



# Career Technical Education



[www.egusd.net](http://www.egusd.net)

## **College, Career, and Community Readiness: Career Academies, Pathways & Career Technical Education Courses**

*EXPLORE: Your Future Starts Here* is EGUSD's Linked Learning initiative, a research-proven approach that prepares EGUSD graduates for college, career, community, and life. EXPLORE connects rigorous academics, technical skills, relevant real-world experiences, work-based learning opportunities, and wrap-around student support to help students develop the 21st century skills and habits of mind they will need to succeed in post-secondary education and career.

Our career academies and pathways engage students through a blend of:

### **Rigorous Academic Study**

All of the academies offer students a-g-approved academic classes that are integrated with career themes and work-based learning opportunities.

### **Relevant Career Technical Education (CTE)**

Students participate in an integrated sequence of core academic and CTE courses related to a career focus area. The three- or four-year program of study features project- and inquiry-based curricula and such real-world experiences as community service, interaction with business and industry, and field trips to colleges.

### **Wrap-around Student Support**

In line with the EGUSD Graduate Profile, career academy and pathway students develop such critical 21st-century skills as communication, critical thinking, problem solving, creativity and teamwork that will ensure their success in college and career. Moreover, students develop strong relationships and systems of support in the "school-within-a-school" atmosphere of an academy.

### **Work-Based Learning Opportunities**

Through our career academies and pathways students can specialize in a number of career fields including public service, business, health, engineering, green energy, agricultural science, auto technology media, and more. Local business and industry partners contribute their expertise by speaking to classes, mentoring, hosting field trips, job shadows and internships, and participating in advisory meetings.

Graduates of EXPLORE are well prepared for life after high school and are ready to succeed in their future endeavors. To learn more about EXPLORE and EGUSD's academies and pathways, visit [www.EgusdExplore.com](http://www.EgusdExplore.com).

## **Cosumnes Oaks High School Architectural Design and Engineering (ADE) Academy**

This interdisciplinary academy provides students with the opportunity to explore the complex worlds of architecture, construction and urban planning and apply their skills in the COHS, LEED Platinum-certified rHouse. The program culminates with students completing an internship at a local business, government agency and/or non-profit organization. Students can earn up to six units of articulated college credit in this District-certified academy.

### **Broadcast Journalism Pathway**

The Broadcast Journalism Pathway is designed to provide students with the opportunity to develop communication, writing, and technical skills necessary to produce high quality video productions and live broadcasts.

### **Culinary Arts Academy (CAA)**

Culinary Arts Academy students receive a four-year sequenced curriculum that prepares them for National Restaurant Certification. Students learn nutrition science, restaurant management, food chemistry and culinary skills to prepare them for employment in the hospitality, tourism or recreation industry. Students in this District-certified academy have opportunities to practice their skills through catering assignments and work in an on-site café.

### **Visual & Performing Arts Pathway**

The Visual and Performing Arts Pathway is designed to provide students who have a strong desire and motivation in the arts with concentrated and focused study in a variety of Arts disciplines. VAPA Pathway students share experiences that recognize and value cultural diversity of artistic expression and that nurture community within the arts. VAPA Pathway students also complete coursework outside their major area of interest, engage in community service that supports the Arts, and maintain high academic standards.

## **Elk Grove High School Automotive Technology Pathway**

This career pathway provides students with basic automotive shop safety, tool recognition, introduction to automotive repair, technology core, exploring automotive technology and automotive technology design. Other topics include the history, development, manufacturing and prototyping of the automobile and its impact on the world. This course also provides students with entry-level training in automotive systems including brakes, engine performance, electrical/electronic systems and suspension/steering.

### **Culinary Arts Career Pathway**

The Culinary Arts Career Pathway is designed to develop career-based culinary knowledge and skills starting at the beginning level and progressing towards increasingly advanced expertise and training. Students receive instruction in a wide variety of culinary topics and practice techniques that help prepare them either for a career or further education in a culinary field.

### **Sustainable Agriculture and Green Education (SAGE) Academy**

The SAGE Academy prepares students for the 21st-century agricultural industry in California. Students learn about the sciences and technologies necessary to understand sustainability and produce food and fiber in a sustainable and energy-efficient manner. This District-certified academy offers students the opportunity to earn articulated college units.

### **Technology and Digital Arts (TDA) Academy**

Students interested in media advertising and entertainment industries can learn filmmaking, photography and digital design in the Technology and Digital Arts Academy. TDA, a District-certified academy, offers students several opportunities to earn articulated college units and participate in dynamic field trips to regional colleges and such high tech companies as Google.

### **Florin High School Ag Tech Academy**

The Ag Tech Academy provides exciting opportunities for students in the broad and challenging fields of Agriscience, Animal Industries, Environmental Horticulture, Agribusiness and Agricultural Engineering/Manufacturing. In this rigorous four-year academic program includes graduation requirements, on-site laboratory experiences, workplace partnerships, study programs, and UC/CSU entrance fulfillment. This District-certified academy offers students the opportunity to earn articulated college units.

### **Auto Technology Career Pathway**

Students learn skills to obtain an entry-level job in the automotive services industry. Topics discussed include engine operation, electrical systems, fuel injection, computer systems, brake, and basic engine repair. Students can earn three units of articulated college credit.

### **Culinary Arts Pathway**

The Culinary Arts Pathway at Florin High School is designed to develop career-based culinary knowledge and skills starting at the beginning level and progressing towards increasingly advanced expertise and training. Students receive instruction in a wide variety of culinary topics and practice techniques in catering assignments and an on-campus café.

### **Law and the World (LAW) Academy**

The LAW Academy is a four-year course of study that features core academic classes that emphasize legal, justice and world language curriculum for students interested in

pursuing a career in law-related fields. This District-certified academy pairs students with mentors from McGeorge and UC Davis law schools and gives them the opportunity to participate in Mock Trial competitions and community law clinics.

### **Project Lead the Way Engineering Pathway**

Project Lead the Way is the nation's leading provider of science, technology, engineering, and math (STEM) programs. Through world-class K-12 curriculum, high-quality teacher professional development, and outstanding partnerships, PLTW helps students develop the skills needed to succeed in the global economy. In 2016-17, Florin High School will offer the first three courses in this four-year sequence, PLTW Introduction to Engineering Design, PLTW Principles of Engineering and PLTW Aeronautical Engineering.

### **Tech Careers Academy (TCA)**

Through this three-year academy, students learn valuable job skills related to computer technology. They also work with adult mentors from local business and professional communities. Tech Careers Academy is a District-certified academy and offers dual enrollment options with the University of Phoenix.

### **Franklin High School Green Renewable Energy Engineering Network (GREEN) Academy**

The GREEN Academy is a four-year course of study that gives students the opportunity to explore a variety of fields based on green and clean technology, including wind, solar energy, hydroelectricity and bio fuel. GREEN is a District-certified Academy.



### **School of Technology, Engineering, and Media (STEM) Academy**

The School of Technology, Engineering and Media Academy allows students to explore computer technology, industrial engineering and media communications careers through three separate strands of study. This is a District-certified academy and offers opportunities for articulated post-secondary units.

### **Laguna Creek High School**

#### **Green Energy Technology Academy (GETA)**

The Green Energy Technology Academy is designed for students interested in the energy and utilities sector. They learn about solar energy, wind turbines, photovoltaics, biodiesel, hydroelectricity and hydrogen fuel cells. Projects include building "solar suitcases" for use in third-world countries and designing and racing solar-powered boats. Students can earn industry-recognized certification in this District-certified academy.



#### **Manufacturing Production Technology Academy (MPTA)**

This academy specializes in training students with hands-on mastery of virtually every aspect of modern-day production and advanced manufacturing. Students will be prepared to enter college and/or careers in manufacturing, engineering and skilled trades. This is a Connect Ed: Model Program and District-certified academy and offers articulated post-secondary credits.

#### **Sports Careers Academy (SCA)**

In this academy students learn skills in athletic training, physical therapy and fitness instruction. They receive a background in ethical and legal issues involved in medicine and medical terminology. Students can earn CPR and First Aid certification.

### **Las Flores High School**

#### **Computer Graphics Pathway**

The computer graphics course allows students to gain a fundamental understanding of computerized graphic art design, illustration, and production techniques and become knowledgeable in the use of software for publication design and production, illustration, and digital imaging. Major projects may be retained for inclusion in a student portfolio.

### **Monterey Trail High School**

#### **Design and Technology Academy (DATA)**

DATA provides a rigorous four-year program designed to give students training, information, and resources in the sectors of engineering, computer science, and environmental architecture. Throughout students' high school career, DATA teachers focus on three main goals: to strength-

en students' motivation and commitment to learning by providing purpose for their learning experiences; to improve students' connection to school through personalized learning environments and workplace experiences; and to prepare students to enter industry with appropriate certification and/or post-secondary education.

### **Pleasant Grove High School**

#### **Digital Media Academy (DMA)**

The Digital Media Academy provides students the opportunity to learn and participate in all aspects of video production and animation including editing, camera work, script-writing, storyboarding, producing and directing using the school's television studio. Articulated post-secondary credits are available.

#### **Innovative Design and Engineering Academy (IDEA)**

This academy prepares students for careers in clean technology and renewable energy. Areas of study include energy, water and natural resource conservation, clean vehicle technology, construction and maintenance of energy-efficient technologies, energy-efficient buildings and research and maintenance of geothermal, biomass, fuel cells, solar, wind and biodiesel power. This is a District-certified academy and articulated post-secondary credits are available.

#### **Agriculture (Future Farmers of America) Pathway**

This agricultural education program allows students to learn by doing. Students are given agricultural related work-based learning experiences while participating in FFA activities. Students can earn articulated college credits.

#### **Public Service Academy (PSA)**

The Public Service Academy gives students an opportunity to study and prepare for careers related to fire science, law and medicine fields. Rigorous community service projects and student leadership opportunities are a feature of this academy. Articulated post-secondary credits are available in the fire science field.

### **Rio Cazadero High School**

#### **Allied Health Pathway**

The Allied Health Pathway includes two courses at Rio Cazadero High School and three more at nearby Valley High School. The courses offered at Rio Cazadero are Medical Terminology, where students learn about the structure of the human body, as well as concepts related to body system, radiology, pharmacology and surgery; and Phlebotomy Technician, which prepares students for State Certification. Additional courses offered in this pathway at Valley High School are certified nurse assistant, certified medical assistant and EKG technician.

### **Sheldon High School**

#### **ARTSwork Career Pathway**

With courses designed to be applicable to many professions, the Artswork Career Pathway prepares students for careers in graphic design, publicity, radio, movies, televi-

sion, music, dancing and drama. Articulated post-secondary credits are available for several courses, as well as the opportunity for mentoring by professionals in a number of art and media fields and participation in a variety of productions. ARTSwork is a state model art pathway program.

### **Biotechnology (BIOTECH) Academy**

Students in the Biotechnology Academy learn the process of genetic engineering and its application in agriculture, forensics, environment and molecular biology. Curriculum includes analyzing their economic impact and evaluating the ethical implications of biotechnology. This a District-certified academy provides students with one-to-one mentoring by UC Davis students and articulated college credits.



### **Building Trades & Engineering Pathway**

The Building Trades and Engineering Career Pathway combines theoretical training with hands-on projects. It prepares students for careers in architecture, construction, engineering and city planning and gives students the opportunity to design and build sheds, cabinetry and other furniture and guitars.

### **Agriculture (Future Farmers of America) Pathway**

The FFA develops a student's potential for premier leadership, personal growth and career success through agricultural education.

### **Valley High School**

#### **Airforce Junior Reserve Officer Training Corps (AFJROTC)**

Students study current military and civilian aeronautic systems and the social aspects of space. This is a four-year program whose mission is to prepare better citizens for the United States of America.

### **Allied Health Pathway**

The Allied Health Pathway is designed for people seeking employment or advanced degrees in the health field. Students follow a sequence of courses that include certified nurse assistant, certified medical assistant and EKG technician. Students in this pathway also may study medical terminology or phlebotomy technician at nearby Rio Cazadero High School.

### **Health Tech Academy**

Health TECH (Tomorrow's Employees in Careers in Health) is an innovative four-year program that combines advanced technology, student workplace experience and direct contact with local health officials. Students partner with Kaiser Permanente in the CACHE Project, which pairs students with Kaiser doctors to develop health resources for specific cultural groups. This is a District-certified academy prepares students for careers in public health.

### **Project Lead The Way Engineering Pathway**

Project Lead The Way is the nation's leading provider of science, technology, engineering, and math (STEM) programs. Through world-class K-12 curriculum, high-quality teacher professional development, and outstanding partnerships, PLTW helps students develop the skills needed to succeed in the global economy. In 2016-17, Valley High School will offer the first three courses in this four-year sequence, PLTW Introduction to Engineering Design, PLTW Principles of Engineering and PLTW Computer-Integrated Manufacturing.

### **William Daylor High School**

#### **Early Childhood Education Pathway**

This program trains future preschool teachers and elementary instructional aides. Students practice guidance, lesson planning and presentation, age-appropriate activities and classroom management. Following pre-training, students work with a training site teacher and children to practice skills and explore classroom teaching as a career. Course qualifies students for Early Childhood Education units at local community college and alternative teacher qualification for preschool programs. Community internships may include placement in preschools, daycare centers, infant centers, elementary schools, licensed family daycare homes, and recreational settings.

### **Construction Trades**

Students focus on the foundational skills needed in the construction trades and for enrollment in advanced CTE courses at the post-secondary level. They study of safety, career opportunities, hand and power tools, planning and design, applicable mathematics, blueprint reading, component nomenclature, trade vocabulary, residential and commercial construction standards, construction manufacturing standards, and specialized skills.

For more information call 916-686-7709 or email [explore@egusd.net](mailto:explore@egusd.net).

