## CAREER PATHWAYS

## **Course Guide**



## Pontiac High School 2023-2024





# A MESSAGE FROM THE SUPERINTENDENT



Greetings Pontiac School District Students and Families,

We're so excited to offer you our current course selections for our Career Pathways programs!

Our Career Technical Education program is one of the most comprehensive available in our region.

We have been honored by the National Association of School Boards for our innovation and success in this arena, and we are proud of the exceptional achievements of our students in these programs throughout their time in the district and following graduation.

Our pathways students can gain real world experience working in some of the leading companies within their chosen fields. Many of them graduate with job opportunities already in place, and all complete their high school education with a better understanding of the industries they are interested in pursuing.

We look forward to continuing this journey with you and further expanding opportunities in these areas to serve our students!

Sincerely,

Pontiac School District Superintendant

# A MESSAGE FROM THE DISTRICT CTE ADMINISTRATOR

Greetings, Pontiac School District Students and Families,

As the District Administrator for the Career and Technical Education Programs for the Pontiac School District, I am pleased to present to you our updated course guide for all CTE Programs and Courses at Pontiac High School.

As a product of, and also having been a classroom teacher in Family and Consumer Sciences (FACS) Education and the Family, Career, and Community Leaders of America (FCCLA), the Career and Technical Student Organization (CTSO) within ARN AWE AND ARN EOROLOGIST RN HER

Family and Consumer Sciences, one of the branches of Career and Technical Education, I know firsthand how important CTE Education is for all students, no matter what branch or pathway your student chooses to go into.

Pontiac High School has some well established Career and Technical Education Programs including Engineering & Manufacturing, Business and Finance and JROTC just to name a few, but I am proud to announce the expansion of our department to include new pathways including our Education & Human Services (Teacher Cadet) Pathway & our partnership with Oakland University, and our Emergency Services/Public Safety Pathway and our partnership with Oakland Community College, both of which will be Dual Enrollment Programs.

Our goal in the CTE Program at Pontiac High School is to set our students up for whatever they choose to do after graduation, including college courses/degree programs or into the workforce with industry recognized credentials to set them up for success.

I look forward to continuing to grow our CTE program throughout the district to give our students as many opportunities as they can for whatever they choose to pursue after graduation.

Sincerely,

Bryan Schuerman, M.A., M.Ed Pontiac School District CTE Administrator



## STARS SHINE BRIGHTEST

in Pontiac!



### **Pontiac School District Career Pathways & Dual Enrollment**

Pontiac School District is leading the charge in preparing our students for incredible careers after graduation!

Our Career Pathways programs provide students with real-world opportunities to gain experiences in some of the most sought out industries, working at Fortune 50 companies, and the keys for success in anything they do. We work directly with NAF.

SME Prime, General Motors, St. Joseph Mercy Hospital, Oakland

University, and many more world-class organizations to bring the best of the best to our students.

Additionally, college-bound students can get a further head start through our Dual Enrollment program. Our students graduate from the district prepared, ready, and experienced in their chosen field.

### **CURRENT PATHWAYS INCLUDE**

Education Foundations/Human Services Hospitality
Emergency Services/Public Safety Information
Manufacturing and Engineering Biomedical
Certified Nursing Assistant (CNA) Business an

Hospitality
Information Technology
Biomedical
Business and Finance
Patient Care Technician (PCT)



Learn more about which pathway is right for your student at:

http://pontiacschools.org







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## **BUSINESS & FINANCE**

### CAREER HIGHLIGHTS

**Career Examples:** 

Entrepreneur Owner Investor Accountant Banker

**Median Annual Wage** 

\$69K

New Jobs by 2029

476K

By 2029, 476,000 people are needed with these skills.



## **PATHWAY DESCRIPTION**

The Business & Finance Pathway connects high school students with the world of financial services, offering a curriculum that covers entrepreneurship, banking and credit, financial planning, international finance, securities, insurance, accounting, and economics, among other topics.

The Business & Finance curriculum is vetted by partners in the financial services and business sectors and emphasizes literacy and project-based learning to engage students. Students begin with Business Communication and Technology to gain a broad understanding of the core concepts needed in this field. Teachers also have access to NFTE's entrepreneurship curriculum and Virtual Enterprises International (VEI). Graduates benefit from learning the critical concepts of business management, accounting, and ethics. NAF students will have completed at least four NAF courses by graduation

## 9TH GRADE

# BUSINESS & FINANCE CURRICULUM

## FINANCE EXPEDITIONS

### **GRADE 9**

Finance Expeditions is a series of authentic project learning experiences that energizes learners to identify passion projects and inspires them to imagine innovative solutions to real-world issues in partnership with career experts. Learners engage in self-reflection, research, and investigation with finance competencies, and Future Ready Passports guide them through deep dives into cryptocurrencies and blockchain (with more topics to come).

### CAREER SKILLS & TECHNOLOGY I

### **GRADE 9**

In this course, students will be introduced to careers and the use of technological resources as they apply to school, business, and industry. Students will develop basic skills in Microsoft Office. Integrated throughout the course are activities related to employability skills, communication/writing skills, and proofreading. Multiple opportunities to enhance their Educational Development Plan (EDP) will be provided. Other topics include internet research and exploring web-based resources. This course is part of the Business, Management, Marketing, and Technology Pathway.

### PRINCIPLES OF FINANCE

### **GRADE 9**

Principles of Finance gives learners a thorough introduction to finance concepts, tools, and institutions and serves as a foundation for the core courses offered by the Business & Finance Pathway. Principles of Finance begins with the basics of financial literacy and the function of finance in society. Learners study income and wealth, including budgeting, personal banking, credit and borrowing, and planning for retirement.

### PROFESSIONAL ETHICS

#### **GRADE 9**

Professional Ethics provides a solid understanding of why ethics is essential in every profession. After an introduction to several philosophies that inform ethics today, learners explore the characteristics of an ethical professional. They consider the range of dilemmas managers and employees face in the workplace and discover the qualities of influential leaders and the tools modern professionals use to instill an ethical workplace culture. Throughout the course, learners have opportunities to refine their personal sense of ethics as they begin to build an ethical foundation for their professional future.

## 10TH GRADE

# BUSINESS & FINANCE CURRICULUM

## APPLIED FINANCE \*

### **GRADE 10**

Finance Expeditions is a series of authentic project learning experiences that energizes learners to identify passion projects and inspires them to imagine innovative solutions to real-world issues in partnership with career experts. Learners engage in self-reflection, research, and investigation with finance competencies, and Future Ready Passports guide them through deep dives into cryptocurrencies and blockchain (with more topics to come).

## BUSINESS OF GLOBAL ECONOMY\*

### **GRADE 10**

Business in a Global Economy provides learners with an understanding of how and why businesses choose to expand their operations into other countries. This course exposes students to the unique challenges facing firms doing business internationally—and to the potential opportunities and markets that are lost to firms that choose not to do business in the global marketplace. Building on concepts introduced in Principles of Finance, Business in a Global Economy broadens learner understanding of how businesses operate and grow and thrive in our ever-changing world.

## FINANCE PLANNING \*

#### **GRADE 10**

This course provides students with an overview of the job of a financial planner. Students learn to consider how all aspects of financial planning might affect a potential client, and learn about the importance of financial planning in helping people reach their life goals. This course includes lessons on saving, borrowing, credit, and all types of insurance, and covers various types of investments. Students also examine careers in financial planning.

## ENTREPRENEURSHIP\*

#### **GRADE 10**

Entrepreneurship provides learners with an understanding of the critical role played by entrepreneurs in the national and global economy. Learners gain the skills necessary to become entrepreneurs and the attitudes, characteristics, and techniques that successful entrepreneurs have and that they will need to succeed. Building on concepts introduced in Principles of Finance, the Entrepreneurship course offers experiential learning by encouraging learners to evaluate, develop, and work with the business ideas they already have or those they conceive during the course.



# 1TH BUSINESS & FINANCE CURRICULUM

## FINANCE SERVICES\*

### **GRADE 11**

Financial Services gives learners an overview of banks and other financial services companies. The course introduces them to the origins of money and banking and then examines the early history of banking in the United States. Learners move into an in-depth study of the financial services industry and explore the types of companies that make up this industry. They learn about the services offered by such companies and analyze the ways these companies earn profits. This course covers the main concepts behind investing and discriminates among different ways to invest money. Learners examine contemporary issues, including the level of personal savings in the United States, ethics in the financial services industry, and the industry's effect on communities and families.

## BUSINESS ECONOMICS\*

### **GRADE 11**

NAF Track Certification with End of Course Exam: This legacy course delivers an introduction to the essential concepts of economics about a business regarding supply, demand, profit, costs, and markets. The course covers the differences between microeconomics from macroeconomics. Discussions about the American economy, the factors that influence the success of businesses and products, and the relationship between labor and business provide a broad overview of the global economy.

## WORK-BASED LEARNING (WBL)\*

### **GRADE 11 & 12**

Work-Based Learning is sustained and progressively intensive interactions with employers or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that fosters indepth, first-hand engagement with the tasks required of a given career field that are aligned to curriculum, instruction, and Career and Technical Education (CTE) Program standards.

# BUSINESS & FINANCE CURRICULUM

## WORK-BASED LEARNING (WBL)★

### **GRADE 11 & 12**

Work-Based Learning is sustained and progressively intensive interactions with employers or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that fosters in-depth, first-hand engagement with the tasks required of a given career field that are aligned to curriculum, instruction, and Career and Technical Education (CTE) Program standards.

### PRINCIPLES OF ACCOUNTING

### **GRADE 12**

Principles of Accounting provides learners with an understanding of the critical accounting process and facilitates decision-making by providing data and information to internal and external stakeholders. Learners find out that accounting is an integral part of all business activities. It plays an essential role in the everyday accountability of a business and highstakes decision-making and analysis. In addition, learners discover how to apply technology to accounting by creating formulas and inputting data into spreadsheets.

### MANAGERIAL ACCOUNTING

### **GRADE 12 | PREREQUISITE: PRINCIPLES OF ACCOUNTING**

Principles of Accounting provides learners with an understanding of the critical accounting process and facilitates decision-making by providing data and information to internal and external stakeholders. Learners find out that accounting is an integral part of all business activities. It plays an essential role in the everyday accountability of a business and highstakes decision-making and analysis. In addition, learners discover how to apply technology to accounting by creating formulas and inputting data into spreadsheets.

### BUSINESS LA'

### **GRADE 12**

This fundamentals course is designed to provide a comprehensive overview of the legal and social environment of business, contracts, sales, and lease of goods. This fundamentals course is designed to provide a comprehensive overview of the liability of the parties under negotiable instruments, debtor-creditor relationships, agency and employment, equal employment opportunity law, business organizations, and real property and estates.

## **BUSINESS & FINANCE** GENERAL CURRICULUM

## **CAREER SKILLS & TECHNOLOGY II**

### **GRADE 9-12 | PREREQUISITE: CAREER SKILLS & TECHNOLOGY |**

This is the second course, part of the BMMT pathway, and a continuation of Career Skills and Technology. Students will be introduced to business and finance. Topics include economics, international business, financial management, credit, and insurance. Students will learn how to use financial information, charts and graphs, and basic databases for business purposes.

## **BUSINESS SKILLS & TECHNOLOGY I**

### **GRADE 9-12 | PREREQUISITE: CAREER SKILLS & TECHNOLOGY**

This is the second course, part of the BMMT pathway, and a continuation of Career Skills and Technology. Students will be introduced to business and finance. Topics include economics, international business, financial management, credit, and insurance. Students will learn how to use financial information, charts and graphs, and basic databases for business purposes.

## **BUSINESS SKILLS & TECHNOLOGY II**

### **GRADE 9-12 | PREREQUISITE: BUSINESS SKILLS & TECHNOLOGY |**

Students will continue their study of the business world and advance their skills in presentation, leadership, teamwork and strategy.

Topics include entrepreneurship, human resources, production and business operations, business management and leadership, and business law. This is the third course and is part of the BMMT pathway.





## **HOSPITALITY & TOURISM**

### CAREER HIGHLIGHTS

**Career Examples:** 

Hotel or Restaurant Manager Travel Agent

**Median Annual Wage** 

\$57K

New Jobs by 2029

10.5M

By 2029, 10.500.000 people with these skills will be needed to fill all the jobs



## PATHWAY DESCRIPTION

The Hospitality & Tourism Pathway helps students chart career paths in one of the world's largest industries, from hotel and event management to sports and entertainment. The NAF Academy of Hospitality and Tourism was adopted by the Marriott Hotels, Inc to provide practical environmental experience for front desk reception.

## **HOSPITALITY & TOURISM** GRADE CURRICULUM

## PRINCIPLES OF HOSPITALITY & TOURISM

### **GRADE 9**

This is the first course students take in the Academy of Hospitality & Tourism and provides an overview of the current hospitality and tourism industry. Students take a brief look at the history of the industry to understand the degree to which it has changed in the past century. They learn about traveler motivation and consumer needs and how these factors affect current lodging, transportation, food and beverage, and entertainment offerings. Students consider the economic and environmental impacts of the industry on the world today. They receive exposure to a wide array of domestic and international travel. Finally, students learn the basics of selling and marketing in tourism.

### GEOGRAPHY FOR TOURISM

#### **GRADE 9**

This course introduces students to the importance of geography in the hospitality and tourism industry through the study of travel or "destination" geography. Students explore the world's geographic regions, focusing on factors that create desirable travel destinations: weather/climate, physical features, cultural elements, historical interest, and tourist attractions. Students study the ways that the tourism industry promotes destinations, and they learn about current trends in travel.

## OTH GRADE

### DELIVERING GREAT CUSTOMER SERVICE

### **GRADE 10**

This course introduces students to the concept of service as a critical component of a hospitality or tourism business. It combines current theory and practices with observations of customer service in action, role-play, and critical analysis of models. Topics include trends, the psychology of interactions between customers and providers, the phases of customer service, common mistakes, internal customer service, management, and customer feedback. Students begin to appreciate how the quality of customer service has wide-ranging implications for all professional endeavors.

### PITALITY MARKETING

### **GRADE 10**

Hospitality Marketing introduces students to the objectives, strategies, and tools that are important to marketing in the hospitality industry, expanding on topics introduced in Principles of Hospitality and Tourism. Students become familiar with each phase of marketing and with strategies to build business and brand equity for both large-scale operations (such as hotel chains) and smaller businesses (such as restaurants). They learn how to assess marketing niches, understand customer and consumer needs, and conduct basic market research. As students study the benefits and potential drawbacks of various marketing channels, they develop an integrated marketing campaign using various appropriate marketing channels.

# 11TH HOSPITALITY & TOURISM GRADE CURRICULUM

## SUSTAINABILITY TOURISM

### **GRADE 11 | PREREQUISITE: GEOGRAPHY FOR TOURISM**

This course introduces students to the profound changes taking place worldwide in the tourism industry. Students examine the environmental and socioeconomic impacts and interrelationships of tourism and the transition to a greener tourism economy. They explore the ramifications of tourism development in terms of increased sustainability, profitability, and benefits to the surrounding communities, and they examine ecotourism as a model for sustainability.

### **HOSPITALITY AND BUSINESS MANAGEMENT**

### **GRADE 11**

This course introduces students to the concepts of general management and leadership and to administration in the hospitality or tourism field. It looks at all aspects of operations.

## **EVENT PLANNING**

#### **GRADE 11**

Event Planning introduces the process of professional event planning for the full range of event possibilities: special events and business events, sports events, and entertainment/ performing arts events. Learners discover all aspects of event planning, including aligning events with the client's goals, sustainable event planning practices, facility selection and management, personnel management, audience management, budgeting, marketing, fundraising, and sponsorship. They also consider the role of events in the larger context of communities and society and realize how important events are to the health or revitalization of regions worldwide.

## WORK-BASED LEARNING (WBL)\*

### **GRADE 11 & 12**

Work-Based Learning is sustained and progressively intensive interactions with employers or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that fosters indepth, first-hand engagement with the tasks required of a given career field that are aligned to curriculum, instruction, and Career and Technical Education (CTE) Program standards.

## 12TH GRADE

# HOSPITALITY & TOURISM CURRICULUM

## **GRAPHIC DESIGN**

### **GRADE 12**

Graphic Design presents a hands-on introduction to a professional designer's technical and creative skills. First, learners find out the distinguishing features of communicating visually through graphic design. Next, they gain technical skills in Adobe Photoshop to equip them for graphic design work. From there, learners master the basic principles of graphic design and then delve into graphic design elements such as color, typography, and images.

### PROFESSIONAL ETHICS

### **GRADE 12**

Professional Ethics provides a solid understanding of why ethics is essential in every profession. After an introduction to several philosophies that inform ethics today, learners explore the characteristics of an ethical professional. They consider the range of dilemmas managers and employees face in the workplace and discover the qualities of influential leaders and the tools modern professionals use to instill an ethical workplace culture. Throughout the course, learners have opportunities to refine their personal sense of ethics as they begin to build an ethical foundation for their professional future.

### ENTREPRENEURSHIP

### **GRADE 12**

Entrepreneurship provides learners with an understanding of the critical role played by entrepreneurs in the national and global economy. Learners gain the skills necessary to become entrepreneurs and the attitudes, characteristics, and techniques that successful entrepreneurs have and that they will need to succeed. Building on concepts introduced in Principles of Finance, the Entrepreneurship course offers experiential learning by encouraging learners to evaluate, develop, and work with the business ideas they already have or those they conceive during the course.

## WORK-BASED LEARNING (WBL) \*

### **GRADE 11 & 12**

WBL is sustained and progressively intensive interactions with employers or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that fosters in-depth, first-hand engagement with the tasks required of a given career field that is aligned to curriculum, instruction, and Career and Technical Education (CTE) Program standards.

## **INFORMATION TECHNOLOGY**

### CAREER HIGHLIGHTS

### **Career Examples:**

Computer Programming Coder Gamer

Digital Video Production Graphic Design Web Design

**Median Annual Wage** 

\$88K

New Jobs by 2029

531K

By 2029, 531,000 new jobs will have been created



## **PATHWAY DESCRIPTION**

The Pontiac High School Information Technology
Pathway aims to provide students with the skills and
knowledge they need to be competitive in future
technological fields.

At Pontiac High School, we engage students by using Information Technology as a lens to analyze, approach, and solve everyday problems. Students learn how to think as professionals, demonstrate high levels of engagement, and enjoy learning.

The Pontiac High School Information Technology pathway is open to all students beginning in the 9th grade. It is a four-year program that will include a curriculum designed to prepare students for jobs in the IT field directly out of high school.

Upon graduation, students will have earned certifications and worked internships with local businesses to prepare them for immediate employment upon graduation.

## PRINCIPLES OF IT COMPUTER SYSTEMS

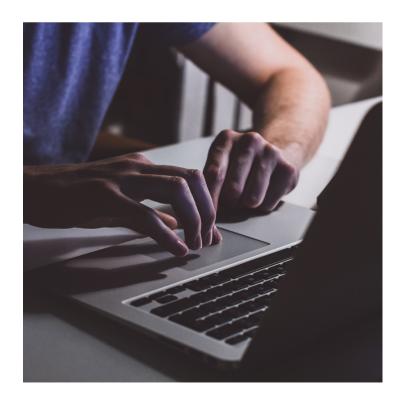
### **GRADE 9**

Computer Systems is a foundational course that guides learners through the intricacies of setting up hardware, installing software, connecting to a network and the Internet, and troubleshooting. The course covers servicing, upgrading, and maintaining processing components for memory, storage, input, and output. It also addresses protecting, maintaining, and upgrading software and provides troubleshooting techniques. Finally, learners research the current computer systems careers.

## COMPUTER SCIENCE PRINCIPLES\*

### **GRADE 9-12**

Designed for 9 - 12 grade students, CS Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. This year-long course can be taught as an introductory course and as an AP course - no prerequisites required for students or teachers new to computer science! CS Principles complements CS Discoveries with a deeper focus on concepts such as how the internet works and the societal impacts of computer science.



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## H INFORMATION TECHNOLOGY **CURRICULUM**

### INTRO TO COMPUTER SCIENCE PROGRAMMING

### **GRADE 10**

Introduction to Programming uses the Python programming language to introduce learners to basic programming skills, and they discover the principles of programming by comparing Python to other programming languages. The course begins with algorithms and lays a foundation for mastering variables, operators, and control structures. Learners use models to solve new problems using knowledge and techniques already learned quickly; after gaining this foundation, learners design programs and write functions. In addition, students learn program design, documentation, formal debugging, and testing.

### INTRO TO PROGRAMMING COMPUTER NETWORKING

### **GRADE 10**

Computer Networking provides a hands-on introduction to working with peer-topeer, client/server, and cloud networks. The course begins with a brief history of networks. It then guides learners through all phases of implementing and troubleshooting standard TCP/IP Ethernet networks using network hardware connected with CAT5/6 cable. It covers network components, cables, and connectors. Learners go through the OSI model, protocols, and topologies and the process of implementing and troubleshooting a LAN and discussing access issues for WANs. Learners get hands-on practice with cloud computing and find out how cloud computing is different from working on a local server network. Finally, they get a chance to discover what types of network-related careers exist today.

## **COMPUTER SCIENCE APPLICATION**

### **GRADE 10**

CSA focuses on integrating technologies across multiple platforms and networks, including the Internet. Students collaborate to produce programs that integrate mobile devices and leverage those devices for distributed collection and data processing. Students analyze, adapt, and improve each other's programs while working primarily in Java and other industry-standard tools. This course prepares students for the College

Board's Advanced Placement CS-A test and aligns with CSTA Level 3C Standards.

## 1TH INFORMATION TECHNOLOGY GRADE CURRICULUM

## **DATABASE DESIGN**

### **GRADE 11**

This course introduces students to the profound changes taking place worldwide in the tourism industry. Students examine the environmental and socioeconomic impacts and interrelationships of tourism and the transition to a greener tourism economy. They explore the ramifications of tourism development in terms of increased sustainability, profitability, and benefits to the surrounding communities, and they examine ecotourism as a model for sustainability.

## DIGITAL ELECTRONICS\*

### **GRADE 11**

Digital Video Production provides a hands-on introduction to digital video. It guides learners through all phases of digital video production, including pre-production and planning, executing and managing a video shoot, and editing and post-production techniques. Learners explore methods of sharing and broadcasting digital videos, including multiple-platform versions, external devices, and web delivery. They also learn about the latest methods for publicizing a digital video, such as using online search engines to direct viewers to the production. Finally, learners have a chance to discover the types of careers that exist in digital media today.

## GRAPHIC DESIGN

### **GRADE 11**

Graphic Design presents a hands-on introduction to a professional designer's technical and creative skills. First, learners find out the distinguishing features of communicating visually through graphic design. Next, they gain technical skills in Adobe Photoshop to equip them for graphic design work. From there, learners master the basic principles of graphic design and then delve into graphic design elements such as color, typography, and images.

## AP COMPUTER SCIENCE A \*

### **GRADE 11 | NAF | PREREQUISITE: COMPUTER SCIENCE PRINCIPLES**

Computer Science A (CSA) introduces students to software engineering and object-oriented design while learning the Java programming language. The Code.org CSA curriculum is recommended for any high school student who wants to continue their computer science education after completing an introductory course, such as CS Principles or CS Discoveries. Students expand their programming skills by developing solutions in the Java programming language, building on the knowledge they acquired from their previous introductory computer science course.

# INFORMATION TECHNOLOGY CURRICULUM

## CYBER SECURITY\*

### **GRADE 12**

Cybersecurity is a comprehensive year-long course geared towards educators teaching high school cybersecurity. With over a hundred and fifty lesson topics and many activities, the Cybersecurity course provides the rigor and relevance expected for top quality cybersecurity education. Not only does Cybersecurity introduce real-world Cyber Security concepts and skills, but it also prepares students to verify their technical know-how through the **CompTIA Security+ certification.** 

## WEB DESIGN\*

### **GRADE 12**

Web Design provides a hands-on introduction to designing, building, and launching websites. First, learners discover how the World Wide Web works, and they examine successful websites. Then, they learn HTML coding basics and create their web pages. Next, learners explore various web development tools and practice creating websites. They learn how to make their websites more effective by applying the principles of design and usability, and accessibility criteria. In the final unit, learners explore various web design careers that they might want to pursue.

## DIGITAL VIDEO PRODUCTION\*

### **GRADE 12**

Digital Video Production provides a hands-on introduction to digital video. It guides learners through all phases of digital video production, including pre-production and planning, executing and managing a video shoot, and editing and post-production techniques. Learners explore methods of sharing and broadcasting digital videos, including multiple-platform versions, external devices, and web delivery. They also learn about the latest methods for publicizing a digital video, such as using online search engines to direct viewers to the production. Finally, learners have a chance to discover the types of careers that exist in digital media today.

## ARTIFICIAL INTELIGENCE \*

### **GRADE 12**

The Introduction to Artificial Intelligence (AI) course teaches students important programming concepts that enable the use of AI in computer science and society at large. Students learn the implications of AI on society and develop a series of projects that illustrate the variety of ways AI can be used to optimize and predict information.

# GENERAL INFORMATION TECHNOLOGY CURRICULUM

## WORK-BASED LEARNING (WBL)\*

### **GRADE 11 & 12**

Work-Based Learning is sustained and progressively intensive interactions with employers or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that fosters in-depth, first-hand engagement with the tasks required of a given career field that are aligned to curriculum, instruction, and Career and Technical Education (CTE) Program standards.



# MANUFACTURING & ENGINEERING

### CAREER HIGHLIGHTS

**Career Examples:** 

CAD/CAM Industrial Maintenance

**Median Annual Wage** 

**\$81K** 

New Jobs by 2029

**74K** 

By 2029, 74,000 new jobs will have been created in this area



## **PATHWAY DESCRIPTION**

The goal of the Pontiac High School Manufacturing & Engineering Pathway is to provide students with the skills and knowledge they need to compete in future manufacturing fields.

In Pontiac High School's Manufacturing & Engineering Pathway, we engage students by using Manufacturing Engineering as a lens to analyze, approach, and solve everyday problems. Students learn how to think as professionals, and demonstrate high levels of engagement and the joy of learning.

The Pontiac High School Manufacturing & Engineering is open to all students beginning in the 9th grade. It is a four-year program that includes a curriculum designed to prepare students for jobs in the Manufacturing field directly out of high school.

Upon graduation, students will have earned certifications and worked internships with local businesses to prepare them for immediate employment upon graduation.

# CAD/ MANUFACTURING & CAM ENGINEERING CURRICULUM

### SME PRIME® PARTNERSHIP RESPONSE IN MANUFACTURING EDUCATION: CAD/CAM

The CAD/CAM Pathway program teaches students the fundamentals of drafting standards. Students will learn basic entry level drafting standards and skills required for that field. Students will gain experience using the software while designing real-world working models. Sketching, 2D/3D drawing, geometric tolerancing and dimensioning, multi-view drawing layout, and much more are taught on the computer. Students will also be introduced to common manufacturing processes and machine tools used within those processes, including the capabilities and limitations of each.

## INTRODUCTION TO MANUFACTURING ENGINEERING & CAD/CAM

### **GRADE 9**

This course introduces students to CAD and CAM systems and how they are used in manufacturing. This class will introduce important terminology and review the history of CAD's evolution in manufacturing. Finally, the course will discuss career opportunities found in the CAD/CAM field. The instructor may coordinate with local companies to schedule a CAD/CAM personnel to visit the class and talk about their day-to-day responsibilities and career development.

## OPERATIONS OF CAD/CAM

### **GRADE 9**

This course introduces the basic navigation and orientation for select CAD/CAM software products. Schools may have preferred software used for their program. To meet this requirement, the lessons are written to support instruction using a number of CAD/CAM software packages

### PRINT READING AND MEASUREMENT

### **GRADE 9 | PREREQUISITE: INTRO TO MANUFACTURING ENGINEERING**

The Introduction to Artificial Intelligence (AI) course teaches students important programming concepts that enable the use of AI in computer science and society at large. Students learn the implications of AI on society and develop a series of projects that illustrate the variety of ways AI can be used to optimize and predict information.

## INTRO TO MACHINE TOOLS & COMPONENTS TO CAD/CAD

### GRADE 10 | PREREQUISITE: BASIC COMPUTERS

As a CAD/CAM designer, one of the pathways for this career is to design parts for metal cutting processes. This course introduces students to metal cutting machines and general processes that turn, bore, thread, form, face, mill, plane, shape, groove, or profile metal materials to meet the required specifications. This course will cover theory and variables in metal cutting, and live equipment will be used to show the application of theory to sample parts.

# CAM

## CAD/ MANUFACTURING & **ENGINEERING CURRICULUM**

SME PRIME® PARTNERSHIP RESPONSE IN MANUFACTURING EDUCATION: CAD/CAM

## CAD/CAM APPLICATIONS

### **GRADE 11**

This course provides students with a working knowledge of how to create documentation needed in the workplace in accordance with standards and codes. Students will create technical drawings and present hard copy versions of the materials for instructor and peer review.

## CAD/CAM DESIGN AND DEVELOPMENT

### **GRADE 11**

This course allows students to draw and create geometry using select CAD/CAM software packages. Schools may have preferred software used for their program. To meet this requirement, the lessons are written to support instruction using a number of CAD/CAM software packages. This course is designed for non-complex objects like lines, circles, arcs, points, polygons, fillets, chamfers, and irregular curves.

### **GEOMETRIC DIMENSIONS & TOLERANCING**

### **GRADE 11**

The instructor will provide a basic introduction to the symbols and vocabulary of geometric dimensioning and tolerancing, or GD&T. The instructor will explain how GD&T uses tolerance zones that more accurately follow the shape of a feature rather than a square grid blueprints usually utilize and how it emphasizes the relationship between features to describe parts. The instructor should use examples of GD&T prints to review symbols and controls. These prints should be matched with finished parts and measured using inspection tools.

The instructor will allow students to fully dimension a working drawing using ANSI standards and add specific notes to the drawing for manufacturing features. The instructor will teach proper dimensioning and annotation using the CAD/CAM system, allowing students to apply these skills in a practical project. Students should be given specifications by the instructor to draw and fully annotate for production. The instructor will evaluate the practical projects, and the class will discuss best practices as a group.

## CAD/ CAM

## MANUFACTURING & ENGINEERING CURRICULUM

SME PRIME® PARTNERSHIP RESPONSE IN MANUFACTURING EDUCATION: CAD/CAM

### **EMPLOYABILITY CAD/CAM CAPSTONE PROJECT**

### **GRADE 12 | YEAR LONG**

This represents the capstone project a student will work on for that encompasses all knowledge and skills attained during the program. Instructors may choose to tie this work to external credentials, build community projects, or have CAD/CAM students work in cooperation with other pathway programs to design and manufacture projects. Instructors may want to have industry partners collaborate, judge, and/or evaluate student projects. The intent of this capstone project is to provide students with a portfolio piece that would impact hiring decisions by employers.

## **WORK-BASED LEARNING (WBL)**

### **GRADE 11 & 12**

Work-Based Learning is sustained and progressively intensive interactions with employers or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that fosters in-depth, first-hand engagement with the tasks required of a given career field that are aligned to curriculum, instruction, and Career and Technical Education (CTE) Program standards.

## AM

## MANUFACTURING & ENGINEERING CURRICULUM

## SME PRIME® PARTNERSHIP RESPONSE IN MANUFACTURING EDUCATION: ADDITIVE MANUFACTURING (AM) PATHWAY

This program teaches students the fundamentals of additive manufacturing careers within the manufacturing industry. Students will apply core product design and design skills within 3D printing technologies. Emphasis will be placed on the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. At a minimum, the Additive Manufacturing pathway aligns with the CTE Manufacturing Career Cluster Manufacturing Production Process Development Pathway, Michigan Academic Standards, and the Departments of Education's Classification of Instructional Programs (CIP).

# AM MANUFACTURING & ENGINEERING CURRICULUM

SME PRIME® PARTNERSHIP RESPONSE IN MANUFACTURING EDUCATION: AM

## CAD/CAM DESIGN AND DEVELOPMENT

### **GRADE 10**

This course allows students to draw and create geometry using select CAD/CAM software packages. Schools may have preferred software used for their program. To meet this requirement, the lessons are written to support instruction using a number of CAD/CAM software packages. This course is designed for non-complex objects like lines, circles, arcs, points, polygons, fillets, chamfers, and irregular curves.

### **GEOMETRIC DIMENSIONS & TOLERANCING**

### **GRADE 10**

The instructor will provide a basic introduction to the symbols and vocabulary of geometric dimensioning and tolerancing, or GD&T. The instructor will explain how GD&T uses tolerance zones that more accurately follow the shape of a feature rather than a square grid blueprints usually utilize and how it emphasizes the relationship between features to describe parts. The instructor should use examples of GD&T prints to review symbols and controls. These prints should be matched with finished parts and measured using inspection tools.

The instructor will allow students to fully dimension a working drawing using ANSI standards and add specific notes to the drawing for manufacturing features. The instructor will teach proper dimensioning and annotation using the CAD/CAM system, allowing students to apply these skills in a practical project. The instructor should give students specifications to draw and fully annotate for production. The instructor will evaluate the practical projects, and the class will discuss best practices as a group.



## AM MANUFACTURING & ENGINEERING CURRICULUM

SME PRIME® PARTNERSHIP RESPONSE IN MANUFACTURING EDUCATION: AM

### DESIGN FOR ADDITIVE MANUFACTURING \*

### **GRADE 11**

The instructor will provide a timeline of manufacturing over time, from its earliest days to exciting new technologies of today's manufacturing environment. In addition, the instructor will discuss career options and pathways available in manufacturing using entertaining but instructional videos. The purpose is to provide awareness surrounding the exciting technologies in manufacturing and to deliver the message that there are many long-term, well-paid careers in the industry. It is encouraged to use as many entertaining, engaging videos as possible to "edutain" the students and to get them excited about working in the industry.

### **EMPLOYABILITY CAD/CAM CAPSTONE PROJECT**

### **GRADE 12 | YEAR LONG**

This represents the capstone project a student will work on that encompasses all knowledge and skills attained during the program. Instructors may choose to tie this work to external credentials, build community projects, or have CAD/CAM students work in cooperation with other pathway programs to design and manufacture projects. Instructors may want to have industry partners collaborate, judge, and/or evaluate student projects. The intent of this capstone project is to provide students with a portfolio piece that would impact hiring decisions by employers. This course will prepare students for entering the workplace. Working in manufacturing requires employees to possess certain foundational skills. These include a strong academic grounding in reading and math and individual abilities such as teamwork, problem solving, work ethic, and integrity. This course will provide students with the abilities that will help them get and keep a job.

## **WORK-BASED LEARNING (WBL)**

### **GRADE 11 & 12**

Work-Based Learning is sustained and progressively intensive interactions with employers or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that fosters in-depth, first-hand engagement with the tasks required of a given career field that are aligned to curriculum, instruction, and Career and Technical Education (CTE) Program standards.

## **HEALTH SCIENCES**

### CAREER <u>HIGHL</u>IGHTS

**Career Examples:** 

Certified Nursing Assistant Patient Care Technician

Median Annual Wage

\$51K

New Jobs by 2029

193K

By 2030, 193,800 people will be needed to fill these positions



## PATHWAY DESCRIPTION

Students who have completed this program have been accepted to collegiate nursing programs and accepted positions at McLaren Hospital, St. Joseph Mercy Oakland, and other medical facilities.

The Pontiac School District has partnered with Covenant Academy to provide students with a unique learning opportunity. The Certified Nursing Assistant (CNA) program provides students with the entry-level knowledge and clinical skills necessary to enter the healthcare field as a Certified Nursing Assistant in hospitals, sub-acute, and rehabilitation care settings.

As vital healthcare team members, CNAs provide direct patient care such as, but not limited to, taking vital signs, specimen collection, and comfort measures.

This program provides excellent preparation for entry into any nursing program.







# HEALTH AND SCIENCES CURRICULUM

## **ANATOMY AND PHYSIOLOGY I**

This course provides the students, primarily in health-related programs, an in-depth understanding of the human body's anatomy, physiology, and medical terminology. Biological principles and the structural and functional relationships among several organ systems are discussed.

## ANATOMY AND PHYSIOLOGY II

### PREREQUISITE: ANATOMY AND PSYSIOLOGY I

This course is a continuation of Anatomy and Physiology I. This course provides students with an in-depth understanding of the structure, function and medical terminology of the remaining organ systems. Interrelationships among organ systems are emphasized.

## **CERTIFIED NURSE AIDE**

This course will introduce the theory and techniques involved with the role of the Nurse Aide. As a nurse aide, one will perform the tasks given to them by the nurse. Upon completion of the training program, the student will be able to perform the following practical patient care procedures with supervision in the following areas:



- VITAL SIGN MEASUREMENT
- ROM EXERCISES
- ADMIT, TRANSFER, AND PATIENT DISCHARGE
- APPLICATION OF HOT AND COLD TREATMENTS
- SPECIMEN COLLECTION
- CARE OF THE DYING PERSON
- POST-SURGERY PATIENTS
- CARE OF THE PATIENT WITH CHRONIC ILLNESSES
- SAFETY WITH TRANSFERRING AND AMBULATION

### EKG AND BLS FOR HEALTHCARE PROVIDER

This course teaches the student how to perform a 12-lead EKG (electrocardiography). Components of the 12-lead EKG, theory, interventions, arrhythmia recognition and clinical applications will be studied in the course. Students will learn the competencies of Basic Life Support (BLS) for healthcare providers and first-aid techniques. Successful completion leads to BLS-Healthcare Providers certification by the American Heart Association.

# HEALTH AND SCIENCES CURRICULUM

## PATIENT CARE TECHNICIAN I

Students learn the fundamental components of direct patient care and the application of techniques and procedures to provide care to patients. Topics include an introduction to patient care skills, basic therapeutic techniques, data collection and communication skills, legal and ethical aspects that affect the practice of patient care technicians, safety measures, and vital signs. Hands-on demonstration, practice, and validation of skills are conducted in the nursing skills laboratory.

## PATIENT CARE TECHNICIAN II

Students build on their patient care knowledge and skills in such areas as patient vital signs, support of the nursing care plan, fundamentals of basic nutrition, and care specific to different body systems. Hands-on demonstration, practice, and validation of skills are conducted in the nursing skills laboratory.

## PATIENT CARE TECHNICIAN CLINICAL

Students apply the knowledge and skills learned in Patient Care Technician I/II to the acute care environment with the supervision of a Michigan Licensed Registered Nurse.



## CNA & PCT

# HEALTH AND SCIENCES CURRICULUM

## PATIENT CARE TECHNICIAN [PCT] & CERTIFIED NURSING ASSISTANT [CNA]

### **GRADE 11 & 12**

This course will introduce the theoretical applications and techniques related to the role of the Patient Care Technician. It involves multi-skilled direct and indirect patient care responsibilities, including but not limited to diagnostic procedures such as 12- Lead electrocardiography, phlebotomy, and specimen collections. Emphasis will be placed on safety, documentation, standard precautions, legal and ethical considerations, and OSHA standards. There will also be a review of Nurse Assistant competencies. The application of course content will be reinforced in the supervised clinical setting. Graduates of this program are eligible to take the following certification exams: EKG Technician, Phlebotomy Technician, AHA Basic Life Support for Healthcare Provider, and Certified Patient Care Technician.

## PATIENT CARE TECHNICIAN [PCT] & CERTIFIED NURSING ASSISTANT [CNA]

### **GRADE 11 & 12**

The Certified Nursing Assistant program provides students with the entry-level knowledge and clinical skills necessary to enter the healthcare field as a Certified Nursing Assistant in hospitals, sub-acute, and rehabilitation care settings. As vital healthcare team members, they provide direct patient care such as, but not limited to, taking vital signs, specimen collection, and comfort measures. Excellent preparation for entry into any nursing program. Students must complete 75 hours to complete this program successfully. The Pontiac School District has partnered with Covenant Academy to provide this unique opportunity.

We cover topics such as:

- Infection Control Safety
- Body Mechanics
- Bed Making, Personal Hygiene Assistance, and Patient Care
- Vital Signs
- Interaction Skills
- Elimination
- Nutrition
- Personal Care

## **WORK-BASED LEARNING (WBL)**

### **GRADE 11 & 12**

WBL is sustained and progressively intensive interactions with employers or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that fosters in-depth, first-hand engagement with the tasks required of a given career field that is aligned to curriculum, instruction, and Career and Technical Education (CTE) Program standards.

## JUNIOR RESERVE OFFICERS TRAINING CORPS (JROTC)



### JROTC CADET CREED

I am an Army Junior ROTC Cadet

I will always conduct myself to bring credit to my family, country, school and the Corps of Cadet

I am loyal and patriotic

I am the future of the United States of America

I do not lie, cheat or steal and will always be accountable for my actions and deeds

I will always practice good citizenship and patriotism

I will work hard to improve my mind and strengthen my body

I will seek the mantle of leadership and stand prepared to uphold the Constitution and the American way of life

May God grant me the strength to always live by this creed



## **PATHWAY DESCRIPTION**

The purpose of Army JROTC is to prepare high school students for responsible leadership roles while making them aware of the benefits of citizenship. JROTC teaches leadership success skills, physical fitness, health, and citizenship.

Retired Army officers and noncommissioned officers teach JROTC classes experienced in working with young people. If students have an interest in the military, this program will prepare them for the U.S. Army by covering topics such as U.S. Military History, first aid, human relations, good techniques for communicating, drill and ceremony, military map reading, etc.

Students are not obligated to join the service. In addition, course materials, uniforms, supplies, and equipment are issued to the students free of charge.

## LET

## I JROTC CURRICULUM

### **LEADERSHIP EDUCATION TRAINING (LET)**

The JROTC program prepares Cadets for leadership roles, giving practical lessons that help them develop into active and engaged learners and leaders. The program promotes academic achievement and leadership development, providing Cadets with skills that they will use for the rest of their lives. The Academy's <u>JROTC program</u> at Army and Navy Academy consists of four levels of Leadership Education Training (LET) instruction. The JROTC curriculum is based on the principles of performance-based, learner-centered education and is linked to the McREL (instructional leadership resource) national standards. Every lesson and assessment actively engages students' higher-order thinking and skill performance. All Levels of LET are also required to do a "Service Learning Project."

## YEAR 1, LET

### **GRADE 9**

The mission of Leadership Education and Training (LET) is to motivate young people to be better citizens. To accomplish this purpose, the text discusses citizenship, leadership, and a number of other courses designed to help cadets succeed in high school and after graduation. Cadets wear uniforms every day. The LET 1 Level consist of Foundations of Army JROTC, Being A Leader, Leadership Skills, Know Yourself-Socrates, Learning to Learn, Study Skills, Communication Skills, and Conflict Resolution. Extracurricular activities include Color Guard, Drill team, and Rifle team competition and participation in local community events.

## YEAR 2, LET

### **GRADE 10 | PREREQUISITE: LET 1**

The second year of Leadership Education and Training is split into units including: Techniques of Communication, Leadership, Cadet Challenge, Leadership Lab, First Aid, Map Reading, History, Your American Citizenship, Career Opportunities, and Role of the U.S. Army. The wearing of the uniform and extracurricular activities are the same as for LET I.

## YEAR 3, LET

### GRADE 11 | PREREQUISITE: LET 1 & LET 2

The third year of Leadership Education and Training provides additional leadership situations. In this year students will not only be more involved as teachers and leaders within the cadet battalion, but they will also do more independent studies in the areas of communication, leader, first aid, history, map reading, career opportunities, and technology awareness. The wearing of the uniform and the extracurricular activities are the same as for LET I.

## YEAR 4, LET

### **GRADE 11 | PREREQUISITE: LET 1, LET 2, LET 3**

The fourth-year Cadets are responsible for the daily Cadet administration and perform as commanders and staff officers. They act as assistant instructors in some subject areas for other JROTC classes. They continue to develop their leadership skills and plan special unit events such as the military ball and the annual awards banquet as well as several Leadership camps.

# EDUCATION FOUNDATIONS & HUMAN SERVICES

### CAREER <u>HIGHLIG</u>HTS

### **Career Examples:**

Head Start Teacher Early Childhood Education Teacher Elementary & Secondary Education Teacher

**Median Annual Wage** 

**\$61K** 

**New Jobs Each Year** 

109K

Every year there will be 109k new elementary school teacher jobs to fill



## **PATHWAY DESCRIPTION**

The Education Foundations & Human Services
Courses are a new part of the CTE program at
Pontiac High School under the Education
General CIP code 13,0000.

There are three levels to this program. Each course covers competencies that, if a student completes all competencies over the 3 courses, can then apply for a CDA (Child Development Associates) or a MiYda (Michigan Youth Development Associates) certificate. The CDA certification is for students interested in working with youth ages birth to 5 years old in an Early Childhood career setting. The MiYDA certificate is for students interested in working with youth ages 5 and up (school-age children) in education or youth group settings.

# EDUCATION FOUNDATIONS & HUMAN SERVICES

## **CHILD DEVELOPMENT I (PARENTING)**

#### **GRADE 10 & 11**

In this course students will study factors of Child Development relating to the major areas, including; Physical, Intellectual, Emotional, Social, and Moral development, fetal development, conception/pregnancy, and infant health and safety. The major assessment of this course is the Real Care Infant Simulator experience, where for one weekend, the student will take home a simulation infant and provide around-the-clock care. Students will also explore careers and have multiple opportunities to connect their educational decisions to career options. Career awareness, exploration, preparation, and training may include field trips, guest speakers, job shadows, and job placements as part of this course. Competencies mastered in this course include Health, Safety, and Wellness and Cultural Competency. The course would start the CDA or MiYDA certification process but is not mandatory to earn these certifications. A student may still enroll in this course to satisfy their ½ Credit of Applied Arts.

### **EXPLORING CAREERS IN EDUCATION & HUMAN SERVICES**

### **GRADE 10 & 11**

This course was designed to assist students with exploring careers and developing the skills necessary to make meaningful decisions about their career choice in Education and Human Services. Students will be made aware that there are many factors to consider before selecting a suitable career. This course will assist the students in assessing their personal strengths and weaknesses as they relate to career decisions. This course will aid the student in developing strategies to make an effective transition from school to work. The student will develop skills in this course that are generic to all occupations, such as properly preparing career documents needed to obtain employment. The student will be able to recognize that career enhancements and career changes are common and that they need to be prepared with the proper tools, resources, and guidance to make informed decisions about their career choice throughout their lifetime. The course would continue and add to the CDA or MiYDA certification process, but is not mandatory to earn these certifications. A Student may still enroll in this course to satisfy their ½ Credit of Applied Arts.

### **EDUCATION FOUNDATIONS I - DUAL ENROLLMENT COURSE**

### **GRADE 11 & 12 | YEAR LONG | TWO CLASS PERIODS**

PREREQ: CHILD DEVELOPMENT & EXPLORING CAREERS IN EDUCATION & HUMAN SERVICES

The Education Foundations I (Teacher Cadet Class) is an innovative, yearlong teacher training course designed for the student who is curious about going into the field of education. This course seeks to provide the student with an insight into many facts of education, including a work-based learning teaching opportunity. The main focus will be teaching, but the course does expand to all aspects of the field of education. Students will do a fieldwork placement in an elementary or middle school classroom in the district. Competencies mastered include ethics & and professional growth, instructional strategies, lesson planning, classroom management, assessment, Work Based learning/Clinical Placement, Career Readiness Practice, strategic partnerships, program development, and special populations and diverse learners. This course is mandatory to complete the process for the CDA or MiYDA certifications. However, it is not mandatory for a student to complete the certification. Students may still enroll in this course as part of their high school graduation credits and is part of the CTE world language and applied arts credits if needed.

# EDUCATION FOUNDATIONS & HUMAN SERVICES

### **PREREQUISITE**

Education Foundations I & II (Dual Enrollment Course. Juniors and Seniors, completion of the application, which includes 3 teacher recommendation forms and an essay piece. The instructor will review all applications. Good attendance is required. Students need to have a G.P.A. of 2.0 or above and no major discipline infractions. See the Counselor or instructor for details and application.

### **EDUCATION FOUNDATIONS II - DUAL ENROLLMENT COURSE**

### **GRADE 12 | YEAR LONG | TWO CLASS PERIODS**

PREREQ: CHILD DEVELOPMENT, EXPLORING CAREERS IN EDUCATION & HUMAN SERVICES, EDUCATION FOUNDATIONS I

This second-year course will expand my knowledge of the teaching field through advanced lesson planning, job shadow observations, and advanced field placement experiences. The student will focus their learning on early childhood or primary/secondary education.

This course is mandatory to complete the process for the CDA or MiYDA certifications. However, it is not mandatory for a student to complete the certification. Students may still enroll in this course as part of their high school graduation credits and is part of the CTE world language and applied arts credits if needed.



# EMERGENCY SERVICES & PUBLIC SAFETY

### CAREER HIGHLIGHTS

**Career Examples:** 

Firefighter Emergency Medical Technician (EMT)

Median Annual Wage Fire Fighter

\$52K

Median Annual Wage EMT

\$40K



## **PATHWAY DESCRIPTION**

The Emergency Services/Public Safety Pathway courses are part of the CTE Program at Pontiac High School and will help prepare students to become part of the emergency services/public safety industry under the CIP code 43.0100.

Public Safety/Protective Services program. There are 6 individual courses students will complete in cooperation with Oakland Community College, which when completed, students will be ready to take the Firefighter I and II state licensure exam, of which Oakland Community College has an 88% pass rate. After passing the exam, students can then choose to begin an EMT program or directly seek employment as some agencies may sponsor EMT/Medic Training. This is a great opportunity to enter into a rewarding career shortly after high school graduation without incurring any debt along the way.

## **EMERGENCY SERVICES**& PUBLIC SAFETY CURRICULUM

### **PROGRAM REQUIREMENTS**

Students must be in 11th and/or 12th grades to take part in this program, students will be scheduled for these classes as part of their normal class day, but classes will meet at Oakland Community College on Monday and Thursday Evenings from 6:30 PM-10:30 PM, and every other Saturday from 9:00 AM-5:00 PM. Transportation from Pontiac High School to Oakland Community College and back will be provided, but students will be responsible for getting to Pontiac High School.

Students will earn 24 Credits from Oakland Community College, in addition to high school course credit for the following courses:

### RESCUE AND EXTRACTION

EMS 1200 | 1 OCC CREDIT

FIRE APPARATUS & TRAINING

FFA 2510 | 5 OCC CREDIT

**COMMUNICATION & COMMAND ON THE FIRE SCENE** 

FFA 2520 | 4 OCC CREDIT

HEALTH, WELLNESS AND SAFETY FOR THE FIREFIGHTER

FFA 2530 | 4 OCC CREDIT

FIRE BEHAVIOR, DETECTION AND SUPPRESSION

**FFA 2540 | 5 OCC CREDIT** 

HAZARDOUS MATERIALS, WILDLAND AND SPECIAL RESCUE

FFA 2550 | 5 OCC CREDIT



NAF is a national non-profit organization that transforms the high school experience to prepare students for college, career, and future success.

NAF's design is uniquely comprehensive in its approach to skill development, enabling students of all backgrounds to participate in a meaningful education and gives businesses the opportunity to partner with schools to shape America's future workforce through career-relevant curricula and work-based learning experiences, including internships.

Since 1980, NAF has been collaborating with communities to improve outcomes for students, especially where institutional and social barriers are the most prevalent, by implementing NAF academies – small learning communities within existing high schools.

NAF has grown from one NAF Academy of Finance in New York City to hundreds of academies across the country focusing on growing industries, including finance, hospitality & tourism, information technology, engineering, and health sciences; and support programs of study that are aligned with the National Career Clusters Framework.

During the 2022-23 school year, over 112,000 students attended 604 NAF academies across 35 states and territories. In 2022, NAF academies reported 99% of seniors graduated, with 88% of graduates planning to go to college.



Michigan's Career and Technical Education (CTE) programs provide students the necessary academic, technical and work skills to help them succeed in college and careers.

State-approved programs are grouped into 17 career clusters, that provide rigorous content aligned with challenging academic standards, as well as related relevant technical knowledge and skills. The blend of work-based learning experiences through partnerships with business and industry, and the development of soft skills through student leadership opportunities, provides a seamless transition into higher education and the world of work. The entire program supports the pillars of the Michigan Department of Education's Top 10 in 10 initiatives.



Since the doors opened, Covenant Academy has been committed to serving the Metro-Detroit area and have graduated some of the best C.N.A.'s in Healthcare. Covenant maintains a 99% State pass rate; #One & Done.

This high level of excellence is credited to a dedicated and efficient staff with over 100 years Nursing experience. Our sustaining motto: "We are fast pace, yet focused; and no student is left behind".



### **Oakland University Mission Statement:**

Oakland University cultivates the full potential of a diverse and inclusive community. As a public doctoral institution, we impact Michigan and the world through education, research, scholarship, and creative activity.

### **Oakland University Vision Statement:**

Oakland University will unlock the potential of individuals and leave a lasting impact on the world through the transformative power of education and research.



The U.S. Army Junior Reserve Officers' Training Corps (JROTC) is one of the largest character development and citizenship programs for youth in the world.

The U.S. Army's JROTC program currently operates in more than 1,700 public and private high schools, military institutions, and correctional centers throughout the United States and overseas. Approximately 40% of JROTC programs are in inner city schools, serving a student population of 50% minorities. As JROTC students (Cadets) progress through the program, they experience opportunities to lead other Cadets. A major component of the JROTC leadership and citizenship program is female Cadets. Female Cadets make up 40% of the Cadet population. The JROTC faculty is led by nearly 4,000 instructors who are retired from active duty, reserve duty, or National Guard Army service. Instructors are trained and qualified in accordance with the National Defense Authorization Act 2007 to teach and mentor approximately 314,000 JROTC Cadets annually.



With five campuses throughout Oakland County, OCC offers degrees and certificates in approximately 100 career fields as well as university transfer degrees in business, science, and liberal arts. The College provides academic and developmental experiences allowing each student to reach their full potential and enhance the communities they serve. More than 40,000 students annually attend OCC; more than a million students have enrolled in the College since it opened in 1965. This community college educates students for life-changing careers and provides unique transfer opportunities to excellent four-year institutions.

## JOIN A

## **CAREER PATHWAY**

## TODAY!













http://pontiacschools.org



http://pontiacschools.org