

ROP Classes/Centers – Regional Occupational Program Classes/Centers, CTE, and Schedules (Master Schedule & Bell Schedule)

(NOTE: The following examples are primarily from California, but similar Career Technical Education (CTE) courses/programs are offered throughout the country with similar requirements and regulations and similar needs for alignment with high school schedules.)

According to the National Center for Education Services, approximately 14 million students are enrolled in CTE courses nationwide.

The Regional Occupational Program offers a wide variety of career technical classes for high school students and adults.

In Marin County, for example, the Marin County ROP provides courses in the following pathways: Arts and Communications, Business and Marketing, Health and Biosciences, Services Occupations, and Technology and Engineering.

In Contra Costa County, CTE/ROP offers a training program for high school juniors and seniors with a goal of helping students “gain knowledge and skills for future careers.” CTE/ROP also helps students prepare for college. Students can try out courses and internship experiences related to their potential college major and career aspirations and also gain the skills needed to obtain “higher paying part-time work to help pay for college expenses.”

In Contra Costa County, 2013-2014 CTE courses are available in the following pathways: Agricultural and Natural Resources; Arts, Media, and Entertainment; Building Trades and Construction; Education, Child Development and Family Services; Engineering and Design; Finance and Business; Health Sciences and Medical Technology; Hospitality, Tourism, and Recreation; Information Technology; Manufacturing and Product Development; Marketing, Sales, and Service; Public Services; and Transportation.

A large and populous county or region such as San Diego, California, is able to offer a wide range of career-technical education courses through ROP centers and at school sites. San Diego County Regional Occupational Program offers the following ROP courses in various schools and Districts. *Note that many popular course titles may be offered in multiple school districts:* 3D Computer Animation, Accounting/Computerized, AG Prod/Integrate AG Science, AG Prod/Veterinary Science, AG Prod/Integrated AG Biology, AG Production/Economics, AG Production/Government, AG Production/Integrated AG Biology, AG Production/ Integrated AG Science, AG Production/Mechanics, AG Production/Veterinary Science, Agricultural Business Management, Agriculture, California I & II, Alternative Energy, American Sign Language I, II, III; Animal Science, Architectural Design, Arts Management, Audio Technology, Auto Body Repair &

Refinishing 3, 4; Auto Body Repair/Refinishing, Auto Engine Performance /Suspension/Steer/Brakes, Auto Engine Performance, Auto Engine Performance/ Emission Control, Auto Lube Service Technician, Auto Suspension/ Steer/Brakes, Auto Suspension/Steering/Brakes, Auto Technology, Automotive Electrical Systems, Automotive Hybrid & Electric Vehicle Technology, Biomedical Human Body Systems, Biomedical Innovations, Biomedical Science/Principles, Biomedical Technology, Biotech Engineering, Biotechnology Services, Block Masonry/Basic, Broadcast Journalism, Building Maintenance & Repair, Business & Computer Applications, Business & Computers, Business & Financial Markets, Business Computer Fundamentals, Business Environments, Business Management & Ownership, Business Management/ Agribusiness, Business Technology, Business/Computer Applications, Cabinetmaking, Cabinetmaking I&II, Career Pathway Exploration, Career Training for Transition, Child Development Careers/Develop Psychology of Child, Child Development Careers, Computer 3-D Design/Animation, Computer Applications, Computer Game Design, Computer Game Programming, Computer Graphic Arts, Computer Integrated Manufacturing, Computer Programming, Computer/Web Site Design, Computerized Graphic Design, Concepts in Hospitality and Tourism, Construction General II, Construction General Introduction, Construction, General; Construction/General, Cosmetology Introduction, Criminal Justice, Criminal Justice Careers, Culinary Arts, Culinary Arts & Management; Culinary Arts 1,2; Culinary Arts 3, 4; Culinary Arts I, Culinary Arts II, Culinary Arts/International Cuisine, Customer Service Specialist; Design, Introduction; Developmental Psychology of Children, Digital Art & Mixed Media, Digital Arts, Digital Arts I & II, Digital Composition, Digital Electronics, Digital Media Production, Digital Photography, Drafting/Computer Aided, Economics and International Trade, Educational Leadership and Peer Support, Electrical Circuits & Microcontrollers, Engine Repair/Small, Engine Repair/Small Motorcycle, Engineering Design & Development, Engineering Design/Intro, Engineering Principles, Engineering/Architecture, Civil; Environmental Science/AP, Event Marketing, Fabrication & Design, Family Sociology-Advanced, Farm & Ranch Maintenance & Repair, Farm and Ranch Maintenance, Fashion Design, Fashion Merchandising, Financial Accounting, Financial Services/Sales, Fine Woodworking, Fire Protection Technology, Fire Science, Fire Technology, First Responder, Floral Design; Floral Design 1,2; Floral Design 3,4; Floriculture; Food Service; Foods and Nutrition I & II, Foundations of Legal Practices, Furniture Manufacturing/ Finishing, Gateway to Technology, Geographic Information Systems (GIS)/Intro, Geographic Information Systems/Intro, GIS & Global Technologies, Graphic Design, Graphic Design/Advanced, Green Careers, Guitar Manufacturing, Healthcare Career Fundamentals I, Healthcare Career Fundamentals II, Healthcare Essentials, Healthcare Essentials & Anatomy, Home Health Aide, Horticulture/ Agriculture, Interior Design, Internet Publishing & Web Design, Landscape Construction, Landscape Design, Large Animal Veterinary Science 1 & II, Law Enforcement/Criminal Justice Careers, Machine Tool Technology, Maritime Technology – Deck/AB Module, Marketing & Business Management, Marketing Education, Marketing Principles, Medical Assistant/Admin, Medical Assistant/Admin/Clinical, Medical Assistant/Administrative, Medical Assistant/Clinical, Medical Interventions, Medical Lab Assist/Phlebotomy Tech, Medical

Occupations/First Responder, Medical Pathway, Introduction; Medical Professions Exploration, Medical Science & Health Careers, Medical Science & Health Careers/Introduction, Medical Terminology; Metal Design, Fabrication, and Welding; Metal Design/Fabrication/Welding, Advanced; Metal Technology and Fabrication 3,4; Modern Media Marketing; Multimedia Production I & II, Multimedia Productions, Nurse Assist/Home Health Aide, Nurse Assistant, Ocean Surf Lifesaving, Photo Processing/Photography, Photographic Imaging, Photography; Photography 1,2; Photography 3, 4; Plant & Soil Science; Plumbing Construction/Introduction; Pre-Engineering & Design; Pre-Engineering, Advanced; Principles of Engineering, Printing & Graphics Technology, Professional Musical Theatre Performer, Professional Musical Theatre Performer I & II, Recording Arts, Restaurant Management, Restaurant Service, Retail Marketing, Retail Sales & Merchandising, Sales & Marketing, Screen Printing, Screen Printing & Design, Sports Medicine; Sports Medicine 1,2; Sports Medicine 3,4; Sports Medicine Aide; Sports Medicine I, II, III; Sports Medicine/Advanced, Sports Medicine/ Athletic Trainer, Sports Medicine/Athletic Training; Stagehand Technician; Stagehand Technician I, II,; Supermarket Operations; Teaching and Learning 1,2; Teaching and Learning 3,4; Teaching Careers/Teaching & Learning Intro; Technology Support Services; Theatre Design I, II; TV Production/Film; TV, Film & Digital Media; TV, Film, and Digital Media; TV/Video Communications, Vet Science, Veterinary Assistant, Veterinary Assistant I, II, Video Broadcasting, Video Production, Virtual Enterprise, Web Design, Web Page Design, Web Publishing & Media Design, Web Site Design, Weld Training/Testing, Welding & Metal Fabrication, Welding and Metal Fabrication, Welding and Sheet Metal Fabrication I & II, Welding and Sheet Metal Fabrication III & IV.

On-line Access to CTE Courses: Increasingly, on-line Course Providers are adding courses that may be considered CTE courses. For example, Florida Virtual School offers: Computing for College and Careers, Photography, Forensic Science, Foundations of Web Design, Journalism, and Law Studies. Pearson recently launched 21 new Career Technical Education Courses for high School students. These include: Anatomy and Physiology; Criminal Investigation; Health, Safety, & Nutrition; Introduction to Business, Introduction to Early Childhood, Introduction to Finance; Introduction to Law; Introduction to Psychology; Introductory Astronomy; Medical Terminology; Accounting 1; Administrative Duties and Office Management, Business Communication, Business Information Systems, Business Law, Introduction to Criminal Justice, Introduction to Homeland Security, Introduction to Medical Assistance, Introduction to Sociology, Principles of Marketing, and Research Methods.

ROP/CTE and Linked Learning/College and Career Academies: Increasingly, ROP courses are part of a 9-12 or 10-12 logical sequence of Career-Technical Education (CTE) courses that are included in an interdisciplinary program of study in a Linked Learning pathway, college and career academy, or other thematic learning and teaching community.

For example, if a large Health and Bioscience pathway had a program that included a CTE Biomedical Science course in junior year, the same students enrolled in the pathway Biomedical courses might also take pathway English 3, pathway U.S. History, pathway Advanced Algebra, and pathway Chemistry as a cohort of pathway students.

Biotechnology Pathway

HBA English III	HBA English III	HBA English III	Common Planning	HBA English III	HBA English III
HBA U.S. History	HBA U.S. History	HBA U.S. History	Common Planning	HBA U.S. History	HBA U.S. History
HBA Advanced Algebra	HBA Advanced Algebra	HBA Advanced Algebra	Common Planning	HBA Pre-Calculus	HBA Pre-Calculus
HBA Chemistry	HBA Chemistry	HBA Chemistry	Common Planning	HBA Chemistry	HBA Chemistry
HBA Biomedical Science	HBA Biomedical Science	HBA Biomedical Science	Common Planning	HBA Biomedical Science ROP	HBA Biomedical Science ROP
				TOTAL OF 25 sections in 11 th grade HBA	

*** In this scenario, ROP funding is able to cover two of the Biomedical Science courses. The school's and/or district's official course list includes both "regular" college preparatory Biomedical Science AND ROP college-preparatory Biomedical Science. In some instances, a science teacher with biotechnology industry experience is qualified to teach both the ROP sections and the regular sections. In another instance, a qualified ROP teacher would teach the two ROP biomedical courses and a (different) teacher who is credentialed in science might teach the other three biomedical courses.*

Emerging Practice from the Field: In *Pasadena Unified School District* in Pasadena, California, several ROP classes are offered as after school courses each semester. This practice increases access for students who need greater flexibility in their program of study in order to pursue advanced career-technical education learning experiences. In a recent Fall Semester, for example, juniors and seniors had access to the following ROP courses: Floristry Design, Film & Animation, Photography/Digital Photography, Graphic Design, Television/Media & Production, Child Care Occupations, Culinary Arts (HS & Adults), Food Service Management CVE, Graphic Arts/Letterpress, and Retail Merchandising.

Similarly, the *North Orange County Regional Occupational Program* offers afterschool courses in the following pathways: Arts, Media & Visual Entertainment; Building Trades & Construction; Education, Child Development & Family Services; Finance & Business; Health Sciences/Medical Technology; Hospitality, Tourism & Recreation (Culinary Arts –

Theme Park – Aquatic); Manufacturing, Sales and Service; Public Services/Public Protection; Transportation/Auto Technology.

Tri-Cities ROP In another example, the Tri-Cities ROP, based in Whittier, California, recently offered the following After School Courses: Automotive Brake and Wheel Alignment, Administration of Justice Academy, Digital Printing and Design, Introduction to Dental Assisting, Nurse Assistant Pre-Certification, Principles of Landscaping, and Recreation Leader. These ROP courses are in addition to the ROP courses offered at each of the comprehensive high schools. For example, at California High School, the following ROP courses were offered during the school day: Administration of Justice, Automotive Technology, Computer Repair, Computer Troubleshooting, Constitutional Law, Digital Photography, Forensics, Hospitality, Introduction to Emergency Responder, Introduction to Medical Careers, Nurse Assistant Pre-Certification, Video Production, Web Page Design.

Regional Occupational Centers/Regional Occupational Center Programs: In many districts, regions, and states, Regional Occupational Centers are common. Some of these are highly innovative ROP/CTE Centers that combine rigorous academics with technical design and learning. One well-known example is CART. The Center for Advanced Research and Technology (CART) serves students from two large school districts – Clovis and Fresno – and is organized around three broad career clusters: Professional Sciences/Engineering; Advanced Communications; and Global Economics. Within each of the career clusters, there are several career-specific, interdisciplinary laboratories in which students “complete industry-based projects and receive academic credit for advanced English, science, math, and technology. Participating students attend a thematic, interdisciplinary team-taught lab for a 3-hour block either for the morning or afternoon session. Approximately 1200 students are enrolled each year, with approximately 600 attending for the morning session and another 600 attending for the afternoon session.

Teachers are scheduled to collaboratively teach both a morning 3-hour block and an afternoon 3-hour block. They have approximately two hours between classes that include lunch time and collaborative planning. Teachers are paid the equivalent of an extra period for preparation time.

Participating eleventh and twelfth grade students from the Clovis and Fresno Unified School Districts are bused to CART where they attend half-day classes in one of the laboratories taught by interdisciplinary teams of instructors, many whom have both education and industry backgrounds. In order for bus transportation, student access to the CART labs, and student access to course work at their home high schools to work, high schools in both Clovis Unified and Fresno Unified must coordinate their bell schedules, master schedules, academic year calendars, and transportation schedules. The sample CART Bus Schedules that follow provide a sense of the complexity involved.

CART Bus Schedule for Clovis Unified High Schools:

Buchanan (Bus Lot)		A.M. Run	Bus #	P.M. Run	Bus #
Depart	BHS	7:10	14	12:05	46
Arrive	CART	7:25	14	12:25	46
Depart	CART	10:35	19	3:35	69
Arrive	BHS	10:45	19	3:45	69
Clovis High		A.M. Run	Bus #	P.M. Run	Bus #
Depart	Gateway	No A.M. Gateway Run		12:07	76
Depart	CHS	7:15	36-SPL	12:15	76_NPL
Arrive	CART	7:25	36	12:25	76
Depart	CART	10:35	56	3:35	36
Arrive	CHS	10:45	56-NPL	3:55	36-SPL
Arrive		No A.m. Gateway Run		4:00	36
Clovis East (Bus Lot)		A.M. Run		P.M. Run	
Depart	CEHS	7:15	77	12:15	44
Arrive	CART	7:25	77	12:25	44
Depart	CART	10:35	8	3:35	36
Arrive	CEHS	10:45	8	3:45	36
Clovis North (Bus Lot)					
Depart	CNHS	7:05	75	12:05	87
Arrive	CART	7:25	75	12:25	87
Depart	CART	10:35	19	3:35	59
Arrive	CNHS	11:00	19	4:00	59
Clovis West (Bus Lot)					
Depart	CWHS	7:05	78	12:05	24
Arrive	CART	7:25	78	12:25	24
Depart	CART	10:35	20	3:35	82
Arrive	CWHS	10:55	20	3:55	82

CART Bus Schedule for Fresno Unified High Schools

	A.M. Run	Bus #	Route	P.M. Run	Bus #	Route
Bullard	(Browning/Palm)			(Browning/Palm)		
Depart	6:55 AM	72	0113AD	12:05 PM	1	0113AG
Arrive	7:20 AM	72	0113AD	12:30 PM	1	0113AG
Depart	10:35 AM	13	0113PD	3:35 PM	67	0113PJ
Arrive	10:56 AM	13	0113PD	3:56 PM	67	0113PJ
Edison H.S.	(California)			(California)		
Depart	6:48 AM	51	0113AE	11:45 AM	5	0113AJ
Arrive	7:25 AM	51	0113AE	12:30 PM	5	0113AJ
Depart	10:35 AM	74	0113PE	3:35 PM	73	0113PI
Arrive	10:56 AM	74	0113PE	4:04 PM	73	0113PI
Fresno H.S.	(Echo)			(Echo)		
Depart	7:01 AM	51	0113AE	11:57 AM	5	0113AJ
Arrive	7:25 AM	51	0113AE	12:30 PM	5	0113AJ
Depart	10:35 AM	17	0113PL	3:35 PM	5	0113PI
Arrive	10:52 AM	17	0113PL	3:52 PM	5	0113PI
Dewolf/Design Science				Dewolf/Design Science (Clark)		
Depart	No A.M. Run			12:03 PM	5	0113PK
Arrive				12:30 PM	5	0113PK
Depart				<i>(Incorrect info on line)</i>		
Arrive				<i>(Incorrect info on line)</i>		
Hoover	(First)			(First)		
Depart	7:06 AM	5	0113AC	12:12 PM	17	0113AH
Arrive	7:25 AM	5	0113AC	12:30 PM	17	0113AH
Depart	10:35 AM	15	0113PC	3:35 PM	51	0113PG
Arrive	10:50 AM	15	0113PC	3:45 PM	51	0113PG
McLane H.S.	(Cedar/Princeton)			(Cedar Princeton)		
Depart	7:10 AM	45	0113AA	12:11 PM	5	0113AJ
Arrive	7:25 AM	45	0113AA	12:30 PM	5	0113AJ
Depart	10:35 AM	5	0113PA	3:35 PM	74	0113PK
Arrive	10:44 AM	5	0113PA	3:45 PM	74	0113PK

Roosevelt H.S.	(Cedar)			(Cedar)		
Depart	6:58 AM	45	0113AA	12:02 PM	2	0113A1
Arrive	7:25 AM	45	0113AA	12:30 PM	2	0113A1
Depart	10:35 AM	5	0113PA	3:35 PM	68	0113PH
Arrive	10:54 AM	5	0113PA	3:50 PM	68	0113PH
Cambridge				Cambridge (Chestnut)		
Depart	No A.M. Run			12:08 PM	2	0113A1
Arrive				12:30 PM	2	0113A1
Sunnyside H.S.	(Lowe)			(Lowe)		
Depart	7:00 AM	60	0113AB	12:13 PM	74	0013AF
Arrive	7:15 AM	60	0113AB	12:30 PM	74	0113AF
Depart	10:35 AM	18	0113PB	3:35 PM	68	0113PH
Arrive	10:45 AM	18	0113PB	3:45 PM	68	0113PH

We will use the example of the bell schedule from one high school in Fresno to demonstrate how the bell schedule supports student participation in CART. The bell schedule at McLane High School in Fresno Unified involves a 7 period day.

Regular schedule

Period 1	8:00 - 8:56
Period 2	9:02 – 10:02
Period 3	10:08 – 11:04
Period 4	11:10 - 12:06
Lunch	12:06 -12:46
Period 5	12:52 – 1:48
Period 6	1:54 – 2:50
Period 7	2:56 – 3:52

Once a month, on the 1st Tuesday of the month, there is Staff Collaboration with Advisory AND there is a short (half-hour) Staff Collaboration that occurs after classes on all other Tuesdays of the month. Even then, the bell schedule is adjusted only slightly so that it does not impact students who are attending CART.

** Advisory is offered in lieu of Period 2 once a month. Note that period 2 is four minutes longer than other periods on the regular day schedule.

A student from McLane High School who attends CART in the morning would return to McLane High School in time to take periods 4-7 at McLane and would have lunch at McLane. A student from McLane High School who attends CART in the afternoon would take periods 1-4 at McLane High School and then be at CART for the rest of the school

day. Since the student who is attending CART is earning credit for three or four courses through CART, he/she will need access to courses not offered at CART during the half day he/she is at McLane. Courses taken at the home school would include mathematics and foreign language and might include art, music, and possibly science or social science (depending on the particular CART lab in which the student is enrolled.)

In the CART Biomedicine Lab, students take English 11 or English 12, Anatomy/Physiology, and Advanced Topics in Medicine, and also receive credit for CART Technology Applications. Three instructors are involved.

In the CART Biotechnology Lab, students take English 11 or English 12, Chemistry or Advanced Science Topics, Bioengineering, and also receive credit for CART Technology Applications. Three instructors are involved.

In the CART Business and Finance ROP Lab, students take English 11 or 12, U.S. History or Government and Economics, and Global Economics and Finance, and also receive credit for CART Technology Applications I or II. Three instructors are involved. (AM only)

In the CART Engineering and Product Development Lab, students take English 11 or 12, Physics and Technology, and Product Development, and also receive credit for CART Technology Applications. Two instructors involved. AM only.

In the CART Environmental Science and Field Research ROP, students take English 11 or 12, Chemistry or Zoology, and Environmental Research and Technology, and also receive credit for CART Technology Applications.

In the CART Forensic Research and Biotechnology Lab, students take English 11 or 12, Chemistry or Physics, and Forensic Research and Biotechnology, and also receive credit for CART Technology Applications. Three instructors are involved.

In the CART Law, Order, and Policy Lab, students take English 11 or 12, Government and Economics, and Law and Order and Policy, and also receive credit for Cart Technology Applications. Three instructors are involved.

In the CART Hospitality and Event Management ROP, students take English 11 or 12, US History or Government and Economics, and Global Economics and Finance, and also receive credit for CART Technology Applications. Three instructors are involved.

In the CART Interactive Game Development Lab, students take English 11 or 12 AND Interactive Game Design (2 periods), and also receive credit for CART Technology Applications. Two instructors are involved.

In the CART Marketing and Advertising ROP Lab, students take English 11 or 12, Government and Economics or U.S. History, and Economics of Marketing and Advertising, and also receive credit for CART Technology Applications. Two instructors are involved.

In the CART Multimedia – Digital Media and Graphic Design ROP Lab, students take English 11 or 12, Digital Media and Graphic Design (2 periods), and CART Technology Applications, and also receive credit for CART Technology Applications. Three instructors are involved.

In the CART Multimedia – Digital Video Production and Broadcast ROP, students take English 11 or 12 AND Digital Video Production and Broadcasting (2 periods) , and also receive credit for CART Technology Applications. Three instructors are involved.

In the CART Network Management and Computer Maintenance ROP Lab, students take English 11 or English 12 AND Advanced Network Management and Certification (2 periods). They also receive credit for CART Technology Applications.

In the CART Psychology and Human Behavior Lab, students take English 11 or 12, Chemistry or Neuroscience, and Psychology of Human Behavior, and also receive credit for CART Technology Applications. Three instructors are involved.

In the CART Robotics and Electronics ROP Lab, students take English 11 or 12, Physics and Technology, Robotics/Electronics, and also receive credit for CART Technology Applications. Two instructors are involved. Offered in the PM only.

In the CART Web Application Development ROP Lab, Students take English 11 or 12, Database Design, and AP Computer Science, and also receive credit for CART Technology Applications. Two instructors are involved.

Types of ROP classes: The terminology will vary in different regions of the country; however, the typical types of ROP classes may include: Classroom/Laboratory courses; Community Classroom courses (combine classroom and unpaid work-based training), and/or Cooperative Education (Co-Op) courses (combine classroom and paid work-based training).

Some ROP courses are articulated with local community colleges. In some cases, students who earn a B or better in an ROP course can earn college credit by exam for the same course.

In California, the University of California has worked closely with the California Department of Education and with California educators to “encourage and facilitate the development and submission of CTE courses for UC approval in all “a-g” subject areas. According to the A-G Guide, available at <http://www.ucop.edu/agguide/career->

technical-education/index.html , “In the past decade, UC has approved CTE courses in all seven “a-g” subject areas and has increased the number of UC-approved CTE courses from 258 to over 11,000.” The A-G Guide also describes some of the challenges:

“Course integration is a complex undertaking, requiring a balance of career technical content with sufficient academic depth. Some CTE pathways align better with the “a-g” subject areas. UC has approved many CTE courses in the laboratory science, visual and performing arts, and elective subject areas. It has been more challenging to develop CTE courses for UC “a-g” approval in other disciplines, such as English, history, and mathematics.”

Which high school students are eligible to enroll in ROP courses?

In many states, ROP classes are only open to juniors and seniors and students who are 16 years and older. In the TriValley ROP in Pleasanton, California, for example, seniors have priority, but juniors who are 16 or older are also “eligible and encouraged to enroll in ROP classes.” NOTE: In Linked Learning Pathways, students in grades 9 and 10 are also expected to take a CTE course each year as part of their pathway program of study.

How Do High School Students Enroll in CTE/ROP?

- For ROP enrollment on a student’s own high school campus, a student would include the ROP course on her/his course selection sheet/scheduling form.
- For ROP enrollment off campus (i.e., at an ROP Center), typically, a student sees her/his counselor or vice-principal and then includes the off-campus ROP course on her/his course selection sheet/scheduling form. In addition, sometimes, the student will need to contact an ROP Career Guidance Liaison or work with the school’s College and Career Counselor.

Who can qualify to teach ROP courses?

This may vary by State as each State may have slightly different rules governing teacher credentialing. Typically, an ROP teacher is someone who has industry experience. He/she is credentialed with a Designated Subjects Career Technical Education (CTE) Teaching Credential.

In California, for example, Senate Bill 1104 (Chap. 576, Stats. 2008) provides that the preliminary career technical education credential is valid for 3 years and requires:

- Three years of experience in the subject named on the credential
- Possession of a high school diploma or equivalency
- Satisfaction of teacher fitness (fingerprint clearance)
- Minimum experience to teach the class assigned by the employer

ROP COURSES/CENTERS AND THE MASTER SCHEDULE

Often 11th & 12th grade ROP courses involve students in work-based internships or community-based classrooms as part of the curriculum. The ROP courses involved may

need to be offered at the beginning or end of the school day in order to allow students and the supervising teachers time for transit as well as ability to participate at times most convenient for the industry partners. It is important, too, to pay attention to the fact that some bell schedules – especially those that involve rotating class periods -- may make having a daily internship placement more challenging.

Shared or part-time ROP Teachers: Sometimes, especially in small or medium size schools, a certified ROP teacher with special expertise is shared by more than one high school. He/she may teach beginning and advanced Sports Medicine courses in the morning at High School A and then drive to teach two additional Sports Medicine courses at High School B. As a result, he/she may only be available to teach a course or courses on a particular campus during a particular time frame of the day. This is further complicated when schools have different bell schedules, especially when class meeting times for classes vary on different days.

Common Planning time: The inclusion of some ROP teachers in common planning time for the pathway community of practice can be problematic. Some ROP teachers are paid on an hourly basis that may or may not include prep time; others are paid for prep time, but their prep time may not always align with the pathway community of practice common planning time. Especially if an ROP teacher is serving more than one high school, he/she may not be available to participate in common planning time.

Funding: In some parts of the country ROP/ROCP teachers are funded with designated ROP/ROCP funding and ROP sections do not count against the FTE allotment that the school receives from the District. If a school is able to offer several ROP courses during the school day and/or after school, the availability of ROP/ROCP often supports greater flexibility in the master schedule.

In some states, funding for ROP/ROCP teachers is included in “block grants” rather than as separate, designated funding stream.

In a few States or Districts, a school’s funding formula may include additional funding for every CTE pathway “completer. “

Transportation –When students are bussed to and from a Regional Occupation Program Center/Career and Technology Center, care must be taken to synchronize the bell schedule and master schedule at the home school in order to provide students with access to career/technical courses, interdisciplinary career-themed labs of interest, and/or internship placements that are part of a CTE/ROP capstone course. See examples of bus schedules and/or allowance for transportation needs from CART and Sanborn Regional High School.

In some instances, slight adjustments in bell schedules are needed or students should be scheduled into academy/pathway classes at times they may need early dismissal in order to participate in a work-place internship.

Excerpts from ROP Policies from Mission Valley ROP in Fremont, California:

“Because instructors are hired based on the number of students enrolled, students will not be allowed to drop an ROP class at any time.

Busing to or from an off campus ROP site may be available but is not guaranteed. Currently, there is no busing available to take students to ROP for the morning session. However there is busing available to bring students back to AHS after the morning session. It returns around 9:45a.m. The afternoon bus leaves AHS at 12:10p.m. and returns around 2:45p.m. Students should have an alternate transportation plan in place in the event that busing is not available.

Students do not get to determine when their class will meet and should be prepared to attend either the morning or afternoon session. The morning session is 7:30a.m. - 9:30a.m. and the afternoon session is 1:00p.m. - 3:00p.m.

..... ROP classes are held at the same time each day for the entire school year, regardless of whether American High School is having a special event that changes the length of the school day or the schedule. ROP teachers are always notified of special days and they understand the individual high school needs. ROP begins the FIRST day of school. Attendance at ROP is mandatory. Credit is based on attendance. Students missing an ROP class, are required to make it up.”

Example From Sanborn Regional High School In New Hampshire Of A Proposed Bell Schedule Change Taking Into Account Student Access To CTE Courses At A Nearby School Of Technology

Juniors and Seniors at Sanborn Regional High School also have access to CTE courses at the Seacoast School of Technology (SST). Students are bussed to and from Seacoast School of Technology for either a “mid-session” or a “PM session.”

Mid-Session SST leaves at 8:50 and returns at 11:20

PM Session SST leaves at 11:55 and returns at 2:15

SST = Seacoast School of Technology – regional Career and Technical Center (serves high school students from six communities)

A BELL SCHEDULE IN TRANSITION

Period Names	Time	Freshmen	Sophomore	Junior/Senior
Block 1	7:30 – 8:55	Freshman	Sophomore	Block 1
Block 2	8:59-10:28	Learning	Experience	Block 2

Flex/Advisory/SSR		10:28-10:49	Community (English, Social Studies, Science, Wellness, Flex Time)	Classes	Flex
Lunch 1	Lunch	10:53 – 11:15		Block 3 class or lunch	Block 3 class or lunch
	Block 4	11:19-12:03			
	Block 5	12:07-12:51			
Lunch 2	Block 3	10:53-11:37	Elective	Block 4 class or lunch	Block 4 class or lunch
	Lunch	11:41-12:03			
	Block 5	12:07-12:51			
Lunch 3	Block 3	10:53-11:37	Lunch	Block 5 class or lunch	Block 5 class or lunch
	Block 4	11:41-12:25			
	Lunch	12:29-12:51			
Period 6		12:55 – 2:20	Block 6 -Math	Block 6	Block 6

A copy of the Sanborn Regional High School's 2013-2014 Master Schedule is available at http://www.sau17.org/images/stories/highschool/Lori/13_14_master_schedule.pdf