Academics at
William D. Ford Career Technical Center

Successful completion of a one-year program will earn three elective credits. All Career-Tech programs may meet the follwing requirements for graduation for Wayne-Westland students:

- Algebra II
- Embedded Algebra II Credit (specific programs)
- Senior Year Math-Related Credit
- VPAA (Visual, Performing, or Applied Arts) Credit
- World Language Cedit
- Science Credit

See your school counselor for more information

High School Schedule

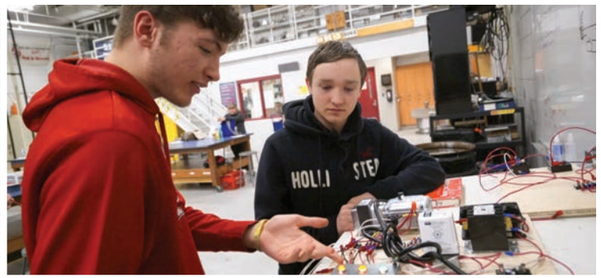
AM Shift: M-F 7:25-10:05AM
PM Shift: M-F 11:10AM-1:50PM

Benefits

- Choose from 21 different training programs
- Train in modern, well-equipped labs and classrooms
- Train on equipment relevant to current industry needs
- Potential work-based learning placement
- Learn from industry experienced instructors

Upon Completion

- Competency Printout
- Job Placement Assistance
- Opportunity for College Articulation Credit
- Opportunity for Industry-Recognized Certification


Wayne-Westland
COMMUNITY SCHOOLS

WILLIAM D. FORD CAREER-TECHNICAL CENTER

CAREER•TECH

of

WAYNE WESTLAND COMMUNITY SCHOOLS

Your Career Starts Here...





WILLIAM D. FORD CAREER-TECHNICAL CENTER
CAREER•TECH

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wwcsd.net

ARTS AND COMMUNICATION • TECHNOLOGY • ENGINEERING/MANUFACTURING • HEALTH SCIENCES • HUMAN SERVICES • SKILLED TRADES

Welcome to

CAREER-TECH

Your Career Starts Here...

3D VISUALIZATION AND IT

In this course, students will develop foundational skills in 3D visualization, focusing on core concepts such as geometry, lighting, textures, and rendering. Through guided instruction and hands-on practice, students will learn to create 3D models and visualizations using industry-standard tools. They will explore techniques for achieving realism and interactivity, including manipulating materials, adjusting lighting, and refining surface details. By completing multiple projects centered around 3D design and visualization, students will gain practical experience in modeling, rendering, and project-based learning, culminating in a portfolio showcasing their work.

ARCHITECTURAL & ENGINEERING DESIGN

Students will use Computer Aided Drafting and Design (CAD) software to plan, prepare, and interpret architectural and mechanical sketches. Students will apply learned skills and knowledge to construct drawings that support manufacturing, construction, robotics, and 3D printing. Advanced students will develop a portfolio to support attainment of employment as a designer.

AUTOMOTIVE COLLISION REPAIR

Students will repair, restore, and refinish vehicles to original condition using the grinders, polishers, air sanders, sheet metal pullers, and advanced painting equipment used by industry professionals. Advanced students will learn the principles of frame and unibody straightening and have opportunities to create custom modifications.

AUTOMOTIVE TECHNOLOGY

Students will have the opportunity to learn through hands-on, high quality instruction working alongside Automotive Service Excellence (ASE) technicians. This full-service, interactive automotive lab prepares students in shop practices, customer service, tool use, safety, diagnostic testing, and repair strategies. Theory and practice are combined to support students in performing basic service in engine repair, engine performance, electrical systems, suspension and steering, brake systems, and heating and air-conditioning.

CONSTRUCTION TECHNOLOGY

Students will gain skills to work in all areas of the construction field, including carpentry, interior/exterior finishing, electrical, plumbing, masonry, home repair, and building and grounds maintenance. Additionally, they will learn to read and follow blueprints and estimate materials and labor costs. Students will collaborate with the City of Westland to build a residential home in our community.

CULINARY ARTS

Students cook alongside professional chefs to create gourmet cuisine and decadent menus. Direct instruction is provided in food preparation and cooking, menu design, staffing and scheduling, and financial management. Students also explore the fundamentals of the hospitality and tourism industries and use industry tools, equipment, and technology to lead the operation of a restaurant and catering enterprise.

CYBER SECURITY AND ETHICAL HACKING

Students are introduced to basic computer and technology security principles involving networks and operating systems. Learning will be focused on identifying system threats and eliminating these weaknesses. Students will gain an understanding of the principles of risk management, security architecture, and disaster recovery by practicing cyber-security response measures within simulated hacking environments.

DIGITAL ART & DESIGN

Students will prepare for careers that use visual communication to present ideas and information. Students will learn graphic communication, graphic design, digital illustration, industry-specific tools, and the Adobe Creative Suite to create digital works and digital/analog products. All students will focus on creating a portfolio to showcase their work for use in securing employment and/or applying for college. This class has a strong emphasis on creative troubleshooting and originality. Desktop computers are used daily in the classroom.

DIGITAL PHOTOGRAPHY & MEDIA

Students gain practical knowledge of digital photography to support preparing for careers in the multiple pathways that communicate ideas and information to the public. Students will be introduced to a variety of digital media used in fine art and commercial photography, social media marketing, and website implementation. Portfolios will be compiled to support students in the transition to career and college.

EMERGENCY MEDICAL TECHNICIAN (EMT)

Students will explore careers in emergency medicine and prepare to become an emergency medical service provider. They will learn to think fast and to adapt to ever-changing environments. Students will explore and practice the basics of pre-hospital care, including oxygen management, bleeding control, and c-spine immobilization, preparing them to complete a minimum of 24 clinical hours in an ambulance and 12 clinical hours in an emergency room.

FILM & TV MEDIA

Students will investigate careers in mass media, with an emphasis on film production and broadcast journalism. Students will gain experience in pre-production, production, and post-production, using professional audio and video equipment to create both live action films and interactive multimedia animations. Students will gain additional skills in script writing, creative direction, storyboarding, location scouting, and acting. Advanced students will work on client projects and begin to build a professional portfolio.

FIREFIGHTING

Students will learn the basics of safety, fire prevention and public education, fire control, and rescue and extrication. Students will use industry specific equipment, such as fire trucks, hoses, protective clothing, fire service hand tools, and The Jaws of Life to put theory into practice as they learn the skills necessary to begin a career with a fire department. Students are exposed to a Chain of Command style of instruction where they are taught to follow orders, work as a team, and practice routine skills on a daily basis. Students take biweekly field trips to Wayne County Community College District's Michigan Institute for Public Safety Education to complete practicum hours required for certification. This state-of-the-art, 10-acre, $6 million facility houses a 5-story fire tower, a 12,000 square-foot training center, a 50,000 square-foot driving training area, and a man-made lake for water rescue simulations.

FUTURE EDUCATORS

Students get a start in teaching by exploring the growth and development of children, lesson design and development, behavior management, exceptional learners, and diversity. This lab style classroom, which supports Sunshine and Rainbows Preschool, provides students with hands-on teaching experiences that develop their leadership, communication, collaboration, creativity, and critical thinking skills. Practicum hours support students in transferring their skills to traditional K-8 classrooms, early childhood centers, and community based education programs.

GAME DESIGN & PROGRAMMING

In this course, students will develop foundational skills in programming logic using Python, focusing on core concepts such as variables, loops, conditionals, and functions. Through guided instruction and hands-on practice, students will apply their knowledge to solve problems and build software. The course also introduces 2D game design using the Godot engine, where students will explore game mechanics, object-oriented programming, and user interaction. By completing multiple projects centered around software development and design, students will gain practical experience in coding, debugging, and project-based learning, culminating in a portfolio of their work.

HEATING, AIR CONDITIONING & REFRIGERATION (HVAC)

Students will learn to diagnose, maintain, install, and repair residential and commercial heating and air conditioning systems. Students will learn safety, basic electricity, electronics, refrigeration, and ventilation. Students will use industry tools to design, wire, and fabricate sheet metal ductwork.

HEALTH OCCUPATIONS

Students learn basic anatomy and physiology, adult patient care, first aid, CPR, medical terminology, medical math, and the theory of nursing care. Clinical practicum hours provide students the opportunity to provide quality care alongside experts in the field and develop professional relationships with nursing home residents. Types of skills include feeding, bathing, toileting, and assistance with daily living activities.

LAW AND PUBLIC SAFETY

Students will learn the basics of The Michigan Compiled Law, legal services, law enforcement, dispatch,and emergency management. Students will perform the duties of police and public security officers in simulated learning sessions. Students will use industry specific equipment, such as police cars, protective clothing, communication devices, and public safety hand tools to put theory into practice as they learn the skills necessary to begin a career with a public safety department. Simulations will include patrol, investigation, traffic and crowd control, public relations, witness interviewing, evidence collection and management, and court procedures. Advanced students will explore crime prevention, risk assessments, and dignitary protection. Students are exposed to a Chain of Command style of instruction where they are taught to follow orders, work as a team, and practice routine skills on a daily basis.

MEDICAL ASSISTING

Students will gain clinical and administrative skills necessary for employment in an outpatient medical facility. Students will learn anatomy and physiology and medical terminology. Students will practice clinical skills including vital signs, height and weight, injections, phlebotomy, electrocardiograms, medication administration, vision screening, and basic laboratory procedures. Students will perform basic administrative tasks including patient insurance billing and coding, appointment scheduling, and medical office management. Clinical practicum hours will provide students the opportunity to provide quality care alongside experts in healthcare.

ROBOTICS, MANUFACTURING, AND ENGINEERING

Students will use high-tech engineering technologies to invent, design, and build solutions that meet the needs of a technologically advancing world. Students will learn core foundational skills for engineering design processes, electronics, additive and subtractive manufacturing, quality, and CAD/CAM. Students will program and operate VEX robots and will create electronic and hydraulic/pneumatic products from engineering blueprints and specifications.

SPORTS MEDICINE & EXERCISE SCIENCE

Students will explore the science of human health by designing a systematic approach learning body structures, their functions and the concept of therapeutic intervention of athletic injuries and increasing human performance in sports. Students will also learn various aspects of fitness training including resistance training, body composition and nutrition, flexibility, agility, and more. Students will be able to design, implement, modify, track and update fitness training programs based on individual needs.

WELDING TECHNOLOGY

Students will learn to use electricity and fire to design, join, dismantle, and fabricate a wide range of materials using different welding processes. Students will use advanced equipment and techniques to join, cut, bend, and manipulate metals including carbon steel, stainless steel, and aluminum. Students will also be exposed to common industrial safety practices and learn to take measurements, read blueprints, and fit together weldments to support their application of gas metal arc welding, shielded metal arc welding, flux cored arc welding, and gas tungsten arc welding processes.