in the masonry and teaching professions. NCCER certified teacher. OSHA Certification. Member of MIAP (Masonry Instructors Association of Pennsylvania).

## **Michael Kline**

**Instructor: Welding Technology (West)**

Berks Career & Technology Center, Welding Technology program graduate. Certifications achieved including AWS/ASME Code D1.1, AWS/ASME Code GTAW 6G Pipe, Yaskawa Motoman Robotics Programmer, FANUC/Lincoln Electric Robotics, FANUC/Lincoln Electric Advanced Robotics, and Panasonic/Miller Robotics Operational Certification. Extensive field experience as a welding fabricator, robotics weld operator and programmer, and sales experience in technical welding sales.

## **Rachel Kline**

**Instructor: Painting & Decorating (East)**

Teacher Certification Program, Temple University. Vocational 2 Certified Teacher. Associates Degree in Interior Design, Harcum College, Bryn Mawr, PA. NCCER Certified Teacher (National Center for Construction Education and Research). NOCTI teacher occupational competency certificate (painting and decorating). OSHA Certification. Graduate of BCTC's Painting & Decorating program. Extensive experience in all aspects of interior design, design consulting, space planning, sales, and customer service.

## **Mary Jo Kuhwald**

**Instructor: Culinary Arts (East)**

Teacher Certification Program, Temple University. Vocational II Certified Teacher. The Restaurant School, Philadelphia, PA. OSHA Certified, ServSafe Certified and ServSafe Proctor and CTC FCCLA advisor. Extensive teaching and work experience in all aspects of the culinary profession.



# BCTC Instructors

## Gayle Leinbach

### Instructor: Automotive Technology (East)

Experienced automotive service manager and service advisor. Diverse automotive knowledge and technical skills. Currently enrolled in Workforce Education Program, Penn State University. Earned Vocational I Certification and working towards Vocational II certification, PA Safety Inspection License. ASE Certified-Steering and Suspension, Brakes and General Maintenance. Automotive Service Consultant, PA Emission License, Certified Vehicle Safety Inspection Mechanic Teacher, Certified Emission Inspection Teacher, Teacher Training at Automotive Training Center 2012 - 2015. MACS Worldwide Refrigerant Recycling and Service Certified, OSHA Safety Certified. Specialized Service Training with Hyundai Motor America, Daimler Chrysler, Mazda, & General Motors. AYES Mentor, SkillsUSA Judge. Participant in Muhlenberg Elementary Career Fair (Literacy), Enhanced Numeracy Workshop 2012 & 2013. 30+ years experience in the automotive service industry with expertise across all levels of the industry.

## John Leinbach

### Instructor: Automotive Collision Repair Technology (East)

Teacher Certification Program, Temple University. Certificate of Competency in Automotive Collision and Refinishing, BCTC. Graduate of BCTC's Automotive Collision Repair Technology program. Certifications include: OSHA, Dupont Color Adjustment Technology, Dupont Basecoat Clearcoat Technology, Chief Automotive Structural Repair Technology, Mobile Air Conditioning Society AC Instruction Certification, EPA 609 Trainer Certification, ASE Certifications in Collision Repair and Refinishing, ASE Certified in AC Refrigerant Recovery & Recycling, PPG Deltron and Global Refinishing Certified, PPG Envirobase Certification, 3M Certifications, I-CAR Instructor Certification, Pennsylvania Certified Inspection & Emissions License. Extensive experience in all aspects of automotive collision repair.

## April Lenhart

### Instructor: Service Occupations (East)

Pursuing Master of Education in Elementary Education, Albright College. Bachelor of Science in Business Administration, Albright College. Three Pennsylvania Teaching Certificates in Family Consumer Science and Business-Computers-Information Technology and in elementary education K-6. Extensive experience as an instructor, DACP coordinator and administrative knowledge purchasing for county of Berks, and office manager for the Berks County Prison.

## Lauren Little

### Instructor: Video & Media Content Production (West)

Bachelors of Art in Journalism and English from Penn State University. Experienced as a Chief Photographer, Photojournalist, Freelance Photography, and Portrait Photography. Recipient of several Keystone Press Awards and local school PR awards.

## Eric Lynch

### Instructor: Culinary Arts (East)

Master of Science in Workforce Education & Development, Penn State University (Vocational Instructional II Certificate); Bachelor of Science, Culinary Arts & Systems, Pennsylvania College of Technology. Current ServSafe certification and proctor's certification. Member of the American Culinary Federation. Educational member of the National Restaurant Association. OSHA CareerSafe 10 hour certification and certified trainer. Variety of experience in many aspects of the hospitality industry.

## James Mack

### Instructor: Heavy Equipment Technology (East)

Teacher Certification Program, Temple University; A.A.S. in Diesel Technology, A. A. S. in Heavy Equipment Technology, Pennsylvania College of Technology, Williamsport, PA; Certificate of Competency in Automotive Technology, BCTC, Oley, PA. Certifications include PA Vehicle Safety Mechanic Instructor, PA Emissions Inspector Certification Instructor, ASE Master Automobile Technician, ASE Master Medium/Heavy Truck Technician, ASE Advanced Level Specialist (L1 & L2); ASE Master Truck Equipment Technician; Association of Equipment Distributors Certified Diesel Equipment Technician; Mobile Air Conditioning Society A/C Instruction Certification; EETC Certification in Driveline/Hydraulic and Compact Diesel Engines; EPA Section 608 Universal (Type IV) Refrigeration Technician Certification; 1999 Pennsylvania College of Technology Mechanic of the Year, 1999 Skills-USA National 3rd place winner in College/Postsecondary Diesel Equipment Technology. Experienced heavy equipment technician and operator.

## Jennifer Maryniak

### Instructor: Sports Medicine & Rehabilitation Therapy (East)

Master of Education, Temple University; Bachelor of Science, Slippery Rock University; Licensed athletic trainer, certified strength and conditioning specialist, "Stop the Bleed" and First Aid, CPR, and AED certified instructor. Member of National Athletic Trainers Association (NATA), American Red Cross CPR/AED for the Professional Rescuer and Health Care Provider. Trained in asthma inhalers and Epinephrine auto-injector training. Extensive experience in education, healthcare and athletic training.

## Therese Matthew

### Instructor: Health Occupations (West)

Nursing Diploma, The Reading Hospital School of Nursing. B.A. in Psychology, Shippensburg University. Oncology Nurse Certification. BLS Certified. Registered Nurse with extensive experience in hospital care, home health care and school nursing.

## Jeffrey Miller

### Instructor: Carpentry (East)

Teacher Certification Program, Temple University; Journeymen – Carpenter Certification, State of Pennsylvania; NCCER Certified Teacher (National Center for Construction Education and Research). Experienced custom home builder and professional teacher.

## Christopher Nappi

### Instructor: Computer Systems & Networking Security (East)

Teacher Certification Program – Temple University, Philadelphia. Cisco Certified Teacher - IT-Essentials v. 4.0, CCNA Sections 1-4. CompTIA Strata Certification, CompTIA Net+ Certification. CompTIA Security+ Certification, MTA – Server Fundamentals Certification. MTA – Network Fundamentals Certification. AOS Culinary Arts – Culinary Institute of America, Hyde Park, NY. Studies in Computer Science – Southern Connecticut State University. AAS Computer Technology – Reading Area Community College. Technology Support Specialist – Berks Career and Technology Center.

# BCTC Instructors

## Keith Nichols

### Instructor: Automotive Technology (East)

Associate Degree, Automotive Technology, Northampton Community College; Graduate of BCTC's Automotive Technology Program. ASE Master Certified. Certified inspection mechanic and emissions inspector. Extensive experience as an Automotive Technician.

## Donna Noecker

### Instructor: Cosmetology (East)

Temple University, Vocational II Certification. Graduate of Pottstown Vocational Annex, Cosmetology program. Graduate of Berks Career and Technology Center's teachers' program. Licensed cosmetology teacher, cosmetologist, supervisor and salon owner/stylist with extensive experience in all areas of the cosmetology profession. Milady Master Educator certifications. Certified "Look Good Feel Better" facilitator with the American Cancer Society. Member of AVTEC.

## Denise Paulson

### Instructor: IT – Programming (West)

PA Teaching Certification, Alvernia University, Reading, PA. MBA, St. Joseph's University, Philadelphia, PA. Bachelor of Science, Computer Science, Indiana University of Pennsylvania, Indiana, PA. Extensive business experience including systems analyst, software and application developer. Experienced Information Technology professional and educator.

## Kelly Piccioni

### Instructor: Horticulture (East)

Certificate of Completion, Hixson's School of Floral Design, Cleveland, OH. Bachelor's Degree, Ornamental Horticulture, Delaware Valley College, Doylestown, PA. Teacher Certification – PA Vocational I. Penn State certificate for the Workforce Education & Development Program. FFA Advisor. Member of PLNA. Board of Directors - Berks County Penn State Extension. 2016 Leo Elite Wedding Professional Award. Certified Pesticide Commercial Applicator. Experience in all aspects of nursery management, landscape and nursery work, and floral design.

## Nancy Quick

### Instructor: Cosmetology (West)

Teacher Certification Program, Temple University; licensed cosmetology teacher; extensive experience in all aspects of cosmetology including teacher, supervisor, and salon owner/operator. Volunteer with the "Look Good Feel Better" program of the American Cancer Society; member of Career & Technical Teachers Educating in Cosmetology; member National Cosmetology Association.

## Dale Roberts

### Instructor: Welding Technology (West)

Vocational II Certification, Temple University. NOCTI Teacher Occupational Competency Certificate in Welding. Partner in Safety/OSHA Safety Training Certificate. Certifications: AWS D1.3GMAW 18 GAUGE GROOVE | AWS D1.3 GMAW 11 GAUGE GROOVE IAWS D1.1 SMAW 1G,2G,3G, 1F,2F,3F UNLIMITED THICKNESS | AWS D1.5 SMAW 1G,2G,3G, 1F,2F,3F UNLIMITED THICKNESS. Extensive experience in the welding and teaching professions.

## Michael Rowe

### Instructor: Heavy Equipment Operations (East)

Bachelors of Science from Slippery Rock University. Heavy Equipment operator experience for 20+ years. Assistant Highway Superintendent. Experience in paving, storm water management, construction and excavation. Excavator Safety Trainings provided by PA1 call system. "The world is your sandbox."

## Rochelle Rudy

### Instructional Coach (East & West)

B. S. in Secondary Education, Kutztown University; certifications in English, Communications, and Family Consumer Science. Experience in human services and guidance assistance. OSHA 10-Hour Certification, AED/CPR Certificate. FCCLA Advisor. Former BCTC Lead Teacher and Early Childhood Education Instructor.

## Kelly Ruth

### Instructor: Medical Health Professions (West)

Master of Education, Curriculum & Instruction, Temple University. Bachelors Degree in Nursing, Kutztown University; Reading Hospital School of Nursing, Registered Nurse. Teacher Certification Program, Temple University. Certified AHA Basic Life Support Teacher. Member of Golden Key International Honour Society. HOSA advisor. Penn HOSA CELC (Competitive Event Leadership Committee). Extensive experience in the nursing field including medical surgical units, operating room and staff development.

## Theodore Semanchick

### Instructor: Electrical Occupations (West)

Teacher Certification Program, Temple University, Vocational I Certified Teacher, Master Teacher/Trainer Certification, IBEW/ECA National Training Institute, University of Tennessee, Knoxville, TN. Associate Degree, Electronic Technology, Lincoln Technical Institute, Allentown. IBEW Local 743 Joint Electrical Apprenticeship, Licensed Journeyman Inside Wireman, Reading, PA. Certifications and training: High Voltage Splices and Termination, Built-Rite, NFPA 70E, Arial Lift, Cat 5 & Cat 6 Terminations, OSHA 30, MSHA certified. Experienced professional electrician and teacher in all aspects of electrical installations.

## Kathi Shaffer

### Instructor: Service Occupations (East)

Masters of Education, Alvernia University, Reading, PA. B.S. in Elementary/Early Childhood Education, Kutztown University, Kutztown, PA; certification in Special Education, Alvernia University, Reading, PA; Family & Consumer Science, Praxis, PA Department of Education. CareerSafe/OSHA Certification. Member of Alpha Epsilon Lambda Honor Society. A broad range of teaching experience.

## Tracey Sholl

### Instructor: Cosmetology (East)

Teacher Certification program, Temple University, Vocational I candidate. Licensed cosmetology teacher. Extensive experience in all aspects of cosmetology including salon management, student intern supervision, stylist, esthetician, and make-up artist. Certified in Bio Elements skin care products and advanced facial techniques and body wraps.

# BCTC Instructors

## **Michael Stein**

### **Technology Instructional Coach (East & West)**

BFA in Communication Design, Kutztown University; focus in animation, microcomputer graphics, computer illustration, and multimedia. VOC II Certification – Vocational Education - Temple University. Occupational Assessment Certifications in Advertising Design and Digital Design. PrintED Certified instructor. Adobe Certified Associate: Rich Media Communication using Adobe Flash CS6, Web Communication using Adobe Dreamweaver CS6, Print & Digital Media Publication using Adobe InDesign, Graphic Design & Illustration using Adobe Illustrator, Visual Communication using Adobe Photoshop CS6. Experienced graphic designer and teacher.

## **Christine Twiford**

### **Educational Facilitator (West)**

Master of Science in Special Education, Albright College; Bachelor of Science in Business Management, Kutztown University. Certified Instructional II in special education and mid-level mathematics and English. Experience in multiple school districts as instructional assistant, learning support teacher and transition coordinator.

## **Heather Wargo**

### **Educational Facilitator (East)**

Masters of Education, Classroom Technology, Wilkes University, Wilkes-Barre, PA. Bachelor of Science Degrees, Special Education & Elementary Education, Misericordia University, Dallas, PA. Certifications: Pennsylvania Instructional II, Special Education & Elementary Education. Highly Qualified in Reading. National Technical Honor Society Advisor. An experienced facilitator in all aspects of special education methods and management.

## **Michael Wentling**

### **Instructor: Plumbing & Heating (East)**

Master Plumbing & Heating License, City of Reading, Reading, PA. Plumbing & Heating Journeyman License, BCTC, Oley, PA. Bachelor of Science, Marketing/Management/Retailing, York College of PA, York, PA. Licensed Master Plumber with extensive experience in all areas of residential and commercial plumbing and heating.

## **Robert Youse, Jr.**

### **School-To-Work Coordinator (East)**

B.S. Education, Millersville University. Certification in Social Studies/ Secondary Education grades 7-12. Pursuing Cooperative Education certification, Penn State University. Three years of substitute teaching prior to BCTC. Phi Alpha Theta History Honor Society member and recipient of Robert Sayre Writing Award, Millersville University (2009).









## Clusters, Programs & Locations

### Business & Information Technology

Business Management & Entrepreneurship (W)  
 Computer Systems Networking & Security (E)  
 IT Programming (W)

### Communications

Advertising Art & Design Technology (W)  
 Video & Media Content Production (W)\*  
 \*Formally Communication Media Technology & Photo Imaging Technology

### Construction

Building Construction Occupations (E)  
 Cabinetry & Wood Technology (E)  
 Carpentry (E)  
 Electrical Occupations (B)  
 Heavy Equipment Operations (E)  
 Horticulture (E)  
 HVAC / Refrigeration (E)  
 Masonry (E)  
 Painting & Decorating (E)  
 Plumbing & Heating (E)

### Engineering & Manufacturing Technology

Drafting Design Technology (W)  
 Engineering Technologies (W)  
 Precision / Computerized Machining Technology (W)  
 Welding Technology (W)

### Healthcare

Dental Occupations (E)  
 Health Occupations (W)  
 Medical Health Professions (W) (seniors only)  
 Sports Medicine & Rehabilitative Therapy (E)

*(B) indicates the program is offered at both campuses.*  
*(E) indicates the program is offered only at the East Campus in Oley.*  
*(W) indicates the program is offered only at the West Campus in Leesport.*

### Services

Cosmetology (B)  
 Culinary Arts (B)  
 Early Childhood Education (B)  
 Protective Services (E)
 

- Homeland Security
- Law Enforcement

 Service Occupations (E)

### Transportation

Automotive Collision Repair Technology (B)  
 Automotive Technology (B)  
 Diesel Technology (E)  
 Heavy Equipment Technology (E)  
 Recreational & Power Equipment Technology (W)

### Technical Academy Programs

Business Management & Entrepreneurship (W)  
 Computer Systems Networking & Security (E)  
 IT Programming (W)  
 Engineering Technologies (W)





All programs meet the quality standards aligned with ISO 9001.

## Contact Information

### Superintendent of Record

Dr. Jill Hackman

### Executive Director

Dr. James Kraft

### Director of Curriculum, Instruction and Assessment

Dr. Michael Stauffer

### Assistant Director of Curriculum, Instruction and Assessment

Mr. Curtis Funkhouser

### West Campus

Mr. Kyle Follweiler  
Principal

Dr. Kristine Rosenberger  
Assistant Principal

### East Campus

Dr. Michael Stauffer  
Principal

Mr. Ray Jenkins  
Assistant Principal



BCTC.CE



berkscareerandtech



BerksCareer



## Berks Career & Technology Center consists of two campuses:

East Campus | 3307 Friedensburg Road | Oley, PA 19547 | 610-374-4073

West Campus | 1057 County Road | Leesport, PA 19533 | 610-374-4073

Berks Career and Technology Center will not discriminate in its employment practices or its educational programs and activities on the basis of race, color, age, creed, religion, gender, sex, sexual orientation, ancestry, domicile, veterans status, national origin, marital status, pregnancy, handicap/disability or genetic information or any other legally protected characteristics in its admission procedures, educational programs and activities or employment practices, as required by the Pennsylvania School Code and related regulations, ADA, Title VI, Title IX, and Section 504 and will provide equal access to the Scouts of America and other designated youth groups. Students are encouraged to consider enrolling in career programs non-traditional to their gender. Berks Career and Technology Center will take steps to assure that the lack of English language skills will not be a barrier to admission and participation in career and technical education programs and will make reasonable accommodations for those with disabilities. Furthermore, harassment in any form, including bullying, by any individual will not be tolerated. All policies, regulations and practices of BCTC shall be guided by this statement. Inquiries regarding compliance with Title IX, Section 504 or Title VI should be directed to the Office of the Executive Director at 1057 County Road, Leesport, PA 19533, 610-374-4073.

Berks Career and Technology Center no discriminará por razones de raza, color, edad, religión, sexo, orientación sexual, origen, domicilio, si es veterano, nacionalidad, estado civil, embarazo, incapacidad o cualquier otra característica protegida legalmente en su proceso de empleo, programas educativos ni actividades o proceso de admisiones como es requerido por el Código Escolar del Estado de Pennsylvania y las regulaciones ADA, Título VI, Título IX y Sección 504 y proporcionará un acceso igualitario a los Exploradores de America y otros grupos de jóvenes designados. Fomentamos que todo estudiante considere registrarse en programas educativos no tradicionales a su sexo. Berks Career and Technology Center tomara pasos para asegurar que la falta de conocimiento de Ingles no sea una barrera para su admisión y participación en los programas educativos y técnicos. También se harán acomodaciones razonables para personas con impedimentos físicos. Cualquier forma de acoso, incluyendo intimidación por parte de cualquier individuo no será permitida. La política, regulaciones y prácticas de BCTC serán guiadas por esta declaración. Dudas o preguntas acerca del cumplimiento del Título IX, Sección 504 o Título VI deberán dirigirse a la oficina del Director Ejecutivo en 1057 County Rd, Leesport PA 19533, 610-374-4073.