



RESEARCH BRIEF

Topic: Career and Technical Education (CTE) Overview, AY 2016-17 to AY 2018-19

Date: July 1, 2020

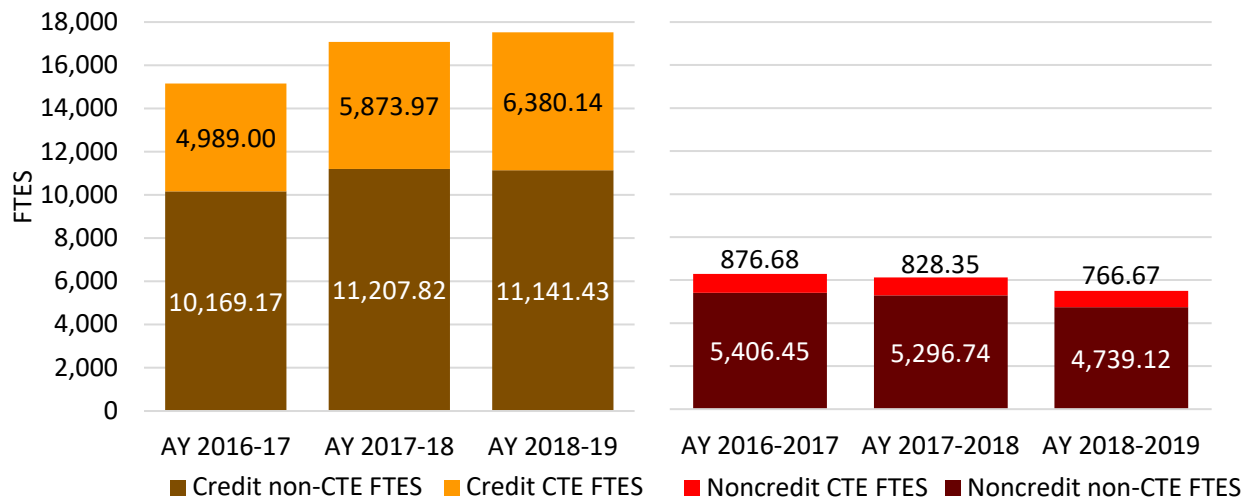
OVERVIEW

Career and Technical Education (CTE) at City College of San Francisco (CCSF) courses and programs are identified by vocational and occupational coding of content as reported to the State of California. CCSF offers a variety of credit and noncredit courses and programs in CTE. This brief examines CTE trends over three academic years, including FTES at the college and for selected departments, degrees and certificates, and credit course success rates. Demographics are provided for students identified as credit and noncredit CTE students, including age, race/ethnicity, and residence.

FINDINGS OR RESULTS

To understand CTE enrollments across the college, we can look at full time equivalent students (FTES), a measure that normalizes for differences in how noncredit and credit enrollments are calculated. Over the past three academic years (2016-17 through 2018-19), about 29% of the college’s total FTES were in CTE. During these three AY, overall credit FTES increased while noncredit FTES decreased. Credit CTE FTES increased at a higher rate than non-CTE FTES, while noncredit CTE and non-CTE FTES declined at similar rates (Figure 1).

Figure 1. Credit and noncredit CTE and non-CTE FTES, AY 2016-17 through AY 2018-19



Over the past three AY, 35 departments offered credit CTE FTES. Most of these departments (N=33) were overwhelmingly CTE focused with more than 85% CTE FTES. In noncredit, over 80% of all CTE FTES

were in three departments, Business, Child Development and Family Studies, and Culinary Arts and Hospitality Studies, while CTE FTES were more evenly distributed across a greater number of departments¹ (Figure 2, Figure 3).

Figure 2. Departments offering credit CTE, 3-year total AY 2016-17 through AY 2018-19

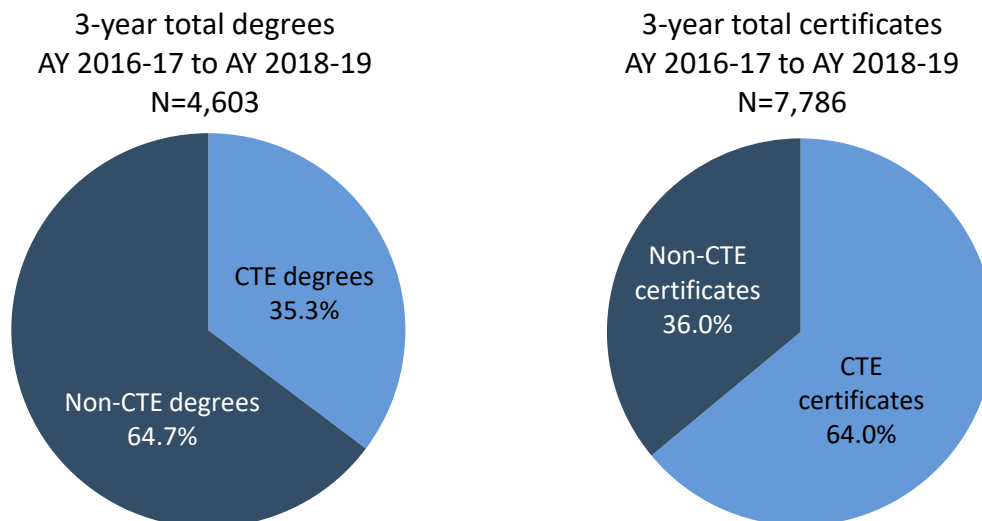
Department offering credit CTE	Percent of 3-year total credit FTES
Business	14.7%
Computer Science	9.7%
Child Development and Family Studies	7.4%
Other departments with credit CTE (N=32)	68.2%
Total FTES (N=17,243.11)	100%

Figure 3. Departments offering noncredit CTE, 3-year total AY 2016-17 through AY 2018-19

Department offering noncredit CTE	Percent of 3-year total noncredit FTES
Business	41.7%
Child Development and Family Studies	30.1%
Culinary Arts and Hospitality Studies	11.6%
Other departments with noncredit CTE (N=8)	16.6%
Total FTES (N=2,471.69)	100%

Overall, 53.3% of all awards earned over the past three years were CTE awards. About a third of all degrees were in CTE, while nearly two thirds of all certificates awarded were in CTE (Figure 4).

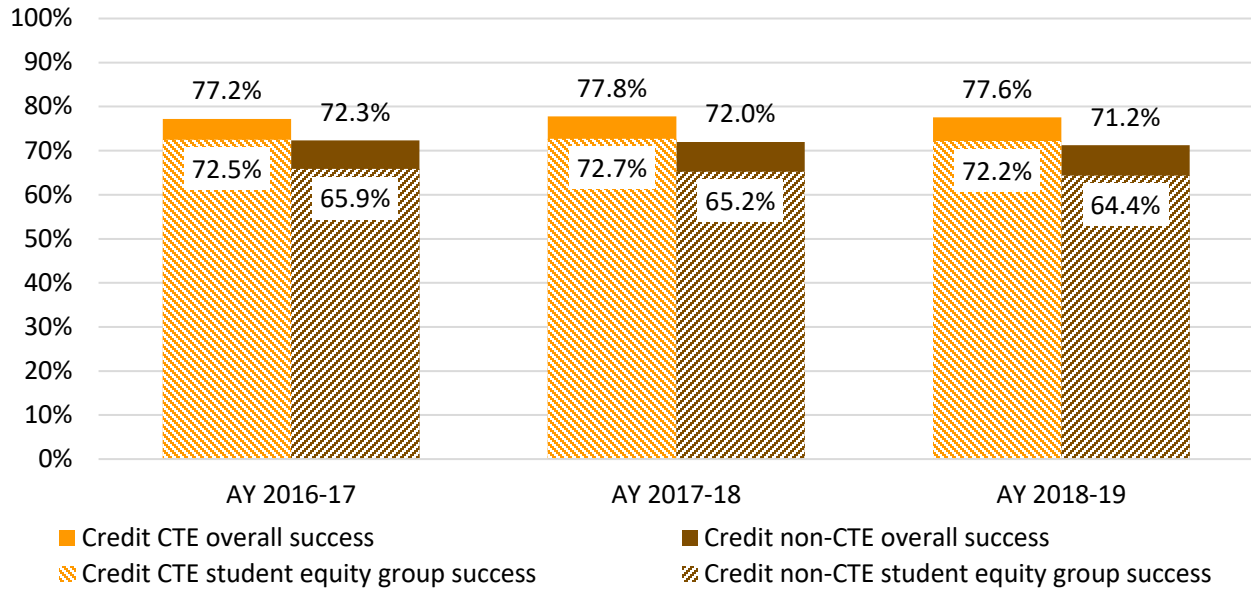
Figure 4. CTE and non-CTE degrees and certificates, 3-year total AY 2016-17 through AY 2018-19



¹ For a complete list of departments offering CTE, see [CTE Numbers](#) report.

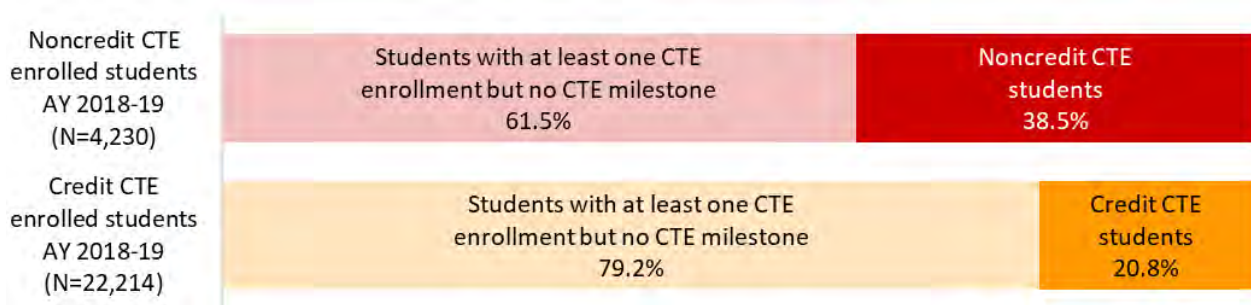
Course success rates in CTE and non-CTE credit courses have remained relatively constant over the past three years, but the opportunity gap in CTE courses is smaller than in non-CTE courses (Figure 5).

Figure 5. Credit CTE and non-CTE course success rates and equity group, AY 2016-17 through AY 2018-19



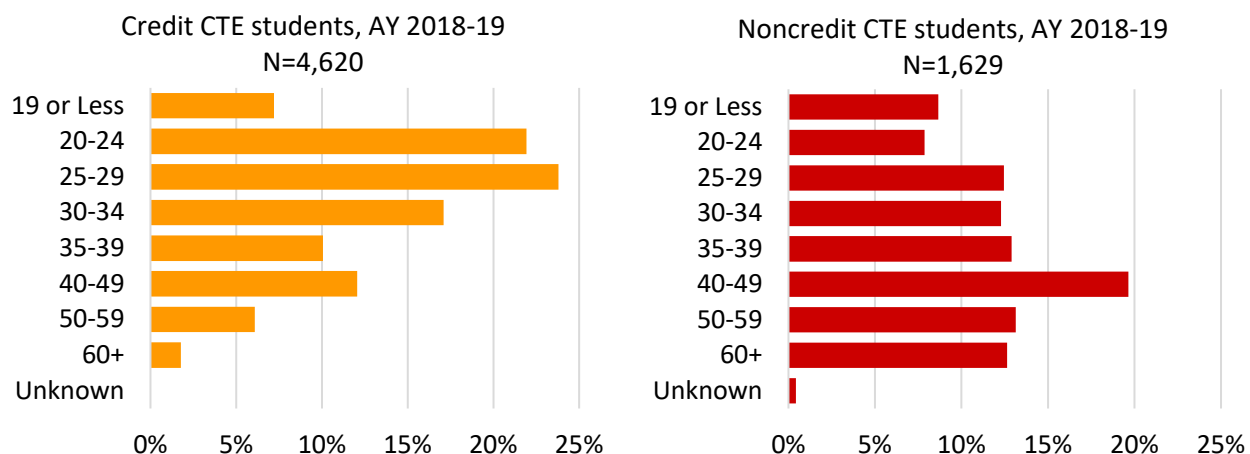
Many students may enroll in a CTE course while pursuing non-CTE related goals, so it is helpful to identify a subset of students to describe as CTE students. CTE students are defined as having met a credit or noncredit CTE milestone: students meet a credit CTE milestone if they complete nine or more CTE units in an academic year, and a noncredit CTE milestone if they complete 48 or more hours in a single noncredit CTE course within an academic year. In AY 2018-19, there were 4,620 credit CTE students and 1,629 noncredit CTE students at CCSF. Students enrolled in noncredit CTE met a CTE milestone at nearly twice the rate of credit CTE enrolled students, at 38.5% to 20.8%, respectively (Figure 6).

Figure 6. Credit and noncredit CTE students, AY 2018-19



Credit CTE students tend to be slightly older than credit non-CTE students, but similarly distributed overall. Noncredit CTE students are less represented at the age group extremes (19 or less and 60+) than noncredit non-CTE students. Credit CTE students are generally younger than noncredit CTE students (Figure 7).

Figure 7. Credit and noncredit CTE students by age group, AY 2018-19



Ethnicity distribution in credit and noncredit CTE is generally similar, with Asian, Latino/a/x and White the most represented ethnicities. Asian students are more represented in credit CTE than credit non-CTE, while Black or African American and White students are more represented in noncredit CTE than in noncredit non-CTE (Figure 8).

Figure 8. Credit and noncredit CTE students by race/ethnicity



Credit students live in San Francisco less frequently than noncredit students, while CTE students live in San Francisco less frequently than non-CTE students (Figure 9).

Figure 9. Credit and noncredit CTE students by Bay Area region of residence, AY 2018-19

Bay Area region	Percent of credit CTE students in AY 2018-19 (N=4,649)	Percent of noncredit CTE students in AY 2018-19 (N=1,629)
East Bay	10.4%	9.5%
Marin	1.1%	1.3%
Peninsula	9.3%	10.1%
San Francisco	70.8%	73.7%
South Bay	1.7%	2.0%
Other	3.8%	1.5%
Unknown	2.9%	2.0%
Total	100%	100%

METHODOLOGY

Definitions

- Academic Year (AY) – summer, fall, spring
- FTES – full time equivalent students
- Headcount – unduplicated count of students
- CTE – career and technical education
- Noncredit CTE students – students who complete 48 or more hours in a noncredit CTE course within a term during the academic year
- Credit CTE students – students who earn 9 or more CTE units during the academic year

CTE and non-CTE student headcount by ZIP code slightly differ from other demographic data due to retrieval at different points in time. Demographic data provided for most recent academic year (AY 2018-2019), while trend data provided for the past three AY (AY 2016-2017 through AY 2018-2019), either as a three-year total or year by year as indicated. Residence region/ZIP code determined using student's current permanent address at time of data retrieval. Annual FTES is a measure that normalizes actual census enrolled units and total attendance hours to 30 units or 525 hours per year. CTE courses and programs are identified by a vocational TOP code or, occupational SAM code (CB09) in credit or workforce noncredit category (CB22) codes. Age calculated for all students as of August 1st of the academic year.

SOURCE

All data except ZIP code data extracted from CCSF ORP Argos Course Success and Demographics, Noncredit Hours and Attendance, and Productivity datablocks. Saved states in datablocks generated from CCSF Banner PROD October 8-15, 2019. ZIP code data extracted from CCSF Banner PROD (SPRADDR) November 15, 2019.

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