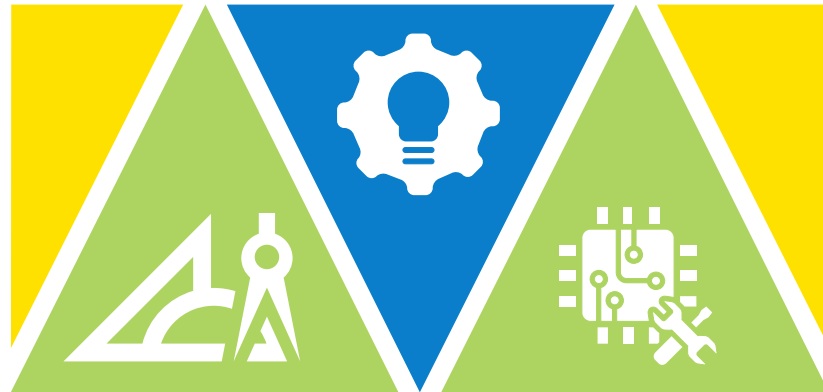


MERCER COUNTY

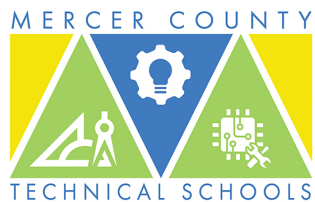


TECHNICAL SCHOOLS

2020-2021 Course Book

www.mcts.edu





KIMBERLY J. SCHNEIDER, Ed.D.
Superintendent

Please use the list below for any Mercer County Technical School District printed material.

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Ms. Dana Hice DePugh, Assistant Superintendent for Curriculum and Instruction

Ms. Deborah Donnelly, School Business Administrator

Ms. Lisa Flynn, Assistant School Business Administrator

Secondary Vocational Education

Mr. Angelo DeStefano, Principal at the Assunpink Center

Mr. Brian Bittings, Substitute Principal at the Sypek Center

Mr. Douglas Shunk, Supervisor of Secondary Education at the Assunpink Center

Mr. John Ketterer, Substitute Supervisor of Secondary Education at the Sypek Center

Adult / Postsecondary Vocational Education

Mr. Gary Mattia, Interim Principal at the Adult Evening Schools

Effective July 9, 2019

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DISTRICT INFORMATION

MERCER COUNTY TECHNICAL SCHOOLS' MISSION

Mercer County Technical Schools' mission is to produce a community of inspired, compassionate learners who are knowledgeable, skilled and possess the competencies that will prepare them for success in an ever-changing technological world. We provide our students with educational opportunities in preparing for careers in business and industry while emphasizing a culture of personal attention that focuses on the individual learner. Our goal is to foster a school climate that emphasizes the importance of the teaching-learning process and provide youth and adults the opportunities to maximize their potential, to reflect and offer solutions to challenges posed by society.

To fulfill this mission, the faculty and staff will:

- Embrace the belief that every student can learn
- Continuously emphasize that learning is a life-long process
- Assist students to enable them to think critically, analyze problems and develop solutions
- Assist students to become productive citizens in a global society

ADMISSIONS

Most high school students apply for shared-time programs in 10th grade. First-year students typically attend in 11th grade from 8:00AM to 10:45AM and return to their home school for lunch and academic classes. Second-year students typically attend in 12th grade from 11:45AM to 2:30PM after completing their academics and lunch at the home school. Individual class schedules for shared-time students are assigned by home school Guidance Counselors ensuring that each student has all the necessary requirements for high school graduation.

CLASS OFFERINGS

Students may enroll in one pull-out class at Mercer County Technical Schools each year. The class will be offered during the time that the career and technical education program is offered. Students enrolled in Cosmetology, Health and Child Care, Health Occupations and Career Prep are ineligible due to other program requirements.

Pull-out classes include Financial Literacy, History, Language Arts, Mathematics, Physical Education/Health and Science. Requests must be made by a Guidance Counselor or Child Study Team Member. Pull-out course offerings vary by center.

CO-CURRICULAR ACTIVITIES

Students have the opportunity to demonstrate what they've learned by participating in co-curricular student organizations such as DECA (International Association of Marketing Students), HOSA (Health Occupations Students of America), FFA (Future Farmers of America) and SkillsUSA.

COLLEGE CREDIT

Articulation Agreements with The Art Institute of Philadelphia, The Culinary Institute of America, Mercer County Community College and other schools allow students to earn valuable college credit upon the successful completion of high school classes.

GRADUATION CREDIT

Mercer County Technical Schools is accredited by the State of New Jersey and Middle States Commission on Secondary Schools. Each shared-time program provides students with twenty high school credits per year. Upon successful completion of the program, each student receives a technical proficiency certificate. For those programs qualifying for board certification and/or a state license, testing is administered and certification and licenses are issued.

INDUSTRY PARTNERSHIPS

Mercer County Technical Schools continue to create industry partnerships resulting in numerous employment opportunities for our students. It is required that we establish at least one industry partnership with each program offered at Mercer County Technical Schools.

STRUCTURED LEARNING EXPERIENCE

(Formerly Cooperative Industrial Education)

This program is an experiential, supervised, educational opportunity designed to offer students the chance to fully explore career interests. SLE's are integrated into the curriculum and provide students with opportunities to develop and apply a high level of academic attainment and to develop career and personal/social goals.

Qualified students with approved employment are placed on a job (paid or unpaid) by the SLE Coordinator. In addition to being paid by the employer, the student continues to earn credits toward graduation. A qualified student is one who has exhibited by his/her performance, effort, attitude and attendance that he/she will represent the school well. Linkages to apprenticeships are arranged in occupational areas where applicable. Although we make every effort to notify students of applicable employment opportunities, students are responsible for securing their employment prior to being eligible to participate in SLE.

TRANSITIONS PROGRAM

The Transitions Program offers high school students an opportunity to participate in half-day career and technical education programs and academics at the Assunpink and Arthur R. Sypek Centers on a full-time basis. Eliminating the midday transport allows students to maximize the school day without missing valuable instructional time. The Mercer County Technical School District provides students with educational opportunities in business and industry while emphasizing a culture of personal attention that focuses on the individual learner. Our mission is to develop Mercer County's most valuable resource— its children; as we prepare them for the high-skill, high-demand, high-wage careers.

TRANSPORTATION

Home school districts provide transportation for students who attend Mercer County Technical Schools.

SHARED-TIME PROGRAMS

ARCHITECTURAL/ENGINEERING DESIGN - Credits Earned

ASSUNPINK CENTER

This program prepares individuals to apply basic engineering principles and technical skills in support of engineers engaged in a wide variety of projects. It includes instruction in various pre-engineering support functions for research, production and operations as well as applications to specific engineering specialties. This program is affiliated with *Project Lead the Way*.

AUTOMOTIVE COLLISION TECHNOLOGY

ARTHUR R. SYPEK CENTER

This program prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders and external features. Includes instruction in structure analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques and damage analysis and estimating.

AUTOMOTIVE TECHNOLOGY - Credits Earned

ARTHUR R. SYPEK CENTER & HOPEWELL VALLEY REGIONAL HIGH SCHOOL

This program prepares individuals to apply technical knowledge and skills to repair, service and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains and heating and air conditioning systems. (*) *Hopewell students attend during the afternoon session.*

AUTOMOTIVE TECHNOLOGY FUNDAMENTALS

ARTHUR R. SYPEK CENTER

This program prepares individuals to apply technical knowledge and skills in the adjustment, maintenance, part replacement and repair of vehicles and mobile equipment.

BAKING AND DINING SERVICES - Credits Earned

ARTHUR R. SYPEK CENTER

This program focuses on the general study of baking and related culinary arts and prepares individuals for a variety of jobs within the food service industry including front-of-the-house operations. It includes instruction in food preparation, cooking techniques, equipment operation and maintenance, sanitation and safety, communication skills, applicable regulations, and principles of food service management.

BUILDING MAINTENANCE TRADES

ARTHUR R. SYPEK CENTER

This program prepares individuals to apply technical knowledge and skills to keep a building functioning and to service a variety of structures including residential and industrial buildings. The program includes instruction in the basic maintenance and repair skills required to service building systems, such as masonry, carpentry, plumbing, electrical and other mechanical systems.

BUSINESS TECHNOLOGY - Credits Earned

ASSUNPINK CENTER

This program prepares individuals to provide basic administrative support under the supervision of office managers, administrative assistants, secretaries and other office personnel. It includes instruction in typing, keyboarding, filing, general business correspondence, office equipment operation, and communications skills.

CARPENTRY

ASSUNPINK CENTER

This program prepares individuals to apply technical knowledge and skills to lay out, cut, fabricate, erect, install and repair wooden structures and fixtures using hand and power tools. The program includes instruction in technical mathematics, framing, construction materials and selection, job estimating, blueprint reading, foundations and roughing-in, finish carpentry techniques and applicable codes and standards.

COSMETOLOGY

ARTHUR R. SYPEK CENTER

This program prepares individuals to cut, trim, and style scalp, facial, and body hair; apply cosmetic preparations; perform manicures and pedicures; massage the head and extremities; and prepare for practice as licensed cosmetologists in specialized or full-service salons. The program includes instruction in hair cutting and styling, manicuring, pedicuring, facial treatments, shampooing, chemical applications, aesthetics, shop management, sanitation and safety, customer service, and applicable professional and labor laws and regulations. Preparation for the New Jersey licensing examination is provided. Licensing requirements include: high school diploma or equivalent, 1,000 consecutive hours of cosmetology instruction, successful completion of an accredited cosmetology program and a passing score on the required state licensing examination. *NOTE: All students are required to purchase their own kit for \$450.*

CRIMINALISTICS & CRIMINAL SCIENCE - Credits Earned

ARTHUR R. SYPEK CENTER

This program focuses on the application of clinical and criminal laboratory science, investigative techniques, and criminology to the reconstruction of crimes and the analysis of physical evidence. Includes instruction in laboratory science, laboratory procedures, criminology and police science, evidentiary testing and analysis, computer applications, record-keeping, reconstruction techniques, evidence handling and storage, and applications to specific types of evidence and crimes.

CULINARY ARTS - Credits Earned

ARTHUR R. SYPEK CENTER

This program prepares individuals to provide professional chef and related cooking services in restaurants and other commercial food establishments. Includes instruction in recipe and menu planning, preparing and cooking of foods, supervising and training kitchen assistants, the management of food supplies and kitchen resources, aesthetics of food presentation, and familiarity or mastery of a wide variety of cuisines and culinary techniques. (*) *First year students attend during the afternoon session.*

DIESEL TECHNOLOGY - Credits Earned

ASSUNPINK CENTER

This program prepares individuals to apply technical knowledge and skills to repair, service and maintain diesel engines in vehicles such as automobiles, buses, ships, trucks, railroad locomotives, and construction equipment; as well as stationary diesel engines in electrical generators and related equipment.

ELECTRICAL CONSTRUCTION

ASSUNPINK CENTER

This program prepares individuals with technical knowledge and skills to install, operate, maintain and repair electrical apparatus and systems such as residential, commercial and industrial electric-power wiring; and DC and AC motors, controls and electric distribution panels. The program includes instruction in the principles of electronics and electrical systems, wiring, power transmission, safety, industrial and household appliances, job estimation, electrical testing and inspection, and applicable codes and standards.

GRAPHIC ARTS TECHNOLOGY - Credits Earned

ARTHUR R. SYPEK CENTER

This program prepares individuals to apply artistic and computer techniques to the interpretation of technical and commercial concepts. Includes instruction in computer-assisted art and design, printmaking, concepts sketching, technical drawing, color theory, imaging, studio technique, still and life modeling, multimedia applications, communication skills and commercial art business operations.

HEALTH OCCUPATIONS (1-year AM)

ASSUNPINK CENTER

This one-year program prepares individuals for entry into specialized training programs or for a variety of concentrations in the allied health area. The program includes instruction in the basic sciences, research and clinical procedures and aspects of the subject matter related to various health occupations.

HEATING, VENTILATION, AIR CONDITIONING & REFRIGERATION TECHNOLOGY (HVACR) Credits Earned

ASSUNPINK CENTER

This program prepares individuals to apply basic technical skills in support of engineers and other professionals engaged in developing and using air conditioning, refrigeration and heating systems. The program includes instruction in principles of heating and cooling technology, design and operational testing, inspection and maintenance procedures, installation and operation procedures and report preparation.

HORTICULTURE AND TURF CARE MANAGEMENT - Credits Earned

ARTHUR R. SYPEK CENTER

This program prepares individuals to manage and maintain indoor and/or outdoor ornamental and recreational plants and ground covers as well as related conceptual designs established by landscape architects, interior designers, enterprise owners or managers and individual clients. It includes instruction in applicable principles of horticulture, gardening, plant and soil irrigation and nutrition, turf maintenance, plant maintenance, equipment operation and maintenance, personnel supervision and purchasing.

MEDICAL ASSISTANT (1-year PM)

ASSUNPINK CENTER

This one-year program is designed to prepare individuals for a career as multi-skilled health care workers in a variety of health care settings. Medical Assistants complete administrative and clinical tasks in the offices of physicians, podiatrists, chiropractors, and other health practitioners. Duties vary with the location, specialty, and size of the practice. This program prepares students for a high-skill, high-demand occupation with much faster than average growth.

PRE-NURSING - Credits Earned

ASSUNPINK CENTER

This course provides an introduction to the profession of nursing. During the first year of the program, students will study body structure and function (anatomy and physiology) in depth. These teachings will be enhanced using laboratory exercises and hands-on demonstrations. Additionally, students will learn the history of medicine, communication skills, legal and ethical issues of the healthcare worker, as well as cultural diversity as it applies in healthcare. Students will have the opportunity of obtaining various certifications that are necessary to function effectively in nursing, such as CPR (Cardiopulmonary Resuscitation) and First Aid. During the second year of the program, students will take the "Fundamental of Nursing" course that articulates with the Post-Secondary Licensed Practical Nursing program. Students will learn the basic overall concepts and skills that apply to the nursing field, including the importance of other health related disciplines and their direct relationship to nursing. While learning the basic core information, students will further explore the nursing field through informed job shadowing or work based experiences that will be coordinated with local sites, as well as a variety of healthcare facilities in the county.

INDUSTRY CERTIFICATIONS

Auto CAD

Architectural/Engineering Design

Automated External Defibrillator (AED), American Heart Association

Health Occupations
Pre-Nursing
Medical Assistant

Cardiopulmonary Resuscitation (CPR), American Heart Association

Health Occupations
Health Science Academy
Pre-Nursing
Medical Assistant

Microsoft Office Specialist

Business Technology

National Automotive Technicians Education Foundation (NATEF) Certified Programs

Automotive Technology
Automotive Technology Fundamentals
Automotive Collision Technology

New Jersey Board of Cosmetology and Hairstyling License

Cosmetology

Occupational Safety Health

Administration (OSHA) 10-hour Course

Building Maintenance Trades
Automotive Technology
Automotive Technology Fundamentals
Automotive Collision Technology
Carpentry
Diesel Technology
Electrical Construction
Graphic Arts Technology
Heating, Ventilation, Air Conditioning and
Refrigeration Technology
Horticulture and Turf Care Management

PrintEd, Graphic Arts Education and Research Foundation (GAERF)

Graphic Arts Technology

REVIT Architecture

Architectural/Engineering Design

ServSafe

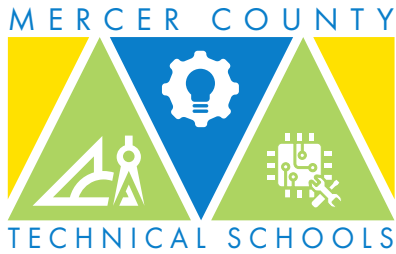
Baking and Dining Services
Culinary Arts
Culinary and Pastry Arts

Universal Certification in Refrigerant Handling

Heating, Ventilation, Air Conditioning and
Refrigeration Technology

The certifications listed above may be earned upon successful completion of the respective program.

FULL-TIME ACADEMIES



Academy of Culinary Arts

Arthur R. Sypek Center

In September 2016, the Mercer County Technical School District launched a full-time, 4 year Academy of Culinary Arts at the Arthur R. Sypek Center. The Academy of Culinary Arts provides Mercer County high school students with an academically challenging and rigorous curriculum. Students work toward the completion of Mercer County Community College credits and industry credentials while in high school. In addition, student learning is enhanced through key business partnerships allowing for multiple workplace readiness and experiential learning opportunities.

OCCUPATIONAL OUTLOOK

A Spring 2015 report indicates Food Service jobs are projected to continue creating the greatest number of new jobs (26,300) in the Retail, Hospitality and Tourism sector from 2012 to 2022. This indicates a faster than average growth.

RELATED CAREERS

Private chef, restaurant owner, restaurant manager and hospitality manager.

QUALITIES FOR SUCCESS

Business skills, communication skills, creativity, dexterity, leadership skills, physical stamina, sense of taste and smell, and time-management skills.

SKILLS /KNOWLEDGE

- Determining food presentation and creating displays
- Planning menus and banquet events
- Monitoring kitchen safety and food sanitation

Source: www.bls.gov

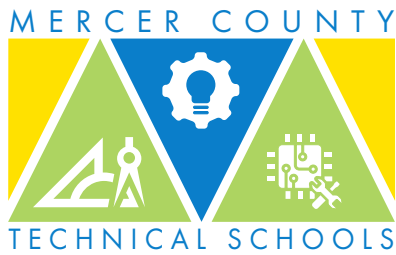
Mercer County Technical Schools
Arthur R. Sypek Center
129 Bull Run Road
Pennington, NJ 08534
609•438•0109



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FULL-TIME ACADEMIES



Health Science Academy

Assunpink Center

The Health Science Academy is a full-time, 4-year program offered by the Mercer County Technical School District. The Health Science Academy offers self-motivated students a comprehensive preparation for careers in the health, medical and biological sciences. Students work and study in a creative environment enhanced by contact with specialists in the health care fields. Personal and career counseling coupled with field experiences prepares each student for college and careers. The Health Science Academy is affiliated with colleges, universities, private practitioners and medical and research facilities in order to enhance a rigorous curriculum.

OCCUPATIONAL OUTLOOK

Employment of health care occupations is projected to grow 19% between 2014 and 2024.

RELATED CAREERS

Acute and Critical Care Nurse, Dentist, Laboratory Scientist, Medical Doctor, Pharmacist, Physical Therapist, Radiologist, Registered Nurse and LPN, Veterinarian.

SKILLS/KNOWLEDGE

Critical-thinking skills, communication skills, compassion, detail oriented, emotional stability, organizational skills, physical stamina.

SKILLS /KNOWLEDGE

- Record patients' medical histories and symptoms
- Administer patients' medicines and treatments
- Set up plans for patients' care or contribute to existing plans
- Observe patients and record the observations
- Consult and collaborate with doctors and other healthcare professionals
- Operate and monitor medical equipment
- Teach patients and their families how to manage illnesses or injuries

Source: www.bls.gov

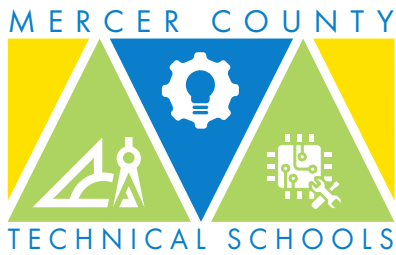


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Assunpink Center
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FULL-TIME ACADEMIES



STEM Academy

Arthur R. Sypek Center

In September 2015, the Mercer County Technical School District launched a full-time, 4-year STEM Academy. The STEM Academy will deliver academically challenging and rigorous curriculum including Project Lead The Way, an activity-, project-, and problem-based curriculum. Students will work toward the completion of college credit and industry credentials while in high school. Student learning will be enhanced through key business partnerships allowing for multiple workplace readiness and experiential learning opportunities. In this specialized learning environment, students will apply what they know, identify problems, find unique solutions, and lead their own learning.

OCCUPATIONAL OUTLOOK

Employment in occupations related to STEM—science, technology, engineering, and mathematics—is projected to grow to more than 9 million between 2012 and 2022.

RELATED CAREERS

Architectural and engineering managers, atmospheric and space scientists, computer occupations and machinists.

SKILLS/KNOWLEDGE

Decision making skills, leadership skills, math skills, organizational skills, problem-solving skills, speaking skills, writing skills.

SKILLS /KNOWLEDGE

- Produce designs and drawings using computer drafting programs
- Use numerical, spatial, and logistics to solve problems
- Work with robotics, coding, computer and electronic systems


Source: www.bls.gov

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Arthur R. Sypek Center
129 Bull Run Road
Pennington, NJ 08534
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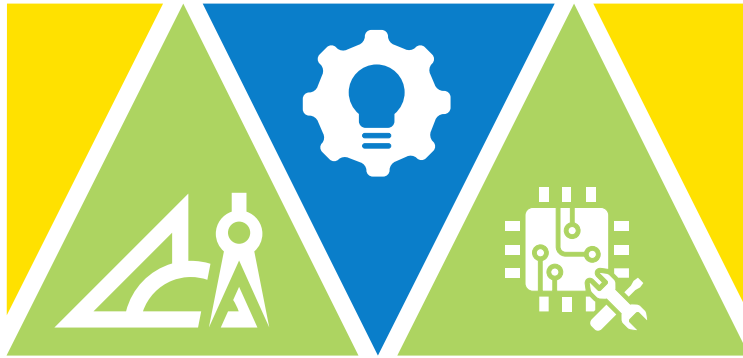
Arthur R. Sypek Center
129 Bull Run Road
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Assunpink Center
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Health Careers Center
1070 Klockner Road
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MERCER COUNTY



TECHNICAL SCHOOLS

ADMISSIONS

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Commissions on Elementary
and Secondary Schools**

MERCER COUNTY



TECHNICAL SCHOOLS

**THE MCTS
EXPERIENCE**

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