

CTE TERMS & CONCEPTS

Based on Federal and
California laws and plans

Industry Sector

Groupings of careers so instruction and training can be organized and aligned to business and industry needs

- 15 identified in California
- Contain 58 defined Career Pathways
- Formerly Career Clusters

Career Pathway

A coherent sequence of rigorous academic and technical courses that allow students to apply academics and develop technical skills in a curricular area

Career pathways are intended to prepare students for successful completion of state academic and technical standards and more advanced postsecondary coursework related to the career in which they are interested

INDUSTRY SECTOR - CAREER PATHWAY MATRIX

Industry Sectors	Pathways		
Agriculture and Natural Resources	1. Agricultural Business 2. Agricultural Mechanics 3. Agriscience	4. Animal Science 5. Forestry and Natural Resources	6. Ornamental Horticulture 7. Plant and Soil Science
Arts, Media, and Entertainment	1. Media and Design Arts	2. Performing Arts	3. Production and Managerial Arts
Building Trades and Construction	1. Cabinetmaking and Wood Products 2. Engineering and Heavy Construction	3. Mechanical Construction	4. Residential and Commercial Construction
Education, Child Development, and Family Services	1. Child Development 2. Consumer Services	3. Education	4. Family and Human Services
Energy and Utilities	1. Electromechanical Installation and Maintenance 2. Energy and Environmental Technology	3. Public Utilities	4. Residential and Commercial Energy and Utilities
Engineering and Design	1. Architectural and Structural Engineering 2. Computer Hardware, Electrical, and Networking Engineering	3. Engineering Design 4. Engineering Technology	5. Environmental and Natural Science Engineering
Fashion and Interior Design	1. Fashion Design, manufacturing, and Merchandising	2. Interior Design, Furnishings, and Maintenance	
Finance and Business	1. Accounting Services	2. Banking and Related Services	3. Business Financial Management
Health Science and Medical Technology	1. Biotechnology Research and Development 2. Diagnostic Services	3. Health Informatics 4. Support Services	5. Therapeutic Services
Hospitality, Tourism, and Recreation	1. Food Science, Dietetics, and Nutrition	2. Food Service and Hospitality	3. Hospitality, Tourism, and Recreation
Information Technology	1. Information Support and Services 2. Media Support Services	3. Network Communications	4. Programming and Systems Development
Manufacturing and Product Development	1. Graphic Arts Technology 2. Integrated Graphics Technology	3. Machine and Forming Technology	4. Welding Technology
Marketing, Sales, and Service	1. E-Commerce 2. Entrepreneurship	3. International Trade	4. Professional Sales and Marketing
Public Services	1. Human Services	2. Legal and Government Services	3. Protective Services
Transportation	1. Aviation and Aerospace Transportation	2. Collision Repair and Refinishing	3. Vehicle Maintenance, Service and Repair

Clusters

The 15 industry sectors are clustered into six broad career areas that have traditionally served as an organizing structure for providing technical assistance supporting CTE student leadership organizations, and facilitating professional development.

Industry Sectors & Clusters

Agriculture Education	Business & Marketing Education	Health & Human Services Education
Agriculture & Natural Resources	Finance & Business	Health Science, & Medical Technology
	Information Technology	Public Services
	Marketing, Sales, & Service	
Home Economics Careers & Technology Education	Industrial & Technology Education	Arts, Media, & Entertainment Education
Fashion & Interior Design	Building Trades & Construction	Arts, Media, & Entertainment
Hospitality, Tourism, & Recreation	Energy & Utilities	
Education, Child Development, & Family Services	Engineering & Design	
	Manufacturing & Product Development	
	Transportation	

ARTICULATION

The process of developing a formal, written, and published agreement that identifies courses (or sequences of courses) from a “sending” campus that are comparable to, or acceptable in lieu of, specific course requirements at a “receiving” campus.

ARTICULATION

Articulation ensures students and faculty that students have taken the appropriate courses...and that outcomes for students are similar to those that would have been attained had the course been taken at the community college. This enables a smooth progression to the next level of instruction at the receiving institution.

ARTICULATION

The new emphasis in Perkins IV on articulation of CTE programs to the baccalaureate level and increased interest in integration in the California Community Colleges suggest that closer integration of CTE and non-CTE (“general education”) academic programs requires increased attention, to ensure that students have the foundation skills to progress to four-year universities if they so choose.

a-g Subject Requirements

These letters represent different academic areas and are assigned to courses that have been certified by the state as meeting the criteria for students to be able to matriculate into the UC and CalState systems.

a-g Subject Requirements

- a) History, Social Science
- b) English
- c) Mathematics
- d) Laboratory Science
- e) Languages other than English
- f) Visual & Performing Arts
- g) College Preparatory Electives

Alignment of CTE Curricula with a-g

In 2008, more than 5,600 CTE courses had been approved to satisfy the academic “a-g” requirements.

Most of the approved courses are in three areas: visual and performing arts, college-prep elective, and laboratory science.

The university systems and CDE offer guidance to CTE faculty about how to amend courses to meet the requirements.

Special Populations

require focused and comprehensive services:

- Individuals with Disabilities
- Economically Disadvantaged
- Individuals Preparing for Nontraditional Fields
- Single Parents , including Single Pregnant Women
- Displaced Homemakers
- Limited English Proficient
- Other Educational Barriers

Regional Occupational Centers and Programs (ROCPs).

Established as regional programs or centers to allow students from multiple schools or districts to attend career technical training programs regardless of the geographic location of their residence in a county or region.

ROP (continued)

To prepare students to both pursue advanced education and to enter the workforce with skills and competencies necessary to succeed. The programs are limited to those occupational areas with employment opportunities, postsecondary articulation, and sufficient student interest. ROCP courses are open to all secondary and adult students with priority enrollment given to those ages 16–18 or in grades eleven and twelve.

ROP (continued)

ROCP programs offer both paid and non-paid workplace experiences.

- ROCP instructors facilitate student placements in these workplace experiences and monitor the experiences through site visits in the field.
- Coordination and supervision of placements are integral aspects of an ROCP instructor's responsibilities, with paid time allotted for these tasks.

ROP (continued)

ROCPs offer career exploration, career counseling and guidance, and placement assistance.

ROCPs work with industry or pathway-specific advisory groups to update curricula annually to address labor market needs.