CTE COURSES THAT COUNT FOR ART/WORLD LANGUAGE FOR GRADUATION These courses meet the Visual/Performing Art or World Language requirement for graduation. They do NOT meet either the Visual & Performing Art or World Language requirements for A-G college admissions.				
Course	**Graduation**	**A-G**	**Description**	**Schools**
Intro to Engineering Design #0434 Grades: 9-12	Elective or Art/WL	G	Introductory course which develops students' problem-solving skills, with emphasis placed upon the concept of developing 3-D models or solid rendering of an object. Students focus on the applications of visualization processes and tools provided by modern, state-of-the-art computer hardware and software. This computer-based process replaces the traditional hand drawing methods. The course will emphasize the design development process of a product and how a model of that product is produced, analyzed, and evaluated. Engineering careers and educational preparation will be researched.	BCHS
Principles of Engineering #0436 Grades: 10-12 *Recommended: Intro/Engineering I with a grade of "C" or better* Articulated with Merced College	Elective or Art/WL	G	This is a project-based course that introduces students to the profession of engineering and engineering technology. Critical thinking skills are used to analyze, synthesize and design engineering systems. Mathematical and physical science formulas and laws are used to explain a variety of engineering concepts	BCHS

ROP Foundations in Education 1/2 #0970/0971 Grades: 11-12 Note: Credit is available for Preschool – 3rd grade fieldwork and the first class in the California teaching education sequence for Liberal Studies 10 Exploring Teaching 1 Articulated with Merced College	Elective or Art/WL	G	This course is designed to introduce students to the theory behind teaching and learning. Emphasis is placed upon teaching; however, support positions are also introduced. Classroom instruction will focus upon students observing, learning, and applying a variety of teaching practices. Students will be assigned to a classroom at a local school based on their individual interest area with a choice of preschool, elementary, or middle school. Leadership training is provided through Club-Ed or FHA-HERO. This is an outstanding course for any student who desires to become a teacher.	AHS GVHS LHS MHS
ROP Hospitality and Tourism #0948 Grades: 11-12	Elective or Art/WL		If you enjoy working with people from different cultures on a day-to-day basis, this class will prepare you for employment in occupations in hospitality, tourism, and recreation. Instruction includes providing hospitality services in diverse settings to meet the needs of a wide variety of clients. You will learn about eco-tourism, guest services, and geography of the continents, customs and cultures of countries as tourist destinations, international travel requirements, planning events, and environmental and ecological principles. In addition, students will complete an Employability Portfolio and develop interview skills	
ROP Marketing Foundations #0924 Grades: 11-12 Note: Single period class Articulated with Merced College	Elective or Art/WL	G	This course will focus on understanding the process of developing, promoting and distributing products to satisfy customers' needs and wants. Students will build their knowledge of marketing on four foundations: economics, communication and interpersonal skills, business management, and entrepreneurship. Students will explore career opportunities in the field of marketing and complete a career portfolio to prepare for entry into the job market with a competitive edge. Training will include the proper completion of resumes, applications and cover letters in addition to interviewing techniques and skills. Emphasis is placed on leadership skills and active participation in DECA is encouraged.	

ROP Marketing Foundations Community Classroom #0923 Grades: 11-12 Note: Two period class Articulated with Merced College	Elective or Art/WL		This course will focus on understanding the process of developing, promoting and distributing products to satisfy customers' needs and wants. Students will build their knowledge of marketing on four foundations: economics, communication and interpersonal skills, business management, and entrepreneurship. Students will explore career opportunities in the field of marketing and complete a career portfolio to prepare for entry into the job market with a competitive edge. Training will include the proper completion of resumes, applications and cover letters. Interviewing techniques and skills will be emphasized. This course also provides individualized community classroom instruction in the following areas: 1) Retail Sales and Merchandising, 2) Food and Beverage Industry, and 3) Inventory Control. Emphasis is placed on leadership skills and active participation in DECA is encouraged.	AHS BCHS MHS
ROP Advanced Marketing #0927 Grades: 11-12 Prerequisite: Marketing Foundations, Marketing Foundations Community Classroom or Sports and Entertainment Marketing Note: Two period class Articulated with Merced College	Elective or Art/WL		Individualized advanced study in marketing concepts, procedures and applications. Students complete an internship in the areas of retail merchandising, restaurant and foods or distribution. Competencies of skills are developed through project based learning in the fields of entrepreneurship, promotion and/or advertising. Students will also build on their existing employability portfolio. Emphasis is placed on leadership skills and active participation in DECA is encouraged.	
ROP Medical Technologies #0905 Grades: 11-12 Articulated with Merced College	Elective or Art/WL	G	This course is designed to prepare students for entry into the Licensed Vocational Nurse Program at Merced College and covers the content of the Medical Terminology class offered at Merced College. Students who complete this class with a B grade or better and pass the college exams will be eligible for four units of Community College credit. Emphasis will also be given to anatomy and physiology of human body systems. Students may also be certified in First Aid, CPR and Bloodborne Pathogens. Successful completion of first semester curriculum will enable students to be placed at community worksites to continue their training. In	AHS BCHS GVHS LHS MHS

			addition, students are encouraged to concurrently enroll in the Certified Nurse Assistant program through Merced College. Graduates of the Medical Occupations class will be prepared with necessary skills for entry-level employment in health care and may also pursue college-level programs in X-ray Technology, Respiratory Care Technology, Health Information Technology, Physical Therapy, Occupational Therapy, Athletic Training, and Emergency Medical Services. Students are offered the opportunity to participate in an active student organization, Health Careers Club, which promotes leadership and successful employment.	
ROP Sports & Entertainment Marketing #0960 Grades: 11-12 Note: Single period class	Elective or Art/WL	G	This course will help students develop a thorough understanding of marketing concepts and theories that apply to sports and entertainment. The sports segment will include collegiate, professional and amateur sports. The entertainment segment will include movies, theater and music. Students will develop skills in the areas of target marketing, merchandising, advertising, public relations/publicity, event marketing, sponsorship, and career opportunities as they relate to the sports and entertainment industry. The exercise, case problems and activities for this course are designed to reflect true situations as the sports and entertainment field has a major influence on the social and economic impact on our economy. Students will complete a career portfolio to prepare for entry into the job market with a competitive edge. Emphasis is placed on leadership skills and active participation in DECA is encouraged	AHS BCHS ECHS
ROP Veterinary Science #0984 Grade 11-12 *Recommended: Completion of an Ag Class; advisor approval*	Elective Science or Art/WL	G	Veterinary Science is designed to provide students with an opportunity to study the science of veterinary medicine, including animal anatomy and physiology, animal health, nutrition, and cause/prevention of disease. Students will also learn various veterinary laboratory skills, aseptic and surgical procedures, basic radiology, and scientific research and writing skills.	AHS BCHS ECHS GVHS LHS MHS

ROP Virtual Enterprise #0945 Grade 11-12 Articulated with Merced College	Elective or Art/WL	G	Virtual Enterprise is a simulated business that is set up and run by students. With the guidance of a teacher ("consultant") and real-world business partners, the students determine the nature of their business, its products and services, and its management and structure, and engage in the daily operations of running a business. The Virtual Enterprise Program links students in a global business network. Emphasis is placed on using current business software, communications, and the Internet for business transactions. See your counselor or the Career Technician if you have questions about ROP	AHS ECHS

AGRICULTURE CTE COURSE THAT COUNT FOR ART/WORLD LANGUAGE FOR GRADUATION

These courses meet the Visual/Performing Art or World Language requirement for graduation. They do NOT meet either the Visual & Performing Art or World Language requirements for A-G college admissions.

Course	Graduation	A-G	Description	Schools
Ag Leadership & Technology #0131 Grades: 10-12 Articulated- Merced College	Elective or Art/WL		This is an agribusiness course designed to train students as team leaders. Students practice leadership and employability skills by combining computers, technology, and advanced communication skills.	AHS ECHS GVHS LHS MHS
Agribusiness Management #0130 Grades: 11-12	Elective or Art/WL		America's agriculture industry is the mainstay of the United States economy. This course is designed for the student interested in understanding the operations and institutions of economic systems as applied to our nation's largest industry—agriculture. Units of instruction include basic economic concepts, comparative economic systems, economic behavior, and international trade policy. Agribusiness terminology and emerging technology within various agribusiness companies will be studied. Students will learn how to manage capital, labor, technology, and natural resources in order to develop a working knowledge of how agribusinesses successfully function. Personal financial management, recordkeeping, and basic accounting	GVHS

			principles of agrimarketing will be addressed using computer simulations in Microsoft Office Suite.	
Agriculture Earth Science #0125 Grades: 10-12	Phys Sci or Art/WL	G	This is a college preparatory laboratory science course designed to provide students with quantitative analysis and experimental tools that will enable them to critically analyze content knowledge in the areas of geology, meteorology, oceanography, and astronomy. The course will focus on the Earth's place in the universe, dynamic Earth processes, energy in the Earth system, biogeochemical cycles, structure and composition of the atmosphere, California geology, and investigation and experimentation as outlined in the California science standards for Earth Science. It brings together the agriculture interactions that occur in the living and nonliving world, and provide the learner with a solid understanding of the processes that take place on and around the Earth and the synergies that exist between them.	AHS BCHS ECHS GVHS LHS YHS MHS
Animal Anatomy and Physiology #0107 Grades: 10-12 *Recommended: Ag Life Science or Ag Biology and Explorations in Agriculture, and enrolled or completed Algebra*	Elect Sci or Art/WL	G	This course is designed to give instruction in animal nutrition, reproductive physiology, animal genetics, and disease and parasites of livestock. In addition students will explore careers in agriculture and develop electronic portfolios, cooperative marketing structure and how it applies to the agriculture industry. General agribusiness management skills and leadership skills will be included.	ECHS GVHS
Environmental Ag Science #0109 Grades: 10-12	Elect Sci or Art/WL		This course will provide the student with an introduction to ecological principles with an emphasis on earth science, biology, and physics while allowing the student to gain insight into the practical application of these principles with respect to agriculture.	BCHS GVHS
Ag Wood 1 #0134 Grades: 9-12	Elective or Art/WL		Ag Wood I covers basic hand tool and machine operations in the wood shop. Shop and machine safety are prioritized and operation of planer, jointer, table saw, band saw, jigsaw, drill press, sanders, and portable tools will be implemented. First semester consists of required projects aimed at principles of construction, joints, assembly, gluing, clamping, and finish. This course qualifies students to participate in all FFA activities throughout the year.	AHS BCHS

			Students will also complete FFA Record Books to keep track of their projects, time and money made or spent. All projects will be shown at the Local Fair.	
Ag Wood 2/3 **#0135/0136** Grades: 10-12	Elective or Art/WL		Ag Wood 2/3 students will be able to operate all shop equipment safely. Ag Wood 2/3 is a continuation of Ag Wood 1 with an emphasis placed on advanced joints (mortise and tennon), advanced construction principles. Primary focus is on machine woodworking skills and the use of materials and processes. Students will be engaged in more complex/advanced projects and focuses on the design and construction of the student's own project(s). Students will also complete FFA Record Books to keep track of their projects, time and money made or spent. All projects will be shown at the Local Fair.	AHS BCHS
Equipment Construction 1 **#0116** Grades: 10-12 *Recommended: Welding Technology 1 & 2 or teacher recommendation* Articulated- Merced College	Elective or Art/WL		Students receive instruction in safety, hand and power tool usage, planning, material selection and usage as related to the design and construction of special agricultural and industrial equipment. Students develop their own ideas in the design and fabrication of individual projects. Students are encouraged to exhibit their project at the county fair and the California State Fair.	AHS BCHS ECHS MHS
Equipment Construction 2 **#0118** Grades: 10-12 *Recommended: Welding Technology 1 & 2 or teacher recommendation* Articulated- Merced College	Elective or Art/WL		Equipment Construction 2 enables student to master and refine their design and fabrication skills already obtained in Equipment Construction 1. Students will have more time and opportunity to design and fabricate more complex individual projects.	BCHS ECHS
Exploration in Agriculture **#0111** Grades: 9-12	Elective or Art/WL		This course is designed for first year agriculture students interested in business, animal science, plant science, floral design and horticulture science. Content areas include California agriculture, FFA, leadership, public speaking, record keeping, animal science and plant science. This course provides hands-on learning and qualifies students to participate in all FFA activities such as showing at the county fair.	AHS ECHS GVHS LHS

Internships in Agriculture 1 & 2 #0934/0936 Grades: 11-12 Articulated- Merced College	Elective or Art/WL		Internships in Agriculture 1/2 is designed to give students the opportunity to explore and gain hands-on knowledge and agriculture industry experience in various agricultural fields including agriculture business and communications, agriculture mechanics, animal science, plant science, horticulture, and floriculture. Agriculture industry/job site hours are developed according to specific job training plans. Course includes exploration of various careers, extended education, and employment/job preparation opportunities.	BCHS ECHS GVHS
Small Engines & Power Equipment #0115 Grades: 9-12 Articulated- Merced College	Elective or Art/WL		This is an introductory course in which students learn the operation, construction, maintenance, repair, and adjustments of two and four cycle engines. Theory and practical work are covered in areas of safety, care, and use of specialized tools used in small engine repair and maintenance. Students practice preventive maintenance, troubleshooting and safe equipment operation.	AHS BCHS ECHS GVHS MHS
Advanced Small Engines/Power Mechanics #0113 Grades: 10-12 *Recommended: Small Engines*	Elective or Art/WL		This course is designed for the second year student. Students will practice advanced shop skills, hydraulics, electronics, heavy-duty electrical, and basic welding. Small engines are used to teach advanced small engine technician training and entry-level skills.	AHS BCHS ECHS GVHS MHS
Horticulture #0459 Grades: 10-12 Articulated- Merced College	Elective or Art/WL		Students will study basic plant science, including the physiology and function of plants, and careers in horticulture. They will also learn and practice various propagation methods. In addition, students will learn introductory fundamentals of landscape design, where they will use scaled drawings to illustrate their plans.	BCHS ECHS GVHS YHS MHS
Ag Welding Technology 1 #0120 Grades: 9-12 *Recommended: Shop Skills or Metal 1* Articulated- Merced College	Elective or Art/WL		Students receive individualized instruction in arc and oxyacetylene welding. Selection of welding methods, welding rod, metals, and equipment are practiced. Students weld metal flat, horizontal, vertical, and overhead positions. M.I.G. and T.I.G. welding are also covered.	AHS BCHS ECHS GVHS YHS MHS

Ag Welding Technology 2 #0122 Grades: 10-12 Articulated- Merced College	Elective or Art/WL		Welding Technology 2 provides advanced instruction with a concentration in metal inert gas and tungsten inert gas (M.I.G./T.I.G.). Students design and construct their own advanced projects.	AHS BCHS ECHS GVHS MHS
Environmental Horticulture #0951 Grades: 10-12 Articulated- Merced College	Elective or Art/WL	G	Horticulture is an applied plant science course that prepares students for careers in the nursery, landscaping, and floral industries. Emphasis is placed on horticultural terminology, plant identification, plant physiology, soil science, plant reproduction, Cal OSHA and labor laws, nursery production, floriculture, integrated pest management, marketing and retail concepts, landscape design, installation, and maintenance.	AHS ECHS GVHS MHS
Welding Ag Shop Skills #0112 Grades: 9-12 Articulated- Merced College	Elective or Art/WL		Beginning shop students develop creativity, imagination, and craftsmanship in introductory shop skills. Students design and construct required projects in electricity, woodwork, plumbing, rope work, and concrete, arc and oxy-acetylene gas welding.	AHS ECHS GVHS MHS

BUSINESS CTE COURSE THAT COUNT FOR ART/WORLD LANGUAGE FOR GRADUATION

These courses meet the Visual/Performing Art or World Language requirement for graduation. They do NOT meet either the Visual & Performing Art or World Language requirements for A-G college admissions.

Course	Graduation	A-G	Description	Schools
Accounting 1 #0616 Grades: 10-12 *Recommended: Basic math skill*s Articulated with Merced College	Elective or Art/WL	G	Accounting is a must for all students interested in a business career. Students learn computer accounting procedures. Accounting theory is integrated with up-to-date technology. Course content includes the accounting cycle for service and merchandising business, general and subsidiary ledgers, receivables, payable, cash control systems, and payroll. This course is offered in a traditional classroom setting as well as on-line in a Skype format.	YHS MHS

Accounting 2 #0618 Grades: 11-12 *Recommended: Successful completion of Accounting 1* Articulated with Merced College	Elective or Art/WL		Students learn advanced accounting theory in depreciation, bad debts, accruals, inventory control, financial statement analysis, notes, partnerships, and corporations. Students practice advanced computer accounting applications. A successful student is prepared to work as a bookkeeper or computer accounting clerk and continue college-level accounting.	MHS
Computer Applications 1 #0629 Grades: 9-12 Articulated with Merced College	Elective or Art/WL		Students will receive instruction in the basics of Microsoft Office 2010 (Word, Excel, PowerPoint, and Access). This is an excellent course to prepare students with the skills to successfully complete assignments/projects in core classes, develop dynamic portfolios for ROP and senior exit interviews and meet several areas of MUHSD Technology Standards graduation requirement. Students will be provided the opportunity to take the Microsoft Office Systems (MOS) exam in at least one application. Students passing the exam will receive industry recognized certification from Microsoft in the application exam passed. This certification indicates that the student has a comprehensive knowledge of the application, which can give you an advantage in obtaining entry to your career of choice	BCHS ECHS GVHS YHS MHS
Computer Applications 2 #0631 Grades: 10-12 *Recommended: Successful completion of Computer Applications 1 with a "C" or better* Articulated with Merced College	Elective or Art/WL		Students receive in depth instruction on the four applications contained in Microsoft Office 2010 (Word, Excel, PowerPoint, and Access). Students have the opportunity to take the Microsoft Office Systems (MOS) exam and receive certification from Microsoft in multiple applications. This course will further enhance students' ability to create professional documents for core classes. The course is a must for students going to college or entering the job market. Industry recognized Certification documents enhance student portfolios and resumes.	ECHS GVHS MHS
Computer Programming 1/2 #0630/0632 Grades: 10-12 *Recommended: Successful completion of Algebra 1 and/or instructor recommendation* Articulated with Merced College	Elective or Art/WL	G (0630 only)	Do you dream of creating video games that millions of people want to play every day? Are you creative? Do you have an idea for your own video game? Maybe you would like to make some simple 3D video games. This class could give you your start towards a very enjoyable and rewarding career. First year students are introduced to programming using a simulated internship environment using Dark Basic Game engine and the "I support Learning.com Video Game Curriculum."	BCHS ECHS GVHS MHS

ROP Business Office Professional 1/ 2 #0920/0922 Grades: 11-12 Articulated with Merced College	Elective or Art/WL		Students enrolled in ROP Business Office Professional 1/2 will practice office skills learned in Business classes taught on-campus, as well as acquiring new business skills. Students will combine classroom activities with placement in a local business office for additional training. Students are placed in medical offices, insurance companies, legal offices, financial institutions and general office settings for on-the-job training. All students will complete an Employability Portfolio. After orientation, students will be placed at a worksite four days a week and will attend an on-campus class once a week.	

FAMILY & CONSUMER SCIENCE CTE COURSE THAT COUNT FOR ART/WORLD LANGUAGE FOR GRADUATION

These courses meet the Visual/Performing Art or World Language requirement for graduation. They do NOT meet either the Visual & Performing Art or World Language requirements for A-G college admissions.

Course	Graduation	A-G	Description	Schools
Child Development #0682 Grades: 10-12 Articulated with Merced College	Elective or Art/WL	G	This course focuses on the importance of developing a working knowledge of the physical, social and intellectual development of children from conception through age 6. Optimum age and conditions for becoming a parent, as well as prenatal care, birth-defect prevention, childbirth, health safety, and the overall wellbeing of children are also emphasized. Students interested in any occupations with children should begin with this class.	AHS GVHS MHS
Clothing & Textiles 1 #0652 Grades: 9-12 Note: Some projects will become the property of the student. Materials for these projects are furnished by the student	Elective or Art/WL		Clothing and Textiles 1 is a study of pattern, fabric, design, and color as they relate to clothing construction. The skills and knowledge learned will enable the student to understand goals and decision-making; social, physical, and psychological needs of individuals and families; use of product information and advertising; clothing and textile requirements of individuals with special needs; clothing budgets; and clothing and textile product care. An awareness of clothing and textile careers and occupations will be stressed. Students are required to construct at least two projects each semester.	

Clothing & Textiles 2/3 #0653 Grade 10-12 *Recommended: Clothing and Textiles 1* Note: Some projects will become the property of the student. Materials for these projects are furnished by the student	Elective or Art/WL		Clothing and Textiles 2 & 3 is a continuation of construction methods. Students are given the opportunity to practice clothing and textile skills that are transferable to jobs and careers. Emphasis is placed on decision-making skills as it relates to clothing and textile products; construction, repair, alterations and remodeling. Each student is required to complete two projects. Each project must demonstrate use of new techniques and skill	
ROP Creative Design/Merchandising 1/2 #0978/0979	Elective or Art/WL	F only 0978	This course is specifically designed to introduce students to the career fields related to the fashion industry. Students will be provided the opportunity to explore various aspects of the fashion industry. Instructional emphasis will include: the design elements and principles, history of fashion, fashion forecasting, textiles and textile products, developing and merchandising a line, garment construction in manufacturing, product knowledge and apparel merchandising, sales and service, and visual merchandising. Students will be introduced to the latest technology in the fashion industry. A section of the course will include employment preparation and self-evaluation. Second-year students may be placed at a community/training site.	
Careers with Infants & Toddlers 1/2 #1010/1011 Grades: 11-12 Note: Credit available for Infant/Toddler Development Class and/or Lab and Field Experience 2-period class Articulated with Merced College	Elective or Art/WL		Careers with Infants and Toddlers 1 & 2 are designed to introduce students to the principles of early childhood development and education through classroom instruction and interaction with infants and toddlers at the MUHSD Child Development Center. Students develop entry-level skills and learn management practices of a child development center. The opportunity to work with infants and toddlers in the very early stages of development at the Child Development Center will help prepare students for a variety of careers related to young children. Leadership training and community service opportunity is provided through the Child Development Club. Students receive certification of skill proficiency.	AHS GVHS/ ECEC MHS

Foods & Nutrition 1 # 0662 Grades: 9-12	Elective or Art/WL		The study of food basics with a focus on food preparation; regional, cultural and foreign foods; decorative foods, pressure cookery, creative cooking and consumer-wise meal preparation. Special emphasis will be on gourmet foods and menu planning	MHS
Foods & Nutrition 2 #0664 Grades: 10-12 *Recommended: Foods & Nutrition 1*	Elective or Art/WL		The study of food basics continues with a focus on food preparation; regional, cultural and foreign foods; decorative foods, pressure cookery, creative cooking and consumer-wise meal preparation. Special emphasis will be on gourmet foods and menu planning	
Culinary Arts 1/2 #0669/0670 Grades: 10-12 *Recommended: Foods & Nut 1 and/or 2 and a career interest in food service management* Articulated with Merced College	Elective or Art/WL		The Culinary Arts program introduces students to the vast and varied career options available in the foodservice industry. In addition to the fun of food preparation, topics like customer relations, cost accounting, food cost controls, and marketing are covered. Whether you are looking to enter the job market or are making plans for college, the culinary program is a great first step. Some students are hired for internships by qualified food service operations. They receive first-hand training from worksite mentors as well as classroom lessons and activities. Students who pass the exam and meet requirements may qualify for 2+2 and scholarships at leading post-secondary hospitality programs. Both levels follow the Prostart curriculum developed by the National Restaurant Association.	BCHS GVHS MHS
Culinary Arts Cafe Lab #0671 Grades: 11-12 Prerequisite: Culinary Arts	Elective or Art/WL		This course is for students currently enrolled in Culinary Arts or Foods and Nutrition who have an interest in pursuing a career in the Foodservice Industry. Students will build upon knowledge learned in Foods/Culinary Arts class to plan and develop menus during the school week. On designated days, they will cook and serve staff and community members.	GVHS MHS

Health & Family Living #0686 Grades: 11-12	Elective or Art/WL		Have you ever wondered what causes people to behave the way they do? Are you ready to learn more about yourself and life? The discussions and activities will help students understand the many factors influencing personality development, human behavior, and healthy lifestyles. Students develop personal skills that will 27 benefit them their entire lifetime. Units of study include: relationships, communication, personality, emotions, sexuality, female/male health concerns, values, stress, personal losses, and living on your own.	AHS GVHS MHS

INDUSTRIAL TECHNOLOGY CTE COURSE THAT COUNT FOR ART/WORLD LANGUAGE FOR GRADUATION

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Course	Graduation	A-G	Description	Schools
Architectural Design #0158 Grades: 9-12 *Recommended: Beginning Drafting* Articulated with Merced College	Elective or Art/WL		The student learns house plans and house construction while designing and drawing a set of plans. The student will have hands-on experience with the Computer Aided Design (CAD) system.	GVHS
Advanced Architectural Design #0159 Grades: 11-12 *Recommended: Architectural Design* Articulated with Merced College	Elective or Art/WL		Advanced Architectural Design is a continuation of the beginning architectural drafting classes. The students will design a home and complete a set of house plans. If time permits, the students will have an opportunity to complete a plumbing plan, perspective materials list, or a heating and air conditioning plan. The students will also have an opportunity for “hands on” experience with the Computer Aided Design (CAD) system.	

Auto Mechanics 1 #0192 Grades: 10-12 Articulated with Merced College	Elective or Art/WL		Entry level course Auto Mechanics covers the basics of operation, construction, maintenance, repair, adjustments, and tune-ups of the internal combustion gasoline engine. Students practice reading, writing, math and critical thinking skills.	LHS MHS
Auto Mechanics 2 #0194 Grades: 11-12 *Recommended: Auto 1* Articulated with Merced College	Elective or Art/WL		For students with above average interest in mechanics, this is an advanced study of automotive systems, engine repair, engine machining, brakes, fuel injection, diagnosis, and engine performance.	LHS MHS
Beginning Drafting #0150 Grades: 9-12 Articulated with Merced College	Elective or Art/WL		Students use industrial equipment to learn the basic concepts of drafting and blueprint reading. This course is highly recommended for college engineering or architectural programs. The student will use Computer Aided Drafting (CAD).	GVHS LHS
Explorations in Industrial Technology #0145 Grades: 9-12	Elective or Art/WL		This is the introductory level course for students interested in the automotive or welding fields. The course will survey the careers and jobs available to students in the Engineering and Industrial Technology Pathway. Emphasis will be placed on the study of small engines, metal and welding and an introduction to drafting.	LHS
Metal Shop 1 #0162 Grades: 9-12 Articulated with Merced College	Elective or Art/WL		In this introduction to metalworking, students are developing basic skills and safety habits. The course includes instruction in welding, foundry, sheet metal, bench metal, lathe, and machine tools. Skill development is accomplished through exercises in project construction. Vocational opportunities and requirements in metalworking trades are explored.	LHS MHS
Metal Shop 2 #0164 Grades: 10-12 Articulated with Merced College	Elective or Art/WL		Metal 2 gives advanced training in the use of metal shop equipment such as lathe and vertical milling machine. Students use precision tools and instruments. Advanced welding skills are developed and students may be introduced to the use of the M.I.G. and T.I.G. welder. Students choose their own projects.	LHS MHS

Metal Shop 3 #0166 Grades: 11-12 Articulated with Merced College	Elective or Art/WL		Seniors may take Metal 3 & 4 concurrently. Shop work in this course is similar to actual working conditions encountered in industry. Assignments help develop a high degree of skill and precision in use of various tools, machines, and materials in the trade. M.I.G. and/or T.I.G. welding are introduced and developed.	MHS
Metal Shop 4 #0168 Grades: 12 Articulated with Merced College	Elective or Art/WL		Metal 4 extends the skills learned in Metal 3. Course work consists of actual project construction.	
Woodshop 1 #0172 Grades: 9-12	Elective or Art/WL		Students practice hand tool procedures and basic machine operations on radial arm saw, jointer, planer, table saw, band saw, jigsaw, drill press, sanders, lathe, and portable tools. Safety in machine use is emphasized. First semester required projects cover principles of construction, joints, assembly, gluing, clamping, and finishing. Second semester, the students design and build their own projects.	GVHS LHS MHS
Woodshop 2 #0174 Grades: 10-12 *Recommended: Wood 1*	Elective or Art/WL		Wood 2 emphasizes joints, construction principles, doors, drawers, and spray finishes. Machine woodworking skills and the use of materials and processes are stressed. The students design and build more complex projects.	GVHS LHS MHS
Woodshop 3 #0176 Grades: 10-12 *Recommended: Wood 2*	Elective or Art/WL		Wood 3 is a continuation of Wood 2 with emphasis placed on cabinet construction, special hardware and fasteners, and special construction techniques. Students work independently.	GVHS LHS MHS
Woodshop 4 #0178 Grades: 10-12 *Recommended: Wood 3*	Elective or Art/WL		Wood 4 builds on and extends the skills learned in previous wood courses. Furniture and cabinet construction are emphasized.	GVHS LHS MHS