Digital Media Academy (DMA)

The Digital Media Academy (DMA) offers students the opportunity to develop skills in the areas of digital video production and broadcasting. Students enroll in a progression of classes starting in 9th grade with the basics of working on computers and ending in 12th grade with creating their own video packages. These videos range from idea to final copy and are broadcast to the entire school community.

Students learn on high-end technology in a hands-on, fully-functional television studio. Students use industry-standard editing software and have the opportunity to experience how the profession works. While students will receive a great education in the process of making and broadcasting video from of in front of and behind the camera, they also develop other skill sets that help in many areas related to technology fields.

Entrance into the Digital Media Academy will be based on a student's successful application. Additional information regarding the application process and terms of enrollment in the program is available from the Counseling Center.

Students enrolled in this academy must complete a sequence of Career Technical Education courses noted below as well as their core academic courses (e.g., English, mathematics, science, social science, etc.) as one cohort.

DMA Academy Programs of Study

Industry Sector: Arts, Media, and Entertainment
Pathway: Production and Managerial Arts

Grade	Academic 1	Academic 2	Academic 3	CTE	Advocacy
9	English 9	Geography		Art 1	Yes
10	English 10: Get Reel- English Through Your Lens	World History		Video Production 1	Yes
11	English 11: Designing the American Dream	US History	Spanish 1	Video Production 2 or Animation 1	Yes
12	English 12	Economics and Government	Spanish 2	Advanced Media Production	Yes

The CTE courses required for this academy are described below.

Course	Class Restrictions	Credits	Description
DMA Animation I **"a-g"/"f" approved** Monterey Trail High Pleasant Grove High Sheldon High **Course #6070**	None	10	This course introduces students to the fundamentals of animation and computer graphics. Students will learn basic concepts, methods and techniques through hands-on experiences and projects directly related to the field of animation and computer graphics. The curriculum is geared toward individuals who wish to use and develop their creative expression skills, in conjunction with professional-level computer software techniques, to create multimedia art. This course is especially for students who are interested in fine art communication, film, drama, computer animation, and/or graphic design. Careers in art and animation will be explored. This course may be repeated for credit. This course meets the UC and CSU visual and performing arts requirement and satisfies the graduation requirement. **Adopted curricular materials:** *The Encyclopedia of Animation Technology,* Running Press
DMA Digital Media Arts 2 **Course #12158**	Junior Senior	10	This course is designed to prepare students to use 21st century tools, coupled with creativity, to produce high-quality digital media projects. Digital Media Arts 2 focuses on the world of digital media production from video and audio to special effects and animation. This advanced course focuses on the ever-expanding world of digital media and the art forms that it supports, providing an opportunity for interested students to improve their craft and expand their knowledge and to better prepare them for college and career. *Prerequisites: Digital Media Arts 1 or Animation 1.* **Adopted curricular materials:** *Television Production Handbook, Tenth Edition,* Wadsworth Cengage Learning
DMA English 10: Get Reel – English Through Your Lens **Course #2150**	Sophomore	10	This course challenges tenth grade students through intensive analysis of text, including visual media, informational writing, and fiction. Students develop the abilities and skills necessary to effectively produce powerful video messages, oral presentations, and written works that critically examine ideological and social influences in an effort to understand how these influences have an impact on both individual and group identity. *Prerequisite: English 9. Co-requisite: Video Production 1 / Digital Media Production 1.* **Adopted curricular materials:** *No textbook assigned.*
DMA English 11: Designing the American Dream **Course #2250**	Junior	10	In this course, students will analyze a diverse collection of American voices in literature and film as they relate to manifestations of "The American Dream" across time, regions, and cultures. Students think critically about how depictions of "The American Dream" have evolved and been perpetuated by literature and the media and use this understanding to create textual and visual responses which reflect a deeper understanding and personal perspective on "The American Dream." Students integrate this extensive literary knowledge with a mastery of video production technical skills. Throughout the course, students develop as critical thinkers, writers, and filmmakers in the analysis and design of their own American Dream. *Prerequisite: None.* **Adopted curricular materials:** *No textbook assigned.*

Digital Media Academy (DMA) (continued)

Course	Class Restrictions	Credits	Description
DMA Advanced Production and Broadcasting **Course #12155**	Senior	20	The focus of this course is to produce a regular broadcast for the school community and to meet their media production needs. Students will use all the skills related to digital media production and face consequential decisions related to target audience, accountability, and deadlines. In addition to teaching the application of a digital media skill set, the course teaches students how to flourish in a collaborative work place. This course is an opportunity for any student interested in a career in media, the film industry, or pursuing the subject with post-secondary studies to deepen their knowledge and improve their skills. **Adopted curricular materials:** No textbook assigned.
DMA Video Production I **Course #12152**	Sophomore	10	This course is an introductory, hands-on course where students learn to use digital video and television studio production equipment in both a classroom and studio environment. Computers running software for non-linear editing will be used to produce a variety of video projects for classroom and school-wide broadcasting. Skills taught include script writing, storyboarding, camera operation, use of audio, lighting, editing, short films, commercials, public service announcements and working in different roles as a member of a video production team. Prerequisite(s): Computer Technology and Multimedia or instructor approval This course is taken during the sophomore year for DMA students. Adopted curricular materials: Digital Video: Production Cookbook, O'Reilly Media, Inc.

For a description of academic courses, see Section 1.
Please contact the school should you need further information.

Innovative Design and Engineering Academy (IDEA)

The Innovative Design and Engineering Academy (IDEA) is a technology driven program with an emphasis on engineering. IDEA students learn the fundamentals of both architectural and mechanical CADD.
They experience a hands-on engineering lab; exploring topics related to fabrication, electricity, robotics, and programming.

All IDEA students also share the same core classes of English, Science, Math, and Social Studies. This allows students to use their technology skills and knowledge towards mastering the standards in both these subjects.

Entrance into the IDEA is based on a student's successful completion of the application process. Additional information regarding the application process and terms of enrollment in the program is available from the Counseling Center.

Students enrolled in this academy must complete a sequence of Career Technical Education courses noted below as well as their core academic courses (e.g., English, mathematics, science, social science, etc.) as one cohort.

IDEA Academy Programs of Study

Industry Sector: Engineering and Architecture
Pathway: Architecture and Structural Engineering

Grade	Academic 1	Academic 2	Academic 3	CTE	Advocacy
9	English 9	Geography	General Science	Engineering Design A	Yes
10	English 10	World History	Biology	Engineering A	Yes
11	English 11	US History	Chemistry	Design and Implementation	Yes
12	English 12	Economics American Government		Robotics or Engineering Design B	Yes

The CTE courses required for this academy are described below.

Course	Class Restrictions	Credits	Description
IDEA Engineering Design A **"a-g"/ "g" approved** Course #12346	Freshman	10	This course introduces students to design principles through the use of a variety of computer applications. Students will use current computer hardware and software to learn basic functions such as lines, colors, dimensioning, layers, and blocks. Projects include a series of 2D mechanical, civil, and introductory architectural drawings. Drawing fundamentals will be taught from conception to drawing and scaling to plotting. This course is aligned with the Career Technical Education Engineering and Design industry Sector and supports select math, English, and history/social science standards. This course meets 10 credits of mathematics and the district Technology Proficiency Graduation Requirement. **Adopted curricular materials:** *Applying Auto CAD 2009,* Glencoe/McGraw-Hill
IDEA Engineering A, Principles of "a-g"/"g" approved Course #12344	Junior	10	This course is designed for students to engage in various hands-on activities to explore the nature of assorted engineering fields. During this exploration, students will gain insight into the educational requirements of the engineering profession, required skills for most engineers, and the roles and functions of engineers. Problem-solving projects will focus on mechanical engineering, electronic engineering, structural engineering, and electrical engineering. While utilizing the engineering design process, students will design, develop, model, and test an engineering solution based on given criteria. Students will create an engineer's portfolio documenting their skills and knowledge gained throughout the year, and they will catalog all the stages of the design process of their student projects. *Prerequisite(s): Mathematics I (or Algebra I).* **Adopted curricular materials:** No textbook assigned.

Course	Class Restrictions	Credits	Description
IDEA Design and Implementation **"a-g"/"f" approved** **Course #12320**	Sophomore	10	This course emphasizes aesthetics and creativity, design, drafting, and project implementation. Project experiences in wood, metal, and sculpture will be included. Assigned and individualized projects along with course work on history of design and construction are also included. Tests will be given regularly and students will be expected to participate in projects and other assignments. Aesthetic judgment will be a part of the course. Credits may be used toward the Visual and Performing Arts graduation requirement. This course meets UC and CSU elective requirement and CSU and UC fine arts requirement**.** **Adopted curricular materials:** No textbook assigned.
IDEA Robotics **Course #16851**	Senior	10	Robotics is an opportunity for students to synthesize science knowledge with practical application. Aligned with California Engineering Technology standards, this program is designed to interest students in the field of robotics and to motivate them to pursue careers in science and engineering. Students will work in small groups to research, design and build a variety of robots. Students may participate in robotic competitions. **Adopted curricular materials:** No textbook assigned.
IDEA Engineering Design B **"a-g"/ "g" approved** **Course #12347**	IDEA students only	10	This course is designed to advance engineering design principles though the three dimensional mechanical and architectural drawings. Students will review and reinforce basic computer-assisted drafting techniques and theories and then produce a series of advanced drawings. AutoCAD software, including Revit and Inventor applications, will be used to create 2D, 3D, parametric models, and simulations. Projects include a series of 3D mechanical drawings and a complete architectural drawing of a 1,200 square foot house. Design engineering occupations will be reviewed and USGBC LEED (Leadership in Energy and Environmental Design) principles will be taught, researched, and followed in the development on the house design. This course is aligned with the Career Technical Education Engineering and Design industry Sector and it supports math, English, science, and history/social science standards. Seniors enrolling in Engineering Design B may request math credit for the course. *Prerequisite(s): Mathematics I (or Algebra I) and Engineering Design A. Concurrent enrollment in Geometry or higher level math class.* **Adopted curricular materials:** *Applying Auto CAD 2009,* Glencoe/McGraw-Hill

For a description of academic courses, see Section 1.
Please contact the school should you need further information.

Public Service Academy (PSA)

The Public Services Academy (PSA) includes courses focused on the fields of fire science, law, and medicine. Students will be exposed to a variety of careers in the public service sector related to these career options. Course instruction will be enhanced through partnerships with fire, police, medical, and other community agencies that will provide valuable mentoring opportunities. Students completing this program will gain extensive knowledge of career opportunities available in the public service sector. Students will also be well-prepared to undertake entry level jobs or to pursue college-level courses related to their chosen career field of study.

Entrance into the Public Service Academy will be based on a student's successful completion of the application and interview processes. The Academy handbook, along with application and additional information regarding the application process and terms of enrollment in the program, is available from the Counseling Center.

Students enrolled in this academy must complete a sequence of Career Technical Education courses noted below as well as their core academic courses (e.g., English, mathematics, science, social science, etc.) as one cohort.

Public Service Academy Programs of Study

Industry Sector: Public Service
Pathway: Legal Practices

Grade	Academic 1	Academic 2	Academic 3	CTE	Advocacy
9	English 9	Health	General Science	PSA Service Learning	Yes
10	English 10	Psychology	Biology	You and the Law	Yes
11	English 11	US History		Criminalistics	Yes
12	English 12	Political Science/AP American Government	Physiology	Fire Control Technician	Yes

The CTE courses required for this academy are described below.

Course	Class Restrictions	Credits	Description
PSA Service Learning **Course #1617**	Freshman	5	This course explores learning through active community service and career exploration. Emphasis will be placed on three levels of service: Direct Service-activities that put students face-to-face helping someone, Indirect Service-activities that are performed "behind the scenes" channeling resources to alleviate a problem, and Active Service-activities that require students to lend their voices and talents for a particular cause or position on an issue. This course may be repeated for credit. **Adopted curricular materials:** *Succeeding in the World of Work,* Glencoe