MEDINA VALLEY INDEPENDENT SCHOOL DISTRICT

Career & Technical Education

Endorsement Pathway / Elective Options for 2019-2020

Revised February 25, 2019

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MVISD Career & Technical Education
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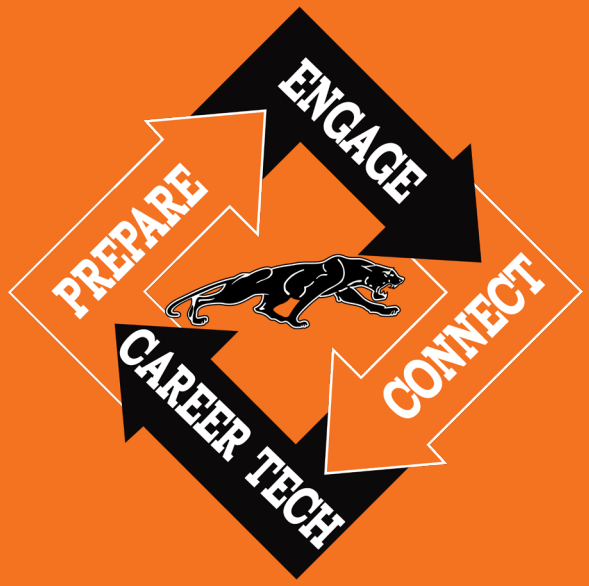
GRADUATION REQUIREMENTS

The default graduation plan for students entering high school in 2014-2015 and after is the Foundation Plan W/ Endorsement.

Courses	Foundation Plan W/Endorsement
English - 4 credits	English I, II, III, IV are required.
Math - 4 credits	Algebra I, Geometry, Algebra II, and one additional state approved math course which may include Math Models if taken prior to Algebra II.
Science - 4 credits	Physics, Biology, Chemistry, and one additional state approved science course. IPC may be taken as a 4th science if completed prior to Chemistry and Physics.
Social Studies - 3½ credits	World Geography, World History, US History
US Government - ½ credit	
Economics - ½ credit	
Languages other than English - 2 credits	Two credits of the same language are required.
Fine Arts - 1 credit	May be selected from courses in the areas of art, music, theatre arts, dance and choir.
Physical Education - 1 credits	TEKS based PE courses, Athletics, JROTC, Cheerleading, Marching Band
Speech - ½ credit	Professional Communications (11th Grade)
Career & Technology** - 3 credits	Business Information Management (9th Grade) 2 additional career pathway courses
Additional Electives - 2½ credits	Academic Elective
Total	26 credits

***Indicates MVISD local graduation requirements: 1 credit Technology.*

To earn a Distinguished Level of Achievement a student must go beyond the Foundation High School program. It requires 26 course credits to include four credits in math to include Algebra 2, a fourth science credit and an Endorsement. A student must earn a Distinguished Level of Achievement to be eligible for the Top 10% Automatic Admission to a Texas Public University.



CTE Required Classes

Business Information Management

Course #: 8122
Grade: 9

Credits: 1

Note: This course is required of all freshman.

In this course students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

Professional Communications

Course #: 8100
Grade: 11
Credits: 0.5

This course blends written, oral and graphic communication in a career-based environment. The student will concentrate on:

- Employability communication skills
- Critical-thinking skills
- Developing leadership skills for the workforce

Dollars & Sense

Course #: 8745
Grade: 11

Credits: 0.5

Learn to make decisions related to managing money and other family resources.

- Understand how to be a good consumer
- Learn skills to budget and invest your money

CTE New Course Offerings

Human Resource Management

Course #: 8111
Grade: 10-12
Credits: 0.5

This course focuses on the concepts related to human resource management, including legal requirements, recruitment, selection methods, and employee development and evaluation. The students will concentrate on:

- Compensation and benefits programs
- Workplace safety
- Employee-management relations
- Impact of global events on human resources management.

Introduction to Culinary Arts

Course #: 8769
Grade: 10-12
Credits: 1

Introduction to Culinary Arts will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. The course will provide insight into the operation of a well-run restaurant. Introduction to Culinary Arts will provide insight into food production skills, various levels of industry management, and hospitality skills.

Lifetime Nutrition & Wellness

Course #: 8223
Grade: 10-12
Credits: 0.5

Hands-on lab course that teaches essential cooking skills and the basics of nutrition.

- Learn impact of nutrients in your body
- Practice basics of food safety
- Participate in cooking labs and meal planning

Engineering Design & Problem Solving (Engineer Your World II)

Course #: 8791
Grade: 11-12
Credits: 1
Prerequisite: Principles of Technology / Engineering Science (EYW I)

Developed by University of Texas Engineering and Computer Engineering faculty, this hands-on course engages students in authentic, integrated engineering and CS practices in a project-based environment.

Graphic Design & Illustration

Course #: 8305
Grade: 10-12
Credits: 1

Create stunning digital art! This course will introduce students to the world of Digital art and advertising. Students will learn programs like Adobe Photoshop and Illustrator and apply the Art Elements and Principles of Design to digital artwork.

Engineering Design & Presentation

Course #: 8760
Grade: 10-12
Credits: 1
Prerequisite: Physics, Algebra I

Students enrolled in this course will demonstrate knowledge and skills of the design process as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. The software used in this course will be AutoDesk AutoCAD and AutoDesk Inventor.

Ag - Plant Science

Pathway Option to Meet the Business & Industry Endorsement

Principles of Agriculture, Food & Natural Resources

Course #: 8420
Grade: 9-10
Credits: 1

This course is designed to give students the opportunity to explore all aspects that the agriculture program has to offer. Students will build a foundation to make them successful in agriculture courses, as well as have the opportunity to become an active member in our student organization FFA.

- Participate on Leadership and Judging teams from District to State level
- Opportunity to raise an animal for Livestock Shows
- Opportunity to become a Chapter, District, Area, and State FFA Officer

This is a required prerequisite for any Agricultural Science pathway.

Horticulture Science

Course #: 8133
Grade: 10-12
Credits: 1

This course offers students an introduction to horticulture sciences with emphasis on technical skills, entrepreneurship, and occupational opportunities. Students will identify and recognize maintenance and storage of tools and equipment used in horticultural science; study horticultural structures and equipment; recognize greenhouse environment and the growing of plants; explore plant propagation and growth; and gain an understanding of vegetable, fruit, and nut production.

Principles & Elements of Floral Design

Course #: 8130
Grade: 11-12
Credits: 1

Floral Design develops students' ability to identify and demonstrate the techniques related to floral design and develop an understanding of the management of floral enterprises.

NOTE: This course satisfies the fine arts graduation requirement.

LAB FEE:$30

Greenhouse Operation & Production

Course #: 8433
Grade: 11-12
Credits: 1

This course is designed to develop an understanding of greenhouse production techniques and practices. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticulture systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

Additional course offerings that can be added to the **Plant Science** pathway.

Professional Standards in Agribusiness

Course: 8427
Grade: 10-12
Credits: 0.5

This course primarily focuses on leadership, communication, employer-employee relations, and problem-solving as they relate to agribusiness.

Agribusiness Management & Marketing

Course: 8429
Grade: 10-12
Credits: 1

Agribusiness Management and Marketing is designed to provide a foundation to agribusiness management and the free enterprise system. Instruction includes the use of economic principles such as supply and demand, budgeting, record keeping, finance, risk management, business law, marketing, and careers in agribusiness.

Ag - Power, Structural & Technical Systems

Pathway Option to Meet the Business & Industry Endorsement

Principles of Agriculture, Food & Natural Resources

Course #: 8420
Grade: 9-10

Credits: 1

This course is designed to give students the opportunity to explore all aspects that the agriculture program has to offer. Students will build a foundation to make them successful in agriculture courses, as well as have the opportunity to become an active member in our student organization FFA.

- Opportunity to participate on Leadership and Judging teams from District to State level
- Opportunity to raise an animal for Livestock Shows
- Opportunity to become a Chapter, District, Area, and State FFA Officer

This is a required prerequisite for any Agricultural Science pathway.

Agriculture Mechanics & Metal Technical Systems

Course: 8424

Grade: 10-12

Credits: 1

An introductory course that develops students' understanding as it relates to safety and skills in tool operation of agricultural mechanics.

- Hands-on work in the shop
- Learn skills in the shop related to agricultural mechanics
- Introduction to electricity, carpentry, plumbing, and metal working techniques

Agricultural Structures Design & Fabrication

Course: 8426

Grade: 11-12

Credits: 2

Prerequisite: Agriculture Mechanics & Metal Technical Systems

Transfer your academic knowledge and technical skills to the principles of facilities design and fabrication as related to agricultural structures.

- Basic welding techniques
- Operation of oxy-acetylene torch
- Design, draw and fabricate objects with the computerized torch
- Opportunity to earn the AWS Sense Welding Level 1 certification

Agricultural Equipment Design & Fabrication

Course: 8434

Grade: 12

Credits: 2

Certification Option: Welding

Prerequisite: Agricultural Structures Design & Fabrication

This laboratory-based course uses hands-on engagement to build knowledge and employability skills in several mechanical fields with a focus on metal technologies. Prerequisite: Agricultural Mechanics & Metal Technology or Agricultural Facilities Design & Fabrication.

- Create metal projects
- Learn to weld with stick, mig, tig, and aluminum
- Operate and make designs for computerized plasma cutting torch
- Oxy-acetylene cutting skills

Additional course offerings that can be added to the **Power, Structural & Technical Systems** pathway.

Professional Standards in Agribusiness

Course: 8427
Grade: 10-12
Credits: 0.5

This course primarily focuses on leadership, communication, employer-employee relations, and problem-solving as they relate to agribusiness.

Agribusiness Management & Marketing

Course: 8429
Grade: 10-12
Credits: 1

Agribusiness Management and Marketing is designed to provide a foundation to agribusiness management and the free enterprise system. Instruction includes the use of economic principles such as supply and demand, budgeting, record keeping, finance, risk management, business law, marketing, and careers in agribusiness.

Ag - Animal Science

Pathway Option to Meet the Business & Industry Endorsement

Principles of Agriculture, Food & Natural Resources

Course #: 8420
Grade: 9-10
Credits: 1

This course is designed to give students the opportunity to explore all aspects that the agriculture program has to offer. Students will build a foundation to make them successful in agriculture courses, as well as have the opportunity to become an active member in our student organization FFA.

- Opportunity to participate on Leadership and Judging teams from District to State level
- Opportunity to raise an animal for Livestock Shows
- Opportunity to become a Chapter, District, Area, and State FFA Officer

This is a required prerequisite for any Agricultural Science pathway.

Equine Science

Course: 8408
Grade: 10-12
Credits: 0.5

This course is designed to help students attain academic skills and knowledge in agriculture including, but not limited to, the equine industry, evaluating and selecting horses, nutritional requirements of horses, the anatomy and physiology of horses, and methods of maintaining horse health and soundness. Students will have the opportunity to participate in live evaluation contests.

AND

Small Animal Management

Course #: 8423
Grade: 10-12
Credits: 0.5

This course examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Students will analyze the nature of science, systems, and models to gather information and make predictions, decisions, and solve problems in animal science.

Livestock Production

Course: 8422

Grade: 10-12

Credits: 1

Develop skills relating to livestock production, anatomy and physiology related to nutrition, reproduction, health, and management of animals.

- Develop skills for judging of livestock
- Develop animal charts relating the anatomy of species of livestock
- Chart livestock prices and the influence it has on livestock producers

Wildlife, Fisheries & Ecological Management

Course: 8421

Grade: 10-12

Credits: 1

Examine the management of game and non-game wildlife species, fish, and aqua crops and their ecological needs.

- Design and build fishing equipment
- Classroom knowledge will be applied at the Agricultural Facilities for wildlife and fish species, and plants native to the area.

Additional course offerings that can be added to the **Animal Science** pathway.

Professional Standards in Agribusiness

Course: 8427
Grade: 10-12
Credits: 0.5

This course primarily focuses on leadership, communication, employer-employee relations, and problem-solving as they relate to agribusiness.

Food Technology & Safety

Course #: 8431
Grade: 10-12
Credits: 1

Food Technology and Safety examines the food technology industry as it relates to food production, handling, and safety. To prepare for careers in value-added and food processing systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to value-added and food processing and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

Agribusiness Management & Marketing

Course: 8429
Grade: 10-12
Credits: 1

Agribusiness Management and Marketing is designed to provide a foundation to agribusiness management and the free enterprise system. Instruction includes the use of economic principles such as supply and demand, budgeting, record keeping, finance, risk management, business law, marketing, and careers in agribusiness.

Arts, AV Technology & Communications - Journalism

Pathway Option to Meet the Business & Industry Endorsement

Journalism

Course #: 1301
Grade: 9-10
Credits: 1

Students will learn about the American media, First Amendment Rights, and the responsibilities of a journalist as to ethics in reporting. They will also develop skills in writing, editing, design, advertising, photography (Photoshop), word-processing (Google Suite), and desktop publishing (SNO sites and InDesign). Students will develop a foundation that will allow them to participate in Yearbook I / Newspaper I.

Note: Writing will be emphasized in this course.

Commercial Photography I (Newspaper I)

Course #: 8762
Grade: 9-12
Credits: 1
Prerequisite: (Journalism)

Commercial Photography II (Newspaper II)

Course #: 8770
Grade: 10-12
Credits: 1

Practicum in Commercial Photography (Newspaper III)

Course #: 8792
Grade: 11-12
Credits: 2

In Newspaper, students will participate in the creation of The Prowler news website. Students will analyze and assess current and emerging technologies, while designing and creating a multimedia newspaper that addresses community needs. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment.

Print & Imaging Technology I (Yearbook I)

Course #: 8108
Grade: 9-12
Credits: 1
Prerequisite: (Journalism)

Print & Imaging Technology II (Yearbook II)

Course #: 8109
Grade: 10-12
Credits: 1

Practicum in Print & Imaging Technology (Yearbook III)

Course #: 8110
Grade: 11-12
Credits: 2

In Yearbook, students will be expected to develop an advanced technical understanding of the journalism industry with a focus on producing, promoting, and presenting professional quality photographs in the school yearbook.

NOTE: Students will be required to photograph a minimum of 4 events per month including outside of school hours.

Arts, A/V Technology & Communications Electives

Animation

Course #: 8306
Grade: 10-12
Credits: 1

Are you ready to make your artwork come alive? Students will learn a variety of both traditional and digital animation techniques including cell, clay and digital. Students will become proficient in Adobe Photoshop, Flash. Students will also learn 3D animation in Autodesk Maya. Students will learn about the history of animation, the impact on society and various career opportunities. Students should expect to work with others and adhere to strict deadlines. Students will create both teacher directed and personal themes. This class is both fun and challenging.

Audio/Video Production

Course #: 8304
Grade: 10-12
Credits: 1

This course is an introduction to the visual and audio media world. Students learn the fundamentals of video and audio production using a variety of equipment. Students will gain knowledge and experience with extensive hands-on assignments involving video cameras, video and audio editing, directing, digital graphics, writing, producing studio productions, pre-production, production and post-production processes. Students will gain job-specific training and seek certification for entry level employment in audio and video production.

Graphic Design & Illustration

Course #: 8305
Grade: 10-12
Credits: 1

Create stunning digital art! This course will introduce students to the world of Digital art and advertising. Students will learn programs like Adobe Photoshop and Illustrator and apply the Art Elements and Principles of Design to digital artwork.

Automotive Technology - SWTJC

Pathway Option to Meet the Business & Industry Endorsement

Automotive Basics

Course #: 8624
Grade: 9-10
Credits: 1

Automotive Basics includes knowledge of the basic automotive systems and the theory and principles of the components that make up each system and how to service these systems. Automotive Basics includes applicable safety and environmental rules and regulations. In Automotive Basics, students will gain knowledge and skills in the repair, maintenance, and servicing of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

Auto Tech I - Maintenance & Light Repair

Course #: 8622
Grade: 10-11
Credits: 2
Prerequisite: Automotive Basics

Students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. The focus of the course is to teach the theory of operation of automotive vehicle systems and associated repair practices.

Auto Tech II - Automotive Service

Course #: 8623
Grade: 11-12
Credits: 2

Prerequisite: Auto Tech I

A continued study in the repair, maintenance, and diagnosis of automotive vehicle systems. Students acquire advanced knowledge in the theory of operation of automotive vehicle systems and associated repair practices.

Practicum in Auto Tech

Course #: 8625
Grade: 12
Credits: 2-3

Prerequisite: Auto Tech II

Course designed to give students supervised practical application of knowledge and skills in transportation, distribution, or logistics related field. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience such as internships, mentorships, independent study, or laboratories.

This pathway is being offered as part of the Southwest Texas Junior College Dual Credit program in Automotive Technology. Upon successful completion of the courses listed above and the certification exam students may receive the certifications listed below:

Name of Certificate: Automotive Technology, Level 1 Certificate

Name of Certification:

- ASE Brakes
- ASE Engine Performance
- ASE Engine Repair
- ASE Suspension & Steering

Business & Finance - General

Pathway Option to Meet the Business & Industry Endorsement

Business Information Management I

Course #: 8122
Grade: 9
Credits: 1

Note: This course is required of all freshman.

In this course students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

Business Information Management II

Course #: 8123
Grade: 10-11
Credits: 1

Prerequisite: Business Information Management I

In this course students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software.

Certification: Microsoft Office Specialist

Business Law

Course #: 8106
Grade: 11-12
Credits: 1

This course focuses on the social responsibility of every citizen to know their rights as individuals and in the business environment. The students will concentrate on:

- Personal responsibility as a citizen
- Business contracts
- Laws applicable in business

Business Management

Course #: 8121
Grade: 11-12
Credits: 1

Business Management is designed to familiarize students with the concepts related to business management as well as the functions of management, including planning, organizing, staffing, leading, and controlling. Students will also demonstrate interpersonal and project-management skills.

AND/OR

Accounting I

Course #: 8101
Grade: 10-12
Credits: 1

This course is an introduction to business money and personal money management. The accounting cycle will be introduced using generally accepted accounting principles. The students will concentrate on:

- Accounting guidelines for a sole proprietorship, partnership and corporation
- Use of journals, ledgers and financial statements
- Personal banking guidelines

Accounting II

Course #: 8102
Grade: 11-12
Credits: 1

Prerequisite: Accounting I

This course continues the study from Accounting I and moves into managerial and cost accounting. The students will concentrate on:

- Automated accounting
- Ethics in Accounting
- Accounting cycle in managerial and cost accounting

Certification: QuickBooks

Additional course offerings that can be added to the Business & Finance pathway.

Global Business

Course: 8127
Grade: 10-12
Credits: 0.5

This course focuses on the international business world. The students will concentrate on:

- International business etiquette
- Entrepreneur skills for the international business environment

Banking & Financial Services

Course #: 8126
Grade: 10-12
Credits: 0.5

Students will develop knowledge and skills in the economic, financial, technological, international, social, and ethical aspects of banking to become competent employees and entrepreneurs.

Human Resource Management

Course #: 8111
Grade: 10-12
Credits: 0.5

This course focuses on the concepts related to human resource management, including legal requirements, recruitment, selection methods, and employee development and evaluation. The students will concentrate on:

- Compensation and benefits programs
- Workplace safety
- Employee-management relations
- Impact of global events on human resources management.

Construction Technology

Pathway Option to Meet the Business & Industry Endorsement

Principles of Construction Technology

Course #: 8520
Grade: 9
Credits: 1

An overview of architecture, interior design, construction science, and construction technology. Technical skills introduced include safety, the use of hand tools and power tools, rigging, and reading technical drawings. Students will be expected to develop an understanding of the various educational requirements and career opportunities in this cluster.

Students will begin completing modules to earn their NCCER CORE certification.

This is a required prerequisite for the Construction Technology pathway.

Construction Technology I

Course: 8522

Grade: 10-11

Credits: 2

Prerequisite: Principles of Construction Technology

Students are introduced to safety, tool usage, building materials, codes, and framing. Students will develop an understanding of the various educational requirements and career opportunities in construction management, architecture, or engineering.

Students will continue to complete modules to earn their NCCER CORE certification.

Construction Technology II

Course: 8525

Grade: 11-12

Credits: 2

Prequisite: Construction Technology I

Students gain advanced knowledge and skills specific to those needed to enter the workforce as carpenters, building maintenance technicians or supervisors. It prepares the students for a postsecondary degree in construction management, architecture, or engineering.

Students will complete modules to earn their NCCER CORE certification.

Practicum in Construction Technology

Course: 8526

Grade: 12

Credits: 2-3

Prequisite: Construction Technology II

In Practicum in Construction Technology, students will be challenged with the application

of gained knowledge and skills from Construction Technology I and II. In many cases students will be allowed to work at a job (paid or unpaid) outside of school or be involved in local projects the school has approved for this class.

Mill & Cabinetmaking Technology

Course: 8524
Grade: 11-12
Credits: 2
Prequisite: Construction Technology II
Students gain knowledge and skills specific to those needed to enter the workforce in the area of millwork and cabinet manufacturing and installation. The student may also apply these skills to professions in carpentry or building maintenance supervision or use the skills as a foundation for a postsecondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in cabinet design, tool usage, jointing methods, finishes, and numerical and computer control production

Science Credit Electives

Science Credit

Anatomy & Physiology

Course #: 4301
Grade: 11-12
Credits: 1

Prerequisite: Biology and 2nd Science

In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

Anatomy & Physiology Pre-AP

Course #: 4302
Grade: 11-12
Credits: 1

Prerequisite: Three levels of Science

Level II SAP on last Biology State assessment

In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis. This course is similar in scope and sequence to Anatomy and Physiology; however, the depth and complexity of the topics covered will be at a higher level.

Forensic Science

Course #: 4403
Grade: 11-12
Credits: 1

Prerequisite: Biology and Chemistry

Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science.

Engineering Science (Engineer Your World I)

Course #: 8790
Grade: 10-12
Credits: 1

Prerequisite: Physics, Algebra I

The Engineer Your World I curriculum was developed by a team of University of Texas faculty and NASA engineers. This course engages students in authentic engineering practices in a project-based environment. This rigorous course was designed for students interested in pursuing a college and career pathway for engineering. Students may also engage in a dual enrollment program with the University of Texas System of Schools.

Engineering Design & Problem Solving (Engineer Your World II)

Course #: 8791
Grade: 11-12
Credits: 1

Prerequisite: Principles of Technology / Engineering Science (EYW I)

This course is for students who want to expand and deepen their engineering design skills and habits of mind through the purposeful integration and application of computer science (CS) principles and practices. Developed by University of Texas Engineering and Computer Engineering faculty, experienced secondary teachers and curriculum developers, and engineers with decades of industry experience, this hands-on course engages students in authentic, integrated engineering and CS practices in a project-based environment.

Engineering Design & Presentation

Course #: 8760
Grade: 10-12
Credits: 1

Prerequisite: Physics, Algebra I

Students enrolled in this course will demonstrate knowledge and skills of the design process as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. The software used in this course will be AutoDesk AutoCAD and AutoDesk Inventor.

Note: This class does not count as a science credit.

STEM - Cybersecurity

Pathway Option to Meet the STEM Endorsement

Fundamentals of Computer Science

Course: 8805
Grade: 9

Credits: 1

This course is for those students just beginning the study of computer science. Students will learn about the computing tools that are used every day. Students will foster their creativity and innovation through opportunities to design, implement, and present solutions to real-world problems.

Principles of Cybersecurity

Course: 8806
Grade: 10
Credits: 1

This course develops the knowledge and skills needed to master fundamental concepts of cybersecurity. Students in the course will develop a basic foundation for continuing their cybersecurity education and choosing a career in the cybersecurity field. Students will explore the challenges facing information security professionals related to ethics, system security, network security, and application security. Students will conduct risk assessments and develop and implement security policies to mitigate those risks. Students will examine trends in cyber-attacks, common vulnerabilities, and the emergence of cyber terrorism.

AP Computer Science Principles

Course: 8804
Grade: 11
Credits: 1

This course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving.

Computer Science I

Course: 9005
Grade: 12

Credits: 1

Students will gain an understanding of the principles of computer science through the study of technology operations, systems, and concepts. Meets high school graduation requirements for Language other than English, may not qualify for College Exemption.

Education & Training - PACE

Peers Appreciating Community Education

Principles of Education & Training

Course #: 8222
Grade: 10
Credits: 1

Instructional Practices in Education

Course: 8225
Grade: 11-12
Credits: 2

Prerequisite: Principles of Education & Training

Practicum Instructional Practices in Education

Course: 8226
Grade: 11-12
Credits: 2

Prerequisite: Instructional Practices in Education

These courses provide an opportunity for student to participate in a peer tutoring program. Peer tutors will be matched with students requiring support in academic subjects or technical skills.

Human Services

Office- Aide

Family & Community Services

Course #: 8793
Grade: 12
Credits: 1

Family and Community Services is a laboratory-based course designed to involve students in realistic and meaningful community-based activities through direct service or service learning experiences. Students are provided opportunities to interact with and provide services to the high school. Emphasis is placed on developing and enhancing organizational and leadership skills and characteristics.

Political Science - Debate

Pathway Option to Meet the Public Services Endorsement

Principals of Government & Public Administration

Course: 8776
Grade: 9
Credits: 1

This course introduces students to foundations of governmental functions and career opportunities within the United States and abroad. Students will examine governmental documents such as the U.S. Constitution, current U.S. Supreme Court and federal court decisions, and the Bill of Rights.

Political Science I

Course: 8794
Grade: 10
Credits: 1
Prerequisite: Principals of Government & Public Administration

This course introduces students to political theory through the study of governments; public policies; and political processes, systems, and behavior.

Political Science II

Course: 8795
Grade: 11
Credits: 1
Prerequisite: Political Science I

This course uses a variety of learning methods and approaches to examine the processes, systems, and political dynamics of the United States and other nations. The dynamic component of this course includes current U.S. and world events.

Planning & Governance

Course: 8796
Grade: 12
Credits: 1
Prerequisite: Political Science II

This course offers students an opportunity to formulate plans and policies to meet social, economic, and physical needs of communities.

Family & Consumer Sciences Electives

Family & Consumer Sciences

Dollars & Sense

Course #: 8745
Grade: 10-12

Credits: 0.5

Learn to make decisions related to managing money and other family resources.

- Understand how to be a good consumer
- Learn skills to budget and invest your money

Introduction to Culinary Arts

Course #: 8769

Grade: 10-12
Credits: 1

Introduction to Culinary Arts will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. The course will provide insight into the operation of a well-run restaurant. Introduction to Culinary Arts will provide insight into food production skills, various levels of industry management, and hospitality skills.

Lifetime Nutrition & Wellness

Course #: 8223
Grade: 10-12

Credits: 0.5

Hands-on lab course that teaches essential cooking skills and the basics of nutrition.

- Learn impact of nutrients in your body
- Practice basics of food safety
- Participate in cooking labs and meal planning

Career Prep

Career Preparation I*

Course #: 8001
Grade: 11-12
Credits: 3

Prerequisite: 15 hours minimum weekly employment

Corequisite: Career Preparation Work 1, 2, 3
Course#: 8003, 8004, 8005
Grade: 11-12
Credits: 0

This work-based course develops essential knowledge and skills through classroom instruction and on the job training. Students will receive general employability skills as a group; however, each student will have an individual training plan that will address his/her job specific knowledge and skills. Each student will be employed at an approved job site. Safety and career opportunities are included, in addition to work ethics and job related study in the classroom.

Career Preparation II*

Course #: 8002
Grade: 12
Credits: 3

Prerequisite: Career Prep I; 15 hours minimum weekly employment

Corequisite: Career Preparation Work 1, 2, 3
Course#: 8003, 8004, 8005
Grade: 11-12
Credits: 0

This work-based course develops essential knowledge and skills through classroom instruction and on the job training. Students will receive general employability skills as a group; however, each student will have an individual training plan that will address his/her job specific knowledge and skills. Each student will be employed at an approved job site. Safety and career opportunities are included, in addition to work ethics and job related study in the classroom.

Project-Based Research

Course #: 8107
Grade: 12
Credits: 1

Problems and Solutions is a project-based research course for students who have the ability to research a real-world problem. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge, skills, and technologies in a variety of settings. This course is designed to provide students an opportunity to earn one advanced measure for the Distinguished Achievement Program.

***Note:** These courses and the job placement must span the entire school year. Students must provide their own transportation. Prerequisite: Two completed courses from one CTE career cluster; Teacher-approved job placement; age 16; previous level for Career Prep II.

WHY CTE?

- Learning through hands-on activities
- Teamwork and collaboration
- Project and problem-based learning
- Working with business and industry
- Simulations and paid work-based learning internships
- Applied academics in relevant contexts
- Preparing for college and the careers that are in demand

CTE Endorsement Pathways

CTE Endorsement Pathways provide all students with a road map to discover and prepare for specific careers. Each sequence of courses allows students to explore specialized interests and passions through customized programs of study.
Endorsement Pathways help students make smarter choices about their decisions after graduation. Students can randomly explore within different pathways or focus on a specific program of study. Either way, they have the opportunity to discover a future career goal and begin learning the knowledge and skills needed for success.

Review Your High School Personal Graduation Plan Each Year

Don't get locked into a cluster and program of study you don't like. You should reexamine your 4-year plan at least once a year and change programs or clusters if your interests have changed. Choosing a cluster and program of study, even if it changes later, means that you'll have a direction in life. The idea is to be aware of what's going on in your life and take control of your future. When you know where your education is going and why, your classes will become more meaningful. You'll make contact with students, teachers, and employers who share your interest in a particular career area. You'll have experiences that are fun and exciting. You'll be on your way to success in school, in a career, and in life.

TEXAS CAREER CHECK

The State of Texas has created a special website for students and others researching careers. It's called Texas Career Check. Texas Career Check lets you explore higher education options by looking at detailed information by school and program of study, AND you can explore careers, occupational information, and postsecondary education options. You'll find a wealth of information about hundreds of career choices. To explore Texas Career Check, go to **www. texascareercheck.com**.

Medina Valley I.S.D. offers career and technical education programs in Agriculture; Architecture & Construction; A/V Technology; Business Management & Administration;
Finance; Health Science; Human Services; Law & Public Safety; Science, Technology, Engineering & Mathematics; Transportation; and Career Orientation. Admission to these programs is based on student interests.
It is the policy of Medina Valley I.S.D. not to discriminate on the basis of race, color, national origin, sex or handicap in its vocational programs, services or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.
It is the policy of Medina Valley I.S.D. not to discriminate on the basis of race, color, national origin, sex, handicap, or age in its employment practices as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972;
the Age Discrimination Act of 1975, as amended; and Section 504 of the Rehabilitation Act of 1973, as amended.
Medina Valley I.S.D. will take steps to assure that lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs. For information about your rights or grievance procedures, contact the Title IX Coordinator at 8449 FM 471 South, Castroville, Texas 78009, (830) 931-2243 ext. 1107, and/or the Section 504 Coordinator, Stefanie Keller-Perkins, at 8449 FM 471 South Castroville, Texas 78009, (830) 931-2243 ext. 1179.