



2020-21 COURSE SELECTION GUIDE

Central Montco Technical High School (CMTHS) provides a variety of educational programs that prepare students to enter the workforce, or to continue their education at colleges, universities and technical schools. In addition to occupation specific training, CMTHS promotes the development of civic responsibility, employability skills, leadership, and professionalism. All programs are competency based and designed to meet the needs, skills, interests, abilities and preferences of the individual students. The school's mission statement is:

"SHAPING TODAY'S STUDENTS FOR TOMORROW'S CAREERS"

CMTHS is also committed to serving the business and industry sector of the community by providing programs that assist in meeting local, state and national workforce requirements. At CMTHS, caring and professionally certified staff share their skills while challenging and mentoring their students. Many of the instructors have established high profiles in their fields of expertise prior to becoming teachers. Teachers serve as mentors and respond to individual needs as they extend their support and enthusiasm while preparing students for the future. Our students have the opportunity to obtain a variety of state and nationally recognized certifications and professional licenses.

TECHNICAL PROGRAM OF STUDY	CAREER FIELD (CLUSTER)	GRADE LEVEL ELIGIBILITY
Allied Health (Honors Program)	Health Sciences and Technology	12
Automotive Repair Technology	Transportation – Distribution - Logistics	10-11-12
Baking & Pastry Arts	Business – Financial Management	10-11-12
Building Trades (Construction)	Engineering – Manufacturing Technology	10-11-12
Collision Repair / Refinishing Technology	Transportation – Distribution - Logistics	10-11-12
Cosmetology	Human Services	10-11-12
Culinary Arts & Restaurant Management	Business – Financial Management	10-11-12
Early Childhood Education	Human Services	10-11-12
Health Care Sciences	Health Sciences and Technology	10-11-12
Landscape Design & Construction	Agriscience & Engineering – Manufacturing Technology	10-11-12
Networking Technology	Communications – Information Technology - The Arts	10-11-12
Public Safety (Fire, Police, EMS)	Human Services	10-11-12
Teacher Leadership Academy	Human Services	12
Visual Communications (Art & Media)	Communications – Information Technology - The Arts	10-11-12
Video, Sound, and Music Production (Art & Media)	Communications – Information Technology - The Arts	10-11-12

ADMISSIONS

Admission to CMTHS is based upon the recommendation of home school staff and/or IEP team. An application with a copy of the IEP, if applicable, is required before enrollment. The school enrolls students who thrive in a competitive environment. Through careful scheduling with home school counselors, students are able to meet most college entrance requirements and attend CMTHS. We encourage all students and parents to visit our school and meet with the CMTHS School Counselor in order to select the most appropriate program and schedule of academic classes. Although our programs are developed around a three-year curriculum, you may enter CMTHS in 10th, 11th or 12th grade.

CMTHS registration forms are available at your home school guidance office and at the CMTHS website www.cmths.org under prospective students— student application. A PDF version of the student application will download to your computer. You may print and handwrite the application or fill in the blanks using a PDF writing utility program. Please give the application to your home school counselor.

CTE COURSE RESOURCES

Students should visit www.pacollegetransfer.com for program specific articulation agreements.

Students should visit www.cmths.org for program specific equipment and applicable uniform purchase information.

DISCLAIMER

Articulation agreements between the Pennsylvania Department of Education / Bureau of Career and Technical Education and post-secondary schools are subject to change as they are annually negotiated and updated. See www.pacollege-transfer.com for more information on articulations.

EQUITY STATEMENT

Central Montco Technical High School does not discriminate in its education programs, activities or employment practices based on sex, color, national origin, race, sexual orientation, disability, age, religion, ancestry, political opinions or affiliations, or lawful activity in any employee organization. CMTHS provides equal access to the Boy Scouts and other designated youth groups. For information about your civil rights and grievance procedures, contact the Equal Rights Coordinator at (610) 277-2301.

SPECIAL SERVICES

SCHOLARSHIPS - The Central Montco Technical High School Scholarship Fund offers scholarships to graduating seniors who have been accepted to a post-secondary institution. Since the inception of this fund, Central Montco Technical High School has given nearly \$800,000 dollars in scholarship awards. Students should visit the student assistance center for a list of scholarships and application.

STUDENT ASSISTANCE CENTER - The purpose of the Student Assistance Center is to enhance student achievement by providing a variety of support services. These services are available to any student who is experiencing difficulty or impediment to learning.

SUPPORT SERVICES - CMTHS provides supplementary assistance to our students enrolled in an approved technical program. Career evaluation, instructional counseling and placement are provided. These evaluation services are designed to provide the student with the necessary information to make a more informed career choice. An assessment counselor is also present to interpret the career interest and aptitude information about the student, and help them maximize the educational value of their chosen career or technical program. Career related math and reading instruction are also provided through Perkins funding. The academic instructional staff includes a certified math teacher and reading specialist. The math and reading programs are designed to address the needs of students in their chosen technical area and provide assistance with home school assignments.

WORK-BASED STUDIES - How do you get experience in your chosen field while still in school? At Central Montco Technical High School, Work-Based Studies (WBS) connects classroom learning with work-based experience and team's employers, educators, community leaders, students and parents. The Work-Based Studies Experiences at CMTHS include:

- **Clinical Experiences**: Non-paid, work-based experiences in hospitals, long term care facilities and day care centers.
- **Cooperative Education**: Program related placements that are paid, on-the-job training positions and are considered an extension of the classroom. The timeline for placement is individualized and based on student need. Students are trained under the direct supervision of the employer and are assigned a mentor. Students' progress is monitored and evaluated by the school and the employer on a continual basis.
- **Internships**: Paid and non-paid work-based experiences for a specified length of time.
- **Job Shadow**: An opportunity for students to observe or shadow a professional in their chosen career and field of work.

STUDENT ORGANIZATIONS

SKILLSUSA & HEALTH OCCUPATIONS STUDENTS OF AMERICA (HOSA) - SkillsUSA and HOSA have very active chapters at CMTHS. These programs are nationally recognized organizations in which all students participate. SkillsUSA is a national partnership of students, teachers and industry working together to ensure America has a skilled work force through leadership training and student government.

COUNCIL OF PRESIDENTS - Council of Presidents is established for each session with representation from all program areas. Meetings are held on a monthly basis with the primary goal of functioning as a student government.

NATIONAL TECHNICAL HONOR SOCIETY - The National Technical Honor Society is the acknowledged leader in the recognition of outstanding student achievement in career and technical education. Over 2000 schools and colleges throughout the U.S. and its territories are affiliated with the Society. Member schools agree that NTHS encourages higher scholastic achievement, cultivates a desire for personal excellence, and helps students find success in today's competitive workplace.

COMMUNICATIONS, TECHNOLOGY-INFORMATION SYSTEMS, THE ARTS

VISUAL COMMUNICATIONS

Course Description: The Visual Communications program emphasizes drawing and illustration. All new students are placed in the Foundation program, in which they are introduced to the proper use of various art tools and fundamental art and design concepts. Students are also introduced to photography and video using the most current technology. The Digital Media curriculum encompasses graphic design, digital imaging and web site design. A sequence of courses, beginning with Foundations of Digital Design, will provide students with a structure that will serve to support personal and professional goals for enrichment and development. Third year students complete a portfolio consistent with their career plans and continuing education plans. Most of the students completing this program continue their education at the post-secondary level.

Course Content: The program includes studies of traditional media such as watercolor, pencil drawing, pen and ink, and air brush as well as digital technologies that include cameras, camcorders, computers, and industry software (Adobe Suite).
Content areas include:

- Advanced color theory and design theory
- Computer Software - Adobe (Photoshop, InDesign, Illustrator)
- Photography and Video equipment use
- Studio setup and Lighting techniques
- Internet design and Social Media marketing

State or National Certifications Available at CMTHS: Pennsylvania and NOCTI Skills Certificate, Adobe Certification

Articulation Agreement: Commercial & Advertising Art— CIP Code: 50.0402

Related Occupations: Web Developer, Graphic Designer, Illustrator, Multimedia Artists, Interior Designer, Set/Exhibit Designer, Photographer, Marketing

Equipment & Tools for CMTHS Commercial Art Program: Students are required to purchase a supply kit at an additional cost (provided by the school) consisting of sketchbook, pencils, markers, brushes, toolbox, portfolio book, paint trays, USB flash drive, and black work shirt.

COMMUNICATIONS, TECHNOLOGY-INFORMATION SYSTEMS, THE ARTS

VIDEO, SOUND, AND MUSIC PRODUCTION

Course Description: The Video, Sound, and Music Production program emphasizes concept and development of ideas, video and sound editing, lighting design, and publishing content to the Internet. Students enter through the Foundation program, in which they are introduced to the idea of storyboard and script concept and development and the use of the proper equipment and technology to make their ideas become reality.

Students are introduced to sound and video using the most current technology. The curriculum encompasses equipment training that includes video and digital cameras, sound and lighting, microphones and sound boards, and editing and publishing software on the Apple platform. A sequence of courses, beginning with Foundations of Digital Design, will provide students with a structure that will serve to support personal and professional goals for enrichment and development. Third year students complete a portfolio consistent with their career plans and continuing education plans. Most students completing this program continue their education at the post-secondary level.

Course Content: The program includes studies of traditional concepts such as script and storyboarding development, as well as, digital technologies that include cameras, camcorders, computers and industry software (Adobe Suite). Content areas include:

- Concept and idea development
- Computer software - Adobe (Premiere, After Effects, Photoshop), iMovie, Garage Band, Final Cut
- Photography and Video equipment use
- Studio setup and Lighting techniques
- Digital editing and publishing

State or National Certifications Available at CMTHS: Pennsylvania and NOCTI Skills Certificate

Articulation Agreement: Communications Technologies/Technicians & Support Services — CIP Code: 10.999

Related Occupations: Audio and Video Equipment Technicians, Multimedia Artists, Film and Video Editors, Camera Operators, Television, Video, and Motion Picture, Sound and Music Engineering Technicians

Equipment & Tools for CMTHS Video, Sound, and Music Production Program: Students are required to purchase a supply kit at an additional cost (provided by the school) consisting of sketchbook, pencils, markers, USB flash drive, and a work shirt.

COMMUNICATIONS, TECHNOLOGY-INFORMATION SYSTEMS, THE ARTS

NETWORK TECHNOLOGY

Course Description: The Networking Technology program at CMTHS is designed to introduce the student to basic computer software and hardware concepts in addition to networking and cabling skills. Connecting and protecting computers on the Internet is a core skill learned and practiced in this program. Students are prepared to earn several highly regarded industry certifications. With an education in infrastructure-level networking, students are highly sought after by employers in all areas of business, education, and healthcare.

Course Content: Students learn basic copper cable termination through C-Tech Associates curriculum and cabling kits. The Cisco IT Essentials curriculum (CompTIA A+ Certification Prep) provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry level IT Helpdesk professionals. Course work consists of the following topics:

- Connecting diverse networks
- Routing and switching essentials
- NDG Linux+
- IT Security
- Scaling networks
- Introduction to computers and networking fundamentals

State or National Certifications Available at CMTHS:

- Pennsylvania and NOCTI Skills Certificate
- CompTIA A+ Certificate
- Cisco Certified Entry Level Network Tech (CCENT)
- Cisco Certified Network Associate Certificate (CCNA)
- CompTIA Network+ Certificate
- Fiber and Copper Certification

Articulation Agreement: Computer Systems Networking & Telecommunications—CIP Code: 11.0901

Related Occupations: Network Architect, Network Administrator, Network Support Specialist, Computer User Support, Telecommunications Installer

Equipment & Tools for CMTHS Video, Sound, and Music Production Program: Students are required to purchase a CMTHS polo shirt.

HEALTH SCIENCES AND TECHNOLOGY

HEALTH CARE SCIENCES

Course Description: The Health Care Sciences course offers a core academic curriculum and skill-based competency tasks linked to careers in the health care industry. This program provides the knowledge base for careers in health care by preparing the student to enter the health care system along with continuing their education. Clinical experience are offered through local healthcare agency visits and internships.

Course Content: The curriculum consists of the communication, cognitive, social-emotional and developmental skills necessary to obtain an entry level position in the health care field. Continuing education on the post-secondary level is re-enforced through the learning process. Topics of study include:

- Healthcare provider skills
- Anatomy and physiology
- Communication; medical terminology; safety and infection control
- CPR and First Aid
- Nutrition

State or National Certifications Available at CMTHS:

- Pennsylvania and NOCTI Skills Certificate
- BLS for Healthcare Provider
- AMA EKG Technician
- AMCA Medical Assisting
- AMCA Nurse Assisting

Articulation Agreement: Health/Medical Assisting Services -CIP Code: 51.0899

Related Occupations: Medical Assistants, Occupational Therapist Assistants, Pharmacists, Physician Assistants, Physician, Radiological Technologists, Radiologists, Registered Nurses, Respiratory Therapists, Surgical Assistants

Equipment & Tools for CMTHS Allied Health and Health Care Sciences courses include: Hospital scrubs, white leather shoes, watch w/second hand background checks, updated physical and immunizations are required. *Per Suburban Community Hospital rules - No visible tattoos or facial piercings. No artificial, long nails or polish.*

HEALTH SCIENCES AND TECHNOLOGY

H ALLIED HEALTH

Course Description: Allied Health Technology is an honors weighted College Prep course designed for students who wish to pursue a career in healthcare professions. The course is located at Suburban Community Hospital where students are supervised during clinical rotations in medical, surgical, support, administrative services. The course is open to 12th grade students who meet the required prerequisites: minimum GPA of 3.0, Algebra I, Biology, and a commitment to take Algebra II and Chemistry, along with excellent attendance and no discipline record.

Course Content: Students learn to plan, organize, interact with patients, assume responsibilities and develop critical thinking and problem solving skills. The curriculum is designed to facilitate communication, cognitive, social-emotional, and developmental skills necessary for an entry level position in the health field and continued education on the post-secondary level.

Topics of study include:

- Legal and ethical standards in health care
- Body systems in wellness and disease; and infection control
- Communications and Leadership through HOSA (Health Occupations Students of America)
- Health care delivery, safety and emergency systems
- Medical Terminology; principles of nutrition; and current issues in health care

State or National Certifications Available at CMTHS:

- Pennsylvania and NOCTI Skills Certificate
- BLS for Healthcare Provider
- AMCA Nurse Assisting
- AMCA Medical Assisting



Articulation Agreement: Health/Medical Assisting Services -CIP Code: 51.0899

Related Occupations: Medical Assistants, Occupational Therapist Assistants, Pharmacists, Physician Assistants, Physician, Radiological Technologists, Radiologists, Registered Nurses, Respiratory Therapists, Surgical Assistants

Equipment & Tools for CMTHS Allied Health and Health Care Sciences courses include: Hospital scrubs, white leather shoes, watch w/second hand, background checks, updated physical and immunizations are required. *Per Suburban Community Hospital rules - No visible tattoos or facial piercings. No artificial, long nails or polish.*

TRANSPORTATION, DISTRIBUTION, AND LOGISTICS

AUTOMOTIVE REPAIR TECHNOLOGY

Course Description: The Automotive Repair Technology program introduces students to the Automotive Service Industry (ASE). The program focuses on developing the hands-on and intellectual skills required of an entry-level automotive technician. The program is NATEF (National Automotive Technicians Education Foundation) certified. Students who meet the academic and employability skills qualifications may apply for membership in the AYES (Automotive Youth Educational Systems) Program.

Course Content: The Auto Tech course focuses on developing the tactile and intellectual skills required for an entry-level auto technician. The course is NATEF (National Automotive Technicians Education Foundation) certified of which only 30% of the secondary programs in the nation carry this endorsement. Hands-on auto work experiences are available so that the student is prepared to service today's complex vehicles. Students must be able to work as a part of a team, lift approximately 50 pounds and, bend at the knees and waist without difficulty. Topics of study include:

- Suspension, Steering, and Brakes
- Vehicle Maintenance and Reconditioning
- Electrical and Electronics Systems
- Engine Repair and Engine Performance
- Heating and Air Conditioning

State or National Certifications Available at CMTHS:

- Pennsylvania and NOCTI Skills Certificate
- Automotive Service Excellence (8 areas of certification)
- Freon Handler's License
- State Inspection License
- SP/2 (Safety & Pollution 2) Certificate
- ACDelco Certificates (5 areas of certification)

Articulation Agreement: Automobile / Automotive Mechanic Technology / Technician CIP Code: 47.0604

Related Occupations: Auto Technician, Mechanic, Auto Parts Sales, Transportation Inspector

Equipment & Tools for CMTHS Automotive Technology Program: A required uniform consisting of Dark blue Dickies® pants, leather work boots and T-shirt. Tool box, lock and tools (required tool list provided by the instructor).

TRANSPORTATION, DISTRIBUTION, AND LOGISTICS

COLLISION REPAIR / REFINISHING TECHNOLOGY

Course Description: Collision Repair Technicians are skilled workers who repair minor and major defects such as scratches, chips, dents, surface rust and rust outs. The technician also welds torn metal, replaces damaged parts, and estimates repairs. A person in this trade should have the desire to work with metal and finishing metals such as paints, solvents, and waxes. The program is A.S.E. (Automotive Service Excellence) and ICAR gold certified.

Course Content: I-Car Curriculum prepares students to remove excessively damaged fenders, panels and grills using wrenches and cutting tools and attaching or manufacturing replacements by bolting, gluing or MIG welding them in place. Students who successfully complete this course, should be able to:

- Perform non-structural repairs (metal straighten repairs, body fillers and metal finishing glazes, panel replacement, panel alignment, interior trim, hardware and glass replacement)
- Complete surface preparations (sanding techniques machine and hand)
- Identify paint code on each car and transfer code to paint mixing room computer for paint formula for each vehicle
- Mix paint formula using computer to match paint on vehicle; Mask and paint vehicles
- Perform undercoats / corrosion protection usage for metal, plastic, fiberglass and carbon fiber materials
- Perform vehicle cleanup and detailing
- Demonstrate welding, including MIG/TIG resistance spot and plasma arc cutting

State or National Certifications Available at CMTHS:

- Pennsylvania and NOCTI Skills Certificate
- PPG On-Line Training and Refinishing (12 certificates)
- SP/2 (Safety & Pollution 2) Certificate
- I-CAR PDP Education Edition (17 certificates)

Articulation Agreement: Auto-body/Collision & Repair Technology / Technician CIP Code: 47.0603

Related Occupations: Auto Glass Installer, Auto body Technician, Insurance Adjuster, Painter, Transportation

Equipment & Tools for CMTHS Automotive Technology Program: A required uniform consisting of Dark blue Dickies® pants, leather work boots and T-shirt.

HUMAN SERVICES

COSMETOLOGY

Course Description: Cosmetology is a PA state approved three (3) year course. Students earn 2.5 hours per day (average 400-420 hours per year) towards the required 1250 clock hours as mandated for licensure by the Pennsylvania State Board of Cosmetology. The Pennsylvania State Board of Professional and Occupational Affairs mandates that the CMTHS Cosmetology program include:

- 50 hours in Professional Practices including bacteriology, disinfection, sanitation, professional attitude, business practices, PA Cosmetology Law
- 200 hours in Sciences; histology, trichology, chemistry, physiology, cosmetic dermatology, electricity
- 1000 hours in Cosmetology Skills - Cognitive & Manipulative

Course Content: The curriculum for the Cosmetology course consists of theoretical instruction and practical skills covering practices constituting the art of Cosmetology. Such theoretical instruction and practical skills include:

- Orientation: History and career opportunities, life skills, professional image and communication
- General Sciences: Infection control, anatomy and physiology, skin, nails, growth and nutrition, diseases, disorders
- Properties of the hair and scalp, basics of chemistry, basics of electricity
- Hair Care: Principles of hair design, scalp care, shampooing and conditioning, haircutting, hairstyling, braiding and braid extensions, wigs and hair additions, chemical texture services, hair coloring
- Skin Care: Hair removal, facials, facial makeup
- Nail Care: Manicures, pedicures, nail tips & wraps, monomer liquid & polymer powder nail enhancements, UV gels
- Business Skills: Seeking employment, On the Job, The Salon Business
- State Law: Pennsylvania State Board of Cosmetology Law

State or National Certifications Available at CMTHS:

- Pennsylvania and NOCTI Skills Certificate
- Pennsylvania State Board of Cosmetology License

Related Occupations:

Color Specialist, Cosmetology Teacher, Esthetician, Nail Technician, Spa Manager

Equipment & Tools for CMTHS Cosmetology Program: Level 1: Cosmetology Kit (Required by PA State Board of Cosmetology); Level 2/3: Two new mannequins each year. School supplies: three ring binder, notebook tabs & paper, flash drive, pencils, highlighters, index cards

HUMAN SERVICES

EARLY CHILDHOOD EDUCATION

Course Description: The Early Childhood Education program is designed for 10th, 11th and 12th grade students who have a sincere desire to teach and care for young children. It prepares students for either an entry-level position in the child-care industry or to pursue a college degree in early childhood education or elementary education. Students observe and interact in a variety of early childhood settings including elementary schools, childcare centers, and early intervention programs, as well as our own on-site preschool, "Little Hands."

Course Content: Along with classroom instruction, students will learn skills by preparing and presenting both individual and team projects appropriate for children ages infant through young school-age. Topics of study include:

- Principles of child development
- Health, safety and nutrition
- Observation and teaching skills
- Communication skills & team building skills
- Child care center management and organization
- Dual enrollment college credits
- PA State Licensing Laws-Office of Child Development and Early Learning

State or National Certifications Available at CMTHS:

- Pennsylvania & NOCTI Skills Certificate
- Emergency Management Institute (EMI) Certificate for Children in Disasters
- First Aid and CPR
- Child Development Associate (CDA Ready)

Articulation Agreement:

Childcare & Support Services Management CIP Code: 19.0708

Related Occupations:

Childcare Center Dir., Childcare Worker, Elementary Teacher, Preschool Teacher, Teacher's Assistant

Equipment & Tools for CMTHS Early Childhood Education Program: Burgundy smock / jacket. Physical Exam & 1-Step Mantoux (Tuberculosis) Test required.

HUMAN SERVICES	
TEACHER LEADERSHIP ACADEMY	
<p>Course Description: High school seniors aspiring to become educators develop skills to be 21st century ready in this college preparatory Teacher Academy program. This course consists of 7.5 hours/week divided between classroom instruction, dual-enrollment college instruction, and 95+ hours of field experience. The field experience is with certified teachers at all grade levels. This is a one-year, senior only program.</p>	
<p>Course Content: Students complete internships with certified mentor teachers in area public and private schools. Mentors teach all grades in all subject areas, including special education.</p> <ul style="list-style-type: none"> • Internships: 95+ hours in local schools • High School to College Transition Program • Dual-enrollment college credits available • Learn how to write for college • Development of a digital portfolio • Learn, practice, & teach research-based strategies for teaching and learning • Research based arts-integrated approach to learning • Professional trainings • Service learning • Comprehensive portfolio • Mock interview with current/former school administrators 	<p>Admission Criteria:</p> <ul style="list-style-type: none"> • Must have applied or intend to apply to a two or four-year college with the goal of earning a degree in education • All required clearances must be attainable • Must be in good academic standing to graduate • Must complete the Teacher Academy (CMTHS) application • Must have a counselor recommendation to enter this program • Must complete a preliminary interview screening with CMTHS staff • Recommended to have own transportation available or must be willing to ride share with other students or find alternate transportation to attend internship rotations
<p>Related Occupations: Certified High School, Middle School or Elementary School Teacher, Math or Reading Specialist, Paraeducator, School Counselor, School Psychologist, Special Education Teacher or Supervisor, School Principal or Assistant Principal, Social Worker, and English-Language Teacher.</p>	
<p>Books and Uniforms Needed: Books are determined by dual-enrollment courses & TA curriculum. Student uniforms should be purchased at www.cmths.org.</p>	

HUMAN SERVICES	
PUBLIC SAFETY	
<p>Course Description: The Public Safety Program is designed to prepare students to enter careers related to Law Enforcement, Emergency Medical Services, Fire Sciences, and Industrial Safety.</p>	
<p>Course Content: Public Safety prepares individuals to apply technical knowledge and skills that relate to performing entry-level duties as a patrolman, corrections officer, juvenile officer, security officer and probation officer. This program will also prepare students for entry level positions in the emergency medical field. Students receive training in firefighting and may sit for certification exams that enable them to participate with local fire companies. Key competences include:</p> <ul style="list-style-type: none"> • Perform CPR and use an AED, and administer first aid at an advanced level • Operate a fire truck pump, deploy hose lines and assist in fire suppression and vehicle rescue • Respond to a mass casualty situation (CERT) • Understand the U. S. Constitution, apply the various laws and make a legal arrest and prepare appropriate forms and affidavits • Perform vehicle rescues as part of a team • Effectively perform various self-defense techniques 	
<p>State or National Certifications Available at CMTHS:</p> <ul style="list-style-type: none"> • Pennsylvania & NOCTI Skills Certificate • First Aid and CPR • Law Enforcement Responder • Defensive Tactics 	
Articulation Agreement:	Criminal Justice / Police Science—CIP Code: 43.0107
Related Occupations:	Corrections Officer, Dispatcher, Emergency Medical Tech, Firefighter, Police Patrol Officer
<p>Equipment & Tools for CMTHS Public Safety Program: Students are required to wear a standard police style shirt with black dress trousers</p>	

BUSINESS AND FINANCIAL MANAGEMENT

CULINARY ARTS AND RESTAURANT PRACTICES

Course Description: The Culinary Arts and Restaurant Practices program offers a cutting edge curriculum for all students interested in culinary arts, baking, restaurant management, safety, sanitation, and nutrition. Our kitchen and classrooms are updated and are state of the art. The program also has a student restaurant that is open to the public for lunch.

Course Content: Students participate in a special classroom management system validated by the American Culinary Federation. Students get hands-on experience in:

- Menu planning and presentation, including buffet presentation
- Safety and sanitation practices (ServSafe®)
- Cooking techniques
- Pastries and baking
- Breakfast cookery
- Guest services and dining
- Production controls and food costing
- Inventories and ordering
- Nutrition

State or National Certifications Available at CMTHS:

- Pennsylvania & NOCTI Skills Certificate
- ServSafe® Sanitation Certificate

Articulation Agreement: Institutional Food Worker - CIP Code: 12.0508

Related Occupations: Chefs & Head Cooks, Dieticians & Nutritionists, Food Prep Supervisor, Food Science Technicians, Waiters/Waitresses

Equipment & Tools for CMTHS Culinary Arts Program: Chef coat, pants, apron and hat.

BUSINESS AND FINANCIAL MANAGEMENT

BAKING AND PASTRY ARTS

Course Description: An extension of the Culinary Arts program, The Baking and Pastry Arts Program is a three-year comprehensive program that covers the skills and knowledge needed to produce bakery items and operate a retail bakery operation. Students will have opportunities to demonstrate their skills in a student run bakery. There will also be opportunities for students to work at Central Montco Tech sponsored catering functions. Many third level students have participated in our school-to-work (Co-op) program, while working in local bakeries.

Course Content: The Baking and Pastry Arts learning experience will reflect the realistic conditions found in the hospitality / food service industry. Students learning is facilitated by an 11,000 sq. ft. commercial kitchen and baking area and a fully operational restaurant and retail bakeshop. Students participate in a special classroom management system validated by the American Culinary Federation.

- Purchasing, Receiving and Storage Practices
- Safety and sanitation practices (ServSafe®)
- Business and Math Skills
- Basic Baking Skills and Preparation
- Product Merchandising
- Human Relations and Career Skills
- Nutrition

State or National Certifications Available at CMTHS:

- Pennsylvania & NOCTI Skills Certificate
- ServSafe® Sanitation Certificate

Articulation Agreement: Baking & Pastry Arts/Baker/Pastry Chef - CIP 12.0501

Related Occupations: Chefs & Head Cooks, Food Prep Supervisor, Cake Decorator, Pastry Chef, Baker

Equipment & Tools for CMTHS Baking and Pastry Arts Program: Chef coat, pants, apron and hat.

ENGINEERING, MANUFACTURING AND TECHNOLOGY

BUILDING TRADES

Course Description: The Building Trades Program is an excellent option for students interested in a career related to residential and commercial construction. This program includes coursework in Carpentry, Masonry, Electricity, Plumbing, and Building Maintenance.

Course Content:

- YEAR ONE is considered a foundation year. Students are taught hand and power tool safety as well as electrical safety, scaffold/ladder safety and fall protection. Residential wiring topics include various switching and receptacle installation and National Electrical Code requirements are covered. Carpentry topics utilize technical drawings to produce student made projects. Plumbing topics include PVC, copper and the installation and repair of various plumbing fixtures. Masonry topics in the first year include building block walls, corners and foundations.
- YEAR TWO is a continuation of the first level. Students are taught blueprint reading and drawing and use those skills to draw a structure that they then build. This project includes installing sheetrock, taping and finishing, painting as well as wiring and copper water lines. Students learn to install 100 amp residential service, proper grounding techniques and power panel circuit breaker installation.
- YEAR THREE is project based. Using blue-prints, students will design and build a foundation. A powder room or bathroom is framed. Electrical, tub, toilet, sink, sheetrock, windows, roofing, siding, painting, tile and a water heater is installed.

State or National Certifications Available at CMTHS:

- Pennsylvania & NOCTI Skills Certificate
- OSHA 10-hour Safety Certification

Articulation Agreement: Building / Property Maintenance & Manager—CIP Code: 46.0401

Related Occupations: Carpenter, Cement Mason, Construction Manager, Electrician, HVAC Tech, Plumber

Equipment & Tools for CMTHS Building Trades Program: Construction Trades black T-shirt /Sweatshirt. Student must wear leather work boots. Students must have a tool box, tool belt and tools (list will be provided by the instructor).

AGRISCIENCE and ENGINEERING, MANUFACTURING AND TECHNOLOGY

LANDSCAPE DESIGN AND CONSTRUCTION

Course Description: The Landscape Design & Construction Program offers hands on learning and will prepare students in all phases of landscape / hardscape design and installation, horticulture, nursery operations, and turf management. With an emphasis on residential home installation, students will learn the proper use of hand and power tools, skid loaders, construction materials, measuring and estimating, blueprint and plan reading, and jobsite safety.

Course Content: Practical experience is gained through school landscape plantings, planting and maintenance of a vegetable garden, plant growing and maintenance of school areas. Topics of study include:

- Plant Identification
- Plant & Soil Science
- Pesticide Management
- Greenhouse/Nursery Production
- Arboriculture & floriculture
- Hardscape Design & Construction
- Bobcat Skid Steer Loader Operator Training Course certification

State or National Certifications Available at CMTHS:

- Pennsylvania & NOCTI Skills Certificate
- ISA Certified Tree Worker/Climber Specialist, International Society of Arboriculture
- PA Pesticide Applicator Certification, PA Dept. of Agriculture
- PA Certified Horticulturist, PA Landscape & Nursery Certification

Articulation Agreement: Applied Horticulture / Horticulture Operations, General- CIP Code: 01.0601

Related Occupations: Landscapers & Grounds, Supervisors-Landscapers, Landscape Architects, Nursery Workers, Nursery/Greenhouse Manager

Equipment & Tools for CMTHS Building Trades Program: Dark Green CMTHS T-shirt and jeans or work pants are required. Optional sweatshirt and leather work boots are required

SAMPLE CMTHS STUDENT COURSE SEQUENCE IN THE 5 BLOCK

ACADEMIC				
GRADE 10				
BLOCK 1	SOC GLOBAL STUDIES	ENG ENGLISH 3	SOC MOD. WORLD HIST	ENG ENGLISH 4
BLOCK 2	<u>MAT</u> INTEGRATED 3	<u>MAT</u> INTEGRATED 4	<u>MAT</u> INTEGRATED 5	<u>HPE</u> HEALTH/FIT 2
BLOCK 3	<u>SCI</u> CHEMISTRY	ELECTIVE	<u>SCI</u> PHYSICS	ELECTIVE
BLOCK 4	CMTHS	CMTHS	CMTHS	CMTHS
BLOCK 5	CMTHS	CMTHS	CMTHS	CMTHS
GRADE 11				
BLOCK 1	SOC GLOBAL STUDIES	ENG ENGLISH 3	SOC MOD. WORLD HIST	ENG ENGLISH 4
BLOCK 2	<u>MAT</u> INTEGRATED 3	<u>MAT</u> INTEGRATED 4	<u>MAT</u> INTEGRATED 5	<u>HPE</u> HEALTH/FIT 2
BLOCK 3	<u>SCI</u> CHEMISTRY	ELECTIVE	<u>SCI</u> PHYSICS	ELECTIVE
BLOCK 4	CMTHS	CMTHS	CMTHS	CMTHS
BLOCK 5	CMTHS	CMTHS	CMTHS	CMTHS
GRADE 12				
BLOCK 1	SOC US GOVERNMENT	ENG ENGLISH 5	SOC US GOVERNMENT	ENG ENGLISH 5
BLOCK 2	<u>MAT</u> ELECTIVE	ELECTIVE	<u>MAT</u> ELECTIVE	ELECTIVE
BLOCK 3	<u>SCI</u> ELECTIVE	ELECTIVE	<u>SCI</u> ELECTIVE	ELECTIVE
BLOCK 4	CMTHS	CMTHS	CMTHS	CMTHS
BLOCK 5	CMTHS	CMTHS	CMTHS	CMTHS

LEARNING SUPPORT				
GRADE 10				
BLOCK 1	<u>SCI</u> APPLIED BIO-S1	<u>SCI</u> APPLIED BIO-S2	<u>HPE</u> HEALTH/FITNESS 2	<u>ENG</u> ENGLISH 4L
BLOCK 2	<u>MAT</u> INTEG. 3M-S1	<u>MAT</u> INTEG. 3M-S2	<u>SOC</u> GLOBAL U 10/11	<u>MAT</u> INTEGRATED 4M
BLOCK 3	<u>ENG</u> ENGLISH 3L-S1	<u>ENG</u> ENGLISH 3L-S2	ELECTIVE	ELECTIVE
BLOCK 4	CMTHS	CMTHS	CMTHS	CMTHS
BLOCK 5	CMTHS	CMTHS	CMTHS	CMTHS
GRADE 11				
BLOCK 1	<u>SCI</u> APPLIED BIO-S1	<u>SCI</u> APPLIED BIO-S2	<u>HPE</u> HEALTH/FITNESS 2	<u>ENG</u> ENGLISH 4L
BLOCK 2	<u>MAT</u> INTEG. 3M-S1	<u>MAT</u> INTEG. 3M-S2	<u>SOC</u> GLOBAL U 10/11	<u>MAT</u> INTEGRATED 4M
BLOCK 3	<u>ENG</u> ENGLISH 3L-S1	<u>ENG</u> ENGLISH 3L-S2	ELECTIVE	ELECTIVE
BLOCK 4	CMTHS	CMTHS	CMTHS	CMTHS
BLOCK 5	CMTHS	CMTHS	CMTHS	CMTHS
GRADE 12				
BLOCK 1	<u>SCI</u> CHOICE of 4*	ENG ENGLISH 5L	<u>SCI</u> CHOICE of 4*	ENG ENGLISH 5L
BLOCK 2	<u>SOC</u> AMERICAN CIVICS	<u>MAT</u> ELECTIVE	<u>SOC</u> AMERICAN CIVICS	<u>MAT</u> ELECTIVE
BLOCK 3	ELECTIVE	ELECTIVE	ELECTIVE	ELECTIVE
BLOCK 4	CMTHS	CMTHS	CMTHS	CMTHS
BLOCK 5	CMTHS	CMTHS	CMTHS	CMTHS

HONORS				
GRADE 10				
BLOCK 1	<u>SOC</u> H GLOBAL STUD	<u>ENG</u> H ENGLISH 3	<u>SOC</u> H WESTERN CIV	<u>ENG</u> H ENGLISH 4
BLOCK 2	<u>MAT</u> H INTEGRATED 3	<u>MAT</u> H INTEGRATED 4	<u>MAT</u> H INTEGRATED 5	<u>HPE</u> HEALTH/FIT 2
BLOCK 3	<u>SCI</u> H CHEMISTRY	<u>WLA</u> H SPAN/LATIN 3	<u>SCI</u> H PHYSICS	ELECTIVE
BLOCK 4	CMTHS	CMTHS	CMTHS	CMTHS
BLOCK 5	CMTHS	CMTHS	CMTHS	CMTHS
GRADE 11				
BLOCK 1	<u>SOC</u> H GLOBAL STUD	<u>ENG</u> H ENGLISH 3	<u>SOC</u> H WESTERN CIV	<u>ENG</u> H ENGLISH 4
BLOCK 2	<u>MAT</u> H INTEGRATED 3	<u>MAT</u> H INTEGRATED 4	<u>MAT</u> H INTEGRATED 5	<u>HPE</u> HEALTH/FIT 2
BLOCK 3	<u>SCI</u> H CHEMISTRY	<u>WLA</u> H SPAN/LATIN 3	<u>SCI</u> H PHYSICS	ELECTIVE
BLOCK 4	CMTHS	CMTHS	CMTHS	CMTHS
BLOCK 5	CMTHS	CMTHS	CMTHS	CMTHS
GRADE 12				
BLOCK 1	<u>SOC</u> H US GOV	ENG H ENGLISH 5	<u>SOC</u> H US GOV	ENG H ENGLISH 5
BLOCK 2	<u>MAT</u> H CALCULUS	ELECTIVE	<u>MAT</u> H CALCULUS	ELECTIVE
BLOCK 3	<u>SCI</u> ELECTIVE	ELECTIVE	<u>SCI</u> ELECTIVE	ELECTIVE
BLOCK 4	CMTHS	CMTHS	CMTHS	CMTHS
BLOCK 5	CMTHS	CMTHS	CMTHS	CMTHS