

THE FACTS: CAREER TECHNICAL EDUCATION

WHAT IS CAREER TECHNICAL EDUCATION?

Career Technical Education (CTE) integrates discipline-specific academic content with industry-specific knowledge and skills. The national CTE movement aims to bridge the college-career divide that has long characterized the American education system and to open the doors of higher education to more students.

While traditional vocational education courses often served to track students into work-only prospects after high school, today's integrated CTE curriculum provides all students with college and career options crucial in today's society. Integrated CTE courses can engage a wider array of students, provide them with increased options and empower them to succeed in our rapidly changing global economy.

WHAT IS UC'S ROLE IN CTE?

The university is a leader in this movement, encouraging the development of new courses that integrate college-preparatory academic work with applied learning in CTE.

In order to be eligible for admission to UC and CSU, high school students must take a minimum of 15 academic courses, commonly called the "a-g" subject requirements. Rather than mandating particular requirements for these courses, UC faculty provides schools with a set of expectations and guidance. Teachers develop their own curriculum to meet these expectations, and then schools submit the courses to UC for approval.

The intent of the "a-g" course approval process is to ensure a course has met faculty expectations of academic rigor. Every comprehensive high school in California has a list of UC-approved courses, which is posted at <https://doorways.ucop.edu/list>. It is these courses that students complete to be eligible for admission to UC.

Over the last decade, the university has increased the number of approved CTE courses from 258 to nearly 10,000 in all seven "a-g" categories. The university is on track to certify 10,000 by 2011-12. However, our CTE mission is far from accomplished.

WHAT ARE THE CHALLENGES?

A primary challenge is the complexity of course integration. Courses must balance competing content priorities and provide sufficient academic depth to satisfy UC requirements. In addition, certain CTE pathways align well with specific subject areas, such as lab sciences, the arts and electives. UC has approved many CTE courses in these disciplines. Finding linkages with other disciplines, including English, history and mathematics, has been more challenging.

HOW DOES UC SUPPORT CTE?

With funding from the California Department of Education, UC Office of the President has sponsored three UC Curriculum Integration (UCCI) Institutes. At the institutes, academic and CTE teachers meet with subject-matter experts and UC and CSU staff and faculty to develop innovative, integrated courses meeting UC "a-g" approval. The courses are made available to any high school in California.

The UCCI Institute addresses the challenges of integrated course development by:

- Facilitating statewide collaboration, communication, trust, leadership and innovation
- Developing challenging and engaging courses blending academics and CTE for adoption by high schools across the state
- Training teachers to be expert integrated curriculum developers
- Providing accessible course development tools and resources to all educators statewide
- Targeting subject areas with lower numbers of UC CTE-approved courses

The first three institutes focused on:

- Mathematics and the CTE industry sectors of finance and business
- History/social sciences, English and multiple CTE industry sectors
- Mathematics and laboratory science in combination with engineering and design, finance and business, and hospitality, tourism and recreation CTE sectors

Two more institutes are planned for the coming academic year. The November 2011 institute will focus on green curriculum, in support of the emerging

green academies throughout the state. The May 2012 institute will focus on the CTE arts, media and entertainment sector in combination with English, mathematics and history/social sciences.

UCCI Institute graduates become members of the UC Cadre of Experts. Cadre members assist high school educators in developing curriculum and creating course descriptions likely to meet the "a-g" subject area requirements. Cadre members field general questions about the UC "a-g" course approval process, offer informal feedback on draft course descriptions and, in some cases, make presentations to school and/or district staff.