Choose your college and career pathway...

- Arts, Media, & Entertainment
- Education, Child Development, & Family Services
- Transportation
- Energy, Environment, & Utilities
- Public Services
- Engineering & Architecture
- Manufacturing & Product Development
- Heath Science & Medical Technology
- Information & Communication Technologies

2023-2024 Course Catalog
History
For over 50 years the Tri-Valley ROP has provided pathways for students to explore career interests and/or college majors by offering courses developed to meet the needs of current industry standards.

Districts We Serve
Dublin Unified School District
Livermore Valley Joint Unified School District
Pleasanton Unified School District

We Provide
Elective courses that satisfy a-g requirements for UC and CSU
College credit through partnerships with local community colleges
Preparation for college and careers through rigorous and relevant instruction
   Hands-on learning and internships
   Instruction by industry professionals

Nondiscrimination Notice
The District's programs and activities shall provide equal access to and shall not unlawfully discriminate based on actual race, color, ancestry, national origin, ethnic group identification, religion, marital or parental status, physical or mental disability, sex, sexual orientation, gender, gender identity or expression, or genetic information; the perception of one or more of such characteristics; or association with a person or group with one or more of these actual or perceived characteristics and against students who are members of special populations. Special populations include, but are not limited to, students with disabilities; students from economically disadvantaged families, including foster youth; students preparing for nontraditional fields; single parents and single pregnant females; displaced homemakers; and students with limited English proficiency.
### Table of Contents - Classes at a Glance

**Contact your Career Center today for more information.**

- Amador Valley High (925) 461-6100 x 6158
- Dublin High (925) 833-3300 x 7220
- Foothill High (925) 461-6600 x 5618
- Granada High (925) 606-4800 x 3520
- Livermore High (925) 606-4812 x 2330

<table>
<thead>
<tr>
<th>Career Pathway</th>
<th>TVROP Class</th>
<th>AVHS - Amador Valley High</th>
<th>DHS - Dublin High</th>
<th>FHS - Foothill High</th>
<th>GHS - Granada High</th>
<th>LHS - Livermore High</th>
<th>OTHER: See Counselor</th>
<th>High School Credits Earned</th>
<th>College Credit Available</th>
<th>UC/CSU Approved</th>
<th>Certification/Licensure</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arts, Media and Entertainment</strong></td>
<td>Animation &amp; Motion Graphics I</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors Artist Portfolio</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Video Game Art &amp; Design</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education, Child Development and Family Services</strong></td>
<td>Developmental Psychology of Children I</td>
<td>x, x, x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Developmental Psychology of Children II</td>
<td>TBD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Energy, Environment, and Utilities</strong></td>
<td>AP Environmental Science</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Engineering and Architecture</strong></td>
<td>Computer Integrated Manufacturing</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors Civil Engineering &amp; Architecture</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors Digital Electronics</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors Principles of Engineering</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Health Science and Medical Technology</strong></td>
<td>Introduction to Health Careers</td>
<td>x, x, x, x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medical Occupations</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nursing Careers</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Principles of Biomedical Science</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information and Communication Technologies</strong></td>
<td>Internet Engineering I (CCNA1)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internet Engineering II (CCNA2)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IT Essentials (Cybersecurity: ICT Essentials)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marketing, Sales, and Services</strong></td>
<td>Integrated Marketing Communications</td>
<td>x, x, x, x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sports and Entertainment Marketing</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduction to Business Careers</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economics of Business Ownership</td>
<td>x, x, x, x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Public Services</strong></td>
<td>Criminal Justice Academy</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduction to Criminal Justice (CJ/CSI)</td>
<td>x, x, x, x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emergency Medical Responder</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td>Auto Body Repair I</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Auto Body Repair</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Automotive Technology</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Animation & Motion Graphics I

Animation students develop their mastery of the skills required to be a professional digital graphic artist or animator. Animation and Motion Graphics combines theory, such as the 12 Principles of Animation, with the knowledge to expertly navigate and use the various digital design programs. Throughout the year, we will be using Adobe Photoshop for digital editing and pre-production, followed by ToonBoom Harmony for our 2D Animation or Autodesk Maya for our 3D work. Students learn the steps of working through a professional animation workflow, working on our new iMac workstations daily and with access to our assortment of Wacom drawing tablets. Projects from this class are shared through internet media such as YouTube, for purposes of leaving the class with a final portfolio of your work to show to possible employers or college institutions.

Students may also complete the Autodesk Certified User and Adobe Certified Associate certification exams.

Campus: Dublin High
Course Length: 1 Year/2 Periods
High School Credits: 20
Potential College Credits: 3
Fulfills a-g: "f"
Certificate Earned: Prepares students for the Adobe Certified Associate and Autodesk Certified User
(Dublin High School is a testing center for Certiport)

Honors Artist Portfolio

The Honors Artist Portfolio course is a challenging course that focuses on building a body of work for student’s professional portfolios. Successful students will demonstrate their development of technical skills and application of the elements and principles of art. The class will focus on the strengthening of independent thinking and creativity, the development of personal style and technique, as well as critical thinking skills through problem solving. This course is designed for students who are committed to improving their skills in visual art and are planning to take AP Studio Art and/or pursue art in college and career.

Coursework will expose students to art through history from international cultures and movements. Students will do written analysis and critique of their own art and other artists, and review/respond to a current gallery or museum exhibition. During the class, students will write formal self and group critiques, analysis and statements about artwork. Throughout the school year, Honors Artist Portfolio students will participate in preparing and exhibiting their work publicly.

Campus: Dublin High
Course Length: 1 Year/1 Period
High School Credits: Varies
Potential College Credits: Varies
Fulfills a-g: "f"
Certificate Earned: Prepares students for the Adobe Certified Associate and Autodesk Certified User
(Dublin High School is a testing center for Certiport)

Video Game Art & Design

Video Game Art & Design students get hands-on experience working in Autodesk Maya learning the skills to be a 3D Modeler. Students spend the majority of the year exploring the methods used to develop 3D models for games, including the ability to prepare and generate textures for their models in Adobe Photoshop. The class also touches on game engines, such as Unreal and Unity, as well as 3D sculpture tools Zbrush and Mudbox. While exploring the development of games, students learn about ludology, the theory of gameplay, in order to understand why people play games and their reaction to game mechanics. All students will develop a portfolio of their work, which can be used when seeking work-based learning placements and/or to gain admission in post-secondary game design programs.

Students may also complete the Autodesk Certified User and Adobe Certified Associate certification exams.

Campus: Dublin High
Course Length: 1 Year/1 Period
High School Credits: 10
Potential College Credits: 3
Fulfills a-g: "f"
Certificate Earned: Prepares students for the Adobe Certified Associate and Autodesk Certified User
(Dublin High School is a testing center for Certiport)
Developmental Psychology of Children I

Interested in a career involving children? Considering a career as a pediatrician, teacher, psychologist, or social worker? If so, the Developmental Psychology of Children (DPOC) course is for you. DPOC is a course that combines classroom instruction and off-campus work-based learning placements. That means you learn about the development of children, while you actually get to work with them! Work-based learning placements take place during the scheduled class time at local elementary schools, child care centers, or preschools. Opportunities for after-school and paid work-based learning placements are also available. Throughout the school year, you will study a variety of child growth and development topics, and you will learn how to work with children ages birth to adolescence. In addition, you will be trained in CPR. After successfully completing the course, you are eligible to receive transferable college credits (for free) from Las Positas College! Make a difference in a child’s life…enroll in Developmental Psychology of Children.

Work-based learning placement is a required component of the program and students must provide their own transportation. Students in after-school paid work-based learning placements may earn up to five additional credits per high school semester or trimester.

Campus:
Foothill High
Granada High
Livermore High

Course Length:
1 Year/2 Periods

High School Credits: 20
Potential College Credits: 6
Fulfills a-g: "g"

Certificate Earned: Eligible for the California Commission on Teacher Credentialing (CCTC), Early Childhood Assistant Permit, and CPR Certification

Developmental Psychology of Children II

This is an advanced course in child development and education. Students increase their knowledge, experience, and job skills at an work-based learning placement. Advanced projects further develop skills. Students will focus on: observation of children and programs; communicating with children, staff, and parents; planning age-appropriate curriculum; and understanding the history, theories, philosophies, and legal aspects of careers related to children.

Work-based learning placement is a required component of the program and students must provide their own transportation. Students in after-school paid work-based learning placements may earn up to five additional credits per high school semester or trimester.

Campus:
Class location will be determined by registrations

Course Length:
1 Year/2 Periods

High School Credits: 20
Potential College Credits: 6
Fulfills a-g: "g"

Certificate Earned: Eligible for the California Commission on Teacher Credentialing (CCTC), Early Childhood Assistant Permit, and CPR Certification
AP Environmental Science

The AP Environmental Science course is designed to be the equivalent of an introductory college course in environmental science. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationship of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. The following themes provide a foundation for the structure of the AP Environmental course:

- Science is a process
- Energy conversions underlie all ecological processes
- The Earth itself is one interconnected system
- Humans alter natural systems
- Environmental problems have a culture and social context
- Human survival depends on developing practices that will achieve sustainable systems

Campus:
Amador Valley High
Foothill High

Course Length:
1 Year/2 Periods

High School Credits: 20
Fulfills a-g: "d"

“When the winds of change blow, some people build walls while others build windmills”

Environmental Science

Environment is the circumstances and conditions that surround organism(s) as well as the complex of social & cultural conditions that affect an individual or community;

Environmental science is the systematic study of our environment and our place in it.
Computer Integrated Manufacturing

How are things made? What processes go into creating products? Is the process for making a water bottle the same as it is for a musical instrument? How do assembly lines work? How has automation changed the face of manufacturing? While students discover the answers to these questions, they're learning about the history of manufacturing, robotics and automation, manufacturing processes, computer modeling, manufacturing equipment, and flexible manufacturing systems. This course is a specialized-level course designed to follow the Project Lead the Way Engineering foundation courses.

Campus: Dublin High
Course Length: 1 Year/1 Period
High School Credits: 10
Fulfills a-g: "d"

Honors Civil Engineering & Architecture

Civil engineering has a significant role in the life of every human being, though one may not truly sense its importance in our daily routines. Architecture is the art / practice of designing and constructing buildings. To help students explore these career fields, students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. In addition, students use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects. This course is a specialization-level course designed to follow the Project Lead the Way Engineering foundation courses.

Campus: Amador Valley High
Livermore High
Course Length: AVHS - 1 year/1 period
LHS - 2 Trimesters/1 Period
High School Credits: 10
Fulfills a-g: "d"

Honors Digital Electronics

Digital Electronics is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras, and high definition televisions. Students are introduced to the process of combinational and sequential logic design, engineering standards and technical documentation. The course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study in the area of digital electronics. While this is one of several courses that allows student to further their engineering studies in a specific field or specialty, the logic design skills learned here are highly transferable to other engineering disciplines.

Campus: Foothill High
Course Length: 1 Year/1 Period
High School Credits: 10
Fulfills a-g: "d"

Honors Principles of Engineering

This second-year foundation course of engineering exposes students to some of the major concepts they will encounter in a postsecondary engineering course of study. Students employ critical thinking, creativity, innovation and engineering concepts in the solution of engineering design problems. Principles of Engineering Design™ (POE) follows a proven hands-on, real-world problem-solving approach to learning, engaging students on multiple levels and exposing them to areas of study that they might not otherwise pursue. They discover the answers to questions like how are things made and what processes go into creating products? Students have an opportunity to investigate engineering and high-tech careers and to apply their knowledge of research and design to create solutions to various challenges. Students will continue to use industry-recognized 3D modeling software learned in IED in the previous year. They’ll design, test and construct device-think machines and robotics. Topics include mechanisms, energy, statics, materials, and kinematics. Throughout POE, students apply the design process, acquire strong teamwork and communication proficiency and develop organizational, critical-thinking and problem-solving skills. Students also learn how to document their work and communicate their solutions to peers and members of the professional community. To be successful in POE, students should be concurrently enrolled in college preparatory mathematics and science. POE is intended to serve as one of two foundation courses within the Project Lead the Way course sequence.

Campus: Dublin High
Course Length: 1 Year/1 Period
High School Credits: 10
Potential College Credits: 2
Fulfills a-g: “d”
Introduction to Health Careers

This course is designed to expose students to the health care industry by surveying the wide spectrum of health care occupations and equipping them with the entry level knowledge and skills that apply to a variety of health occupations. This course is a great course to take before taking Medical Occupations or Nursing Careers. Students who successfully complete this course will acquire the necessary knowledge and skills that will allow them to pursue an education and career in the health care industry. Students will be trained in hands on skills, taking vital signs, etc. Students will earn their Basic Life Support CPR Certification. Students will develop a professional career portfolio, job shadow health care professionals and earn volunteer service hours (outside of the school day) in the health care field.

Campus:
Dublin High
Livermore High
Granada High

Course Length:
DHS - 1 Year/1 Period
GHS - 2 Trimesters/1 Period
LHS - 2 Trimesters/1 Period

High School Credits: 10
Potential College Credits: 2
Fulfills a-g: "g"
Certificate Earned: CPR Certification

Medical Occupations

Medical Occupations provides an introduction and broad exploration into several careers within the medical field including: Medical Assisting, Emergency Medicine, Veterinary Medicine, Dental Assisting/Hygienist, Geriatric Assistant, Physical Therapy, Surgical Technician and Nursing. Instruction is combined with a hands-on learning experience through instructor approved clinical work-based learning placements at local medical facilities. After completion of the course, students are eligible to take the California certification exam for Medical Assistants and become a California Certified Medical Assistant—Administrative (CCMA-A).

NOTE: Spring orientation is required in order to be enrolled in the program and must be attended by the student and parent/guardian(s).

Requirements for Clinical: Current immunization record and CPR BLS Health Care Provider training must be completed prior to the first day of class. Flu shot (required for all students per hospital policy) is administered in September. Quantiferon TB test is required to be completed 60 days prior to the beginning of clinical work-based learning placement. Additional immunizations may be required by employer partner (for example, COVID vaccination and booster). Clinical work-based learning placements require that students provide their own transportation. Students must be available for work-based learning placements daily. Uniforms required.

Campus:
Foothill High
Granada High

Course Length: 1 Year/2 Periods

High School Credits: 20
Potential College Credits: 6
Fulfills a-g: "g"
Certificate Earned: California Certified Medical Assistant Administrative (CCMA-A) (Must pass exam), various industry recognized certifications

Nursing Careers

Nursing Careers offers a comprehensive introduction to the field of nursing while studying the care of patients and the role nurses provide in a variety of healthcare systems. Focus is given to the various specialties within the field and studies include a basic understanding of the systems of the body, medical terminology, diseases, basic patient care, taking vital signs, charting, medical ethics and understanding patient privacy laws. Instruction is combined with a hands-on learning experience through instructor approved work-based learning placements at local hospitals, clinics and physician offices.

NOTE: Spring orientation is required in order to be enrolled in the program and must be attended by the student and parent/guardian(s).

Requirements for Clinical: Current immunization record and CPR BLS Health Care Provider training must be completed prior to the first day of class. Flu shot (required for all students per hospital policy) is administered in September. Quantiferon TB test is required to be completed 60 days prior to the beginning of clinical work-based learning placement. Additional immunizations may be required by employer partner (for example, COVID vaccination and booster). Clinical work-based learning placements require that students provide their own transportation. Uniforms Required. Students must be available for work-based learning placements between 1:00 and 4:30 pm daily.

Campus:
Foothill High

Course Length: 1 Year/2 Periods

High School Credits: 20
Potential College Credits: 6
Fulfills a-g: "g"
Certificate Earned: Various industry recognized certifications
Health Science & Medical Technology

**Principles of Biomedical Science**

Students investigate various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person’s life. The activities and projects introduce students to human physiology, medicine, and research processes.

**Campus:**
Foothill High

**Course Length:**
1 Year/1 Period

**High School Credits:** 10

**Fulfills a-g:** "d"

**Sports Medicine – Athletic Trainer I**

Sports Medicine - Athletic Trainer I is an exciting, growing field with employment opportunities in athletic training, sports medicine, and physical therapy. Instruction encompasses the study of Anatomy, Physiology, Nutrition, Biology and Kinesiology to understand the aspects of the field. Students are introduced to associated medical terminology and the practice of classification and assessment of injuries. Through work-based learning placements, students apply skills learned in class to the prevention of injuries, the understanding of human body modalities and rehabilitation, the procedures of training rooms and the safety factors related to sports medicine.

**Campus:**
Amador Valley High
Dublin High
Foothill High
Granada High
Livermore High

**Course Length:**
AVHS - 1 Year/1 Period
DHS - 1 Year/1 Period
FHS - 1 Year/1 Period
GHS - 2 Trimesters/1 Period
LHS - 2 Trimesters/1 Period

**High School Credits:** 10

**Fulfills a-g:** "g"

**Certificate Earned:** CPR Certification

**Sports Medicine II**

Sports Medicine II provides an excellent opportunity for students to continue exploring their interest in the fields of Health Science and Medicine. This class provides a framework of advanced skills for understanding functional anatomy and kinesiology, building on the concepts of anatomy/physiology learned in Sports Medicine I. The lecture/lab format focuses on clinical hands-on learning, including evaluation, assessment treatment and events, assisting the Head Athletic Trainer or Team Physician, and working with other health care professionals. Integrated throughout the course are career technical education standards, which include basic academic skills, communication, career planning, technology, problem solving, safety, responsibility, ethics, teamwork and technical knowledge.

**Campus:**
Amador Valley High
Dublin High
Foothill High
Granada High
Livermore High

**Course Length:**
AVHS - 1 Year/1 Period
DHS - 1 Year/1 Period
FHS - 1 Year/1 Period
GHS - 2 Trimesters/1 Period
LHS - 2 Trimesters/1 Period

**High School Credits:** 10

**Fulfills a-g:** "g"

**Certificate Earned:** CPR Certification

Fulfills a-g: "g"

**Certificate Earned:** CPR Certification
Information & Communication Technologies

IT Essentials (Cybersecurity: ICT Essentials)
An in-depth exposure to computer hardware and operating systems. Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Through hands-on activities and labs, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot problems. An introduction to computer networking is included.

Campus:
Livermore High
Course Length:
2 Trimesters/1 Period
High School Credits: 10
Potential College Credits: 4
Certificate Earned: Prepares students for the A+ Certification Exam

Internet Engineering I (CCNA1)
CCNA Routing and Switching curriculum is a gateway to entry-level networking jobs and IT Careers. The curriculum consists of 4, 70-hour courses: Introduction to Networks (Internet Engineering 1 (CCNA1)) Routing and Switching Essentials (Internet Engineering 2 (CCNA2)).

Internet Engineering 1 is an interdisciplinary course designed to prepare students for post-secondary success in the Information and Communication Technologies (ICT) field. The course engages students with studies of: the history and implications of network communications; the protocols which make the Internet possible; how networks provide access to services; and college and career preparation in the ICT field. This course integrates the theory and application of network communications, exposing students to media that invites them to consider how Internet engineers think, design, and solve problems. Students have several opportunities to produce college-ready writing, collaborate, research, develop study skills, and develop 21st century skills in this course.

IMPORTANT! This is the first course in a series of three that prepares students for the Cisco CCNA Networking Certification and A+ industry certification.

Campus:
Livermore High
Course Length:
2 Trimesters/1 Period
High School Credits: 10
Potential College Credits: 3
Fulfills a-g: ’g’
Certificate Earned: Prepares students for the CCENT Certification

Internet Engineering II (CCNA2)
Internet Engineering 2 is a follow-up course to Internet Engineering 1. It is designed to prepare students for postsecondary success in the Information and Communication Technologies (ICT) field. The course engages students with studies of the network protocols which make the Internet possible; how networks communicate with one another; methods used to increase scalability, reliability, and security in the modern network; and college and career preparation in the ICT field. This course integrates the theory and application of network communications, exposing students to media that invites them to consider how Internet engineers think, design, and solve problems. Students will produce college-ready writing collaborate with peers and mentors, research solutions to complex challenges, improve student skills and strategies, and develop a Personal Learning Network.

IMPORTANT! This is the second course in a series of three that prepares students for the Cisco CCNA Networking Certification and A+ industry certification.

Campus:
Livermore High
Course Length:
2 Trimesters/1 Period
High School Credits: 10
Potential College Credits: 3
Fulfills a-g: ’g’
Certificate Earned: Prepares students for the CCENT Certification
Marketing, Sales, & Services

**Integrated Marketing Communications**

Learn about the field of marketing and the vast career opportunities within this industry. Explore areas such as market research, product development, pricing, promotion, distribution, visual merchandising, presentation and project management through a variety of hands-on projects. Bring your ideas and creativity! Students receive training in constructing resumes, employment applications, cover letters and references, in addition to interviewing skills. Students will complete a career portfolio to prepare for entry into the job market with a competitive edge. Marketing concepts and leadership skills are reinforced through co-curricular participation in the Career and Technical Student Organization, DECA*. DECA is an integral component to this program and provides additional focus on developing written and oral presentation skills, as well as leadership and social and professional skills that will build self-confidence for college and career success.

*DECA, www.deca.org, prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management. DECA offers the opportunity for students to participate in competitive events throughout the year, in a variety of locations at local, state and international levels. Students have the opportunity to receive recognition, awards and scholarships. DECA is endorsed by the United States Department of Education and the California Department of Education.

Students who work 10-15 hours per week (at approved sites in the Tri-Valley geographical area within their current job) have the opportunity to earn additional high school credits based on their on-the-job experience. Student is responsible for maintaining all required employment records and meeting all deadlines established by the teacher. Note: students must provide their own transportation.

**Campus:**
Amador Valley High
Dublin High
Foothill High
Granada High

**Course Length:**
AVHS - 1 Year/1 Period
DHS - 1 Year/1 Period
FHS - 1 Year/1 Period
GHS - 2 Trimesters/1 Period

**High School Credits:** 10

**Potential College Credits:** 3

Fulfills a-g: "g"

---

**Sports and Entertainment Marketing**

Learn what it takes to have a career in the field of sports and entertainment marketing. Through focused instruction on the marketing concepts and strategies, students explore the professional, college and amateur sports world, as well as a vast variety of entertainment events and how this lucrative industry reaches their target audience. Students will plan and utilize market research; develop promotion and marketing materials for sports and entertainment events; and improve leadership skills through co-curricular participation in the Career and Technical Student Organization, DECA*. DECA is an integral component to this program and provides additional focus on developing written and oral presentation that will build self-confidence for college and career success. Students will also receive training in constructing resumes, employment applications, cover letters and references, in addition to interviewing skills and will complete a career portfolio to prepare for entry into the job market with a competitive edge.

*DECA, www.deca.org, prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management. DECA offers the opportunity for students to participate in competitive events throughout the year, in a variety of locations at local, state and international levels. Students have the opportunity to receive recognition, awards and scholarships. DECA is endorsed by the United States Department of Education and the California Department of Education.

Students who work 10-15 hours per week (at approved sites in the Tri-Valley geographical area within their current job) have the opportunity to earn additional high school credits based on their on-the-job experience. Student is responsible for maintaining all required employment records and meeting all deadlines established by the teacher. Note: students must provide their own transportation.

**Campus:**
Dublin High

**Course Length:**
1 Year/1 Period

**High School Credits:** 10

**Potential College Credits:** 3

Fulfills a-g: "g"
**Introduction to Business Careers**

Students will be introduced to the world of business and career options within the industry. Students will explore foundations of business operations, and gain knowledge and skills required for success in today’s marketplace. Units of instruction will introduce economic systems, global markets, ethics, entrepreneurship, management, human resources, marketing, accounting, finance in business, and personal finance.

**Campus:**
Granada High

**Course Length:**
1 Trimester/1 Period

**High School Credits:** 5

---

**Economics of Business Ownership**

Learn the process of starting and managing a business. Students with an entrepreneurial interest learn skills related to organization, effective decision making, and goal setting. Students develop comprehensive business plans including research & development of ideas, product planning, finance and marketing. Students research how marketing, management, ethics and communication play an important role in business success. Students gain practical experience by managing a student-run business and receive training in constructing resumes, employment applications, cover letters and references and interviewing skills. Students complete a career portfolio to prepare for entry into the job market with a competitive edge. Business concepts and leadership skills are reinforced through co-curricular participation in the Career and Technical Student Organization, DECA*. DECA is an integral component to this program and provides additional focus on developing written and oral presentation skills, as well as leadership and social and professional skills that will build self-confidence for college and career success.

*DECA, www.deca.org, prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management. DECA offers the opportunity for students to participate in competitive events throughout the year, in a variety of locations at local, state and international levels. Students have the opportunity to receive recognition, awards and scholarships. DECA is endorsed by the United States Department of Education and the California Department of Education.

Students who work 10-15 hours per week (at approved sites in the Tri-Valley geographical area with their current job) have the opportunity to earn additional high school credits based on their on-the-job experience. Student is responsible for maintaining all required employment records and meeting all deadlines established by the teacher. Note: students must provide their own transportation.

---

**Campus:**
Amador Valley High
Dublin High
Foothill High
Granada High

**Course Length:**
AVHS - 1 Year/1 Period
DHS - 1 Year/1 Period
FHS - 1 Year/1 Period
GHS - 2 Trimesters/1 Period

**High School Credits:** 10

**Potential College Credits:** 3

Fulfills a-g: "g"
Public Services

Criminal Justice Academy

Students will have the unique opportunity to participate in a variety of exciting activities designed to enhance their learning. Activities include field trips, career exhibitions, leadership opportunities, mentoring, ride alongs, and academy competitions. Students will complete physical training at the RTC facility in the Alameda County Sheriff’s campus and have the opportunity to complete the confidence course just like a cadet! To help students develop their professional skills, each student may be assigned a mentor. Mentor assignment is contingent upon industry partner availability.

Students will learn the historical development, philosophy of law, and constitutional provisions of administrative justice. Students will explore the ethical, legal, and moral complexities within a democracy; they will examine the complex, dynamic relationship between communities and the justice system. Students will write investigative reports with an emphasis on accuracy and details necessary, including arrest reports, incident reports, and miscellaneous field reports.

Academy cadets will have the opportunity to wear attire that best suits their desired career path within the justice system. To show a commitment to the principles of public service, volunteer hours are a required component of this course.

Campus:
Las Positas College/Alameda Co. Sheriff’s Office Regional Training Center
Course Length:
1 Year/2 Periods
High School Credits: 20
Potential College Credits: 16
Fulfills a-g: “g”
Certificate Earned: CPR Certification

Introduction to Criminal Justice (CJ/CSI)

This course provides students with a strong overview of law enforcement as a career. Each portion of the course helps students obtain a proficiency in understanding the different components of the criminal justice system. Students are provided with an overview of career opportunities, including but not limited to sworn personnel such as police officers, sheriffs, highway patrol, correctional officers and non-sworn personnel such as dispatchers, evidence technicians, lab technicians, and attorneys. Students study the connections between the criminal justice and court systems through laws and report writing. The course is tied together utilizing curriculum in crime scene investigation. Students employ skills learned with hands-on projects, including investigating a mock crime scene.

Campus:
Amador Valley High
Dublin High
Foothill High
Livermore High
Course Length:
1 Year/1 Period
High School Credits: Varies
Potential College Credits: 6
Fulfills a-g: “g”
Certificate Earned: CPR Certification

Emergency Medical Responder

This course develops the knowledge and skills necessary for recognizing and caring for emergency situations, including CPR, prevention of disease transmission, and automated external defibrillation. Designed for first responders in an emergency. Successful completion of the skills test with an 80% or better qualifies students for the American Safety and Health Institute (ASHI) First Responder certificate and an American Heart Association Basic Life Support Health Care Provider certificate. This will be offered in the evening both Fall and Spring semester. College credits available.

Campus:
Foothill High
Course Length:
1 semester (2 days per week – evenings only)
High School Credits: 5
Potential College Credits: 3
Certificate Earned: EMR Certification
Auto Body Repair I
Examine the world of auto body repair by learning the industry skills necessary for a successful career in the field. Students explore trends and future technologies of the collision repair and refinishing industry and practice identifying auto body damage and the relationship to cost estimation. Instruction focuses on giving students a hands-on experience in learning the skills of the trade, including: how to straighten and repair auto bumper covers, replace panels, prep cars for paint, rebuild and repaint auto bodies, mig weld, and detail cars.

Campus: Livermore High
Course Length: 1 Year/1 Period
High School Credits: Varies
Potential College Credits: 3
Fulfills a-g: "g"
Certificate Earned: I-CAR

Advanced Auto Body Repair
This course is for students interested in a career in auto body repair. Students study advanced topics and complete projects that include learning the skills required for color matching to industry specifications. Instruction focuses on students applying skills and knowledge learned to identify frame damage and methods of repair and measuring. Students will become proficient in shop management, team leadership, and business principles.

Campus: Livermore High
Course Length: 1 Year/1 Period
High School Credits: Varies
Fulfills a-g: "g"
Certificate Earned: I-CAR

Automotive Technology
Automotive Technology is a comprehensive, hands-on course that allows students to explore and practice the necessary skills needed to repair automobile systems as well as parts. Instruction includes: steering and suspension, brakes, electrical, maintenance, engine diagnostics and repair, rear axle, automatic transmissions, and emission controls. Students gain experience in tire repair, changing and high-speed tire balancing, brake and wheel bearing inspection, measuring and repairing, and front and four-wheel alignment. Desired business and shop practices are studied, along with advanced automotive theory used in the industry. Students practice test preparation and procedures for the Automotive Service Excellence (ASE) certification and learn the benefits of gaining ASE certifications. Students may work on their own or family car with approval of instructor.

Campus: Livermore High
Granada High
Course Length: 1 Year/1 Period
High School Credits: Varies
Potential College Credits: 4
Fulfills a-g: "g"
Certificate Earned: Automotive Service Excellence (ASE) Certification
Tri-Valley Regional Occupational Program

**BOARD MEMBERS**
- Kristen Speck, DUSD
- Emily Prusso, LVJUSD
- Steve Maher, PUSD

**COORDINATING COUNCIL**
- Dr. Matt Campbell, DUSD
- Ms. Melissa Theide, LVJUSD
- Dr. William Nelson, PUSD

**ROP ADMINISTRATIVE OFFICE TEAM**
- Julie Duncan, TVROP Superintendent
- Suzanne Smith, Director, College and Career Readiness
- Dawn Pavon, Program Coordinator
- Roxanne Villanueva, Assistant to the Superintendent
- Corinna Jauregui, Senior Support Specialist
- Kristen Sims, Accounting Specialist
- Lynette Hasan-Marshall, Transition Specialist
- Amy Brown, Program Coordinator, Middle College
- TBD, Support Specialist, District Office
- Madison Schlick, Attendance Secretary, Middle College

**COLLEGE AND CAREER SPECIALISTS**
- Janice Wilson, Amador Valley High School
- Daniel Yang, Dublin High School
- Anabel Delgado, Foothill High School
- Danielle Watson, Granada High School
- Paula-Ann Cabading, Livermore High School

**HIGH SCHOOL INSTRUCTIONAL TEAM**
- Marjan Akrami
- Randy Barnard
- Sara Beyne
- Kathy Cabrera
- Stephany Chavez
- Dave Coleman
- Kimberly Connors
- Denise Gauthier
- Dr. Satnam Gunsi
- Nakisha Harris
- Diana Hasenpflug
- Austin Hutson
- Bailey Laughlin
- Larry Low
- Chris Meyer
- Kelly Mogilefsky
- Allyson Ortner
- Tami Raaker
- Russell Rockstad
- Fabiola Salceda
- Sergio Verbis