



2025-2026

Pathways Guide

Jersey Shore Area Senior High School

Arts and Media Technology

Business, Finance, & Information Technology

Engineering & Industrial Technology

Health & Science Technology

Human Services

SOAR! Students Occupationally & Academically Ready

SOAR is the career and technical educational plan that aligns, through articulation agreements, the secondary career and technical programs to a postsecondary diploma, credential or associate degree. SOAR programs lead students into a career pathway that is in high demand by employers, have higher skill needs, and are most likely to provide family sustaining wages.

Students that successfully complete a CTE program at Jersey Shore and meet post-secondary entrance requirements may be eligible to earn 9.0-13.0 credits at Pennsylvania colleges and universities through the SOAR program depending on the statewide articulation agreement. Check out the Pathway Maps in the Pathways Planning Guide for specific information about Articulation Credit Opportunities. Students can also view a summary of CTE programs at jsasd.org/CTE and can learn about how to obtain post-secondary credits at collegetransfer.net.



Compliance Statement

It is the policy of the Jersey Shore Area School District not to discriminate on the basis of race, sex, religion, color, national origin, age, handicap or limited English proficiency in its educational programs, services, facilities, activities or employment policies as required by Title IX of the 1972 Educational Amendments, Title VI and VII of the Civil Rights Act of 1964, as amended, Section 504 Regulations of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, Section 204 Regulations of the 1984 Carl D. Perkins Act or any applicable federal statute.

For information regarding programs, services, activities, and facilities that are accessible to and usable by handicapped persons or for inquiries regarding civil rights compliance, contact: Jersey Shore Area School District, 75 A&P Drive, Jersey Shore, PA 17740, 570- 398-1561; or the Director of the Office of Civil Rights, Department of Health, Education and Welfare, Washington, D.C.

Career and Technical Education (CTE) Programs

Program Title	CIP Code	Career and Technical Education Program Requirements
Automotive Technology	47.0604	The Career & Technical Education (CTE) programs at Jersey Shore are designed to foster career and college readiness by embedding technical skill training into a comprehensive academic curriculum that prepares students for college-level studies and successful careers. This not only promotes personal success but increases individual contributions to an innovative and competitive regional and state economy. Building this foundation is what CTE is all about. CTE also grants students access to industry-recognized certifications, work-based learning environments, articulation agreement credit opportunities, and access to industry-standard equipment, supplies, and technology used by professionals working in the industry. Each CTE program has specific requirements that are outlined in the Pathways Guide.
Diversified Occupations	32.0105	
Building Property Maintenance	46.0401	
Business: Accounting Technology	52.0302	
Business: Entrepreneurship	52.0701	
Business: Sales, Marketing & Distribution	52.1801	The Department of Education has approved the twelve (CTE) programs offered here at (JSASH). These CTE programs are built around high expectations for student learning. These expectations include the development of strong reading, writing, numeracy, problem solving, and teamwork skills, in addition to the practical and tangible career skills that motivate students and help them develop a career path for future education and work.
Child Care / Early Childhood Education	19.0708	
Communications & Digital Media	10.9999	
Computer Systems Networking	11.0901	Students who enroll in a CTE program are committed to a program of study in their eleventh and twelfth grades culminating in taking a nationally recognized skills test. Many colleges across the country award college credit for scoring high on these nationally recognized skills tests.
Culinary Arts / Institutional Food Workers	12.0508	
Health & Medical Assisting	51.0899	
Precision Machining Technology	48.0501	
For more information, contact Mr. David Bittner, Director of Career & Technical Education [dbittner@jsasd.org].		

Cooperative Education and Diversified Occupations

The Cooperative Education and Diversified Occupations programs provides training through the use of business and industry to help bridge the gap between school and employment. Cooperative Education is a unique plan of education designed to integrate classroom study with planned, supervised, practical work experience connected with a Career and Technical Education Program of Study. The Diversified Occupations experience is a unique plan of education designed to integrate classroom study with planned, supervised, practical work experience which the district does ***not*** have a connected Career and Technical Education Program of Study. Students who meet the requirements of basic trade and technical training, good attendance, a good attitude and work habits, are recommended to the employer for on-the-job training. The Cooperative Education experience translates to a student grade and credit is granted towards graduation. **Students can earn up to four (4) elective credits through a Cooperative Education experience.**

Dual Enrollment Courses

Course Number/Course Title	Penn College NOW Requirements
BWM150 Introduction to Web Page Development	Students may need to purchase a textbook for Penn College and Lackawanna Community College courses. Talk to your guidance counselor if this is a financial difficulty.
CHM100 Fundamentals of Chemistry	
EET124 Engineering, Technology & Society	PCT Registered students will need to take a placement test to determine readiness for the class. Placement tests in Reading, Math and/or English will be required.
EET145 Computer Systems & Networking 2	
ENL111 English Composition 1	Penn College and Lackawanna Community College provide a transcript upon request. Courses will also be recorded on the high school transcript.
MTH123 Technical Algebra	
MTR100 Medical Terminology Survey	Dual Enrollment courses will not be offered as independent study courses.
MTR104 Basics of Medical Terminology	
BIO103 Human Anatomy and Physiology	Due to an agreement between the Pennsylvania College of Technology and Jersey Shore Area School District, there is no cost to students or parents for enrolling into PCT Dual Enrollment.
LCC- MGT105 Principles of Management	
LCC-ACC Financial Accounting	There is a \$100 per credit tuition fee for all Lackawanna Community College Courses which must be submitted with registration prior to the start of the school year.

Future Ready PA Index

The Pennsylvania Future Ready Index, referred to as the Future Ready PA Index, allows school systems more flexibility for meeting school accountability measures and replaces the School Performance Profile. JSASD will use the **SmartFutures** program to manage the Future Ready expectations. The Future Ready PA Index indicators are as follows:

1. **State Assessment Measures**
 - Proficient and Advanced Scores on the Keystone Exams
 - Annual Growth Expectations (PVAAS)
2. **On-Track Measures**
 - English Language Proficiency
 - Chronic Absenteeism
3. **College and Career Measures**
 - Graduation Rate
 - Career Readiness Benchmark
 - Industry Based Learning (Career & Technical Education)
 - Rigorous Courses of Study (Career Pathway Model)
 - Post-Secondary Transition to School, Military, or Work

Pennsylvania Career Education & Work (CEW) Standards

Pennsylvania's economic future depends on having a well-educated and skilled workforce. No student should leave secondary education without a solid foundation in Career Education and Work. It is the rapidly changing workplace and the demand for continuous learning and innovation on the part of the workers that drive the need to establish academic standards in Career Education and Work. Through a comprehensive approach, Career Education and Work Standards complement all disciplines and other academic standards. If Pennsylvania's students are to succeed in the workplace, there are certain skills that they need to obtain prior to graduation from high school. These skills have been identified in the Career Education and Work Standards, but it is up to individual school districts to decide how they are to be taught. Districts can implement integration strategies within existing disciplines or can implement stand-alone courses to specifically address these standards.

CEW Standard 1: Career Awareness and Preparation

Pennsylvania public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge pertaining to career interests and aptitudes.

CEW Standard 2: Career Acquisition

Pennsylvania public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills pertaining to career acquisition skills such as resume writing, interviewing, and communications.

CEW Standard 3: Career Retention and Advancement

Pennsylvania public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills pertaining to workplace skills, human resources, personal finance, and career retention.

CEW Standard 4: Entrepreneurship

Pennsylvania public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills pertaining to entrepreneurship and personal career goals.

Arts and Communications Pathway

This pathway is designed to cultivate students' awareness, interpretation, application and production of visual, verbal and written work.

Pathway Focus Areas

***Communication Technology (CT)**
***Performing Arts (PA)**

***Music Industry (MI)**
***Visual Arts (VA)**

Are you interested in...

Acting
Attending concerts
Decorating
Fashion
Interviewing and reviewing
Multi-media
News reporting and writing
Performing in a band, chorus
Radio, TV, Film, Video

Can you...

Act
Be creative
Draw
Meet deadlines
Paint
Sculpt
Sing
Play an instrument
Write and conduct interviews
Write

Do you enjoy...

Developing creative solutions
Making videos
Performing in front of a live audience
Seeking creative ideas
Working with sound effects
Working with computers
Working with film props
Working with illustrations

If you answered "yes" to most of these questions, you might consider a future in one of the same occupations listed below based on their level of post-secondary training.

Sample Careers

Entry (OJT)

Circulation (CT)
Copy Person (CT)
Desktop Publisher (CT)
Film Loader (VA)
Floral Designer (VA)
Florist (VA)
Model (PA)
Newsroom Worker (CT)
Projectionist (VA)
Radio Operator (MI)
Set Designer (PA)
Sound Technician (MI)
Stage Hand (PA)
Stunt Performer (PA)

Technical/Skilled (1-3 yrs)

Actor (PA)
Animator (VA)
Artist (VA)
Billboard and Sign Artist (CT)
Book Illustrator (CT)
Broadcast Technician (VA)
Camera Technician (VA)
Choreographer (PA)
Computer Graphic Artist (VA, CT)
Dancer (PA)
Disc jockey (PA)
Designer / Stylist (VA)
Make-up Artist (VA)
Musician (PA, MI)
Photographer (VA)
Recording Engineer (MI)
Talent Agent (PA)
Video Manager (VA)
Web Designer (CT)

Professional (4 +yrs)

Advertising Creator (VA)
Art Director (VA)
Art or Music Teacher (CT)
Art Historian (VA)
Art Restorer (VA)
Cinematographer (PA)
Composer (PA)
Copy Writer (CT)
Curator (VA)
Film Editor (CT)
Illustrator (VA)
Industrial Designer (VA)
Music Critic (MI)
Music Director (PA)
News Broadcaster (CT)
Telecommunications (CT)
Writer (CT)

Check out Occupational Outlook Handbook – www.bls.gov/OCO/ or check your Choices profile

Holland Codes for Arts & Comm.

Artistic



Realistic

Arts & Communications: Art Industry Pathway Map

	Grade 9	Grade 10	Grade 11	Grade 12
Pathway Courses				
Pathway Courses Grades 9-12	Introduction to Art (.5)	Art & Design (.5)	Fiber Crafts (.5)	Sculpture (.5)
	Commercial Art (.5)	Pottery 1 (.5)	Pottery 2 (.5)	Pottery 3 (.5)
	Learn to Draw (.5)	Advanced Art (.5)	Learn to Paint (.5)	Mixed Media (.5)
			Stage & Set Design (.5)	Glass Crafts (5)
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra, Academic Algebra 1 or Geometry Honors	Algebra 2, Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Chemistry or Environmental & Astronomy	Physics
Social Studies	US History or US 1	US 2 or World History	World or American Gov't & Elective	American Gov't & Elective Course
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Electives	+1.0 credit	+1.0 credits	+1.0 credit	+1.5 credits
Scheduling Notes:			Advanced Placement Credits	Dual Enrollment Credits
			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	MATH123 ENGL111 CHEM100
			Work-Based Learning Programs	
				Diversified Occupations (4.0)
			Grade 11	Grade 12

Arts & Communications Pathway Map

Communications & Digital Media CTE Program 10.9999

CIP 10.9999	Grade 9	Grade 10	Grade 11	Grade 12
	Exploratory Courses	Introductory Courses	Career & Technical Education Courses	
Technical Courses Grades 11-12 6.0 credits 720 hours	Multimedia Design (.5)	Introduction to Communications & Digital Media (.5)	Communications & Digital Media 1 (3.0)	Communications & Digital Media 2 (3.0)
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra 1 or Academic Algebra 1 or Geometry Honors	Algebra 2 or Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Physics	Chemistry or Environmental & Astronomy
Social Studies	US History	World History	American Government & Social Studies Elective (.5)	Social Studies Elective (1.0)
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Recommended Electives	Learn to Draw (.5) +1.5 credit	Commercial Art (.5) +2.5 credits	Web Page Development (.5)	+0.5 credits
Articulation Agreement Credit Opportunities			Advanced Placement Credits	Dual Enrollment Credits
Harrisburg Area Community College (9.0) Luzerne County Community College (10.0) Montgomery County Community College (9.0) Pennsylvania Highlands Community College (9.0-11.0) Westmoreland County Community College (12.0)			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	BWM 105 MATH123 ENGL111 CHEM100
Scheduling Notes:  			Work-Based Learning Programs	
				Cooperative Education (4.0)
			CTE Experience/Internship (4.0)	CTE Experience/Internship (4.0)
			CTE Industry Credentials & Certifications	
			OSHA 10-Hour General Safety	Adobe Certified Professional
			Grade 11	Grade 12

Arts & Communications: Music Studies Pathway Map

	Grade 9	Grade 10	Grade 11	Grade 12
Pathway Courses				
Technical Courses Grades 9-12	REQUIRED Choir/Band (.5/1)	REQUIRED Choir/Band (.5/1)	REQUIRED Choir/Band (.5/1)	REQUIRED Choir/Band (.5/1)
	Music History (.5)	American Musical Theatre 1 (.5)	Music Theory 1 (.5)	Song Writing (.5)
		American Musical Theatre 2 (.5)	Music Theory 2 (.5)	
	History of Rock 1 (.5)	History of Rock 2 (.5)	Voice 1 (.5)	Voice 2 (.5)
	Keyboard 1 (.5)	Keyboard 2 (.5) or Guitar (.5)		
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra, Academic Algebra 1 or Geometry Honors	Algebra 2, Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Physics	Chemistry or Environmental & Astronomy
Social Studies	US History or US 1	US 2 or World History	World or American Gov't & Elective	American Gov't & Elective Course
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Electives	+ 0.5 credits	Recommended Introduction to Business (1.0) + 0.5 credits	Recommended Stage Technology (.5)	Recommended: Business Law 1 (0.5) Accounting 1 (1.0)
Scheduling Notes: If taking Introduction to Business in Grade 10, student must drop one pathway elective, but not band/choir.			Advanced Placement Credits	Dual Enrollment Credits
			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	MATH123 ENGL111 CHEM100
			Work-Based Learning Programs	
				Diversified Occupations (4.0)
			Grade 11	Grade 12

Business, Finance and Information Technology Pathway

This pathway is designed to prepare students in the world of business, finance and information services.

Pathway Focus Areas

***Accounting and Finance (F) *Business Management and Marketing (BM) *Information Technology(IT)**

Are you interested in ...	Can you...	Do you enjoy...
A business environment Advertising Computers and technology Different work sites Insurance Office management Presentations to groups Sales Record keeping Telecommunications	Organize your time efficiently Pay attention to details Show initiative Solve problems Work easily with others Work Independently Work on a team Work with statistics Use computers and other technology	Following directions Learning new software programs Making budgets Meeting with groups Organizing a project Planning an event Preparing Financial reports Processing numbers and figures Selling products and services Working with technology

If you answered “yes” to most of these questions, you might consider a future in one of the same occupations listed below based on their level of post-secondary training.

Sample Careers

Entry (OJT)	Technical/Skilled (1-3 yrs)	Professional (4 + yrs)
Accounts payable Office Manager (BM) Administrative Assistant (BM) Bank Teller (BM) Book Keeper (F) Cashier (F) Computer Operator (IT) Customer Service Representative (BM) File Clerk (BM) Payroll Clerk (F) Reservation/Travel Agent (BM) Retail Sales Clerk (BM) School Secretary (BM) Telemarketer (BM) Title Searcher (F)	Bank Collection Officer (F) Claims Adjuster (F) Computer Programmer (IT) Computer Salesperson (BM) Desktop Publisher (IT) Medical Secretary (BM) Production Support Analyst (IT) Real Estate Agent (BM) Restaurant Manager (BM) Retail Buyer (BM) Sales Representative (BM) Software Engineer (IT) Tax Preparer (F)	Bank President (BM, F) Certified Public Accountant (F) Chief Executive Officer (BM) E-Commerce Analyst (IT) Economist (F) Financial Planner (F) Hospital Administrator (BM) Human Resources Manager (BM) Marketing Manager (BM) Operations Analyst (IT) Systems Analyst (IT) Tax Examiner (F)

Check out Occupational Outlook Handbook – www.bls.gov/OCO/ or check your Choices profile

Holland Codes for Business	Conventional	Enterprising
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Accounting Technology CTE Program of Study CIP 52.0302

The Accounting Technology CTE Program of Study is designed to provide students with foundational knowledge and practical skills in financial management, accounting principles, and business operations. This program adheres to the Pennsylvania Department of Education standards and prepares students for careers in accounting, finance, and business. Students will gain an understanding of basic accounting procedures, financial reporting, payroll, taxation, and business ethics.

Career Pathways: Completers of the program will be prepared for positions such as *accounting assistant*, *payroll clerk*, *financial analyst*, and *bookkeeping*, and can continue their education in higher education or pursue professional certifications in accounting.

Throughout the CTE program, students will:

Learn Basic Accounting Principles: Understand and apply generally accepted accounting principles (GAAP), including the preparation of financial statements, balance sheets, income statements, and cash flow statements.

Develop Skills in Financial Recordkeeping: Gain proficiency in maintaining financial records, using accounting software, and understanding the process of recording transactions and adjusting entries.

Explore Managerial and Cost Accounting: Study cost analysis, budgeting, financial forecasting, and performance evaluation for decision-making in business operations.

Understand Payroll and Taxation: Learn the basics of payroll accounting, including wage calculations, payroll taxes, and compliance with state and federal tax regulations.

Prepare for Professional Certifications: The program prepares students to pursue certifications such as Certified Public Accountant (CPA), Certified Management Accountant (CMA), or other related credentials.

Certifications attainable in High School: NOCTI Accounting Basic, OSHA General Safety, Microsoft Excel Specialist

Develop Ethical Business Practices: Emphasize the importance of ethics and integrity in financial reporting and business operations.


The curriculum includes hands-on experience with accounting software, case studies, and simulated business environments to provide real-world applications. By the completion of the program, students will be equipped to enter the workforce or pursue further education in accounting and finance. The program ensures that students meet state and national industry standards, ensuring both academic excellence and preparation for successful careers in accounting and finance.

Required Credits & Courses: Accounting technology CTE completers must successfully complete 9.0 credits or 720 hours of technical instruction by enrolling in the following courses:

Grade 10	Introduction to Business, Accounting I, & Business Law I-II
Grade 11	Personal Finance, Business Communications, Accounting II, & MGT 105 Principles of Management
Grade 12	Financial Algebra, ACC 105 Principles of Accounting, & Business Leadership

Business, Finance & Information Technology Pathway Map:

Accounting Technology CTE Program 52.0302


CIP 52.0302	Grade 9	Grade 10	Grade 11	Grade 12
	Exploratory Course	Career & Technical Education Program Courses		
Technical Courses 9.0 credits 1080 hours	Computer Applications (.5)	Introduction to Business (1.0)	Personal Finance (.5) Business Communications (.5)	Financial Algebra for Business Applications (1.0)
		Accounting I (1.0)	Accounting II (1.0)	ACC 105 Principles of Accounting (1.0)
		Business Law I (.5) Business Law II (.5)	MGT 105 Principles of Management (1.0)	Business Leadership (1.0)
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra 1 or Academic Algebra 1 or Geometry Honors	Algebra 2 or Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Physics	Chemistry or Environmental & Astronomy
Social Studies	US History or US 1	US 2 or World History	World or American Gov't & Elective	American Gov't & Elective Course
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Recommended Electives	+2 credits	+0.5 credits	+0.5 credits	+1.5 credits
Articulation Agreement Credit Opportunities			Advanced Placement Credits	Dual Enrollment Credits
Community College of Beaver County 9.0 Delaware County Community College 10.0 Lackawanna College 12.0 Luzerne County Community College 9.0 Northampton County Area Community College 9.0			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	MGT 105 ACC105 MATH123 ENGL111 CHEM100
Scheduling Notes:  		Work-Based Learning Programs		
				Cooperative Education (4.0)
			CTE Experience/Internship (4.0)	CTE Experience/Internship (4.0)
		CTE Industry Credentials & Certifications		
		OSHA 10-Hour General Safety		Microsoft Excel Specialist
		Grade 10	Grade 11	Grade 12


Business, Finance & Information Technology Pathway Map: Sales, Marketing & Distribution CTE Program 52.1801

CIP 52.1801	Grade 9	Grade 10	Grade 11	Grade 12
		Career & Technical Education Program Courses		
Technical Courses 9.0 credits 1080 hours	Computer Applications (.5)	Introduction to Business (1.0)	Personal Finance (.5) Business Communications (.5)	Advanced Marketing (2.0)
		Accounting 1 (1.0)	Marketing (1.0)	
		Business Law 1 (.5) Business Law 2 (.5)	MGT 105 Principles of Management (1.0)	Business Leadership (1.0)
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra 1 or Academic Algebra 1 or Geometry Honors	Algebra 2 or Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Physics	Chemistry or Environmental & Astronomy
Social Studies	US History or US 1	US 2 or World History	World or American Gov't & Elective	American Gov't & Elective Course
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Electives	+2.0 credits	+0.5 credits	Not Available	+0.5 credits
Articulation Agreement Credit Opportunities			Advanced Placement Credits	Dual Enrollment Credits
Harcum College 9.0 Lackawanna College 9.0 Luzerne County Community College 9.0 Westmoreland County Community College 9.0			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	MGT 105 MATH123 ENGL111 CHEM100
Scheduling Notes:  			Work-Based Learning Programs	
				Cooperative Education (4.0)
			CTE Experience/Internship (4.0)	CTE Experience/Internship (4.0)
			CTE Industry Credentials & Certifications	
			OSHA 10-Hour General Safety	Microsoft Excel Specialist
			Grade 11	Grade 12

Business, Finance & Information Technology Pathway Map: Entrepreneurship CTE Program 52.0701

CIP 52.0701	Grade 9	Grade 10	Grade 11 (EVEN)	Grade 12 (ODD)
	Exploratory Course	Career & Technical Education Program Courses		
Technical Courses 9.0 credits (1080 hours)	Computer Applications (.5)	Introduction to Business (1.0)	Personal Finance (.5) Business Communications (.5)	MGT 105 Principles of Management (1.0)
		Accounting 1 (1.0)	Fundamentals of Entrepreneurship (1.0)	**Creativity, Innovation, & Design (1.0)
		Business Law 1 (.5) Business Law 2 (.5)	Marketing (1.0)	Business Leadership (1.0)
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra 1 or Academic Algebra 1 or Geometry Honors	Algebra 2 or Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Physics	Chemistry or Environmental & Astronomy
Social Studies	US History or US 1	US 2 or World History	World or American Gov't & Elective	American Gov't & Elective Course
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Electives	+2 credits	+0.5 credits	+0.5 credits	+1.5 credits
Articulation Agreement Credit Opportunities			Advanced Placement Credits	Dual Enrollment Credits
Pennsylvania College of Technology (9.0)			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	MGT 105 MATH123 ENGL111 CHEM100
Scheduling Notes: **New Course for 2026-2027 School Year			Work-Based Learning Programs	
				Cooperative Education (4.0)
			CTE Experience/Internship (4.0)	CTE Experience/Internship (4.0)
			CTE Industry Credentials & Certifications	
			OSHA 10-Hour General Safety	A*S*K Certification
			Grade 11	Grade 12





Future Business Leaders of America

Engineering and Industrial Technology

This pathway is designed to cultivate students' interests, awareness and applications to careers related to technologies necessary to design, develop, install and maintain physical systems

Pathway Focus Areas

- *Automotive and Transportation (TDL)
- *Building Trade Maintenance (BT)
- *Computer Aided Design (CAD)
- *Computer and Information Networking (ET)
- *Construction Trades (CO)
- *Electronics and Computer Engineering (ET)
- *Manufacturing Technologies (M)

Are you interested in...

Buildings and construction
Computer technology
Design and architecture
Engineering
Fitness and sports
How things work
Math and Science classes
Precision work
Production management
Tools, equipment and materials
Woodworking

Can you...

Apply science and math to real world
Organize reports and people
Read and understand directions
See a task through to completion
Solve problems of a complex nature
Understand directives and read maps
Use a computer

Do you enjoy...

Building with your hands
Design/working with project, models, prototypes
Operating tools and equipment
Paying close attention to details
Working with your hands
Working in a lab setting
Working on a team
Travel

If you answered "yes" to most of these questions, you might consider a future in one of the same occupations listed below based on their level of post-secondary training.

Sample Careers

Apprenticeships and Entry Level (OJT)

Brick Mason (CO)
Carpenter (CO)
Diesel Mechanic (TDL)
Electrician (CO)
HVAC (CO)
Machinist (CO)
Plumber (CO)
Carpet Installer (CO)
Drywall Worker (CO)
Freight Handler (TDL)
Machine Operator (M)
Roofer (CO)
Warehouse Worker (TDL)

Technical/Skilled (1-3 yrs)

Air Traffic Controller (TDL)
Auto Mechanic & Repair (TDL)
Bus & Truck Driver (TDL)
CAD/CAM Technician (M,ET)
Civil Engineering Technician (ET)
Diesel Mechanic (TDL)
Electric Technician (M)
Grader and Dozer Operator (CO)
Laser Technician (M, ET)
Metals Engineering Technician (M)
Motorcycle Mechanic (TDL)
Robotics Technician (ET)
Taxi Driver (TDL)

Professional (4 + yrs)

Aeronautical Engineer (ET, TDL)
Aerospace Engineer (ET, TDL)
Airline Pilot (ET, TDL)
Architect (ET, CO)
Astronaut (ET)
Chemical Engineer (ET)
Civil Engineer (ET, CO)
Computer Network Engineer (ET)
Industrial Engineer (ET, M)
Mechanical Engineer (ET, M)
NASA Scientist (ET)
Navigator (TDL)
Nuclear Engineer (ET)
Petroleum Engineer (ET)
Transportation Engineer (ET, TDL)

Check out Occupational Outlook Handbook – www.bls.gov/OCO/ or check your Choices profile

Holland Codes for Eng. & Ind. Tech.

Realistic

Conventional

Automotive Technology CTE Program of Study CIP 47.0604

Automotive Technology I

The automotive industry is in dire need of service technicians. This course provides foundational knowledge and skills needed to enter the workforce. Students will study modern aspects of automotive brake systems, including anti-lock brakes while also being introduced to suspension systems & components, steering systems & components, wheels & tires, and vehicle alignments. The course is a mixture of classroom theory and hands-on applied technical training. Students will learn on actual vehicles seen in the industry. The course will offer base knowledge, operations, diagnosis, and dis/reassembly automotive systems. Students will obtain an Occupational Safety & Health Administration (OSHA) certificate along with prevalent AC Delco Training certificates throughout the course. Preference is given to students in Grade 11 who have successfully completed Introduction to Automotive Technology.

Automotive Technology II

Automotive Technicians are in high demand right now across the United States. This program will further the students' knowledge of vehicle systems and build off the knowledge gained from Automotive Technology 1. Students will study engine operation, design, diagnostics and repair. Students will have a major focus on diagnostic procedures of electronic ignition systems, fuel systems, computerized engine control systems, and emission systems. Students will also have the opportunity to enroll in CO-OP learning, as well as "Live Work" of actual employee vehicles. Preference is given to students in Grade 11 who have successfully completed Introduction to Automotive Technology.

Program Requirements

Students are required to have coveralls, or work/shop shirt and pants, that are dark in color (navy, dark blue, black). Leather shoes with a hard sole are required, i.e. leather boots or work sneakers (Sketchers, Timberland, Caterpillar, etc.). Students will become active members of SkillsUSA. Preference is given to students in Grade 11 who have successfully completed Introduction to Automotive Technology.

Industry Credentials

- OSHA 10-Hour General Industry via CareerSafe
- AC Delco Training Certificates

College Credits



Statewide articulation agreements, known as SOAR – Students Occupationally and Academically Ready, allow students to earn college credit for their work in the automotive technology CTE program. Check out the Pathway Map for a list of Articulation Agreement Credit Opportunities. This program also has local agreements with Penn College of Technology and the University of Northwestern Ohio.

Career Pathways/High-Priority & In-Demand Occupations



- **Career Pathway/Cluster:** Automotive Technology
- **Central PA High-Priority Occupations:** Automotive Technician
- **PA In-Demand Occupations:** Automotive Technician, Service Advisor, Parts Clerk

Engineering & Industrial Technology Pathway Map



Automotive Technology CTE Program 47.0604

CIP 47.0604	Grade 9	Grade 10	Grade 11	Grade 12
	Exploratory Courses	Introductory Courses	Career & Technical Education Courses	
Technical Courses Grades 11-12 6.0 credits 720 hours	Automotive Technology Exploration (.25)	Introduction to Automotive Technology (.5)	Automotive Technology 1 (3)	Automotive Technology 2 (3)
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra 1 or Academic Algebra 1 or Geometry Honors	Algebra 2 or Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Physics	Chemistry or Environmental & Astronomy
Social Studies	US History	World History	American Government & Social Studies Elective (.5)	Social Studies Elective (1.0)
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Elective Credits	+ 2.25 credits	+ 3 credits	+ 0.5 credits	+ 0.5 credits
Articulation Agreement Credit Opportunities			Advanced Placement Credits	Dual Enrollment Credits
Community College of Allegheny County (PA) (9.0) Delaware County Community College (PA) (10.0) Johnson College (11.0) Luzerne County Community College (9.0) Northampton County Area Community College (9.0) Pennsylvania College of Technology (13.0) University of Northwestern Ohio (12.0)			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	MATH123 ENGL111 CHEM100
Scheduling Notes:  			Work-Based Learning Programs	
				Cooperative Education (4.0)
			CTE Experience/Internship (4.0)	CTE Experience/Internship (4.0)
			CTE Industry Credentials & Certifications	
			OSHA 10-Hour Automotive Safety	Snap-on 504 Multimeter
			AC Delco Electrical Stage 1 & 2	PennDOT Certified Safety Inspector, Cat I
			AC Delco Battery Starting & Charging Systems	PennDOT Certified Emissions Inspector
			Grade 11	Grade 12



Engineering & Industrial Technology:
Building Property Maintenance CTE Program 46.0401

CIP 46.0401	Grade 9	Grade 10	Grade 11	Grade 12
	Exploratory Courses	Introductory Courses	Career & Technical Education Courses	
Technical Courses Grades 11-12 6.0 credits 720 hours		Introduction to Building Property Maintenance (0.5)	Building Property Maintenance 1 (3)	Building Property Maintenance 2 (3)
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra 1 or Academic Algebra 1 or Geometry Honors	Algebra 2 or Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Physics	Chemistry or Environmental & Astronomy
Social Studies	US History or US 1	US 2 or World History	World or American Gov't & Elective	American Gov't & Elective Course
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Electives	+2.5 credits	+3.0 credits	N/A	+0.5 credits
Articulation Agreement Credit Opportunities			Advanced Placement Credits	Dual Enrollment Credits
Community College of Allegheny County (10.0) Pennsylvania College of Technology (6.0)			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	MATH123 ENGL111 CHEM100
Scheduling Notes:  			Work-Based Learning Programs	
				Cooperative Education (4.0)
			CTE Experience/Internship (4.0)	CTE Experience/Internship (4.0)
			CTE Industry Credentials & Certifications	
			OSHA 10-Hour Construction	Articulated Ladder Safety
			Mobile Ladder Safety	Step Ladder Safety
			Single & Extension Ladder	NOCTI Exam
			Grade 11	Grade 12

Engineering & Industrial Technology Pathway: Computer Systems Networking CTE Program 11.0901

CIP 11.0901	Grade 9	Grade 10	Grade 11	Grade 12
	Exploratory Courses	Introductory Courses	Career & Technical Education Courses	
Technical Courses Grades 11-12 6.0 credits 720 hours	Computer Systems Networking Exploration (.25)	Introduction to Computer Systems Networking (.5) EET 124 Engineering, Technology & Society (.5)	Computer Systems Networking 1 (3)	Computer Systems Networking 2 (3) EET 145
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	ENGL111/Technical Communication or AP English
Mathematics	Algebra, Academic Algebra 1 or Geometry Honors	Algebra 2, Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Physics	CHEM 100 or Environmental & Astronomy
Social Studies	US History	World History	American Government Economics	
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Recommended Electives	+2.25 credits	+2.5 credits	N/A	Business Communications (0.5) +1.0 credits
Articulation Agreement Credit Opportunities			Advanced Placement Credits	Dual Enrollment Credits
Bucks County Community College (12.0) Butler County Community College (10.0) Community College of Allegheny County (9.0) Community College of Beaver County (10.0) Delaware County Community College (9.0) Harrisburg Area Community College (13.0) Johnson College (10.0) Northampton County Area Community College (10.0) Thaddeus Stevens College of Technology (9.0) Westmoreland County Community College (9.0)			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	EET124 EET145 MATH123 ENGL111 CHEM100
Scheduling Notes: Do not schedule Financial Algebra for Business Applications  			Work-Based Learning Programs	
				Cooperative Education (4.0)
			CTE Experience/Internship (4.0)	CTE Experience/Internship (4.0)
			CTE Industry Credentials & Certifications	
			CompTIA A+ (Plus)	CompTIA Network+ (Plus)
			Grade 11	Grade 12

Engineering & Industrial Technology: Precision Machining Technology CTE Program 48.0501

CIP 48.0501	Grade 9	Grade 10	Grade 11	Grade 12
	Exploratory Courses	Introductory Courses	Career & Technical Education Courses	
Technical Courses Grades 11-12 6.0 credits 720 hours	Exploratory Precision Machining (.25)	Introduction to Precision Machining (.5)	Precision Machining Level 1 (3.0)	Precision Machining Level 2 (3.0)
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra, Academic Algebra 1 or Geometry Honors	Algebra 2, Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Physics	Chemistry or Environmental & Astronomy
Social Studies	US History	World History	American Government & Social Studies Elective (0.5)	Social Studies Elective (1.0)
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Electives	+2.25 credits	+3.0 credits	Not Available	+0.5 credits
Articulation Agreement Credit Opportunities			Advanced Placement Credits	Dual Enrollment Credits
Butler County Community College (9.0) Delaware County Community College (10.0) Johnson College (9.0) Luzerne County Community College (12.0) Pennsylvania College of Technology (6.0) Reading Area Community College (12.0) Thaddeus Stevens College of Technology (11.0) Westmoreland County Community College (12.0)			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	MATH123 ENGL111 CHEM100
Scheduling Notes:  			Work-Based Learning Programs	
				Cooperative Education (4.0)
			CTE Experience/Internship (4.0)	CTE Experience/Internship (4.0)
			CTE Industry Credentials & Certifications	
			OSHA 10-Hour General Industry	NIMS Machining Level I
			Grade 11	Grade 12

Human Services (HS) Pathway

This pathway is designed to cultivate students' interests, skills and experiences for employment in careers related to family and human needs.

Pathway Focus Areas

***Child/Personal Care (CPC)**

***Culinary Arts, Hospitality and Tourism (HT)**

***Education and Counseling (E)**

***Law, Public Safety and Government (LPG)**

Are you interested in...

Aging adults
Child development
Counseling
Family and social services
Food preparation
Owning your own business
Teaching
Working with people

Can you...

Apply science and math to the real world
Assume leadership
Be conscientious and dependable
Be creative
Communicate well
Organize well
Plan and direct programs
Plan budgets
Use interpersonal skills
Work with a team

Do you enjoy...

Communicate services
Counseling and advising people
Handling customer complaints
Helping and protecting others
Interviewing people
Searching for answers to human problems
Selling products or services
Serving others' needs
Working with people

If you answered "yes" to most of these questions, you might consider a future in one of the same occupations listed below based on their level of post-secondary training.

Sample Careers

Entry (OJT)

Aerobics Instructor (HT)
Armed Services Career (LPG)
Bailiff (LPG)
Building Trade Maintenance (HT)
Child Care (CPC)
Dry Cleaning Operator (CPC)
Home Health Aide (CPC)
Library Assistant (E)
Postal Services Worker (LPG)
Security Guard (LPG)
Travel Agent (HT)
Utility Worker (LPG)
Waitress (HT)

Technical/Skilled (1-3 yrs)

Armed Services Career (LPG)
Barber (CPC)
Chauffer (HT)
Cosmetologist (CPC)
Crime Lab Technician (LPG)
Fashion Designer (CPC)
Flight Attendant (HT)
Fire Fighter (LPG)
Manicurist (CPC)
Massage Therapist (CPC)
Meat Cutter (HT)
Mortician (CPC)
Personal Trainer (CPC)
Teacher's Aid (E)
Truck Driver (CPC)

Professional (4 + yrs)

Athletic Agent (HT)
City Manager (LPG)
College Professor (E)
Criminologist (LPG)
Executive Chef (HT)
Family Planner (HT)
FBI Agent (LPG)
Food Services Manager (HT)
Funeral Director (CPC)
Guidance Counselor (E)
Hotel/Motel Management (HT)
Lawyer (LPG)
Marriage and Family Therapist (CPC)
Paralegal (LPG)
Park Ranger (LPG)
Parole Officer (LPG)
Psychologist (CPC)
Teacher (E)
Workforce Director (LPG)



Check out Occupational Outlook Handbook – www.bls.gov/OCO/ or check your Choices profile

Holland Codes for Human Services

Social



Enterprising

Human Services Pathway Map: Child Care CTE Program 19.0708

CIP 19.0708	Grade 9	Grade 10	Grade 11	Grade 12
	Exploratory Courses	Introductory Courses	Career & Technical Education Courses	
Technical Courses Grades 11-12 6.0 credits 720 hours	Intro to Human Services (.5)	ABCs of Child Care (.5)	Child Care 1 (3)	Child Care 2 (3)
	Family & Consumer Science (.5)	Intro to Baking & Pastries (.5)		
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra, Academic Algebra 1 or Geometry Honors	Algebra 2, Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Chemistry or Environmental & Astronomy	Physics
Social Studies	US History or US 1	US 2 or World History	World or American Gov't & Elective	American Gov't & Elective Course
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Electives	+ 1.5 credits	+ 2.5 credits	Not Available	+ 0.5 credits
SOAR Articulation Agreement Credit Opportunities			Advanced Placement Credits	Dual Enrollment Credits
Commonwealth University of Pennsylvania (6.0) Community College of Beaver County (9.0) Harcum College (9.0) Luzerne County Community College (9.0) Montgomery County Community College (9.0) Reading Area Community College (9.0)			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	CHEM100 ENGL111 MATH123
Scheduling Notes:  			Work-Based Learning Programs	
				Cooperative Education (4.0)
			CTE Experience/Internship (4.0)	CTE Experience/Internship (4.0)
			CTE Industry Credentials & Certifications	
			Basic First Aid	OSHA Interview Skills
			CPR & AED	ServSafe Food Handler
			Penn State Getting Started with Center-Based Care	PA Mandated & Permissive Reporter
			Grade 11	Grade 12

Human Services:

Culinary Arts CTE Program 12.0508

CIP 12.0508	Grade 9	Grade 10	Grade 11	Grade 12
	Exploratory Courses	Introductory Courses	Career & Technical Education Courses	
Technical Courses	Intro to Baking & Pastries (.5)	Advanced Baking & Pastries (.5)	Culinary Arts 1 (3)	Culinary Arts 2 (3)
Grades 11-12	Intro to Food Prep & Cooking (.5)	Advanced Food Prep & Cooking (.5)		
6.0 credits 720 hours				
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra, Academic Algebra 1 or Geometry Honors	Algebra 2, Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Chemistry or Environmental & Astronomy	Physics
Social Studies	US History or US 1	US 2 or World History	World or American Gov't & Elective	American Gov't & Elective Course
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Electives	+ 1.5 credits	+ 2.5 credits	Not Available	+ 0.5 credits
Articulation Agreement Credit Opportunities			Advanced Placement Credits	Dual Enrollment Credits
Community College of Philadelphia (10.0) Delaware County Community College (9.0) Harrisburg Area Community College (9.0) Luzerne County Community College (9.0) Montgomery County Community College (9.0) Pennsylvania Highlands Community College (11.0) Westmoreland County Community College (9.0)			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	MATH123 ENGL111 CHEM100
Scheduling Notes:  			Work-Based Learning Programs	
				Cooperative Education (4.0)
			CTE Experience/Internship (4.0)	CTE Experience/Internship (4.0)
			CTE Industry Credentials & Certifications	
			OSHA 10-Hour General Safety	ServSafe Food Handler
			Grade 11	Grade 12

Health and Science Technologies Pathway

This pathway is designed to cultivate students' interests, skills and experiences for employment in careers related to science, agriculture, and health technologies.

Pathway Focus Areas

***Agriculture, Food and Natural Resources (AFN)**

***Science, Technology and Math (STM)**

***Health Sciences and Technologies (HS)**

*** Wellness (HS)**

Are you interested in...

Conservation
Environment and conservation
Food production
Health care environment
Information systems
Medical research
Pharmacy
Physical therapy
Radiology
Science and medicine
Sports/fitness

Can you...

Apply a scientific theory to real life problems
Collect and analyze data from experiments
Pay attention to detail
Use a computer and technology
Work in a lab setting or medical facility
Work outdoors around animals and plants
Work with people in need
Work with science and math theories

Do you enjoy...

Developing conclusion from a database
Diagnosing and caring for sick animals
Making a contribution to society
Medical lab research
Solving problems
Working on a team
Working on cutting-edge scientific research
Working outdoors with wildlife
Working with numbers

If you answered "yes" to most of these questions, you might consider a future in one of the same occupations listed below based on their level of post-secondary training.

Sample Careers

Entry (OJT)

Health Science Careers

Dialysis Technician (HS)
EEG Technician (HS)
Home Health Aide (HS)
Hospital Worker (HS)
Optician (STM)
Patient Care Technician (HS)
Physical Therapy Aide (HS)

Science and Technology Careers

Animal Caretaker (AFN)
Breeder (AFN)
Data Entry (STM)
Extension Services Worker (AFN)
Farm Manager (AFN)
Food Conservation Worker (AFN)
Hazardous Waste Technician (STM)
Zoo Caretaker (AFN)

Technical/Skilled (1-3 yrs)

Health Science Careers

Certified Nursing Assistant (HS)
Dental Hygienist (HS)
Dental Lab Technician (HS, STM)
Emergency Medical Technician (STM)
Practical Nurse (HS)
Personal Trainer (STM)
Pharmacy Assistant (HS)
Radiological Technician (HS)
Respiratory Therapist (HS)
Sports Instructor (HS)

Science and Technology Careers

Fish and Game Worker (AFN)
Forest Conservationist (AFN)
Licensed Nano-technician (STM)
Sound Engineer (STM)

Professional (4 + yrs)

Health Science Careers

Athletic Trainer (HS)
Chiropractor (HS)
Dietician (HS)
Geneticist (STM)
Pharmacists (HS)
Physician (HS)
Physician Assistant (HS)
Registered Nurse (HS)

Science and Technology Careers

Chemist (STM)
Geologist (AFN)
Marine Biologist (AFN)
Soil Conservationist (AFN)
Veterinarian (AFN)
Zoologist (STM)

Check out Occupational Outlook Handbook – www.bls.gov/OCO/ or check your Choices profile

Holland Codes for Health & Science

Social

Enterprising

Health & Medical Assisting CTE Program of Study CIP 51.0899

Program Requirements

Students will be required to exhibit professionalism in the classroom, lab, and on clinical sites. School-issued scrubs and medical equipment will be provided. Closed-toed shoes (sneakers) and a watch will be required for lab-time and skills. Students will have the opportunity to participate in cooperative education experiences in the healthcare field during the second year of this program as well as SkillsUSA workforce development competitions throughout years one and two.

Course Requirements

- Health & Medical Assting 1 (HMAS 1)
- Health & Medical Assisting 2 (MHAS 1)
- Enrollment preference for HMAS 1 is granted to students who have successfully complete Introduction Health & Medical Assisting. Similarly students who successfully complete HMAS 1 are granted preference for enrollment in HMAS 2.

Industry Credentials

- OSHA 10-Hour General Industry via CareerSafe
- NOCTI/NIMS Skills Certificate
- American Heart Association BLS for Healthcare Provider Certification
- Act 126: Child Abuse Recognition and Reporting
- Patient Care Technician (AMCA, NHA)

Post-Secondary Credit Opportunities

Dual-Enrollment Courses: MTR100: Medical Terminology Survey, MTR104: Basics of Medical Terminology; BIO103: Human Anatomy and Physiology; MATH123, ENGL111, CHEM100

Articulation/Pathway Credit Opportunities



- Bucks County Community College (9.0)
- Greater Altoona Career and Technology Center (9.0)
- Pennsylvania College of Technology (6.0)
- Pennsylvania Highlands Community College (9.0)

Career Pathways/ High-Priority & In-Demand Occupations

In-Demand Occupations in Healthcare: Medical and Nursing Assistants, Registered Nurses, Licensed Practical Nurses, Occupational and Physical Therapy Assistants, Respiratory Therapists, Nurse Practitioners, Physicians Assistants, Dental Assistants

Health & Science

Health & Medical Assisting CTE Program 51.0899

CIP 51.0899	Grade 9	Grade 10	Grade 11	Grade 12
	Exploratory Courses	Introductory Courses	Career & Technical Education Courses	
Technical Courses Grades 11-12 6.0 credits 720 hours	Exploratory Health Occupations (.25)	Introduction to Health & Medical Assisting (.5)	Heath & Medical Assisting 1 (3) MTR 100	Health & Medical Assisting 2 (3) MTR 104
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra, Academic Algebra 1 or Geometry Honors	Algebra 2, Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Biology	CHM 100 Fundamentals of Chemistry	BIO 103 Anatomy & Physiology	Genetics & Microbiology
Social Studies	US History or US 1	US 2 or World History	World or American Gov't & Elective	American Gov't & Elective Course
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Electives	+2.25 credits	+3.0 credits	Not Available	+0.5 credits
Articulation Agreement Credit Opportunities			Advanced Placement Credits	Dual Enrollment Credits
Bucks County Community College (9.0) Greater Altoona Career & Technology Center (9.0) Pennsylvania College of Technology (6.0) Pennsylvania Highlands Community College (9.0)			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	MATH123 ENGL111 CHEM100 BIO 103 MTR 100 MTR 104
Scheduling Notes:  			Work-Based Learning Programs	
				Cooperative Education (4.0)
			CTE Experience/Internship (4.0)	CTE Experience/Internship (4.0)
			CTE Industry Credentials & Certifications	
			OSHA 10-Hour Healthcare	AMCA Patient Care Technician
			BLS First Aid, CPR, & AED	NHA Patient Care Technician
			Grade 11	Grade 12

Health & Science:

Health Sciences Pathway Map

	Grade 9	Grade 10	Grade 11	Grade 12
Pathway Courses				
Technical Courses Grades 9-12	Exploratory Health & Medical Assisting (.5)	Safety & First Aid (.5)	Medical Terminology Survey (.5)	Medical Terminology (1)
	Family & Consumer Science (.5)	Intro to Health & Medical Assisting (.5)	Fundamentals of Chemistry (1)	Organic Chemistry (.5)
			Genetics & Microbiology (1)	Anatomy & Physiology (1)
Academic Courses				
English	English 9 or Honors 1	English 10 or Honors 2	English 11 or College Prep or Honors 3	Fantasy Fiction or ENG 111/Biography or AP English
Mathematics	Algebra, Academic Algebra 1 or Geometry Honors	Algebra 2, Academic Geometry or Honors Algebra 2	Trig/Pre-Calc Honors or Statistics or SAT Math	Unified Algebra & Trig or Financial Algebra for Business Application or Calculus
Science	Environmental Science 1 & Earth & Space or Biology 9	Biology or Chemistry	Chemistry and/or Genetics & Microbiology	Organic Chemistry (.5) and Anatomy & Physiology
Social Studies	US History or US 1	US 2 or World History	World or American Gov't & Elective	American Gov't & Elective Course
Required Courses	Comp. Applications (.5) Health 9 (.5) Physical Education (.5)	Physical Education (.5)	Personal Finance (.5) Physical Education (.5)	Physical Education (.5)
Electives	Introduction to Human Services (.5) + 1.0 credits	+ 2.5 credits	REQUIRED High School Nutrition (.5)	REQUIRED Strength & Conditioning for Life Fitness (.5) + 1.5 credits
Scheduling Notes:			Advanced Placement Credits	Dual Enrollment Credits
			AP Calculus AP Chemistry AP European History AP English AP Environmental Science AP Statistics AP US History	MTR100 Medical Terminology Survey MTR104 Medical Terminology MATH123 ENGL111 CHEM100
			Work-Based Learning Programs	
			BLS First Aid/CPR	Diversified Occupations (4.0)
			Grade 11	Grade 12