

# BUILDING CONSTRUCTION OCCUPATIONS

**New Student Orientation Guide** 

## CONGRATULATIONS

on your acceptance to the Berks Career & Technology Center



BE IN DEMAND. BE SKILLED. BE HERE.

## BUILDING CONSTRUCTION OCCUPATIONS

#### EAST CAMPUS

**Instructor: Matthew Huck** 

Have Questions? Contact:

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#### **SAFETY** is our first priority at BCTC!

By ensuring that every student has the fundamental safety knowledge and skills required in the workplace, BCTC places safety as our first priority. Safety instruction and testing are documented and maintained as part of the student's instructional record

All career and technical teachers at BCTC implement a safety program within their particular program areas. As part of that safety program, every student enrolled in an approved career and technical education program at BCTC must complete an OSHA 10-hour General Industry or Construction Industry Safety Training during their first year in the program. To be eligible to return the following school year, all students must complete and pass this required safety training. These courses are web-based and can be completed online whenever and wherever internet service is provided.

Upon successful completion of the safety training program, students earn and receive an OSHA credential from the Federal OSHA Training Institute. These programs are 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 career.

BCTC dress code is dictated by safety rules and industry standards which may include the use of hard hats, eye protection, respirators, ear protection, hair nets, safety shoes, and uniforms, depending on the requirements. Dress that is consistent with industry expectations is required as established under the provisions of Act 46 of 1998 which authorizes schools to adopt dress and uniform policies. (See Student Dress/Grooming Guidelines) Any deliberate act or behavior deemed unsafe that jeopardizes the safety and well-being of the individual or others may be cause for immediate suspension and dismissal from BCTC.



# NATIONAL CENTER FOR CONSTRUCTION EDUCATION AND RESEARCH (NCCER)

The National Center for Construction Education and Research (NCCER) is a not- for-profit 501(c)(3) education foundation. NCCER was developed with the support of more than 125 construction CEOs and various association and academic leaders who united to revolutionize training for the construction industry. This progressive program has evolved into curricula for more than 70 craft areas and a complete series of more than 70 assessments offered in over 4,000 NCCER- accredited training and assessment locations across the United States. BCTC is a NCCER-accredited training and assessment school.

BCTC utilizes NCCER standardized construction and maintenance curriculum and assessments with portable credentials. BCTC students earn these portable credentials. The credentials are tracked through NCCER's registry which allows students, teachers, organizations, and companies to track the qualifications of craft professionals and/or check the qualifications of possible new hires. NCCER's registry also assists craft professionals by maintaining their records in a secure database.

NCCER's workforce development process of accreditation, instructor certification, standardized curriculum, registry, assessment, and certification is a key component in the industry's workforce development efforts. NCCER also drives multiple initiatives to enhance career development and recruitment efforts for the industry. BCTC's students benefit from this accreditation with training, nationally recognized curriculum, and certifications.

#### **BCTC CONTINUING EDUCATION PROGRAM**

NCCER's transcripts will be accepted and applied by BCTC's Continuing Education Program and will result in advanced placement in the Apprenticeship Programs.





### **STUDENT**

## **REGISTRATION AND RELEASE FORM Berks Career and Technology Center**

Important: Type or print legibly. Any	inaccuracies on this forn	n may be reflected	l on transcripts &	training records.
PRINT Name:				
Birthdate:	and/or Social Se	curity #:		
Home Address:				
City/Town:				
State:	Zip:			
HomePhone:				
Cell Phone:				
Youremail:				
Berks CTC campus:	Oley	Leesport		
Construction trade you are studying	g:			
Grade Level: Freshman (9)	Sophomore (10)	Junior (11)	Senior (12)	Adult
Name of BCTC teacher:				
Your career goal:				
How can Associated Builders & Co.	ntractors help you reac	h your career go	oal?	
Please check all that apply:				
I would like to receive inform goals.*	ation that explains appre	nticeship and how	it can help me rea	ach my career
I would like to receive inform contractors who are looking for			tors, next spring, r	egarding
After high school, I am considerable construction trades) and woul the ABC scholarship program	d like to receive informa			
* Information will be mailed to your hor	ne address			
I hereby authorize the Berks CTC to so NCCER Registry Department. I also training records to Sponsor Represent Keystone Chapter, and the National Ce	authorize the NCCER tatives upon request. I	Registry Depart	ment to verify in armless the Berk	formation in my ts CTC, the ABC
Signature:				
Parent/Guardian Signature (if under	18 years old):			

Reports containing trainee/participant information, including score sheets, training prescriptions, and transcripts,

will not be distributed without properly documented release information from the trainee/participant.

#### **Building Construction Occupations**

Instructor Matthew Huck | 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.

#### 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 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 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 

#### **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.

#### **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



# PATH WAYS: Building Maintenance Repa

**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.







05.05\* - Use an architect's scale - P, N

#### Berks Career & Technology Center Building Construction Occupations Task Check Off List 46.9999 2020-2021

P = Program of Study	N = NOCTI	R = Restoration Tasks	Asterisk (*) = Local Tasks		
Standard					
Standard 01.00 - Safety					
	d job opportunitie	es in building construction fields			
01.02* - Demonstrate lab s					
01.03* - Demonstrate use of					
01.04* - Demonstrate use of extension ladder - P, N					
01.05* - Demonstrate setting up metal scaffold - P, N					
01.06* - Demonstrate setting up pump jacks					
01.07* - Demonstrate setting up roof jacks  02.00 - HAND TOOLS					
	ar use of layout/ n	neasuring tools - P N			
02.01* - Demonstrate proper use of layout/ measuring tools - P, N  02.02* - Demonstrate proper use of sawing/cutting tools - P, N					
02.03* - Demonstrate prope					
		g and dismantling tools - P, N			
02.05* - Identify and gain v		<u> </u>			
02.06* - Construct a bench		ood joints			
03.00 - POWER TOOLS	TIOOK				
03.01* - Operate a circular	saw safely and a	ccurately P N			
•	•	nd drill press safely and accurate	elv - P. N		
03.03* - Operate belt and h		•	, ,		
03.04* - Operate reciprocat		-			
03.05* - Operate routers sa					
03.06* - Operate pneumation					
		saw safely and accurately - P, N			
03.08* - Operate power tab					
		electric planer safely and accura	tely - P, N		
03.10* - Operate band saw		-			
03.11* - Construct a tool bo	)X	-			
03.12* - Construct a saw ho	orse				
03.13* - Perform off-hand g	 rinding				
04.00 - CONSTRUCTION I	MATERIALS				
04.05* - Identify/describe us	ses of glues/mast	tics, N			
04.01* - Identify abbreviation	ns of lumber tern	ns - N			
04.02* - Explain difference	between nominal	/ actual size			
04.03* - Identify varieties/gi	rades of plywood	- N			
04.04* - Identify/describe co	onstruction fasten	ners - N			
04.06* - Identify common ty	pes of construction	on hardware - N			
04.07* - Use sandpaper - N	<u> </u>				
05.00 - CONSTRUCTION I	DRAWINGS AND	SITE LAYOUT			
05.01* - Identify building co					
		symbols and terms, including stru			
-		, components, abbreviations and	symbols - P, N		
05.04* - Interpret architectu	ral specifications	- P, N			
OF OF*		. , . •			

- 05.06\* Set up and use builder's level or laser level P, N
- 05.07\* Layout building using diagonals or 3-4-5 rule

#### **06.00 - MASONRY**

- 06.01\* Identify and safely use masonry hand tools P, N
- 06.02\* Identify and estimate concrete materials P, N
- 06.03\* Construct forms for concrete P, N
- 06.04\* Mix concrete P, N
- 06.05\* Place, screed and finish concrete P, N
- 06.06\* Identify types of masonry units P, N
- 06.07\* Estimate masonry materials P, N
- 06.08\* Cut block/brick P. N
- $06.09^*$  Describe mortar types and applications and mix mortar to proper proportions and consistency P, N
- 06.1\* Lay block/brick stretcher course P, N
- 06.11\* Lay block/brick corner P, N
- 06.12\* Describe various masonry positions and bonds P, N
- 06.13\* Lay block/brick to a line P, N
- 06.14\* Describe function of and install wall ties P, N
- 06.15\* Describe function of and install anchor bolts N
- 06.16\* Describe installation of lintels

#### 07.00 - FLOOR FRAMING

- 07.01\* Identify different types of framing materials and systems P, N
- 07.02\* Install floor beams, columns, and sill plates P, N
- 07.03\* Lay out, cut and install floor joists and openings P, N
- 07.04\* Cut and install bridging and subflooring P, N

#### 08.00 - WALL FRAMING

- 08.01\* Lay out wall/sole plates N
- $08.02^*$  Construct rough openings for windows and doors, using headers, full length and cripple studs P, N
- 08.03\* "Construct corners and ""T"" intersecting walls P, N"
- 08.04\* Install wall sheathing, and erect and assemble wall sections P, N
- 08.05\* Plumb, align and brace walls N
- 08.06\* Lay out top plates for ceiling joists and rafters P, N
- 08.07\* Lay out, cut, install ceiling joists and nailers P, N
- 08.08\* Describe how to install various steel framing components P

#### 09.00 - ROOF FRAMING

- 09.01\* Identify various roof types P, N
- 09.02\* Lay out ridge board N
- 09.03\* Lay out, cut, and install common rafters P, N
- 09.04\* Lay out, install, and brace roof framing members (trusses) P, N
- 09.05\* Cut and install framing in gable P, N
- 09.06\* Cut and install face board N
- 09.07\* Cut and install solid roof sheathing P, N
- 09.08\* Estimate various roof component materials P, N

#### 10.00 - ROOF COVERINGS/MATERIALS

- 10.01\* Install felt paper, ice and water barrier, and roof edging P, N
- 10.02\* Install flashing P, N
- 10.03\* Install asphalt shingles P, N
- 10.04\* Install roof ventilation N
- 10.05\* Estimate various roof covering materials P

#### 11.00 - EXTERIOR FINISHES

- 11.01\* Install house wrap P
- 11.02\* Cut and install soffit and fascia P
- 11.03\* Install window units on exterior walls P, N
- 11.04\* Install exterior door units P, N

11.05* - Cut and install horizontal and vertical siding - P, N
11.06* - Describe how to install various types of cornices - N
11.07* - Estimate various exterior finish materials - P, N
12.00 - RESIDENTIAL ELECTRICITY
12.01* - Describe and demonstrate basic electrical safety - P
12.02* - Identify components of the National Electric Code (NEC) - P
12.03* - Identify and draw electrical symbols - P
12.04* - Explain AC electrical theory and basic electrical circuits - P
12.05* - Identify and describe wire types and sizes - P, N
12.06* - Identify electrical tools and materials - P, N
12.07* - Install conductors and connectors - N
12.08* - Install rough wiring for 110 and 220 circuits - P, N
12.09* - Trim out and finish circuits - P, N
12.10* - Install low voltage circuits - P
12.11* - Install residential service equipment, including various overcurrent devices - P
13.00 - RESIDENTIAL PLUMBING
13.01* - Describe and safely use plumbing hand tools
13.02* - Describe and safely use plumbing power tools - P
13.03* - Identify various types of pipes and fittings, including valves and devices - P
13.04* - Interpret plumbing blueprints and specifications - P
13.05* - Cut, ream and solder copper tubing
13.06* - Install PEX water distribution system and troubleshoot any leaks - P
13.07* - Size drain , waste and ventilation systems - P
13.08* - Cut, join, and hang PVC pipe
13.09* - Install fixtures in rough plumbing: tub and shower tubs and showers - P, N
13.10* - Install fixtures in finish plumbing: toilets and sinks, and troubleshoot any leaks - P, N
14.00 - INTERIOR FINISHES
14.01* - Estimate quantities of insulation - P, N
14.02* - Cut, install, and fasten various types of insulation - P, N
14.03* - Install and spackle drywall/wallboard - P, N
14.04* - Identify composition of paints and solvents and prepare paint for application - P
14.05* - Paint a room using a roller and/or brush - P
14.06* - Clean brush and other painting tools/equipment - P
14.07* - Describe and apply various types of caulk - P
14.08* - Install various types of moldings - P, N
14.09* - Lay out, cut and assemble stairway - P, N
14.10* - Estimate various materials for wall surfaces - P
14.11* - Estimate various types of interior moldings - P
14.12* - Demonstrate how to install ceramic floor tile - P, N
15.00 - METAL FABRICATION
15.01* - Square a piece of metal
15.02* - Gouge sheet metal
15.03* - Cut out patterns with snips
15.04* - Lay out and make a riveted seam
15.05* - Remove a riveted seam
15.06* - Make a single hemmed edge
15.07* - Construct a 3-piece spackle tray using riveted seams and a hemmed edge
15.08* - Demonstrate personal welding safety
15.09* - Prepare oxyacetylene equipment for use
15.10* - Cut metal using oxyacetylene equipment
15.11* - Run beads on mild steel
90.00 - NCCER
90.01* - Basic safety - Identify causes of accidents and job site hazards
90.02* - Use personal protective equipment and lift properly

90.03* - Describe safe behavior on and around ladders and scaffolding
90.04* - Explain hazard communications and Safety Data Sheets
90.05* - Demonstrate fire and electrical safety
90.06* - Identify and use hand tools
90.07* - Identify/explain use of electric pneumatic, hydraulic and other power tools
90.09* - Identify types of blueprints
90.10* - Identify components of blueprints, including scale
90.12* - Identify lines of construction abbreviations, symbols, grids and dimensions
90.14* - Calculate with whole numbers
90.15* - Simplify measurements
90.16* - Calculate with measurements
90.17* - Convert between fractions decimals and percent's
90.18* - Apply construction geometry
90.19* - Identify basic rigging principles
90.20* - Explain materials handling
90.21* - Demonstrate basic communication skills
90.22* - Define employability skills
96.00 - HEALTH AND WELLNESS
96.01* - Participate in health and wellness activities - Level I
96.02* - Participate in health and wellness activities - Level II
96.03* - Participate in health and wellness activities - Level III
96.04* - 96.04* Self-care in the 21st Century
97.00 - CERTIFICATION
97.01* - Prepare to obtain NCCER Core certification
97.02* - Obtain CareerSafe-OSHA Certification - P
97.03* - Prepare to obtain PA Builders Association Skills Certificate (based on NOCTI)
97.04* - Prepare to obtain Step Ladder Safety Training certification
97.05* - Prepare to obtain Extension Ladder Safety Training certification
97.06* - Prepare to obtain Articulated Ladder Safety Training certification
98.00 - STUDENT PROJECT/CAPSTONE
98.04* - Complete student capstone project
99.00 - CAREER EDUCATION AND WORK
99.01* - Explore your value system to determine how it affects your job performance
99.02* - Complete application forms
99.03* - Prepare a resume
99.04* - Write a cover letter
99.05* - Participate in a mock job interview
99.06* - Evaluate employer-employee relationships and analyze your own on-the-job attitudes
99.07* - Prepare your career portfolio
eSD Export 2/2/2021

#### PROGRAM OF STUDY (POS)

Program of Study (POS) is based on a straightforward idea: students, parents, educators, and employers work together to help students graduate prepared for high-paying, technical jobs, and further education. SOAR. (Students Occupationally and Academically Ready) as defined by the PA Department of Education, the POS educational plan articulates the high school-level career and technical programs to a post-secondary degree, diploma, or certificate program.

#### WHO participates?

Any Berks County high school student attending the Berks Career and Technology Center is part of the Program of Study. Students work in conjunction with their sending school counselor to develop the most appropriate rigorous academic schedule to foster preparedness for post-secondary education.

#### WHAT is a POS?

Berks County High Schools, the Berks Career and Technology Center, post-secondary institutions, and trade apprenticeships work together to develop a planned program of technical and academic courses for students to pursue careers in a technical field. Working with people from business and industry, secondary and post-secondary schools develop a seamless curriculum of courses, combining at least the final two years of secondary school with two years of post-secondary education, leading to an associate, two-year certificate, a trade apprenticeship or a bachelor's degree.

#### WHEN does a POS begin?

The POS begins at the high school and continues with the Berks Career and Technology Center in a technology cluster or an advanced technically-specific occupational program. In cooperation with the PA Department of Education, career and technical programs have an identified core of competencies to master called POS.

#### WHY a POS?

Advances in technology and increasing global competition mean a need for a better-skilled workforce with more technical knowledge. To fill high-skill positions, employers need employees that are both academically well rounded and technically proficient. POS grads are well-educated and career/college ready! POS benefits students, parents, schools, and employers. It is a win-win situation!

POS provides a smooth transition between secondary and post-secondary schools with no duplication of courses or credits loss. The SOAR program offers a tool to find post-secondary schools that recognize and accept BCTC's coursework as part of the state-wide articulation agreement and provide college credits that are earned before the student even begins at the college. Saving money and saving time are the reasons why students should strive to take advantage of POS!

# **Building Construction Occupations LAB SAFETY AND BEHAVIOR REGULATIONS**

Safety must be practiced at all times.
2. Safety glasses must be worn by students at ALL times in the lab area.
3. Students must wear proper work shoes, NO SNEAKERS.
4. Students will not leave the lab area for any reason without the permission of the instructor.
5. Students will not be allowed to use the lab equipment until they have met all safety requirements for the program.
6. As a student enrolled in this program, I will not engage in the following: Horseplay Stealing Fighting Smoking Or, talking back to the instructor.
7. ALL STUDENTS must do the lab clean up jobs assigned to them.
I, have read the Safety and Lab rules and agree to abide by them for my own safety and the safety and welfare of others.
Date:

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

BCTC offers students an array of co-curricular career and technical student organizations (CTSO's) in which students have the opportunity to develop leadership skills through community service projects, participation in skill competitions and engage in other planned career-related educational events. Therefore, all students are expected to join and actively participate in one or more of these national organizations.

The annual state and national dues for the student organizations vary by organization and are established on an annual basis by the state and national organization guidelines. BCTC chapter fundraising activities are partially utilized to provide an opportunity for students to join these organizations. Additional funding may be provided by BCTC in support of students who compete and represent BCTC and their career and technical program at competitions. The BCTC career and technical student organizations chapters have BCTC chapter advisors.



**SkillsUSA** is the largest of the six organizations. It 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. All students are eligible to participate in SkillsUSA and/or one of the other career specific organizations.



**HOSA (Health Science Education)** is open to students enrolled in the Health-care and Protective Services program. 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.



fcclainc.org

**FCCLA** (Family, Career and Community Leaders of America) is open to students enrolled in 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 (Agricultural Education)** is open to students enrolled in the Horticulture program. This co-curricular experience assists students by developing their potential for leadership, personal growth, and career success. Students participate in community service and competitions.



nths.org

**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 Builders (NAHB) and is open to students enrolled in the construction trades 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.

#### Textbooks, Uniforms, Tools and Supplies

Students attending Berks Career and Technology Center are taking the first steps in preparing for their chosen career. In preparing for any career, it is important to begin establishing a reference library of books, technical materials and tools to support their study and eventual practice in this specific career. All students are expected to purchase their own textbooks, workbooks, shop uniform, tools and supplies so they are prepared for the first day of class. **We highly recommend purchasing these items by July 1 to allow sufficient time for preparation and delivery.** 

Instructions for purchasing textbooks, uniforms, tools and supplies may be found on the BCTC Website. Step 1. Go to: www.berkscareer.com

Step 2. Under "Quick Links" click on Books/ Tools/ Uniforms

The following three icons will appear with more detailed instructions.

#### For Textbooks



A list of the first, second, and third year books will display. There will be a screen shot of the textbook, Author's name, Edition and **ISBN number**, as well as approximate price from new to gently used. To purchase the textbook, click on the title of the book, or picture of the book, which will take you to Amazon.com. You may go to any on-line bookseller using the **ISBN number** in the search field. Follow the directions for making a purchase, and in most cases the textbooks will be delivered to your home address within a few days.



#### For Uniforms

Click on the link for the "BCTC Uniform Store". Choose East or West Campus. Then click on your program name.

A list of required and optional items will display. All uniforms may be purchased safely and securely through Apex Advertising on the BCTC website. Simply follow the prompts for instructions.



#### For Tools and Supplies

A list of required tools and supplies will display by program.

Should you need assistance, please feel free to contact the BCTC Main Office at (610) 374-4073.

#### **CAREER AND TECHNOLOGY CENTER**

#### **PORTFOLIO**

A portfolio is a collection of work representing education, self-development, and career information. It should contain multiple pieces of information that will serve as proof of your training and achievements. Your portfolio will help you to prepare for and obtain employment, enter military service or college.

Each Berks Career and Technology Center student is required to complete a career portfolio.

Each student's portfolio should contain the following items:

- Title page
- Table of Contents
- Resume
- Academic achievements
- Career and Technical achievements
- Personal management skills
- Team-building skills
- Work experience
- Copies of all industry certificates
- Community activities
- Other related information

#### STUDENT PROJECT/CAPSTONE CHOICES

In accordance with the Berks Career and Technology Center program certificate completion requirements, a student must successfully complete a Student Project/Capstone under the guidance and direction of Berks Career and Technology Center faculty. Students must complete Learning Guide 98.04 and present their student project before Spring/Easter Break of their senior year. If not completed by the end of the third quarter, student will receive a grade of (I) incomplete for the quarter. A student must have successfully completed his/her Student Project/Capstone prior to participating in the Cooperative Education Program at the Berks Career and Technology Center.

The intent of the Student Project/Capstone is for Berks Career and Technology students to demonstrate and apply vocation and academic skills into a meaningful project. Some important skills all employees must possess include the ability to manage projects, find and use resources, read, write, compute, manage deadlines, and communicate. The project/capstone is to be included in your portfolio.

Students are required to select one of the following types of projects:

**CTSO-Based:** This project focuses on the student's extensive involvement (e.g., Student Officer) in a CTSO. The student will be responsible for documenting her/his participation as a CTSO officer, outlining her/his organization and leadership skills, and showcasing an initiative she/he personally directed toward an identified outcome. The student will record her/his experiences along the way in a journal. The student will use these journal entries to compose a summary paper of her/his project. The summary paper may contain elements of a research paper, and therefore, sources will need to be documented properly. Lastly, the student will deliver an oral presentation about her/his project.

**Project-Based:** This project is related to a student's focus area and/or provides an extended learning experience. This option will result in a tangible product that is designed, developed, and created by the student. The student will record his/her experiences along the way in a journal/project log. The student will use these entries to compose a summary paper of his/her project. The summary paper may contain elements of a research paper, and therefore, sources will need to be documented properly. Lastly, the student will deliver an oral presentation about his/her project.

**Community Service-Based:** For this project, a student will provide a needed and viable service to the community, a non-profit agency, or organization. The student will participate in a non-profit activity of a specified length. The student will record her/his experiences along the way in a journal/project log. The student will use these entries to compose a summary paper of her/his project. The summary paper may contain elements of a research paper, and therefore, sources will need to be documented properly. Lastly, the student will deliver an oral presentation about her/his project.

**Research-Based** (This option is available only to students who have completed less than 50% of the program curriculum): For this project, a student will explore an unfamiliar area of interest related to the student's program area. The student will gather information and facts about a certain topic for the purpose of creating a research paper and quality presentation. For this project, the student should investigate current issues in his/her field of study and be prepared to present materials in an oral presentation that depict an accurate and detailed representation of his/her research through charts, graphs, historical information, etc.. Research can be conducted through a wide variety of sources, including the internet, interviews with subject matter experts, literature on the subject, etc. No project component is required for this selection.

#### **WORK-BASED EDUCATION**

The purpose of the Work-Based Education program is to provide occupational training, which supplements and enriches the educational experiences of students by utilizing the resources of business and industry. The program takes the school curriculum beyond the walls of Berks Career and Technology Center and serves as a bridge between the theoretical world of the classroom and the actual experiences encountered by workers. The program can involve one or all of three different options: job shadowing, internship/clinical experience (paid or unpaid), and/or cooperative education.

By participating in **job shadowing**, students can learn about work environments and job responsibilities. Students follow workers as they go about their daily duties in their everyday work environments. They benefit from seeing work as it is in real life and learn firsthand from people who have careers in fields that interest them. The program is designed to give students a better understanding of careers in order to make informed career decisions.

Students can also participate in internships; these are work experiences that allow students to complete skill tasks in a real-world environment. The internships will provide a start/end date with an educational goal attached to their individual career field. Internships can be paid or unpaid and give the student the opportunity to explore a career in more depth.

Internship students in Cosmetology, Dental Occupation, Health Occupations, SMaRT, Health Related Technology, Early Childhood Education, and Protective Services programs have opportunities to participate in **clinical experiences**. Students are assigned to in-school and off-campus worksites where they can become involved in the day-to-day activities of those locations. Examples of clinical sites include, but are not limited to, area hospitals, retirement communities, nursing facilities, day care centers, fire departments, and ambulance associations.

**Cooperative education** provides occupational training that supplements the in-school educational experiences of students. One half of the day is spent at the sending school district taking academic subjects; the other half of the day is spent on the job. Students are paid at least the prevailing minimum wage for their time at work.

Thus, the Work-Based Education program is a collaborative effort by the school, business, and industry for the training of career and technical school students. Those students who meet basic trade and technical skill standards, exhibit good attitudes and habits, and maintain acceptable grades are eligible for these experiences.

#### **QUALIFICATIONS**

Students may be placed in work-based education cooperative education experiences when the following conditions are met:

- The job is related to the student's career objective.
- The job offers a training opportunity, which adequately addresses the student's abilities and goals.
- The work-based education experience will benefit the student.
- The student has completed all instructor indicated tasks toward the selected career objective, including Career Education and Work tasks.
- \*\*\*Per program teacher; The student has completed the written and product components of his/her student project and the oral presentation has been scheduled. (Optional by program)

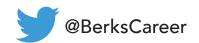
Berks
Career & Technology
Center

#### **Berks Career & Technology Center:**

East Campus | 3307 Friedensburg Road | Oley, PA 19547
West Campus | 1057 County Welfare Road | Leesport, PA 19533
610-374-4073







#### BerksCareer.com

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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, Titulo VI, Titulo 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.