



ACADEMIC SENATE
for CALIFORNIA COMMUNITY COLLEGES

Code Alignment Project

More and Better CTE

Orientation

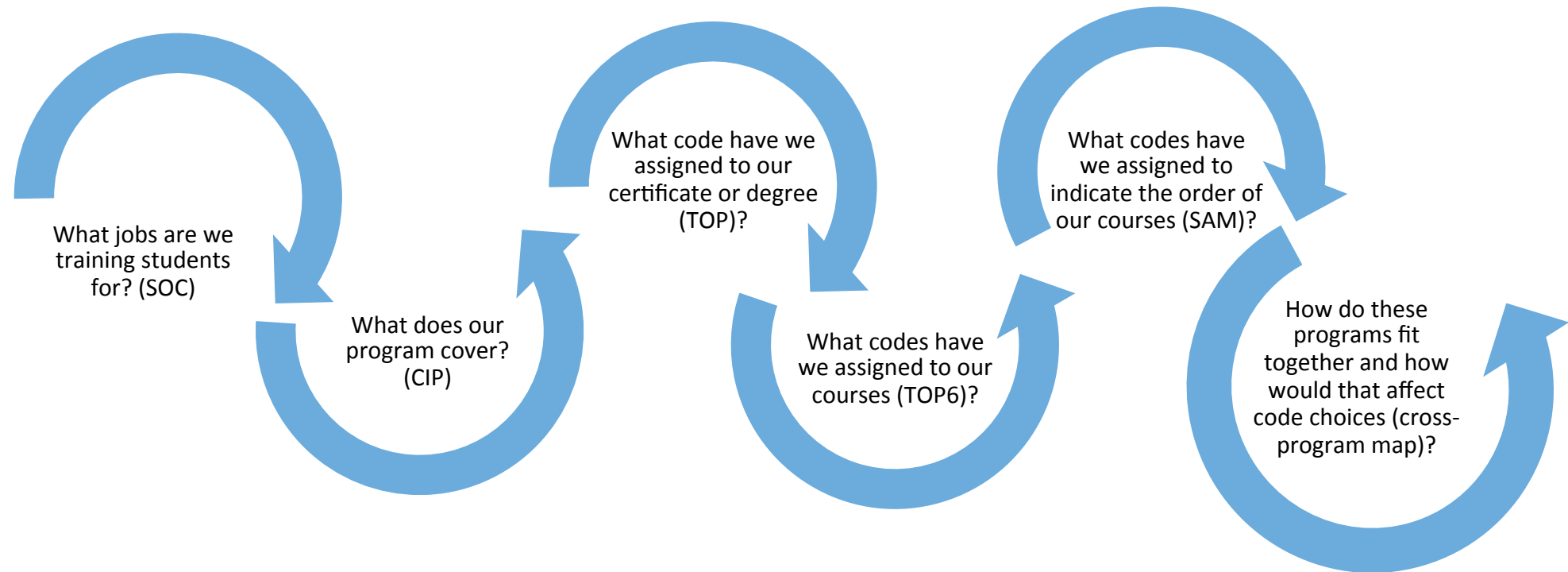
Code Alignment

- The Code Alignment Project is a faculty-led process for examining the reporting codes (SOC, CIP, TOP, and SAM) that have been assigned to CTE courses and program awards, to ensure that they appropriately match the content of the curriculum.
- The project is lead by the Academic Senate for California Community Colleges, working with the Chancellor's Office, the Centers of Excellence, and WestEd.

The Process:

1. Faculty review draft lists of the courses associated with specific degrees and certificates, and related jobs.
2. The college reviews proposed changes, determines which changes to make, and moves forward with those changes through local and state processes.

Examining Codes at the Face-to-Face



SOC Codes: What They Are

- Standard Occupational Classification (SOC) is used to classify workers into **occupational categories**.
- Used when calculating supply and demand and developing labor market projections for job openings.

Example:

15-0000 Computer and Mathematical Occupations

15-1100 Computer Occupations

15-1120 Computer and Information Analysts

15-1121 Computer Systems Analysts

SOC codes are used in demand and supply calculations

Exhibit 4: 5-Year Projected Occupation Data, Architecture & Engineering Occupations

SOC	Description	2015 Jobs	2020 Jobs	5-Yr Change	5-Yr % Change	Annual Replacements	Annual Openings
17-3023	Electrical and Electronics Engineering Technicians	2,666	2,687	21	1%	67	71
17-3029	Engineering Technicians, Except Drafters, All Other	1,512	1,606	94	6%	38	57
17-3011	Architectural and Civil Drafters	1,469	1,566	97	7%	19	38
17-3027	Mechanical Engineering Technicians	764	834	70	9%	20	34
17-3022	Civil Engineering Technicians	638	710	72	11%	17	31
17-3026	Industrial Engineering Technicians	716	757	41	6%	15	21
17-3012	Electrical and Electronics Drafters	855	898	43	5%	13	17
17-3013	Mechanical Drafters	528	568	40	8%	11	15
17-3031	Surveying and Mapping Technicians	407	444	37	9%	10	14
17-3024	Electro-Mechanical Technicians	299	316	17	6%	7	10
17-3021	Aerospace Engineering and Operations Technicians	207	234	27	13%	6	9
17-3025	Environmental Engineering Technicians	165	191	26	16%	5	8
17-3019	Drafters, All Other	158	170	12	8%	4	6
	Total	10,383	10,982	599			

Exhibit 6: Education and Training Requirements, Architecture & Engineering Occupations

SOC	Occupations	Typical Entry Level Education	Typical On-The-Job Training	% of Community College Award Holders or Some Postsecondary Coursework
17-3011	Architectural and Civil Drafters	Associate degree	None	62%
17-3012	Electrical and Electronics Drafters	Associate degree	None	62%
17-3013	Mechanical Drafters	Associate degree	None	62%
17-3019	Drafters, All Other	Associate degree	None	62%
17-3021	Aerospace Engineering and Operations Technicians	Associate degree	None	55%
17-3022	Civil Engineering Technicians	Associate degree	None	55%
17-3023	Electrical and Electronics Engineering Technicians	Associate degree	None	55%
17-3024	Electro-Mechanical Technicians	Associate degree	None	55%
17-3025	Environmental Engineering Technicians	Associate degree	None	55%
17-3026	Industrial Engineering Technicians	Associate degree	None	55%

CIP Codes: What They Are

- Classification of Instructional Program (CIP) codes are the **federal** standard for postsecondary instructional program classification.
- All other postsecondary institutions in the U.S. use CIP codes for coding of instructional programs.
- These codes are used for financial aid, veterans programs, gainful employment reporting, and accreditation.

Example:

50 Visual and Performing Arts

50.04 Design and Applied Arts

50.0402 Commercial and Advertising Art

CIP codes affect information that is posted on your website

Gainful Employment

Program & Certificate Listing

Real Estate

Program Level: Undergraduate certificate
Program Length: 2 years

COST

Q. How much will this program cost me?*

A. Tuition and fees: \$1,207
Books and supplies: \$1,746
On-campus room & board: *not offered*

[What other costs are there for this program?](#)

For further program cost information [click here](#).

* The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

FINANCING

Q. What financing options are available to help me pay for this program?

A. Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* There were fewer than 10 graduates in this program. Median

SUCCESS

Q. How long will it take me to complete this program?

A. The program is designed to take 2 years to complete. Of those that completed the program in 2014-2015, *% finished in 2 years.

* Fewer than 10 students completed this program in 2014-15. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

Q. What are my chances of getting a job when I graduate?

A. The job placement rate for students who completed this program is *%.

* This institution is not currently required to calculate a job placement rate for program completers.

Click here for more information on jobs related to this program.

TOP Codes: What They Are

- Taxonomy of Programs (TOP) codes are used for every course, degree, and certificate to help identify the **program of study**.
- TOP codes are specific to the **California Community College system**.
- TOP codes are used as a proxy for programs, which impacts the Student Success Scorecard, Data Mart, Salary Surfer, LaunchBoard, and any effort to compare outcomes across the state.

Example:

12 Health

1230 Nursing

1230.30 Certified Nursing Assistant

SAM Codes: What They Are

- Student Accountability Model (SAM) codes help identify **pathways** within CTE programs, such as which courses are introductory and which are the capstone courses.
 - For example, in an EMT program, “Gateway to Health Careers” might be given an introductory code (SAM D) and “Selected Topics in Emergency Medical Care” might be given a capstone code (SAM B).
 - SAM codes are used to determine Perkins and Strong Workforce Program funding and in the calculations for the Student Success Scorecard, CTE Outcomes Survey, and LaunchBoard.
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- SAM A: Apprenticeship (offered to apprentices only)
 - SAM B: Advanced Occupational (not limited to apprentices)
 - SAM C: Clearly Occupational (but not advanced)
 - SAM D: Possibly Occupational (introductory course)
 - SAM E: Not Occupational

SAM codes affect calculations about students who took non-intro courses and skills-builders

Program Snapshot Data Tables

What level of program information would you like?

Program Level:

Sub-Disciplines (TOP4) ▼

Credit Status:

Both For and Non-Credit ▼

Which programs would you like to view?

College or Region:

MACROREGION - Bay Area ▼

Program or Sector:

Information Technology, General (070... ▼

Comparison

Historic ▼

Academic Year

2014-2015 ▼

View

Export

Program Size

Student Characteristics

Milestones

Success

Employment

Regional Labor Market Information

Course-Taking

Among students who took one or more courses

	Selected Year	
Students Who Took Non-Introductory Courses	45%	Trend
	Selected Year	
Skills-Builder Students	6%	Trend

How Do Codes Get Changed?

- **TOP – Awards (degrees/Certificates):** codes must be submitted to the Chancellor's Office for a review before they can be changed in the Curriculum Inventory.
- **TOP - Courses:** codes can be changed in the new Curriculum Inventory, without review by the Chancellor's Office.
- **SAM:** codes can be changed in your college's local data system, without review by the Chancellor's Office.

Things to Know Before Changing Codes

If you decide to change the codes, first ensure you understand how the changes will affect colleges processes including:

- **Federal reports:** Gainful employment, accreditation, and IPEDS
- **Funding:** Strong Workforce Program and Perkins
- **Students:** Financial aid and veterans programs
- **College planning:** facilities and program review

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Code Alignment Benefits

- **More accurate information for accountability reporting:** codes are used in tools like Data Mart, the Scorecard, the CTE Outcomes Survey, and the LaunchBoard, which can help with accreditation and program review.
- **Better information on labor market conditions:** codes impact the tools that provide supply and demand data, which you need for program approval and Strong Workforce Funding.
- **More accurate career and educational planning information:** student-facing tools like Salary Surfer, Here to Career, and Career Coach rely on these codes.

Code Alignment Benefits

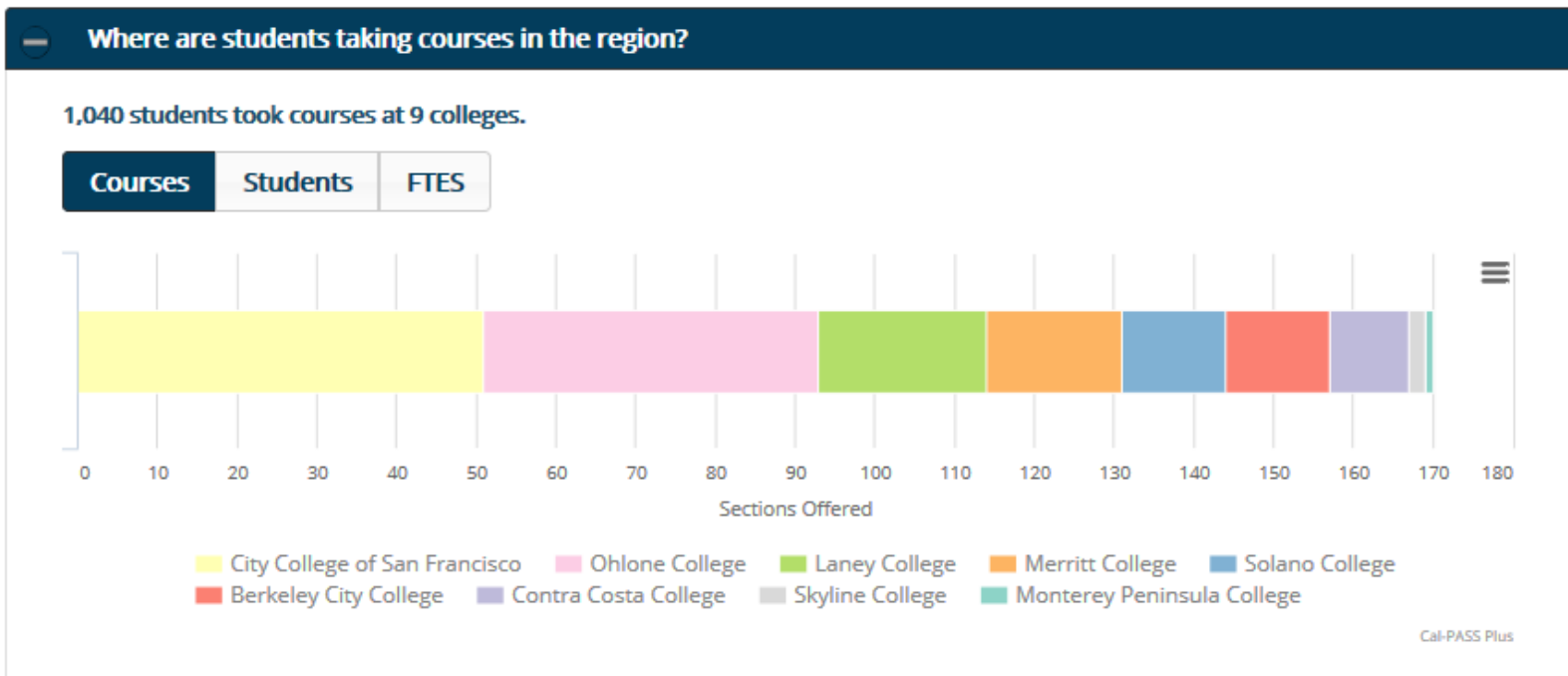
- **Better statewide data:** information will be used to inform updates to critical crosswalks, lists of codes, and resources to support code selection in the future.
- **Less work for your college:** much of the documentation will be compiled for you.
- **Access to experts:** curriculum, data, and labor market experts will be available to help your faculty sort through the options.

If your codes are wrong, your program won't show in tools like the LaunchBoard

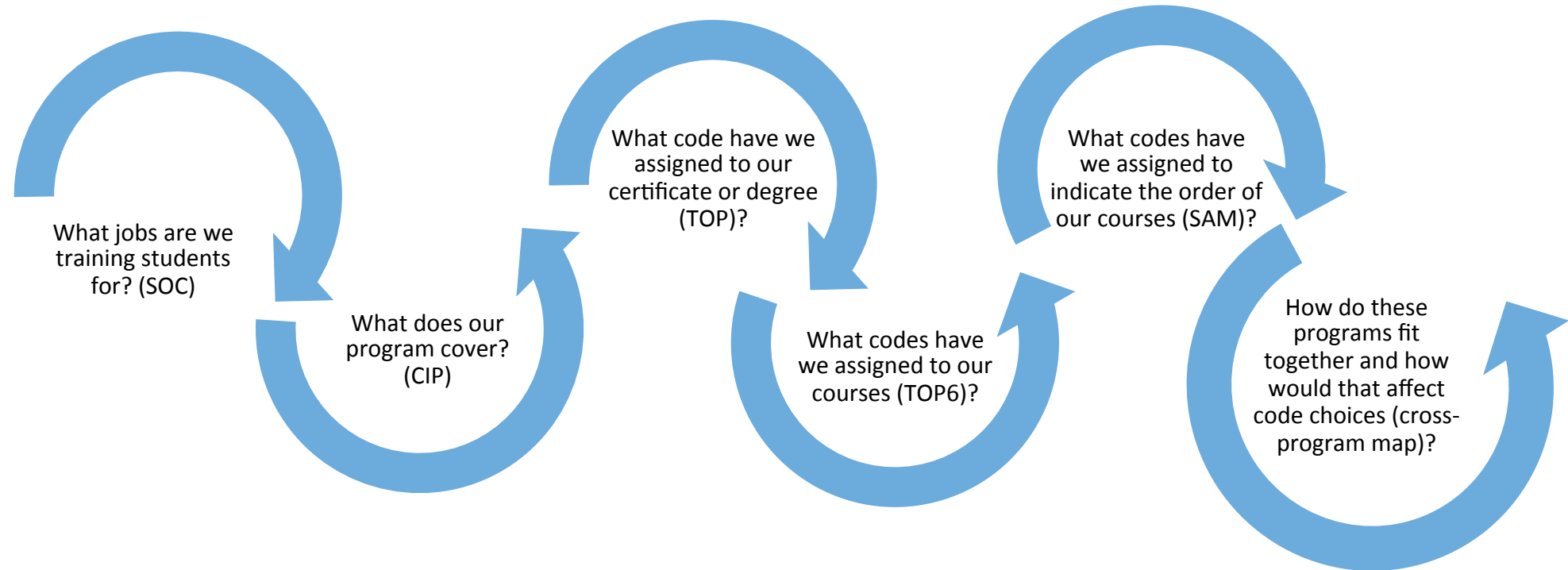
Program Snapshot Reports

MACROREGION - Bay Area || Biotechnology and Biomedical Technology (0430) || 2014-2015 [\(Change Filter?\)](#)

Students



Examining Codes at the Face-to-Face



Select the right jobs

(Standard Occupational Classification code)

The faculty determined that its curriculum was only focused on the first of the three possible occupations. The other jobs are the focus of other accounting certificates.

Certificate of Performance: Accounting Bookkeeping

What jobs are you training students for?

Federal Occupational Codes: Standard Occupational Code (SOC)

1) Bookkeeping, Accounting, and Auditing Clerks (SOC 43-3031.00)

Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.

Sample of reported job titles: Account Clerk, Account Receivable Clerk, Accounting Assistant, Accounting Associate, Accounting Clerk, Accounts Payable Clerk, Accounts Payable Specialist, Accounts Payables Clerk, Accounts Receivable Clerk, Bookkeeper

2) Payroll and Timekeeping Clerks (SOC 43-3051.00)

Compile and record employee time and payroll data. May compute employees' time worked, production, and commission. May compute and post wages and deductions, or prepare paychecks.

Sample of reported job titles: Accounting Technician, Human Resources Assistant (HR Assistant), Payroll Administrator, Payroll Assistant, Payroll Clerk, Payroll Coordinator, Payroll Manager, Payroll Representative, Payroll Specialist, Payroll Technician

3) Tax Preparers (SOC 13-2082.00)

Prepare tax returns for individuals or small businesses.

Sample of reported job titles: Certified Income Tax Preparer (CTP), Corporate Tax Preparer, Enrolled Agent, Income Tax Preparer, Master Tax Advisor, Tax Advisor, Tax Associate, Tax Consultant, Tax Preparer, Tax Specialist

Process: Selecting SOC Codes

- Select no more than **3-5** occupations per award.
- Select **6-digit** SOC codes; stay away from 8-digit codes (there is no labor market data for them).
- Each occupation is assigned a “typical” entry-level education and “typical” on-the-job training. Ask: Will my students be qualified for employment in this occupation right after they complete my program?

Select the federal program code (Classification of Instructional Program code)

The faculty determined the accounting program is inadvertently being reported as a retail management program to federal agencies.

What do students learn in your program?

Federal Program Codes: Classification of Instructional Program (CIP)

Crosswalk	Gainful Employment	Financial Aid	Veterans Program	Accreditation	Recommended Change
52.0302 52.1601	52.0212	52.0212	No data from the college	No data from the college	

1) Retail Management (CIP 52.0212)

A program that prepares individuals to manage the operations of a wide variety of retail businesses, including department stores; independent and chain stores; fashion, food and beverage, and pharmaceutical establishments; and online retail businesses. Includes instruction in retail management, merchandise management, customer service management, marketing, organizational behavior, accounting, finance, business law, and personnel management.

2) Accounting Technology/Technician and Bookkeeping (CIP 52.0302)

A program that prepares individuals to provide technical administrative support to professional accountants and other financial management personnel. Includes instruction in posting transactions to accounts, record-keeping systems, accounting software operation, and general accounting principles and practices.

3) Taxation (CIP 52.1601)

A program that prepares individuals to provide tax advice and management services to individuals and corporations. Includes instruction in tax law and regulations, tax record systems, individual and corporate income taxation, tax planning, partnerships and fiduciary relationships, estates and trusts, property depreciation, capital gains and losses, dispositions, transfers, liquidity, valuation, and applications to specific tax problems.

Process: Selecting CIP Codes

- Select **only 1** CIP per award.
- Look for the best fit based on CIP description and what is taught in your program.
- Chose how many digits in the CIP code, based on how broad or specific the program is.
- Remember that CIP sometimes provides an opportunity for a more specific code.

Select the CA *Program* code (Taxonomy of Program code)

The faculty affirmed that the correct state code is being used for its accounting certificate.

What do students learn in each program?

[State Program Codes for Awards: Taxonomy of Program \(TOP\)](#)

Crosswalk	Current	Recommended Change
0506.50	0502.00	

1) Accounting (TOP Code: 0502.00)

Procedures to systematize information about transactions and activities into accounts and quantitative reports to verify accuracy of data by applying accounting, internal reporting, and decision making principles. Includes accounting and financial reporting that assists in making internal management decisions.

2) Retail Store Operations and Management (TOP 0506.50)

Principles and methods of retail store operations and management, including department stores and supermarkets.

Process: Selecting TOP Codes

- Select **only 1** TOP per award.
- Some TOP codes and/or definitions could be out of date; find the **best fit** within the existing structure.
- Through the Code Alignment Project, we will document common programs for which there is no TOP code.

Select the CA *course* codes

The faculty found that while the course codes regarding content were correct, the sequence of courses was incorrect.

What do students learn in each course?

State Program Codes for [Courses](#): Taxonomy of Program (TOP) Codes and SAM Codes

Course Name/Number	Control Number	TOP Code	Recommended Change
SAM A			
SAM B			
Computer Accounting Applications	CCC000348864	0502.00	
SAM C			
Basic Accounting	CCC000358554	0502.00	
Financial Accounting	CCC000369648	0502.00	
SAM D			
Business Mathematics	CCC000374538	0506.00	
Intermediate Microsoft Excel	CCC000507954	0514.00	
SAM E			

1) Accounting (TOP Code: 0502.00)

Procedures to systematize information about transactions and activities into accounts and quantitative reports to verify accuracy of data by applying accounting, internal reporting, and decision making principles. Includes accounting and financial reporting that assists in making internal management decisions.

2) Business Management (TOP Code: 0506.00)

Planning, organizing, directing, and controlling business operations. Includes various theories, tools, and practical applications used to maintain business sustainability through the management of capital, financial, and human resources.

3) Office Technology/Office Computer Applications (TOP Code: 0514.00)

Recording and disseminating of information, by manual and/or electronic means, including administrative office practices (keyboarding, computer literacy/applications, internet usage, e-mailing, scheduling, etc.), global concepts, and office management skills (problem solving, critical thinking, and interpersonal relations).

Process: Validating SAM Codes

- Arrange courses in their logical **sequence**.
- Pay attention to which courses are marked as introductory versus further in the sequence, particularly if many students take intro courses without intending to major in the program.

Find Out More

Code Alignment Project resources including:

- Information on codes and where they come from
- What to know before changing a code
- Sample code binders

<http://doingwhatmatters.cccco.edu/LaunchBoard/CodeAlignment.aspx>