

CAREER TECH ED

What is Career Technical Education?

The RBVHS Career Technical Education (CTE) program is designed to provide all students with opportunities for enhanced learning experiences, preparation for future career decisions and a realistic view of the world of work.

Elective CTE Courses provide students with the academic knowledge and skills needed to prepare for post-secondary education. Many of the CTE courses are articulated with Palomar College and offer students an opportunity to earn college credit. Students also receive a strong experience and understanding of all aspects of the industry they are considering for a future career. The competency based applied learning methodology featured in CTE courses contributes to the academic knowledge, problem solving abilities, work attitudes, technical expertise and future employability.

CTE ARTS & MEDIA PATHWAYS

TV, Film & Digital Media

Recommended Sequence of classes:

- Digital Arts **OR** Photo Imaging I
- TV, Film & Digital Media I
- TV, Film & Digital Media II
- Video Broadcasting

Print Media

Recommended Sequence of classes:

- Digital Arts **OR** Photo Imaging I
- Graphic Design I
- Graphic Design II

Web Publishing

Recommended Sequence of classes:

- Digital Arts **OR** Photo Imaging I
- Web Publishing I
- Web Publishing II

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CTE VISUAL ARTS COURSE DESCRIPTIONS

Digital Arts

R175

Digital Arts is a one year course introducing students to the basic skills required for more advanced studies in the CTE Arts & Media Pathway. This course blends activities and lecture to develop both an artistic approach and the technical skills to create digital artwork. Hands on activities reinforce student creativity by applying elements of art and principles of design. Students work with industry standard software on a leading edge hardware platform to acquire confidence and understanding of the process of digital creativity. Digital Arts is the perfect introduction to self expression while students develop the technical skills to achieve success in more advanced visual arts Career Technical Education courses.

UC Accreditation: UC “f”

Articulation: Palomar GCIP 140, Digital Imaging/Photoshop I, Pending

Photo Imaging

R160 Photo Imaging I

Photo Imaging I is an introductory course designed to instruct students in the fundamental skills of composing digital photo images and processing them using industry standard software. Basic and intermediate techniques are taught to enhance or manipulate images for any purpose. With hands on experience, students become familiar with photographic imaging equipment, materials, methods, and processes. Applied creative thinking and visual problem solving prepares students for more advanced courses and a foundation for professional career possibilities. This course is recommended prior to enrollment in advanced courses in the CTE Visual Arts Pathway.

UC Accreditation: UC “f”

Articulation: Palomar GCIP 150, Digital Photo I, Pending

R162 Photo Imaging II

This is a studio course designed for students who wish advanced training or to pursue a career in photography. Advanced concepts, techniques, practices, aesthetics and photographic imaging and image-making with digital technology are included in instruction, with an emphasis on portfolio building.

Graphic Design

R180 Graphic Design I

Graphic Design I will prepare students to design and produce a variety of print and electronic media. Techniques for planning, designing and creating illustrations, brochures, newspapers, flyers, advertisements, publications, and instructional materials are included in instruction. All aspects of graphic communications are explored in order to successfully deliver a message. Students are prepared for entry level positions in industry or advanced career technical studies at colleges and universities. Students produce real life projects based on industry standards and are visible throughout the school and community.

UC Accreditation: UC “f”

Articulation: Palomar College Credit Pending

R185 Graphic Design II

Graphic Design II is a course that provides advanced study in art, design and digital illustration and is available for students who wish to pursue Graphic Design as a career.

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TV, Film and Digital Media

R805 TV, Film & Digital Media I

This is the first in a sequence of courses that introduces the technical skills required to produce broadcast quality media content. The focus of this course is learning the production process of making movies. The language and aesthetics of cinematography are explored through the design and production of a digital movie short or documentary. Pre-production techniques are taught to include selection of cast and crew, proper video camera techniques, digital video editing, script writing, storyboard drawing, effective lighting, audio, directing, production responsibilities, computer generated graphics, animation, and special effects. The professional skills learned in this course give students a first-hand opportunity to explore career choices within this industry.

UC Accreditation: UC "f"

Articulation: Palomar College Credit Pending

R806 TV, Film & Digital Media II

Advanced studies in TV, Film & Digital Media is available to students who have career interests in this field.

Video Broadcasting

Prerequisite for this course is the satisfactory completion of TV, Film and Digital Media I & II

The Video Broadcast class prepares you to gather, produce, and deliver the news school wide. You learn techniques and management skills for the production of news, sports, and feature-length programs and segments through television broadcasting. You will prepare for careers as news and sports journalists, camera operators, writers, anchors, and video editors. In addition to journalism, the study of ethics, on-air performance, broadcast writing, and media production will be studied to prepare you for broadcast news industry.

Web Publishing & Media Design

R191 Web Publishing & Media Design I

Web Publishing & Media Design I provides instruction in designing, building, managing, and deploying dynamic content for the Internet. Students learn HTML: the language that makes up all web pages. Object oriented language is taught to allow students to create more advanced sites, working both individually and in teams. The skills of color theory and composition learned in earlier courses are integrated and honed to professional standards. Students create a blog and a podcast. Advanced skills are developed by creating Flash animations and producing a digital portfolio which can be published to CD-ROM or the Internet. Careers in web design, multimedia production, new media and graphic design are fully explored.

Articulation: Palomar College Credit Pending

R192 Web Publishing & Media Design II

Advanced studies in Web Design is available to students who have career interests in this field.



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CTE ENGINEERING AND ARCHITECTURE PATHWAY

Pre Engineering & Design

Recommended Sequence of classes:

- Drafting/Computer Aided
- Pre Engineering & Design I
- Pre Engineering & Design II
- Pre Engineering & Design Advanced

Architectural Design

Recommended Sequence of classes:

- Drafting/Computer Aided
- Pre Engineering & Design I
- Architectural Design I
- Architectural Design II

MATH OPTION: Students who complete Pre-Engineering & Design 1 and Architectural Design 1 or Pre-Engineering and Design 2 with grades of "B" or better may receive 1 year of Math credit. Students must also complete Algebra 1.

PRE ENGINEERING & DESIGN PATHWAY

Drafting/Computer Aided (9-12)

R150

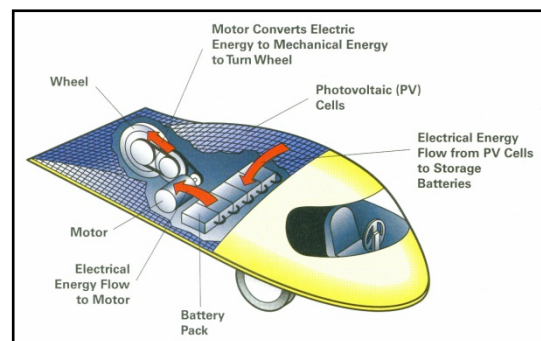
This class offers a combination of mechanical, computer-aided drafting and design skills for application in the fields of Engineering, Fashion Design, Interior Design, Landscape Design and other professions utilizing Computer Aided Design techniques. This is the introductory course for Pre-Engineering and Architectural Design but can be used for careers in related industries.

Palomar College Credit DT 125, AutoCAD Introduction to Computer Aided Drafting, Pending

Pre-Engineering & Design I (9-12)

R156

Semester one focuses on mechanical design. Technical drawing and 3D visualization skills are developed which enable students to use cutting edge computer aided design software: "SolidWorks". This program is used by industry professionals to design a wide range of products ranging from the music industry to military and defense. Students learn industry standards and computer skills that will enable them to design their own skateboards, surfboards, or other products.



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Semester two focuses on architectural design. Technical drawing and visualization skills are refined as students are challenged to design their own home. Students simultaneously build knowledge about residential construction as they are guided through home design room by room. After creating a sketch of each room in their house, they then learn how to draw them using AutoCAD, the most widely used computer aided design program in the engineering industry. By the end of this course students have learned how to design living rooms, bedrooms, bathrooms, kitchens, and electrical lighting systems.

Palomar College Credit Pending
Earns UC/CSU "g" Elective Requirement

Pre-Engineering & Design II (10-12)

R157



Students who prefer working with the program "SolidWorks" as a result of their first year in pre-engineering design continue to explore of the industry as they apply science & math concepts along with problem solving skills while learning about the fundamentals of engineering and material science. These concepts are implemented through individualized design projects. Students gain experience designing, prototyping, analyzing and improving existing designs while using "SolidWorks".

Requires "C" or better in Pre-Engineering & Design I
Palomar College Credit Pending

Pre-Engineering Advanced (11-12)

R158

Pre-Engineering Advanced is a follow up to Pre-Engineering & Design 2. Pre-Engineering topics are studied in greater depth and more emphasis is placed on original design and reverse engineered projects. Additional solid modeling commands and concepts are covered including lofts, sweeps, revolves, sheet metal and assembly mates. The "SolidWorks" software is utilized to model parts, mate parts into assemblies, develop fully dimensioned working drawings, rendered images, and implement theory based force analysis.

Requires completion of Pre-Engineering & Design 2 with a "C" or better

ARCHITECTURAL DESIGN PATHWAY

Drafting/Computer Aided (9-12)

R150

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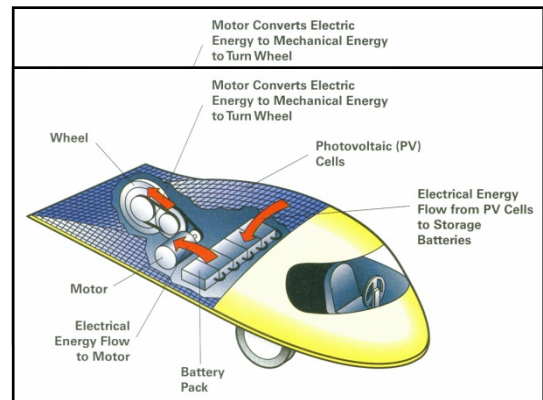
Palomar College Credit DT 125, AutoCAD Introduction to Computer Aided Drafting, Pending

CAREER TECH ED

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Palomar College Credit Pending
Earns UC/CSU "g" Elective Requirement

Architectural Design I (10-12)

R220

Students who prefer house design increase their industry knowledge about home design and construction standards as they are introduced to the most popular and cutting edge software in the architectural industry called "Revit Architecture". Students design their dream house, explore new architectural styles, and learn more advanced computerized design techniques in order to incorporate the exact features desired for their home design.



Requires completion of Pre-Engineering & Design 1 with a "C" or better or Instructors approval

- **Palomar College Credit Pending**
- **UC Accreditation: UC "f"**

Architectural Design II (11-12)

R225

In Design II students will study home design in greater depth with emphasis on design features. Additional topics covered include site plans, foundations, typical wall sections and architectural renderings. Students continue expanding their skills with the industry's best architectural design software: "Revit Architecture"

Requires completion of Architectural Design 1 with a "C" or better

CAREER TECH ED

CTE BUSINESS AND FINANCE PATHWAY

Business

Recommended Sequence of classes:

- Business & Computer Applications I
- Business & Computer Applications II

Finance

Recommended Sequence of classes:

- Business & Computer Applications I
- Business & Financial Markets

Business and Computers

R200 Business & Computer Applications I

The sequence of Business & Computer Application courses is designed to prepare students to work with industry standard software and hardware commonly found in business settings. Applications include word processing, spreadsheets, databases, presentation programs, multimedia applications and layout and web page design. Other subjects include resumes, cover letters, applications, and the impact of computers on society and business. Keyboarding and integrating data skills are also taught.

Earns Palomar College credit CSIT 120, Computer Applications

R201 Business & Computer Applications II

Advanced studies in Business & Computer Applications for students are available for students with career interests in this field of business.



Finance

R280 Business & Financial Markets

This entry level course will expose the student to the inner workings of multiple financial businesses. Students will learn how banks operate along with the ethics and regulations that are tied to financial institutions. Instruction includes information about insurance, mortgages and international finance. Each student will develop a personal financial plan at the completion of the course.

Earns UC/CSU "g" Elective Requirement

Palomar College credit pending

Earns Consumer Math credit

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CTE THEATRICAL PATHWAY

Recommended Sequence of classes:

- Stagehand Technician I
- Stagehand Technician II



Stagehand Technician I

R420

Prerequisite: Must be 16 years old or receive waiver.

Students interested in a theatre career will learn about set construction and design, lighting, sound, costuming, and make-up. These skills can help build a career in the theater field by allowing students to become employable as a stagehands, light technicians, sound technicians or costumers. Students who are enrolled in this course and who are working may earn additional credit toward graduation by co-enrolling in the internship program.

Mira Costa College Credit Pending

Stagehand Technician II

R421

Prerequisite: Completion of Stagehand Technician I or approval of instructor.

This course provides advanced training in stagehand technical skills. Instruction will include advanced training in make-up, costuming, and design. Instruction also includes use of soundboards, lighting equipment, hand tools and other tricks of the trade. Further job opportunities become available as a stage manager, property manager or costume manager. Students who are enrolled in this course and who are working may earn additional credit toward graduation by co-enrolling in the internship program.

Mira Costa College Credit Pending

CTE HEALTH CARE AND MEDICAL SCIENCE PATHWAY

Sports Medicine

R415

Prerequisite: Must be 16 years old

This course provides entry-level instruction in sports medicine and athletic training. It is designed for high school students, 16 years and older. Employment possibilities include, among others, athletic trainer assistant, sports medicine aide, and physical therapy aide. Instruction covers the following areas: anatomy and physiology, vital signs, CPR, and safety factors related to sports medicine. Opportunity exists for students to have supervised involvement with the training needs and treatment of injuries of students involved in athletics on campus.

Palomar College Credit Pending