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The 2007 Revision of the Career/Technical Education Portion of the Secondary School Taxonomy

**Technical/Methodological
Report**

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**CAREER/TECHNICAL
EDUCATION STATISTICS**



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The 2007 Revision of the Career/Technical Education Portion of the Secondary School Taxonomy

Technical/Methodological Report

October 2007

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Executive Summary

Introduction

To meet its mandate to collect and report data on career/technical education (CTE), the National Center for Education Statistics (NCES) consolidates information on CTE from federal surveys that describe the secondary, postsecondary, and adult learning systems. This consolidated information is called the Career/Technical Education Statistics (CTES) system. The primary data collection tool for analyzing the participation of high school students in CTES is high school transcripts, which provide an objective, reliable record of students' coursetaking. To permit analysis of these data, analysts code the courses listed on the transcripts using the Classification of Secondary School Courses (CSSC), which provides standardized numeric codes for over 2,200 courses. Most analysts aggregate these CSSC courses into broad subject areas in order to make comparisons easier to comprehend and to create analytically powerful comparison groups. One framework that is used for this analytic aggregation is the Secondary School Taxonomy (SST). Since the last revision of the SST in 1998, CTE has evolved considerably. In 2004, the CTES Technical Review Panel (TRP), established in 1998 to provide input on data collection and reporting needs with respect to CTE, recommended that it was time to revisit the career/technical portion of the SST. This report summarizes the resulting revision process.

Revision Rationale and Goals

Recent developments in CTE led the CTES TRP to conclude that the CTE classification system needed updating to reflect changing practices concerning the types of courses that schools offer and how they organize those courses into subjects, sequences, and programs. In particular, the TRP recommended development of a classification system for CTE that could be linked to the 16 career clusters originally developed by the Office of Vocational and Adult Education and currently supported by the National Association of State Directors of Career Technical Education Consortium. Because the CTES system relates high school students' coursetaking to their later postsecondary education and work experience, the TRP also recommended that the secondary CTE taxonomy be linked to the NCES system for classifying postsecondary coursetaking and to the Standard Occupational Classification used by the U.S. Department of Labor to classify occupations.

To develop an SST that could be linked to both the Classification of Instructional Programs (CIP) categories that are used in the postsecondary taxonomy and to the career clusters, analysts developed a crosswalk between the CIP occupational program codes and the career clusters. In cases of disagreement among the existing taxonomies, the SST revision gave more weight to the CIP (and corresponding occupational classifications) than to the career clusters. This decision was based on the critical need for NCES to have consistent course classifications at the secondary and postsecondary levels. Nonetheless, the final SST revision can be aligned almost completely with the career clusters.

Process of the Revision

Members of the CTES TRP convened in late summer of 2004 to discuss the SST revision, including current CTE organization within their states and by their constituencies as well as future data needs and uses. Using the results of that initial discussion, MPR Associates, Inc. (MPR) and NCES staff prepared subsequent SST drafts, and TRP members commented on all aspects of the revision throughout the winter. Issues considered included the limitations of basing the revised taxonomy on an existing and perhaps outdated course classification system, the connotations of category nomenclature, and the intricacies of separating content or industry-related substance from function or skill. Throughout the development of the SST revision, NCES and MPR staff worked to create a secondary CTE taxonomy with categories linked as closely as possible to the postsecondary taxonomy, but also designed so that categories could be re-arranged to be linked as closely as possible to the career clusters.

Outcomes

Based on balancing the linkages between the CIP postsecondary program categories, the career clusters, and the Standard Occupational Classification (SOC) occupation categories, MPR and NCES staff developed the structure outlined in exhibit A for the CTE portion of the SST. This revision keeps the three prior CTE major categories of family and consumer sciences education, general labor market preparation, and specific labor market preparation (or occupational education). Within occupational education, the revision includes 21 program categories, which can be aggregated into higher-level categories in various ways. This approach provides flexibility to link the new SST to the career clusters, the CIP program areas, and the SOC occupation categories, depending on how categories are combined. Appendix H in this report lists the placement of specific courses within the program categories listed in exhibit A.

Exhibit A. The 2007 Secondary School Taxonomy (SST) categories for career/technical education (CTE)

Family and Consumer Sciences Education

General Labor Market Preparation

Specific Labor Market Preparation (Occupational Education)

Agriculture and Natural Resources
Communications and Design
Computer and Information Sciences
Health Sciences
Marketing

Business Support
Business Management
Business Finance
Engineering Technologies
Architecture

Construction
Manufacturing
Mechanics and Repair
Transportation
Consumer Services

Culinary Arts
Education
Library Science
Public Administration
Legal Services

Protective Services

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Introduction

The National Center for Education Statistics (NCES) has a mandate to collect and report data on career/technical education (CTE).¹ To meet this mandate, NCES consolidates information on CTE from federal surveys that describe the secondary, postsecondary, and adult learning systems. This consolidated information is called the Career/Technical Education Statistics (CTES) system. Data sources for the CTES system are primarily education surveys conducted by NCES, but these sources may be supplemented and enhanced by survey data from other offices within the U.S. Department of Education as well as from the U.S. Departments of Commerce (Census Bureau) and Labor (Bureau of Labor Statistics).

The primary data collection tool for analyzing the participation of high school students in CTE is high school transcripts, which provide an objective, reliable record of students' coursetaking. Analysts can use these data to answer the following questions about student participation in CTE:

- How many students participate in the CTE curriculum?
- Which students are more or less likely to participate in CTE?
- In which parts of the CTE curriculum are students more or less likely to participate?
- How broad and deep is students' CTE coursetaking?
- How does students' CTE coursetaking relate to their academic coursetaking?
- What are the trends in the level of students' CTE coursetaking and in who participates in CTE?
- How does students' CTE coursetaking in high school relate to their coursetaking in postsecondary education?
- How does students' CTE coursetaking in high school relate to their occupations after they leave school?
- Do students who enroll in postsecondary education that is related to their high school CTE coursetaking more often complete postsecondary education than do students who enter without a related background?
- Do students who enter an occupation that is related to their high school CTE coursetaking earn a higher salary or show other signs of increased economic success than do students who enter jobs without a related background?

¹ The Carl D. Perkins Career and Technical Education Improvement Act of 2006 gives school districts and postsecondary institutions funds to support improvements in their CTE programs and also mandates that NCES collect and report information on CTE (Section 114(a)(3)).

To permit analysis of the high school transcript data, analysts code the courses listed on the transcripts using the Classification of Secondary School Courses (CSSC), which provides standardized numeric codes for over 2,200 courses. Most analysts aggregate these CSSC courses into broad subject areas (e.g., mathematics, business) in order to make comparisons easier to comprehend and to create analytically powerful comparison groups. One framework that is used for this aggregation is the Secondary School Taxonomy (SST), which was last revised in 1998. (See appendix A for an overview of the entire 1998 SST structure.) Within CTE, the 1998 SST divides the curriculum into three broad areas—family and consumer sciences education, general labor market preparation, and specific labor market preparation (or occupational education). As seen in appendix A, occupational education is further subdivided into 10 areas—and, for some areas, into even more specific sub-areas.

Since the 1998 revision of the SST, CTE has evolved considerably. In 2004, the CTES Technical Review Panel (TRP), established in 1998 and composed of individuals familiar with CTE at the secondary, postsecondary, and adult education levels to provide input on data collection and reporting needs with respect to CTE, recommended that it was time to revisit the SST. This report summarizes the resulting revision process. After presenting an overview of the rationale and goals of the revision undertaken over the last 3 years, this report reviews each primary classification system that might be linked to the CTE portion of the SST (postsecondary education classifications, career clusters, and occupational classifications). Next, the report presents the revised CTE portion of the SST, followed by a summary of the major changes that were made between the 1998 version and the current version. The report concludes with a table using the revised taxonomy and data from the 2005 High School Transcript Study to examine the effect of the revisions on the reporting of students' CTE coursetaking.

Revision Rationale and Goals

Although the last revision of the SST in 1998 was less than 10 years ago, recent developments in CTE led the CTES TRP to conclude that the CTE classification system needed updating to reflect changing practices concerning the types of courses that schools offer and how they organize those courses into subjects, sequences, and programs. In particular, the TRP recommended development of a classification system for CTE that could be linked to the 16 career clusters originally developed by the Office of Vocational and Adult Education (OVAE) and currently supported by the National Association of State Directors of Career Technical Education Consortium (NASDCTEc). A state survey conducted in 2005 by the NASDCTEc indicated that most states are using the career clusters (often modified to fit local labor markets) as an organizing framework for instruction; over 30 states have integrated career clusters into

their state plans and/or strategy papers (NASDCTEc, 2006). Because the CTES system relates high school students' coursetaking to their later postsecondary education and work experience, the TRP also recommended that the secondary CTE taxonomy be linked to systems that classify postsecondary coursetaking and to those used by the U.S. Department of Labor to classify occupations and/or industries.

Finally, the TRP recommended the development of two taxonomies—one that would assign each secondary course uniquely to one occupational area (depending on the occupational area for which the course is most relevant), and another that would assign each course to one or more occupational areas (depending on the occupational areas for which the course could be considered relevant). For example, in a single-placement taxonomy based on the career clusters, a child development course might be considered preparation for day care workers and thus placed under a *human services* category. In a multiple-placement taxonomy, a child development course might be considered relevant for both day care workers and teachers, and thus could be placed under both *human services* and *education and training* categories. The former version would be used to tally unduplicated counts of courses taken or credits earned, while the latter could be used to identify students who have taken or completed particular patterns of coursework.

The CTES TRP suggestion of two versions of the SST is a recognition of the fact that many occupations use the same skills, as acknowledged within the career cluster framework (described below). However, incorporating multiple placements into a course taxonomy may result in the double-counting of students' courses, which often runs counter to analysts' needs to describe coursetaking in a coherent way (so that, for example, the percentage of credits earned in all the SST categories sums to 100 percent).² Although analysts working on this project developed a few initial drafts of a taxonomy with multiple placements, further development of these efforts was postponed, as it seemed more efficient to focus resources on a single-placement taxonomy that can then serve as a starting point for a multiple-placement taxonomy. This document thus summarizes the development of a single-placement taxonomy. An additional adjustment to the TRP's intent concerns engineering courses. In order to link the SST closely to the career clusters and to the postsecondary taxonomy, engineering courses should be included within CTE. However, changing the academic portion of the SST (where the engineering courses are currently located) would have involved a more extensive process involving a larger community of curriculum experts, and NCES was not interested in a revision of that scope.

² Previous versions of the SST have all used the single placement technique. A physics course, for example, falls within the *science* category and not the *mathematics* category, even though a physics course may involve a good deal of mathematics.

Linking the SST to the Career Clusters

The career clusters were developed to help schools organize their curricula and counsel students concerning their career choices. The career clusters organize occupations into 16 “clusters” that each require common skills and knowledge. (See appendix B for a description of each cluster.) These clusters include the full spectrum of occupations, including those traditionally considered “vocational” as well as those considered professional and artistic. It should be noted that clusters designed for organizing instruction and career advisement do not readily lend themselves for inclusion in a course taxonomy, at least not in a single-placement taxonomy. The main difficulty in linking the SST to the career clusters is that the clusters describe occupations rather than courses; thus, when different occupational areas involve similar skills, a particular course may appropriately fall within multiple clusters. As mentioned above, a child development course represents one situation in which a course can be linked to multiple clusters, as child care falls within the *human services* cluster while teaching falls within the *education and training* cluster. The revision process used the career clusters brochures published by NASDCTEc and the descriptions that accompany the CSSC codes to determine course placements that would link the taxonomy to the career clusters; both of these sources leave room for interpretation.

Although the task at hand concerned a revision of only the CTE portion of the SST, the career cluster framework makes no distinction between academic and career/technical coursework. (In fact, the career cluster framework itself makes no reference to coursework at all.) Thus, individual clusters include occupations (and by extension, courses) that are traditionally considered academic, as well as those traditionally considered CTE. For example, fine arts courses, traditionally considered academic, could be categorized under the *arts, audio-visual, and communications* cluster, along with CTE courses in communications technology. Other examples are science courses, which could be seen as part of the *science, technology, engineering, and mathematics* cluster. As will be seen below, since this effort focused on the CTE curriculum, the revised SST category names (and contents) reflect only CTE topics.

Linking the SST to the Postsecondary Taxonomy

NCES currently collects data related to postsecondary coursetaking from several surveys, each providing a different perspective on coursework: postsecondary degree fields, student majors or fields of study, and faculty teaching fields.³ These postsecondary measures are

³ Postsecondary degree fields are collected through the Integrated Postsecondary Education Data System (IPEDS), student majors or fields of study are examined in the National Postsecondary Student Aid Study (NPSAS) and in the Beginning Postsecondary Students Longitudinal Study (BPS), and faculty teaching fields are analyzed in the National Study of

classified using another NCES coding system, the 2000 Classification of Instructional Programs (CIP). The CIP provides codes for classifying postsecondary instructional programs at three levels of aggregation. At the 2-digit level, instructional programs are aggregated into 49 occupational and academic program categories (listed in appendix C). The 4-digit level provides more information on programs within these 49 areas, and the 6-digit level supplies even more specific instructional detail. For example, CIP code 13 encompasses all *education* programs, code 13.10 includes all *special education and teaching* programs, and code 13.1013 includes all programs related to *education/teaching of individuals with autism*. Currently, NCES postsecondary data collections use various levels of CIP coding, which yield different abilities to link to other classification systems. However, future data collections are planned to collect data at the more detailed 4- or 6-digit CIP level.

NCES developed and recently revised a taxonomy for aggregating the CIP fields into CTE and academic areas, based on: recommendations of a panel of postsecondary experts; reviews of other postsecondary taxonomies and community college course catalogs; and analyses of National Postsecondary Student Aid Study (NPSAS) data on student majors and degree expectations, Integrated Postsecondary Education Data System (IPEDS) data on postsecondary completion, and U.S. Bureau of Labor Statistics data on the educational backgrounds of workers. This postsecondary taxonomy revision was completed in 2006 during the SST revision, and is presented in appendix D.

Because it was important to develop an SST that could be linked to both the CIP categories and the career clusters, the analysts developed a crosswalk between the CIP instructional program codes (using 2-digit codes) and the career clusters. Although 10 of the 16 career clusters link fairly well to the CIP categories, problems arose for several clusters, particularly for *hospitality and tourism*. The CIP does not have a *hospitality and tourism* category. Instead, related programs are found throughout the CIP, some at the 4-digit level and others at the 6-digit level. Examples include the *culinary arts* category (12.05), the *parks, recreation and leisure facilities management* category (31.03), and the *hospitality administration/management* category (52.09). Other categories of programs, such as *tourism promotion operations* (52.1906) or *food service system administration/management* (19.0505), can be identified only at the 6-digit level. Similar issues—although to a lesser degree—affected the career clusters of *business finance; marketing, sales, and service; human services; and government and public administration*.

Postsecondary Faculty (NSOPF). High school coursetaking will not be analyzed in relation to postsecondary teaching fields, but the latter is still relevant to the SST revision effort, as the revision is likely to influence how NCES identifies secondary school teachers' teaching fields, and those data may be related to postsecondary teaching fields.

These misalignments complicated the revision process, making exact links between both the postsecondary taxonomy and the career clusters impossible. As discussed below, the same issue arose with occupational classifications, which align fairly well with the CIP, but less well with the career clusters. In cases of disagreement among the existing taxonomies, the SST revision gave more weight to the CIP (and corresponding occupational classifications) than to the career clusters. This decision was based on the critical need for NCES to have consistent course classifications at the secondary and postsecondary levels. Nonetheless, as will be seen below, the final SST revision can be aligned almost completely with the career clusters.

Linking the SST to Occupational Classification Systems

NCES collects data on the occupations of students while in school and after they leave school.⁴ To classify these occupation data, the U.S. Department of Labor developed the Standard Occupational Classification (SOC) system, which was most recently revised in 2000.⁵ The SOC is designed to cover all occupations in which work is performed for pay or profit. It classifies occupations at four levels of aggregation, with the highest level consisting of 23 major occupation groups. (Major and second-level occupation categories are listed in appendix E.) Although the SST revision attempted to incorporate the SOC categories, the effort to do so was complicated by inconsistencies among the SOC framework and the frameworks used in the postsecondary taxonomy and the career clusters.

These inconsistencies are highlighted when looking at *management* occupations and *office and administrative support* occupations. The SOC category of *management* occupations encompasses all types of managers (agricultural, marketing, human resources, industrial production and food service managers; education administrators; and legislators) and therefore is linked to all of the career clusters. *Office and administrative support* occupations also encompasses many different kinds of clerks.⁶

In addition, as is true with the CIP, the SOC does not have separate categories for two career clusters (*hospitality and tourism* and *government and public administration*), but instead includes related occupations throughout several categories. In addition to the hospitality-related occupations found within the *food preparation and serving related* occupations, bakers and butchers can be found within the *production* occupations, meeting and convention planners

⁴ These data are collected in the National Postsecondary Student Aid Study (NPSAS), Education Longitudinal Study (ELS), Beginning Postsecondary Students Longitudinal Study (BPS), and National Household Education Survey (NHES).

⁵ The SOC was scheduled for revision in 2005, but the revised version had not yet been released during SST revision.

⁶ As will be seen below, the 2007 SST revision follows the career cluster approach, placing all business courses within one category.

within *business and financial operations* occupations, travel agents within *sales and related* occupations, maids and housekeeping cleaners within *building and grounds cleaning and maintenance* occupations, and entertainment attendants and transportation, tourism, and lodging attendants within *personal care and service* occupations. Similarly, occupations related to government and public administration can be found throughout the SOC: tax examiners, collectors, and revenue agents within *business and financial operations* occupations; urban and regional planners within *life, physical, and social science* occupations; postal service workers within *office and administrative support* occupations; and agricultural inspectors within *farming, fishing, and forestry operations* occupations.⁷

Some data collections also code the industries corresponding to students' occupations. Until 2002, the government coded industries using the Standard Industry Classification (SIC) system. In 2002, the U.S. Census Bureau replaced SIC with the North American Industry Classification System (NAICS), an industry coding system that is used by the United States, Canada, and Mexico. At the highest level of aggregation, NAICS provides 20 industry categories (listed in appendix F). An even greater amount of career cluster misalignment exists with the industry categories than with the occupation categories. Because of this misalignment, industry classifications were ultimately not used in the SST revision effort. However, it may be worth considering the development of an industry-based taxonomy at a later date. Such a taxonomy does seem to provide a better match to some of the career clusters, such as *hospitality and tourism*.

Process of the Revision

Interaction with the CTES TRP

Members of the CTES TRP convened in late summer of 2004 to discuss the parameters of the SST revision. (See appendix G for a list of the members of the SST Work Group.) Using basic statistics that reviewed prior student coursetaking and a proposed framework that attempted to connect or merge the major categories of the 1998 SST and the career clusters, TRP members discussed current CTE organization within their states and by their constituencies as well as future data needs and uses. Their discussion included the following major topics:

- defining relevant occupational program areas;

⁷ For hospitality and tourism, the 2007 SST revision mainly follows the SOC framework rather than the career clusters, as it has no separate *hospitality and tourism* category. The 2007 revision includes a *public administration* sector for government and public administration, but also includes categories such as *business finance* and *agriculture* that would capture students preparing for some of the occupations listed within those SOC areas.

- classifying individual courses into the program areas;
- identifying current cross-cutting or general preparation courses;
- determining current relevance of the family and consumer sciences education, general labor market preparation, and specific labor market preparation (occupational education) categories; and
- determining the current relevance of the “levels” of occupational education courses within each program area.

Using the results of that initial discussion, MPR Associates, Inc. (MPR) and NCES staff prepared a second draft of revisions to the SST. In that draft, the categories were similar but not identical to the 16 career clusters, because the revision also took into account the postsecondary taxonomy and corresponding CIP codes, the SOC codes for occupations, and the historical coursetaking patterns of American high school students. TRP members commented on all aspects of the revision throughout the winter. In doing so, they considered the limitations of basing the revised taxonomy on an existing and perhaps outdated course classification system, the connotations of category nomenclature, and the intricacies of separating content or industry-related substance from function or skill (e.g., agricultural production of food vs. industrial food processing; food preparation/culinary arts vs. restaurant/food service management). Reviewers also were encouraged to assist with locating specific courses within the suggested categories.

Thus began an iterative process of placing the 1,023 CTE courses into revised SST categories, based on the CSSC course descriptions, career cluster descriptions, and CIP category descriptions. A number of issues affected the development and titling of the revised SST categories and placement of the CSSC-defined courses within those categories. The remainder of this section reviews some of those issues and their effect on the revision.

NCES Priorities

Several members of the TRP expressed an interest in having the SST signify the future direction of CTE, as more schools and states are beginning to use the career cluster initiative to develop and organize curricula and as courses evolve to meet changing labor market demand. However, the NCES mandate is to report on student coursetaking, rather than to assume an advocacy or policy change role. Related to that mandate is the preference to use traditional (but not outdated) terminology that accurately reflects current conditions, rather than terminology designed to encourage change. One such example is the preference of using marketing instead of retail/wholesale sales and services. In addition, NCES staff believed it more important that the secondary taxonomy be linked to the postsecondary taxonomy than to the career clusters. This linkage would enable NCES to examine the extent to which students pursue similar studies in

secondary and postsecondary education, and to link trends in secondary and postsecondary occupational coursetaking. Nevertheless, NCES staff recognized the value of having a taxonomy that is linked to the career clusters, because states often use these clusters for reporting purposes. So throughout the development of the SST revision, MPR and NCES staff worked to create a secondary CTE taxonomy with categories linked as closely as possible to the postsecondary taxonomy, but also designed so that categories could be re-arranged to be linked as closely as possible to the career clusters. In NCES reports, the arrangement used would depend on the purpose of the analysis, but the “default taxonomy” would link to the postsecondary taxonomy.

One further limiting factor for the SST revision was the number of high school students taking courses in each category. If too few students take courses in a given category, for example, that category may not be reliable enough for analysis. Thus, the taxonomy allows for combining small categories in order to obtain groups large enough for analysis. For example, *legal services* consists of only two courses; it is anticipated that this category will need to be combined with other categories for analytic purposes.

Outcomes

Based on TRP input and efforts to balance the linkages between the CIP postsecondary program categories, the career clusters, and the SOC occupation categories, MPR and NCES staff developed the structure outlined in exhibit 1 for the CTE portion of the SST. Appendix H lists the CSSC codes that belong in each category. This revision keeps the three prior CTE major categories of family and consumer sciences education, general labor market preparation, and specific labor market preparation (or occupational education). Within occupational education, the revision includes 21 categories, which can be aggregated into higher-level categories in various ways. In addition to allowing the creation of larger categories in response to small cell sizes, this approach provides flexibility to link the new SST to the career clusters, the CIP program areas, and the SOC occupation categories depending on how categories are combined. For example, one can combine *architecture* and *construction* to link to the *architecture and construction* career cluster, or combine *architecture* and *engineering technologies* to link to the postsecondary *engineering, architecture and science technologies* category. Exhibit 2 shows how the 2007 SST can be linked to the postsecondary coursetaking taxonomy and to the career clusters.

**Exhibit 1. The 2007 Secondary School Taxonomy (SST) categories for career/technical
education (CTE)**

Family and Consumer Sciences Education

General Labor Market Preparation

Specific Labor Market Preparation (Occupational Education)

Agriculture and Natural Resources
Communications and Design
Computer and Information Sciences
Health Sciences
Marketing

Business Support
Business Management
Business Finance
Engineering Technologies
Architecture

Construction
Manufacturing
Mechanics and Repair
Transportation
Consumer Services

Culinary Arts
Education
Library Science
Public Administration
Legal Services

Protective Services

Exhibit 2. Potential linking of the 2007 Secondary School Taxonomy (SST) to the postsecondary taxonomy and to the career clusters

Postsecondary Taxonomy Categories	SST Occupational Categories	Career Clusters
Agriculture and Natural Resources	← Agriculture and Natural Resources →	Agriculture, Food, and Natural Resources
Communications and Design	← Communications and Design →	Arts, Audio-Video Technology, and Communications
Computer and Information Sciences	← Computer and Information Science →	Information Technology
Health Care	← Health Sciences →	Health Science
Marketing	← Marketing →	Retail/Wholesale Sales and Services
Business Support	← Business Support	→ Business and Administration
Business Management	← { Business Management	
	Business Finance }	
Engineering, Architecture, and Science Technologies	← { Engineering Technologies	→ Scientific Research and Engineering
	Architecture	→ Architecture and Construction
Manufacturing, Construction, Repair, and Transportation	← { Construction	→ Manufacturing
	Manufacturing Mechanics and Repair }	
	Transportation	
Consumer Services	← { Consumer Services	→ Transportation, Distribution, and Logistics
	Culinary Arts	→ Human Services
Education	← Education	→ Hospitality and Tourism
		→ Education and Training
Public, Legal, and Social Services	← { Library Science	→ Government and Public Administration
	Public Administration }	
	Legal Services }	
Protective Services	← Protective Services	→ Law, Public Safety, Corrections, and Security

Major Changes

The following discussion provides an overview of which individual courses were moved within the 1998 and 2007 SSTs for the two non-occupational program areas and the 21 categories within the occupational program area. The specific courses that were moved across categories are listed in appendix I. Exhibit 3 presents a comparison of the 1998 and 2007 SST occupational course categories. This exhibit uses an aggregation of the 21 categories that facilitates linkage to the postsecondary taxonomy and is expected to provide reliable estimates for each category.

Family and Consumer Sciences Education (non-occupational): This category remained similar to the previous *family and consumer sciences education* (FCSE) category in the 1998 SST. The exceptions include 8 courses moved into this category from *personal and other services*, 1 course from *construction*, and 1 course from *mechanics and repair*.

General Labor Market Preparation (non-occupational): This category remained similar to the previous *general labor market preparation* category in the 1998 SST. Five courses that have been added to the CSSC since the 1998 SST were included here, and 10 courses have been moved into this category from other areas: 1 from *business services*; 1 from *computer technology*; 5 from *other precision production*; and 3 from SLMP, unidentified.

Agriculture and Natural Resources: This category is made up of courses from the previous *agriculture and renewable resources* category, with a single additional course from *other precision production*.

Communications and Design: This category consists of nearly all of the courses from *communications technology* and 21 courses from the former *drafting/graphics/printing* category (within *precision production*). Other courses include 7 courses from *personal and other services*; 4 courses from *other precision production*; 3 courses from *marketing and distribution*; 1 course from *business services*; and 3 courses added to the CSSC since the publication of the SST in 1998.

Computer and Information Sciences: This category remained similar to the previous *computer technology* category. Ten courses that have been added to the CSSC since 1998 were also included in this category.

Health Sciences: This category remained similar to the previous *health care* category. Additions include 2 courses from *agriculture and renewable resources*; 1 course from *business services*; and 2 courses from *other technology* (within *technology and communications*).

Marketing: This category was drawn mostly from the previous *marketing and distribution* category, in addition to 5 courses from *food service and hospitality* and 1 course added to the CSSC since 1998.

Business Support: This category was drawn predominantly from the prior *business services* category; 1 course was moved into this category from *marketing and distribution*.

Business Management: This category was drawn predominantly from the previous *business management* category, with 5 additional courses from *marketing and distribution*, 1 from *food service and hospitality*, 1 from *general labor market preparation*, and 1 course added to the CSSC since 1998.

Business Finance: This new category took 11 of its courses from *business management*, 12 from *business services*, and 2 from *marketing and distribution*.

Engineering Technologies: This new category is predominantly made up of 33 courses from the previous *other technology* category (within *technology and communications*) and 9 courses previously within the *drafting/graphics/printing category* (within *precision production*). Other additions include 4 courses from *computer technology* and 2 from *other precision production*.

Architecture: This new category consists of 13 courses from the previous *drafting/graphics/printing production* category and 1 course from *other precision production*.

Construction: This category was drawn solely from the previous *construction* category and 1 course added to the CSSC since 1998.

Manufacturing: This new category consists of 30 courses that were previously within *metals/woods/plastics production* and 27 courses previously within *other precision production*. In addition, clothing and apparel-related courses are now included here, drawing in 17 courses from *personal and other services* and 7 courses from *family and consumer sciences education*. Other additions include 5 courses from *transportation and material moving*, 4 courses from *mechanics and repair*, 2 courses from *construction*, and 1 course from *general labor market preparation*.

Mechanics and Repair: This category consists of courses that were previously within *mechanics and repair*, in addition to 7 courses from *personal and other services*, 5 courses from *transportation and material moving*, 2 courses from *construction*, and 1 course from *communications technology*.

Transportation: This category consists of courses that were previously within *transportation and material moving*, in addition to 1 course from *marketing and distribution*.

Consumer Services: This category is predominantly made up of the courses that were previously within *personal and other services* and the 12 child care/child development-related courses formerly in *child care and education*. Other additions include 10 courses from *family and consumer sciences education*, 5 courses from *agriculture and renewable resources*, 2 courses from *marketing and distribution*, 1 course from *food service and hospitality*, 1 course from *business management*, and 1 course from *transportation and material moving*.

Culinary Arts: This category predominantly consists of 15 courses that were previously within *food service and hospitality*; other additions were 6 courses from *other precision production*, and 1 course from *family and consumer sciences education*.

Education: This category includes courses that were previously within *child care and education* and 2 courses added to the CSSC since 1998.

Library Science: This new category is made up of 8 courses that were previously within *child care and education*.

Public Administration: This new category is made up of 8 courses that were previously within *public and protective services*.

Legal Services: This new category consists of 1 course from *business services* and 1 course from *health care*.

Protective Services: This category is made up of courses that were previously within *public and protective services* and 1 course added to the CSSC since 1998.

Exhibit 3. Comparison of the 2007 and 1998 Secondary School Taxonomy (SST) categories within the Career/Technical Education (CTE) Specific Labor Market Preparation categories

2007 SST categories	1998 SST categories
Agriculture and Natural Resources	Agriculture and Renewable Resources
Computer and Information Sciences	
Health Sciences	Health Care
Engineering Technologies	
Architecture	
Communications and Design	Technology and Communications Communications technology Computer technology Other technology
Marketing	Marketing and Distribution
Business Support	Business
Business Management	Business services
Business Finance	Business management
Construction	Trade and Industry
Manufacturing	Construction
Mechanics and Repair	Precision production ¹
Transportation	Mechanics and repair
Consumer Services	Transportation and material moving
Culinary Arts	Personal and Other Services ²
Education	Food Service and Hospitality
Library Science	Child Care and Education ³
Public Administration	
Legal Services	
Protective Services	Public and Protective Services

¹ Drafting courses were moved from *precision production* to *engineering technologies*; architecture and architectural drawing courses were moved from *precision production* to *architecture*; commercial/graphic arts, print production, and commercial photography courses were moved from *precision production* to *communications and design*.

² Clothing and textile courses were moved from *personal and other services* to *manufacturing*.

³ Child care courses were moved from *child care and education* to *consumer services*.

NOTE: Arrows denote movement of 10 or more courses from a major category within the 1998 SST to a different major category within the 2007 SST. Footnotes indicate the re-assignment of parts of a major category.

Applying the SST

Table 1 presents data from the NCES High School Transcript Study of 2005. The table presents coursework aggregated using the revised SST to examine the average number of credits⁸ earned in each category, percentage of graduates who earned any credit in each category, and the percentage of graduates who earned at least three credits in each occupational category (often referred to in NCES reports as “concentrating” in an occupational area). Standard errors for these measures are presented in appendix J.

As mentioned above, analysts employing this SST revision could aggregate the 21 occupational categories into smaller numbers of categories, depending on the purpose of the analysis and the size of the available sample. The occupational categories may also be realigned as needed depending upon the linkage desired, as shown in exhibit 2.

Table 1. Summary measures of public high school graduates’ participation in career/technical education, using the 2007 Secondary School Taxonomy (SST): 2005

Category	Average credits earned	Percentage of graduates earning any credits	Percentage of graduates earning 3.0 or more credits
Career/technical education, total	4.01	96.6	61.5
Family and Consumer Sciences Education	0.40	41.1	1.1
General Labor Market Preparation	0.97	69.1	6.8
Occupational, total	2.63	86.9	39.3
Agriculture and Natural Resources	0.23	11.5	2.9
Communications and Design	0.36	30.2	2.0
Computer and Information Sciences	0.24	19.4	1.4
Health Sciences	0.16	9.3	2.1
Marketing	0.13	9.4	1.4

See notes at end of table.

⁸ Credit is measured in Carnegie units; one Carnegie unit represents the successful completion of a course that meets 1 period per day for 1 year (based on a 6-period school day).

Table 1. Summary measures of public high school graduates' participation in career/technical education, using the 2007 Secondary School Taxonomy (SST): 2005—Continued

Category	Average credits earned	Percentage of graduates earning any credits	Percentage of graduates earning 3.0 or more credits
Business Support	0.23	22.2	0.7
Business Management	0.17	17.3	0.8
Business Finance	0.11	10.1	0.2
Engineering Technologies	0.15	11.8	1.0
Architecture	0.02	2.1	0.1
Construction	0.10	4.9	1.1
Manufacturing	0.21	16.4	1.8
Mechanics and Repair	0.17	8.1	2.2
Transportation	0.01	1.0	0.0
Consumer Services	0.16	12.4	1.3
Culinary Arts	0.11	9.7	0.7
Education	0.03	2.2	0.2
Library Science	0.01	1.3	0.0
Public Administration	0.00	0.2	0.0
Legal Services	0.00	0.0	0.0
Protective Services	0.04	3.5	0.3

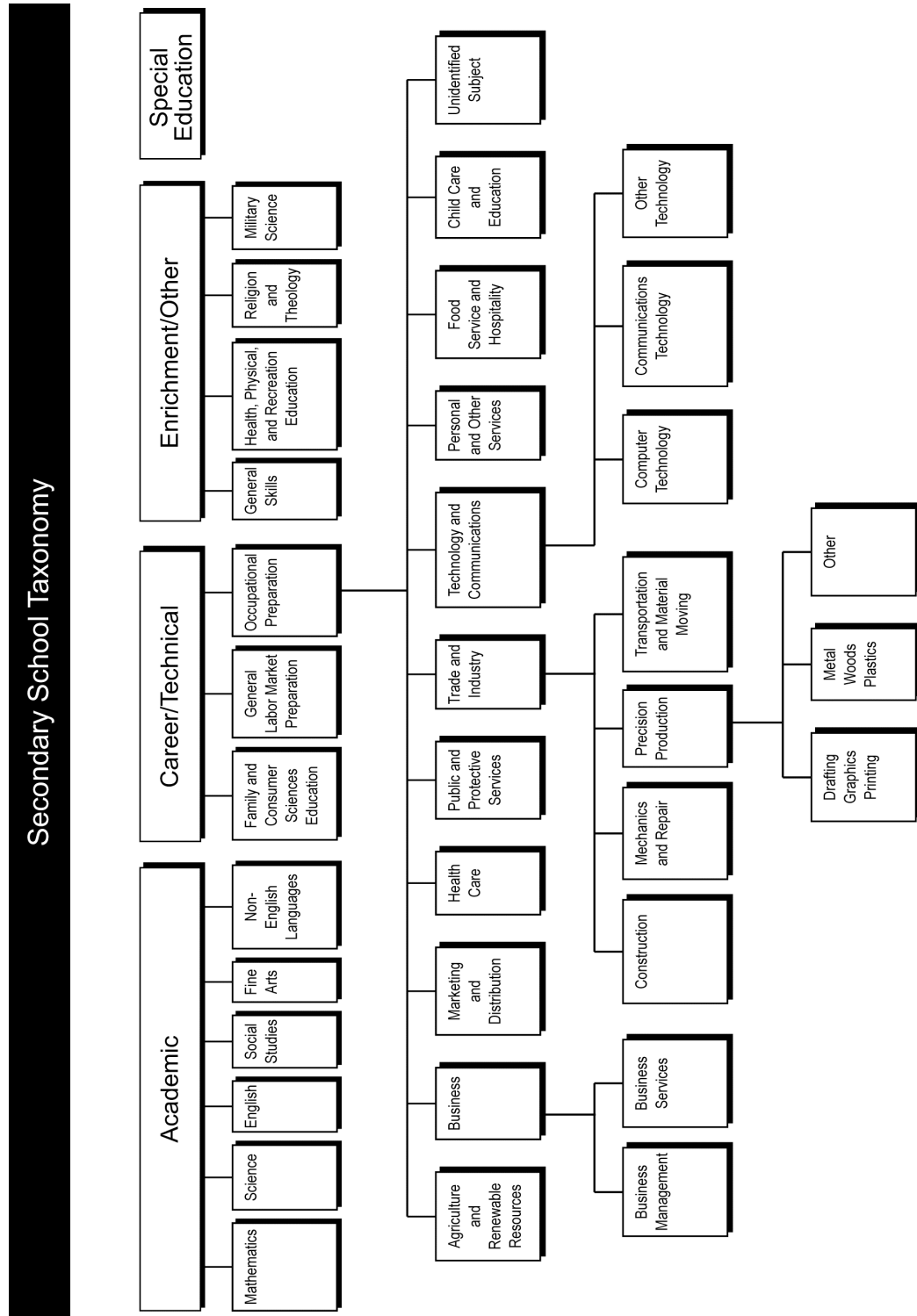
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Transcript Study, 2005.

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APPENDIX A: OVERVIEW OF THE 1998 SST STRUCTURE

Exhibit A-1: Overview of the 1998 Secondary School Taxonomy (SST) Structure



SOURCE: Adapted from Denise Bradley and E.G. Hoachlander, 1998 Revision of the Secondary School Taxonomy (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, Working Paper No. 1999-06, March 1999).

APPENDIX B: THE 16 CAREER CLUSTERS

Career Cluster	Related careers and pathways
Agriculture, Food, and Natural Resources	<p>The production, processing, marketing, distribution, financing and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.</p> <p>Pathways: Food Products and Processing Systems; Plant Systems; Animal Systems; Power, Structural and Technical Systems; Natural Resource Systems; Environmental Service Systems; and Agribusiness Systems</p>
Architecture and Construction	<p>Designing, planning, managing, building and maintaining the built environment.</p> <p>Pathways: Design/Pre-Construction; Construction; and Maintenance/Operations</p>
Arts, Audio-Video Technology and Communications	<p>Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.</p> <p>Pathways: Audio and Video Technology and Film; Journalism and Broadcasting; Printing Technology; Telecommunications; Performing Arts; and Visual Arts</p>
Business, Management, and Administration	<p>Planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. These careers are available in every sector of the economy.</p> <p>Pathways: Management; Business Financial Management and Accounting; Human Resources; Business Analysis; Marketing; and Administration and Information Support</p>
Education and Training	<p>Planning, managing, and providing education and training services, and related learning support services.</p> <p>Pathways: Teaching and Training; Professional Support Services; and Administration and Administrative Support</p>
Finance	<p>Planning services for financial and investment planning, banking, insurance, and business financial management.</p> <p>Pathways: Financial and Investment Planning; Business Financial Management; Banking and Related Services; and Insurance Services</p>

See notes at end of table.

Career Cluster	Related careers and pathways
Government and Public Administration	<p>Executing governmental functions to include governance, national security, foreign service, planning, revenue and taxation, regulation, and management and administration at the local, state and federal levels.</p> <p>Pathways: Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Public Management and Administration</p>
Health Science	<p>Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.</p> <p>Pathways: Therapeutic Services; Diagnostic Services; Health Informatics; Support Services; and Biotechnology Research and Development</p>
Hospitality and Tourism	<p>Management, marketing, and operations of restaurants and other food services, lodging, attractions, recreation events, and travel related services.</p> <p>Pathways: Lodging; Travel and Tourism; Restaurant and Food and Beverage Services; Recreation, Amusements and Attractions</p>
Human Services	<p>Preparing individuals for employment in career pathways that relate to families and human needs.</p> <p>Pathways: Early Childhood Development and Services; Personal Care Services; Consumer Services; Family and Community Services; and Counseling and Mental Health Services</p>
Information Technology	<p>The design development, support and management of hardware, software, multimedia, and systems integration services.</p> <p>Pathways: Programming and Software Development; Network Systems; Information Support and Services; and Interactive Media</p>
Law, Public Safety, Corrections, and Security	<p>Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.</p> <p>Pathways: Correction Services; Emergency and Fire Management Services; Security and Protective Services; Law Enforcement Services; and Legal Services</p>

See notes at end of table.

Career Cluster	Related careers and pathways
Manufacturing	<p>Planning, managing, and performing the processing of material into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.</p> <p>Pathways: Production; Maintenance, Installation, and Repair; Health, Safety and Environmental Assurance; Manufacturing Production Process Development; Quality Assurance; and Logistics and Inventory Control</p>
Marketing, Sales, and Service	<p>Planning, managing, and performing marketing activities to reach organizational objectives.</p> <p>Pathways: Management and Entrepreneurship; Professional Sales and Marketing; Buying and Merchandising; Marketing Communications and Promotion; Marketing Information Management and Research; Distribution and Logistics; and E-Marketing</p>
Science, Technology, Engineering, and Mathematics	<p>Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.</p> <p>Pathways: Engineering and Technology; and Science and Mathematics</p>
Transportation, Distribution, and Logistics	<p>Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water, and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facilities maintenance.</p> <p>Pathways: Transportation Operations; Facility and Mobile Equipment Maintenance; Sales and Service; Warehousing and Distribution Center Operations; Transportation System Infrastructure; Health, Safety and Environmental Management; and Logistics Planning and Management</p>

SOURCE: National Association of State Directors of Career Technical Education Consortium, retrieved September 9, 2005, from <http://www.careerclusters.org/16clusters.htm> and Career Cluster brochure set.

**APPENDIX C: CLASSIFICATION OF INSTRUCTIONAL PROGRAMS (CIP)
AT THE 2-DIGIT LEVEL**

CIP

CIP Number	CIP Title	CIP Description
01	Agriculture, Agriculture Operations, and Related Sciences	Instructional programs that focus on agriculture and related sciences and that prepare individuals to apply specific knowledge, methods, and techniques to the management and performance of agricultural operations.
03	Natural Resources and Conservation	Instructional programs that focus on the various natural resources and conservation fields and prepare individuals for related occupations.
04	Architecture and Related Services	Instructional programs that prepare individuals for professional practice in the various architecture-related fields and focus on the study of related aesthetic and socioeconomic aspects of the built environment.
05	Area, Ethnic, Cultural, and Gender Studies	Instructional programs that focus on the defined areas, regions, and countries of the world; defined minority groups within and across societies; and issues relevant to collective gender experience.
09	Communication, Journalism, and Related Programs	Instructional programs that focus on how messages in various media are produced, used, and interpreted within and across different contexts, channels, and cultures, and that prepare individuals to apply communication knowledge and skills professionally.
10	Communications Technologies/Technicians and Support Services	Instructional programs that prepare individuals to function as equipment operators, support technicians, and operations managers in the film/video, recording, and graphic communications industries.
11	Computer and Information Sciences and Support Services	Instructional programs that focus on the computer and information sciences and prepare individuals for various occupations in information technology and computer operations fields.
12	Personal and Culinary Services	Instructional programs that prepare individuals to provide professional services related to cosmetology, funeral services, and food preparation and service.
13	Education	Instructional programs that focus on the theory and practice of learning and teaching, and related research, administrative and support services.
14	Engineering	Instructional programs that prepare individuals to apply mathematical and scientific principles to the solution of practical problems.
15	Engineering Technologies/Technicians	Instructional programs that prepare individuals to apply basic engineering principles and technical skills in support of engineering and related projects.

See notes at end of table.

CIP Number	CIP Title	CIP Description
16	Foreign Languages, Literatures, and Linguistics	Instructional programs that focus on foreign languages and literatures, the humanistic and scientific study of linguistics, and the provision of professional interpretation and translation services.
19	Family and Consumer Sciences/Human Sciences	Instructional programs that focus on the human interface with the physical, social, emotional, and intellectual environments and the developmental stages and needs of individuals in the interrelated spheres of family, workplace, and community.
21	Technology Education/Industrial Arts	Instructional programs that provide individuals with knowledge, learning experiences and competencies pertaining to aspects of industry and technology. The programs are also designed to assist individuals in making informed occupational choices and provide preparation for entry into occupational training or education programs.
22	Legal Professions and Studies	Instructional programs that prepare individuals for the legal profession, for related support professions and professional legal research, and focus on the study of legal issues in non-professional programs.
23	English Language and Literature/Letters	Instructional programs that focus on the structure and use of the English language and dialects, speech, writing, and various aspects of the literatures and cultures of the English-speaking peoples.
24	Liberal Arts and Sciences, General Studies and Humanities	General instructional programs and independent or individualized studies in the liberal arts subjects, the humanities disciplines and the general curriculum.
25	Library Science	Instructional programs that focus on the knowledge and skills required for managing and/or maintaining libraries and related information and record systems, collections and facilities for research and general use.
26	Biological and Biomedical Sciences	Instructional programs that focus on the biological sciences and the non-clinical biomedical sciences, and that prepare individuals for research and professional careers as biologists and biomedical scientists.
27	Mathematics and Statistics	Instructional programs that focus on the systematic study of logical symbolic language and its applications.
28	Reserve Officer Training Corps (JROTC, ROTC)	Instructional programs that prepare secondary students as officer cadets and postsecondary students as commissioned officers in the U.S. armed forces.

See notes at end of table.

CIP Number	CIP Title	CIP Description
29	Military Technologies	Instructional programs that prepare individuals in specialized and advanced subject matter for the armed services and related national security organizations.
30	Multi/Interdisciplinary Studies	Instructional programs that derive from two or more distinct programs to provide a cross-cutting focus on a subject concentration that is not subsumed under a single discipline or occupational field.
31	Parks, Recreation, Leisure, and Fitness Studies	Instructional programs that focus on the principles and practices of managing parks and other recreational and fitness facilities; providing recreational, leisure and fitness services; and the study of human fitness.
32	Basic Skills	Instructional programs that focus on the fundamental knowledge and skills that individuals need to function productively in society.
33	Citizenship Activities	Instructional programs that prepare individuals for citizenship, and provide instruction in how citizens may engage in civic activities.
34	Health-Related Knowledge and Skills	Instructional programs that focus on the promotion of personal and family health.
35	Interpersonal and Social Skills	Programs that focus on the development of methods and skills for effective interactions with others in a variety of settings (private, social, and business settings).
36	Leisure and Recreational Activities	Programs that focus on the development of an appreciation for and competency in recreational and leisure-related activities.
37	Personal Awareness and Self-Improvement	Programs that focus on the development of improved self-awareness, avoidance of stressful behavior, and improved decision-making skills.
38	Philosophy and Religious Studies	Instructional programs that focus on logical inquiry, philosophical analysis, and the academic study of organized systems of belief and religious practices.
39	Theology and Religious Vocations	Instructional programs that focus on the intramural study of theology and that prepare individuals for the professional practice of religious vocations.
40	Physical Sciences	Instructional programs that focus on the scientific study of inanimate objects, processes of matter and energy, and associated phenomena.
41	Science Technologies/Technicians	Instructional programs that prepare individuals to apply scientific principles and technical skills in support of scientific research and development.

See notes at end of table.

CIP Number	CIP Title	CIP Description
42	Psychology	Instructional programs that focus on the scientific study of the behavior of individuals, independently or collectively, and the physical and environmental bases of mental, emotional, and neurological activity.
43	Security and Protective Services	Instructional programs that focus on the principles and procedures for providing police, fire, and other safety services and managing penal institutions.
44	Public Administration and Social Service Professions	Instructional programs that prepare individuals to analyze, manage, and deliver public programs and services.
45	Social Sciences	Instructional programs that focus on the systematic study of social systems, social institutions, and social behavior. Note: History programs have been moved from this Series and placed in a newly-established Series (Series 54.).
46	Construction Trades	Instructional programs that prepare individuals to apply technical knowledge and skills in the building, inspecting, and maintaining of structures and related properties.
47	Mechanic and Repair Technologies/Technicians	Instructional programs that prepare individuals to apply technical knowledge and skills in the adjustment, maintenance, part replacement, and repair of tools, equipment, and machines.
48	Precision Production	Instructional programs that prepare individuals to apply technical knowledge and skills to create products using techniques of precision craftsmanship or technical illustration.
49	Transportation and Materials Moving	Instructional programs that prepare individuals to apply technical knowledge and skills to perform tasks and services that facilitate the movement of people or materials.
50	Visual and Performing Arts	Instructional programs that focus on the creation and interpretation of works and performances that use auditory, kinesthetic, and visual phenomena to express ideas and emotions in various forms, subject to aesthetic criteria.
51	Health Professions and Related Clinical Sciences	Instructional programs that prepare individuals to practice as licensed professionals and assistants in the health care professions and focus on the study of related clinical sciences.
52	Business, Management, Marketing, and Related Support Services	Instructional programs that prepare individuals to perform managerial, technical support, and applied research functions related to the operation of commercial and non-profit enterprises and the buying and selling of goods and services.

See notes at end of table.

CIP Number	CIP Title	CIP Description
53	High School/Secondary Diplomas and Certificates	Instructional programs that define the prescribed requirements for high school/secondary school graduation.
54	History	Instructional programs that focus on the study and interpretation of past events, institutions, issues, and cultures.
55	French/Canadian Language and Literature/Letters	[For use in Canada only]
60	Residency Programs	This is a new series established for the reporting of residency training programs.

SOURCE: Classification of Instructional Programs (CIP 2000), Institute of Education Sciences, U.S. Department of Education, retrieved September 2005, from <http://nces.ed.gov/pubs2002/cip2000/ciplist.asp>.

APPENDIX D: CAREER/TECHNICAL EDUCATION STATISTICS (CTES) POSTSECONDARY TAXONOMY

The Career/Technical Education Statistics (CTES) postsecondary taxonomy categorizes the Classification of Instructional Programs (CIP) categories into program areas initially agreed upon by a panel convened by the National Center for Education Statistics (NCES) in 2003, with subsequent revision in 2006. This taxonomy excludes a small number of classifications used in the CIP for programs in technology education/industrial arts, Reserve Officer Training Corps (ROTC), personal improvement and leisure (including citizenship, high school diplomas and certificates, and social skills), and residency programs. The 2-digit CIP codes for each program area are listed in parentheses to the right of the program area's name.

Liberal Arts (Academic) Education

Mathematics (27)

Science

Biological and biomedical sciences (26)

Chemistry

Physical sciences

Geology/earth science

} (40)

Humanities

Foreign languages, literatures, and linguistics (16)

Liberal arts and sciences, general studies, and humanities (24)

Philosophy and religious studies (38)

English/letters (23)

Social sciences

Area/ethnic studies (05)

Psychology (42)

History (54)

Anthropology

Economics

Geography

Political science/government

Sociology

} (45)

Fine/performing arts (50, excluding 50.04)

Interdisciplinary studies (30)

Career Education

Agriculture and natural resources

Agriculture, agriculture operations, and related sciences (01)

Natural resources and conservation (03)

Engineering, architecture, and science technologies

Architecture and related services (04)

Engineering (14)

Engineering technologies/technicians (15)

Military technologies (29)

Science technologies/technicians (41)

Marketing (52.14, 52.15, 52.18, 52.19)

Business support (52.04)

Business management (all other 52)

Computer and information sciences (11)

Health care (51)

Manufacturing, construction, repair, and transportation

Apparel and textiles (19.09)

Construction trades (46)

Mechanics and repair technologies/ technicians (47)

Precision production (48)

Transportation and materials moving (49)

Communications and design

Communication, journalism, and related programs (09)

Communications technologies/technicians and support services (10)

Design (fashion design, interior design, commercial art) (50.04)

Consumer services

Personal and culinary services (12)

Family and consumer sciences/human sciences (19, except 19.09)

Parks, recreation, leisure and fitness studies (31)

Education (13)

Public, legal, and social services

Legal professions and studies (22)

Library science (25)

Theology and religious vocations (39)

Public administration and social service professions (44)

Protective services (43)

APPENDIX E: STANDARD OCCUPATIONAL CLASSIFICATION (SOC) MAJOR AND SECOND-LEVEL CATEGORIES

11-0000 Management Occupations

- 11-1000 Top Executives
- 11-2000 Advertising, Marketing, Promotions, Public Relations, and Sales Managers
- 11-3000 Operations Specialties Managers
- 11-9000 Other Management Occupations

13-0000 Business and Financial Operations Occupations

- 13-1000 Business Operations Specialists
- 13-2000 Financial Specialists

15-0000 Computer and Mathematical Occupations

- 15-1000 Computer Specialists
- 15-2000 Mathematical Science Occupations

17-0000 Architecture and Engineering Occupations

- 17-1000 Architects, Surveyors, and Cartographers
- 17-2000 Engineers
- 17-3000 Drafters, Engineering, and Mapping Technicians

19-0000 Life, Physical, and Social Science Occupations

- 19-1000 Life Scientists
- 19-2000 Physical Scientists
- 19-3000 Social Scientists and Related Workers
- 19-4000 Life, Physical, and Social Science Technicians

21-0000 Community and Social Services Occupations

- 21-1000 Counselors, Social Workers, and Other Community and Social Service Specialists
- 21-2000 Religious Workers

23-0000 Legal Occupations

- 23-1000 Lawyers, Judges, and Related Workers
- 23-2000 Legal Support Workers

25-0000 Education, Training, and Library Occupations

- 25-1000 Postsecondary Teachers
- 25-2000 Primary, Secondary, and Special Education School Teachers
- 25-3000 Other Teachers and Instructors
- 25-4000 Librarians, Curators, and Archivists
- 25-9000 Other Education, Training, and Library Occupations

27-0000 Arts, Design, Entertainment, Sports, and Media Occupations

- 27-1000 Art and Design Workers
- 27-2000 Entertainers and Performers, Sports and Related Workers

27-3000 Media and Communication Workers
27-4000 Media and Communication Equipment Workers

29-0000 Healthcare Practitioners and Technical Occupations

29-1000 Health Diagnosing and Treating Practitioners
29-2000 Health Technologists and Technicians
29-9000 Other Healthcare Practitioners and Technical Occupations

31-0000 Healthcare Support Occupations

31-1000 Nursing, Psychiatric, and Home Health Aides
31-2000 Occupational and Physical Therapist Assistants and Aides
31-9000 Other Healthcare Support Occupations

33-0000 Protective Service Occupations

33-1000 First-Line Supervisors/Managers, Protective Service Workers
33-2000 Fire Fighting and Prevention Workers
33-3000 Law Enforcement Workers
33-9000 Other Protective Service Workers

35-0000 Food Preparation and Serving Related Occupations

35-1000 Supervisors, Food Preparation and Serving Workers
35-2000 Cooks and Food Preparation Workers
35-3000 Food and Beverage Serving Workers
35-9000 Other Food Preparation and Serving Related Workers

37-0000 Building and Grounds Cleaning and Maintenance Occupations

37-1000 Supervisors, Building and Grounds Cleaning and Maintenance Workers
37-2000 Building Cleaning and Pest Control Workers
37-3000 Grounds Maintenance Workers

39-0000 Personal Care and Service Occupations

39-1000 Supervisors, Personal Care and Service Workers
39-2000 Animal Care and Service Workers
39-3000 Entertainment Attendants and Related Workers
39-4000 Funeral Service Workers
39-5000 Personal Appearance Workers
39-6000 Transportation, Tourism, and Lodging Attendants
39-9000 Other Personal Care and Service Workers

41-0000 Sales and Related Occupations

41-1000 Supervisors, Sales Workers
41-2000 Retail Sales Workers
41-3000 Sales Representatives, Services
41-4000 Sales Representatives, Wholesale and Manufacturing
41-9000 Other Sales and Related Workers

43-0000 Office and Administrative Support Occupations

- 43-1000 Supervisors, Office and Administrative Support Workers
- 43-2000 Communications Equipment Operators
- 43-3000 Financial Clerks
- 43-4000 Information and Record Clerks
- 43-5000 Material Recording, Scheduling, Dispatching, and Distributing Workers
- 43-6000 Secretaries and Administrative Assistants
- 43-9000 Other Office and Administrative Support Workers

45-0000 Farming, Fishing, and Forestry Occupations

- 45-1000 Supervisors, Farming, Fishing, and Forestry Workers
- 45-2000 Agricultural Workers
- 45-3000 Fishing and Hunting Workers
- 45-4000 Forest, Conservation, and Logging Workers

47-0000 Construction and Extraction Occupations

- 47-1000 Supervisors, Construction and Extraction Workers
- 47-2000 Construction Trades Workers
- 47-3000 Helpers, Construction Trades
- 47-4000 Other Construction and Related Workers
- 47-5000 Extraction Workers

49-0000 Installation, Maintenance, and Repair Occupations

- 49-1000 Supervisors of Installation, Maintenance, and Repair Workers
- 49-2000 Electrical and Electronic Equipment Mechanics, Installers, and Repairers
- 49-3000 Vehicle and Mobile Equipment Mechanics, Installers, and Repairers
- 49-9000 Other Installation, Maintenance, and Repair Occupations

51-0000 Production Occupations

- 51-1000 Supervisors, Production Workers
- 51-2000 Assemblers and Fabricators
- 51-3000 Food Processing Workers
- 51-4000 Metal Workers and Plastic Workers
- 51-5000 Printing Workers
- 51-6000 Textile, Apparel, and Furnishings Workers
- 51-7000 Woodworkers
- 51-8000 Plant and System Operators
- 51-9000 Other Production Occupations

53-0000 Transportation and Material Moving Occupations

- 53-1000 Supervisors, Transportation and Material Moving Workers
- 53-2000 Air Transportation Workers
- 53-3000 Motor Vehicle Operators
- 53-4000 Rail Transportation Workers
- 53-5000 Water Transportation Workers
- 53-6000 Other Transportation Workers

53-7000 Material Moving Workers

55-0000 Military Specific Occupations

55-1000 Military Officer Special and Tactical Operations Leaders/Managers

55-2000 First-Line Enlisted Military Supervisors/Managers

55-3000 Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members

SOURCE: Standard Occupational Classification, Bureau of Labor Statistics, U.S. Department of Labor, retrieved January 6, 2006, from <http://www.bls.gov/soc>.

APPENDIX F: NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (2002)

This appendix lists the major categories of the North American Industry Classification System (NAICS), with the further division of “other services” category into the four sub-industries of repair and maintenance; personal and laundry services; religious/civic/advocacy organizations; and private households.

Number	Industry name
11	Agriculture, Forestry, Fishing and Hunting
21	Mining
22	Utilities
23	Construction
31–33	Manufacturing
42	Wholesale Trade
44–45	Retail Trade
48–49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance (includes day care)
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (except Public Administration)
811	Repair and Maintenance
812	Personal and Laundry Services
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations
814	Private Households
92	Public Administration

SOURCE: North American Industry Classification System, U.S. Census Bureau, retrieved January 3, 2006, from <http://www.census.gov/epcd/naics02/N02TON97.HTM>.

APPENDIX G: MEMBERS OF THE SST WORK GROUP

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APPENDIX H: 2007 SECONDARY SCHOOL TAXONOMY (SST), WITH CSSC CODES

Family and Consumer Sciences Education

CSSC course title and alternate titles	CSSC code
Home Economics, Other General	19.0100
Business Home Economics, Other	19.0200
Family/Consumer Resource Management, Other	19.0400
Food Sciences and Human Nutrition, Other	19.0500
Human Environment and Housing, Other	19.0600
Individual and Family Development, Other	19.0700
International/Comparative Home Economics, Other	19.0800
Textiles and Clothing, Other	19.0900
Home Economics, Other	19.9900
Consumer and Homemaking Home Economics, Other	20.0100
Home Economics 7; Comprehensive Consumer and Homemaking 7; Homemaking 7	20.0111
Home Economics 8; Comprehensive Consumer and Homemaking 8; Homemaking 8	20.0112
Home Economics 1; Comprehensive Consumer and Homemaking 1; Homemaking 1; Homemaking, General; Home Arts	20.0113
Home Economics 2; Comprehensive Consumer and Homemaking Home Economics 2; Homemaking 2	20.0114
Home Economics 3; Comprehensive Consumer and Homemaking Home Economics 3; Homemaking 3	20.0115
Home Economics 4; Comprehensive Consumer and Homemaking Home Economics 4; Homemaking 4	20.0116
Adult Roles and Functions; Independent Living; Survival Skills; Singles Survival	20.0117
Comprehensive Consumer and Homemaking Home Economics, Independent Study	20.0118
Consumer Education 1; Economic Survival; Economics, Personal; Comparison Buying and Budgeting; Money Management, Personal; You and Your Money	20.0141
Consumer Education 2	20.0142
Family Relations; Family Sociology; Family Living	20.0171
Marriage Society and Change; Lifestyles	20.0172
Parenthood; Parent Education; Parenting	20.0173
Foods and Nutrition 7	20.0181
Foods and Nutrition 8	20.0182
Foods 1; Nutrition and Food Management 1; Kitchen Survival; Meal Management; Family Meals; Foods Preparation, Basic	20.0183
Foods 2; Nutrition and Food Management 2; Cooking for Compliments; Foods Preparation, Intermediate	20.0184

CSSC course title and alternate titles	CSSC code
Foods 3; Gourmet Foods; Foods, Experimental; Foods Preparation, Advanced	20.0185
Foods 4	20.0186
International Foods; Foreign Foods	20.0187
Home Management 1	20.0191
Home Management 2	20.0192
Home Maintenance and Repair	46.0441
Auto Owner Maintenance; Consumer Auto	47.0651
General Home Economics 1	55.4011
General Home Economics 1, not for credit	55.4019
General Home Economics 2	55.4021
General Home Economics 2, not for credit	55.4029
General Home Economics 3	55.4031
General Home Economics 3, not for credit	55.4039
Food and Nutrition 1	55.4311
Food and Nutrition 1, not for credit	55.4319
Food and Nutrition 2	55.4321
Food and Nutrition 2, not for credit	55.4329
Home Economics Work Study 1	55.4411
Home Economics Work Study 1, not for credit	55.4419
Home Economics Work Study 2	55.4421
Home Economics Work Study 2, not for credit	55.4429
Home Economics Work Experience 1	55.4511
Home Economics Work Experience 1, not for credit	55.4519
Home Economics Work Experience 2	55.4521
Home Economics Work Experience 2, not for credit	55.4529

General Labor Market Preparation

Keyboarding	7.0361
Typewriting 1; Typewriting, Beginning; Typewriting, Business	7.0711
Typewriting, Personal; Word Processing, Personal	7.0721
Computer Appreciation; Computer Literacy; Computers, Introduction	11.0111
Introduction to Internet and the World Wide Web	11.0112
Multimedia Computer Applications	11.0152
Desktop Computer Application Suites	11.0161
Industrial Arts, Other	21.0100
Industrial Arts 7	21.0101
Industrial Arts 8	21.0102
Industrial Arts 1; Shop 1, Exploratory; Shop, General; Industrial Materials 1; Industrial Arts Orientation; Industrial Crafts 1	21.0103
Industrial Arts 2; Shop 2, Exploratory; Industrial Materials 2; Industrial Crafts 2	21.0104
Industrial Arts 3	21.0105

CSSC course title and alternate titles	CSSC code
Industrial Arts 4	21.0106
Industry and Technology	21.0107
Industrial Production; Manufacturing and Production	21.0108
Industrial Occupations 1; Industrial Cooperative Training; World of Construction	21.0109
Industrial Occupations 2; Industrial Cooperative Training, Advanced	21.0110
Industrial Cooperative Work Experience	21.0111
Industrial Cooperative Work Experience, Advanced	21.0112
Industrial Education Management Trainee	21.0125
Industrial Arts Research; Industrial Arts, Independent Study	21.0126
Technology Education; Intro to Technology	21.0127
Career Preparation; So You Want A Job; Business Opportunities; Job Entry Training; College and Career Planning; Guidance	32.0102
Career Exploration; Vocations, Introduction; Career Development; Work Observational Experience; Career Education; Occupational Exploratory Program	32.0103
Work Experience; Job Entry	32.0104
Work Experience, Advanced; Job Training	32.0105
Cooperative Education 1; Vocational Cooperative Program; Cooperative Training, Diversified	32.0106
Cooperative Education 2	32.0107
Off-Campus Vo Tech Training—Unspecified	32.0121
Coordinated Vocational and Academic Education	32.0131
Joint Effort Training	32.0141
Executive High School Internship 1	51.0101
Executive High School Internship Program 2	51.0102
International Careers Internship	51.0103
Work Program (OJT off campus) EMH	52.0110
Physically Handicapped Work Program	52.0902
General Prevocational Preparation	55.0001
General Prevocational Preparation, not for credit	55.0009
Career Exploration	55.0101
Career Exploration, not for credit	55.0109
General Work-Study/Experience	55.0201
General Work-Study/Experience, not for credit	55.0209
General Work Experience	55.0301
General Work Experience, not for credit	55.0309
Combined Vocational/Academic Preparation	55.0401
Combined Vocational/Academic Preparation, not for credit	55.0409
General Industrial Arts 1	55.5011
General Industrial Arts 1, not for credit	55.5019
General Industrial Arts 2	55.5021

CSSC course title and alternate titles	CSSC code
General Industrial Arts 2, not for credit	55.5029
General Industrial Arts 3	55.5031
General Industrial Arts 3, not for credit	55.5039
Resource Career Exploration/Prevocational Skills	56.3201
Resource Career Exploration/Prevocational Skills, not for credit	56.3209

Agriculture and Natural Resources

Agricultural Business and Management, Other	1.0100
Agribusiness, Introduction; Agricultural Business	1.0111
Agricultural Business Operation; Agricultural Business Leadership	1.0121
Farm and Ranch Management	1.0131
State and Community Agriculture	1.0141
Agricultural Microprocessing	1.0161
Agriculture Cooperatives; Agricultural Cooperative Education I	1.0171
Agricultural Cooperative Education II	1.0172
Agriculture, Independent Study	1.0181
SOEP—Supervised Occupational Experience Program	1.0182
Agricultural Mechanics, Other	1.0200
Agricultural Mechanics, General; Agricultural Construction and Maintenance	1.0211
Agricultural Mechanics 2	1.0212
Agricultural Mechanics 3	1.0213
Agricultural Mechanics 4	1.0214
Welding, Agricultural	1.0221
Power and Machinery, Agricultural; Small Engines, Agricultural	1.0231
Farm Construction	1.0241
Electricity and Electronics, Agricultural	1.0251
Soil and Water Mechanical Practices	1.0261
Surveying, Agricultural	1.0271
Agricultural Production, Other	1.0300
Agricultural Production, General; Production Agriculture	1.0311
Agriculture Technology 1	1.0312
Agriculture Technology 2	1.0313
Animal and Veterinary Science; Animal Husbandry; Animal Production	1.0321
Crop Production	1.0331
Agricultural Products and Processing, Other	1.0400
Agricultural Products and Processing I	1.0411
Agricultural Products and Processing II	1.0412
Agricultural Products and Processing—Cooperative Education	1.0421
Agricultural Services and Supplies, Other	1.0500
Agricultural Supplies Marketing	1.0511
Horticulture, Other	1.0600
Horticulture; Plant Propagation	1.0611

CSSC course title and alternate titles	CSSC code
Floriculture; Floriculture and Gardening	1.0621
Landscaping; Landscaping and Home Fruit Production; Landscape Maintenance and Construction; Landscape Design	1.0631
Landscaping, Advanced	1.0632
Greenhouse Management	1.0641
Nursery Operations and Management; Nursery Practices; Nursery Management	1.0651
Horticulture Mechanics I; Horticulture Power Equipment Operation and Maintenance	1.0661
Horticulture Mechanics II; Horticulture Mechanics—Cooperative Education	1.0662
Turf Management	1.0671
Fruit and Vegetable Production	1.0681
International Agriculture, Other	1.0700
Agribusiness and Agricultural Production, Other	1.9900
Agricultural Sciences, Other General	2.0100
Agricultural Sciences, General; Agriculture Fundamentals	2.0111
Agricultural Occupations 1	2.0121
Agricultural Occupations 2	2.0122
Agricultural Occupations 3	2.0123
Agricultural Occupations 4	2.0124
Animal Sciences, Other	2.0200
Animal Sciences 1	2.0211
Animal Sciences 2	2.0212
Livestock 9	2.0221
Livestock 10	2.0222
Poultry	2.0231
Dairy Production	2.0241
Nutrition and Feeds	2.0251
Horse Production	2.0261
Horseshoeing/Farrier Training	2.0262
Small Animal Production	2.0271
Small Animal Production 2; Small Animal Production—Cooperative Education	2.0272
Fish Production	2.0281
Food Sciences, Other	2.0300
Plant Sciences, Other	2.0400
Agronomy; Plant Science	2.0411
Ornamental Horticulture 1	2.0421
Ornamental Horticulture 2	2.0422
Ornamental Horticulture 3	2.0423
Soil Sciences, Other	2.0500
Soil Sciences, General	2.0511
Agricultural Chemistry; Fertilizers and Chemicals	2.0521

CSSC course title and alternate titles	CSSC code
Agricultural Sciences, Other	2.9900
Renewable Natural Resources, Other General	3.0100
Conservation and Regulation, Other	3.0200
Conservation and Regulation; Soils, Forestry and Wildlife	3.0211
Environmental Management 1	3.0212
Environmental Management 2	3.0213
Environmental Management—Cooperative Education	3.0221
Fishing and Fisheries, Other	3.0300
Waterman Occupations	3.0311
Forestry Production and Processing, Other	3.0400
Forestry and Related Sciences, Other	3.0500
Forestry Science 1; Forestry, Introduction	3.0511
Forestry Science 2	3.0512
Forestry Occupations—Work Experience; Forestry—Cooperative Education	3.0521
Wildlife Management, Other	3.0600
Wildlife Management	3.0611
Rural Recreation	3.0621
Marine Management/Oceanography 1; Marine Technology 1	3.0711
Marine Management/Oceanography 2; Marine Technology 2	3.0712
Renewable Natural Resources, Other	3.9900
Precision Food Production, Other	48.0400
General Agriculture 1	55.1011
General Agriculture 1, not for credit	55.1019
General Agriculture 2	55.1021
General Agriculture 2, not for credit	55.1029
General Agriculture 3	55.1031
General Agriculture 3, not for credit	55.1039
Animal Care 1	55.1111
Animal Care 1, not for credit	55.1119
Animal Care 2	55.1121
Animal Care 2, not for credit	55.1129
Plant Care 1	55.1211
Plant Care 1, not for credit	55.1219
Plant Care 2	55.1221
Plant Care 2, not for credit	55.1229
Agricultural Mechanics 1	55.1311
Agricultural Mechanics 1, not for credit	55.1319
Agricultural Mechanics 2	55.1321
Agricultural Mechanics 2, not for credit	55.1329
Agricultural Work Study	55.1411
Agricultural Work Study, not for credit	55.1419

CSSC course title and alternate titles	CSSC code
Agricultural Work Experience	55.1511
Agricultural Work Experience, not for credit	55.1519

Communications and Design

Interior Design, Other	4.0500
Interior Design	4.0511
Fashion Design and Illustration	8.0121
Communications, Other General	9.0100
Mass Media; Channels of Communications; Media Communications; Media and Persuasion; Media in Society; Media and Critical Thinking	9.0111
Advertising, Other	9.0200
Advertising	9.0211
Communications Research, Other	9.0300
Yearbook Production 1; Publications 1	9.0441
Yearbook Production 2; Publications 2	9.0442
Radio/Television News Broadcast, Other	9.0600
Broadcast Journalism; Television News	9.0611
Careers in Radio/Television Broadcasting	9.0612
Radio/Television, Other General	9.0700
Broadcasting, Introduction	9.0711
Radio and Television Appreciation; Television and Taste	9.0721
Cryptography	9.0831
Communications, Other	9.9900
Communication Technologies, Other	10.0100
World of Communications	10.0111
Audio Visuals; Media Production Aide; Communications Media Production	10.0121
Photography, Commercial; Photojournalism	10.0131
Advanced Commercial Photography	10.0132
Broadcast Management 1	10.0141
Broadcast Management 2	10.0142
Broadcasting Practicum	10.0143
Film Making and Production 1; Cinematography; Filming and Staging; Film Technology	10.0151
Film Making and Production 2	10.0152
Radio Production	10.0161
Telecommunications 1; Television Occupations; Television Production 1; Videotape Production	10.0171
Television Production 2	10.0172
Television Production 3	10.0173
Television Production 4	10.0174
Cable Television	10.0181
Radio/Television Production 1	10.0191

CSSC course title and alternate titles	CSSC code
Radio/Television Production 2	10.0192
Housing and Interior Design 1; Homes and Interiors; Home Furnishings; Living Environments	20.0511
Housing and Interior Design 2	20.0512
Interior Design Occupations; Home Environment Occupations	20.0513
Floral Design	20.0521
Home Decorating	20.0531
Graphic and Printing Communications, Other	48.0200
Commercial Art 1; Advertising Design	48.0211
Commercial Art 2; Advertising and Illustration, Advanced	48.0212
Commercial Art, Cooperative	48.0213
Commercial Art 3; Advanced Commercial Art	48.0214
Graphic Arts 1; Printing, Introduction; Production Printing; Graphic Communications 1	48.0221
Graphic Arts 2; Printing, Advanced; Graphic Communications 2	48.0222
Graphic Arts 3; Printing Production—Cooperative	48.0223
Graphic Arts 4	48.0224
Sign Painting 1; Lettering	48.0231
Sign Painting 2	48.0232
Sign Painting 3	48.0233
Bindery	48.0241
Electronic Composition	48.0251
Copy Editing	48.0261
Desktop Publishing	48.0271
Digital Design 1	48.0281
Digital Design 2	48.0282
Digital Design 3	48.0283
Design, Other	50.0400
Graphic Design	50.0411
Graphic Arts Technology, Other	50.0800
Computer Graphics Design; Computer Art	50.0811
Graphic and Printing Communications 1	55.7111
Graphic and Printing Communications 1, not for credit	55.7119
Graphic and Printing Communications 2	55.7121
Graphic and Printing Communications 2, not for credit	55.7129
Computer and Information Sciences	
Computer and Information Sciences, Other General	11.0100
Computer Mathematics 1; Computer Problem Solving; Mathematics and Computing	11.0121
Computer Mathematics 2	11.0122
Computer Applications; Computer Sciences 1	11.0131

CSSC course title and alternate titles	CSSC code
Computer Applications, Independent Study; Computer Sciences 2	11.0132
Computer Science, Advanced Placement; Computer Sciences 3	11.0141
AP Computer Science A	11.0143
AP Computer Science AB	11.0144
Artificial Intelligence	11.0151
Computer Programming, Other	11.0200
Computer Programming 1	11.0211
Computer Programming 2	11.0212
Computer Programming 3	11.0213
FORTRAN, Introduction	11.0221
PASCAL, Introduction; PASCAL 1	11.0231
Advanced PASCAL; PASCAL 2	11.0232
BASIC, Introduction; BASIC 1	11.0241
Advanced BASIC; BASIC 2	11.0242
COBOL, Introduction; COBOL 1	11.0251
Advanced COBOL; COBOL 2	11.0252
LOGO, Introduction	11.0261
RPG Programming, Introduction	11.0271
C Programming	11.0272
C++ Programming	11.0273
Data Processing, Other	11.0300
Data Processing, Introduction; Data Processing Systems and Procedures; Computer Concepts; Data Processing; Electronic Data Processing; Data Systems 1	11.0311
Data Processing, Intermediate; Data Processing 2	11.0312
Data Processing, Advanced; Data Processing, Internship	11.0313
Computer Programming—Cooperative Education	11.0321
Information Sciences and Systems, Other	11.0400
Systems Analysis, Other	11.0500
Computer Programming and Website Design, Other	11.0600
HTML	11.0601
Jave, Java Script	11.0602
Web Site Design, Development	11.0603
Network Administration/Management	11.0604
Computer and Information Sciences, Other	11.9900
PC Operating Systems; PC Hardware; PC Repair; A+ Certification	15.1001
Health Sciences	
Dental Services, Other	17.0100
Dental Assistant 1; Dental Office Assisting	17.0111
Dental Assistant 2	17.0112
Dental Assistant, Cooperative	17.0121

CSSC course title and alternate titles	CSSC code
Dental Technology 1	17.0131
Dental Technology 2	17.0132
Diagnostic and Treatment Services, Other	17.0200
First Aid; CPR and First Aid; Medical Emergencies; Emergency Medical Technician	17.0211
EKG Technician	17.0221
Medical Laboratory Technologies Other	17.0300
Laboratory Program 1; Health Technology	17.0311
Laboratory Program 2	17.0312
Chemical Technology 1; Chemistry Lab; Chemistry, Qualitative	17.0321
Chemical Technology 2	17.0322
Mental Health/Human Services, Other	17.0400
Home Health Aide	17.0411
Community Health	17.0421
Mental Health Worker; Psychiatric Aide	17.0431
Miscellaneous Allied Health Services, Other	17.0500
Health Occupations 1; Health Careers; Medical Career Opportunities	17.0511
Health Occupations 2; Health Occupations Training Medical Careers Work Experience	17.0521
Central Service Technician	17.0522
Medical Terminology	17.0531
Medical Records Secretary	17.0541
Medical Assisting	17.0551
Veterinary Science; Veterinary Aide	17.0571
Chemistry for Health Science; Medicinal Chemistry; Nursing Chemistry	17.0581
Health Occupations, Independent Study	17.0591
Health Occupations—Cooperative Education 1	17.0592
Health Occupations—Cooperative Education 2	17.0593
Nursing-Related Services, Other	17.0600
Health Office; Student Assessment of Child Health	17.0611
Nursing, Introduction; Nursing, Practical	17.0621
Nurse Aide and Orderly; Nurse's Assistant; Patient Care Technician	17.0631
Nurse Aide, Cooperative	17.0641
Ophthalmic Services, Other	17.0700
Optical Services Assistant	17.0711
Rehabilitation Services, Other	17.0800
Allied Health, Other	17.9900
Audiology and Speech Pathology, Other	18.0100
Basic Clinical Health Sciences, Other	18.0200
Chiropractic, Other	18.0300
Dentistry, Other	18.0400
Emergency/Disaster Science, Other	18.0500

CSSC course title and alternate titles	CSSC code
Epidemiology, Other	18.0600
Health Sciences Administration	18.0700
Hematology, Other	18.0800
Medical Laboratory, Other	18.0900
Medicine, Other	18.1000
Nursing, Other	18.1100
Optometry, Other	18.1200
Osteopathic Medicine, Other	18.1300
Pharmacy, Other	18.1400
Pharmacy Technician	18.1411
Podiatry, Other	18.1500
Population and Family Planning, Other	18.1600
Pre-Dentistry, Other	18.1700
Pre-Medicine, Other	18.1800
Medical Ethics	18.1801
Pre-Pharmacy, Other	18.1900
Pre-Veterinary, Other	18.2000
Public Health Laboratory Science, Other	18.2200
Toxicology (Clinical), Other	18.2300
Veterinary Medicine, Other	18.2400
Health Sciences, Other	18.9900
Dietetic Aide	20.0461
General Health Occupations 1	55.3011
General Health Occupations 1, not for credit	55.3019
General Health Occupations 2	55.3021
General Health Occupations 2, not for credit	55.3029
General Health Occupations 3	55.3031
General Health Occupations 3, not for credit	55.3039
Health Occupations Work Study 1	55.3111
Health Occupations Work Study 1, not for credit	55.3119
Health Occupations Work Study 2	55.3121
Health Occupations Work Study 2, not for credit	55.3129
Health Occupations Work Experience 1	55.3211
Health Occupations Work Experience 1, not for credit	55.3219
Health Occupations Work Experience 2	55.3221
Health Occupations Work Experience 2, not for credit	55.3229
Marketing	
Hotel and Motel Training	6.0712
Real Estate, Other	6.1700
Real Estate Marketing	6.1711
Apparel and Accessories Marketing, Other	8.0100

CSSC course title and alternate titles	CSSC code
Fashion Merchandising	8.0111
Fashion Merchandising—Cooperative Education 1	8.0131
Fashion Merchandising—Cooperative Education 2	8.0132
Business and Personal & Other Services Marketing, Other	8.0200
E-Commerce	8.0331
Financial Services Marketing, Other	8.0400
Floristry, Farm and Garden Supplies Marketing, Other	8.0500
Floral Sales	8.0511
Food Marketing, Other	8.0600
Food Marketing/Distribution—Overview	8.0611
Grocery Management; Wholesale/Retail Grocery Operation	8.0612
Food Marketing—Cooperative Education 1	8.0621
Food Marketing—Cooperative Education 2	8.0622
General Marketing, Other	8.0700
Distributive Education 1; Sales and Marketing; Retailing and Merchandising; Distribution and Marketing; Distribution 1; Marketing and Distribution 1; Merchandising	8.0711
Distributive Education 2; Distribution 2; Marketing and Distribution 2	8.0712
Distributive Education 3	8.0713
Distributive Education 1, Cooperative; Store Experience; Marketing Occupational Experience	8.0721
Distributive Education 2, Cooperative	8.0722
Salesmanship	8.0731
Retail Learning Laboratory	8.0741
Cashier Checker Training	8.0751
Distributive Education, Independent Study	8.0771
Home and Office Products Marketing, Other	8.0800
Computer Sales Representative	8.0811
Hospitality and Recreation Marketing, Other	8.0900
Orientation to Hospitality Careers	8.0911
Hospitality Sales 1	8.0921
Hospitality Sales 2	8.0922
Insurance Marketing, Other	8.1000
Transportation and Travel Marketing, Other	8.1100
Vehicles and Petroleum Marketing, Other	8.1200
Auto Parts Merchandising	8.1211
Automotive Service Station Operation; Automotive Professional Training	8.1221
Marketing and Distribution, Other	8.9900
Business Support	
Recordkeeping 1; Recordkeeping, Clerical	7.0151
Recordkeeping 2; Recordkeeping Techniques, Specialized	7.0152

CSSC course title and alternate titles	CSSC code
Office Machines; Business Machines; Adding and Calculating Machines	7.0161
Office Machines, Vocational	7.0162
Financial Mathematics	7.0221
Business Data Processing and Related Programs, Other	7.0300
Computers In Business; Business Computer Concepts	7.0311
Business Data Processing 1	7.0321
Business Data Processing 2	7.0322
Business Computer Programming 1; Business Computer Applications	7.0331
Business Computer Programming 2	7.0332
Keypunch Operator	7.0341
Data Entry Operator 1; Computer Operator	7.0351
Data Entry Operator 2	7.0352
Peripheral Computer Operator	7.0371
Secretarial and Related Programs, Other	7.0600
Shorthand 1; Stenography 1; Shorthand, Beginning	7.0611
Shorthand 2; Stenography 2; Shorthand, Advanced; Stenography, Advanced	7.0612
Transcription; Dictation and Transcription; Transcription, Machine; Touch Shorthand; Machine Shorthand	7.0621
Secretarial Administration 1; Secretarial Practice; Secretarial Procedures; Secretarial Office Practice; Secretarial Typewriting, Integrated; Secretarial Skills, Integrated	7.0631
Secretarial Administration 2	7.0632
Word Processing 1	7.0641
Word Processing 2	7.0642
Word Processing 3; Advanced Word Processing Applications	7.0643
Reprographics	7.0651
Legal Office Procedures; Legal Secretary	7.0661
Medical Office Procedures; Medical Office Assisting; Medical Secretary	7.0671
Legal/Medical Office Procedures	7.0681
Typing, General Office, and Related Programs, Other	7.0700
Typewriting 2; Typewriting, Advanced	7.0712
Typewriting 3; Typewriting, Executive; Typewriting, Career	7.0713
Office Procedures 1; Office Practice 1; Office Specialist 1; Automated Office 1; Office Skills, Integrated; Clerk Typist; Office Technology 1; Business Careers 1; Office Services 1; Clerk Typist 1	7.0731
Office Procedures 2; Office Practice 2; Office Career Occupations; Automated Office 2; Office Careers 2; Office Technology 2; Office Specialist 2; Clerk Typist 2; Business Careers 2	7.0732
Simulated Office; Model Office; Office Practice, Advanced; Business Experience, Simulated; Business Careers 3; Office Pool; Office Services, Advanced	7.0733
Office Education 1, Cooperative; Clerical On The Job Training; Office Training, Vocational; Office Occupations Work Experience	7.0741

CSSC course title and alternate titles	CSSC code
Office Education 2, Cooperative	7.0742
Business and Office, Other	7.9900
Telephone Service Representative	8.0781
Telephone Directory Assistant	8.0782
General Office Practice 1	55.2011
General Office Practice 1, not for credit	55.2019
General Office Practice 2	55.2021
General Office Practice 3	55.2031
Office Machines 1	55.2111
Office Machines 2	55.2121
Business Work Study 1	55.2211
Business Work Study 2	55.2221
Business Work Experience 1	55.2311
Business Work Experience 2	55.2321
Business Management	
Business and Management, Other General	6.0100
Business Introduction; Business, General; Business Survey; Business, Basic; Business Dynamics; Business Careers Overview	6.0111
Business Law	6.0121
Business, Independent Study	6.0131
Business Education, Cooperative	6.0141
IB Business Management	6.0151
Business Administration and Management, Other	6.0400
Business Organization and Management; Business Management; Business Leadership; Junior Executive Training	6.0411
Business Economics, Other	6.0500
Business Economics	6.0511
Human Resources Development, Other	6.0600
Institutional Management, Other	6.0700
Hotel and Motel Management	6.0711
International Business Management, Other	6.0900
Labor Industrial Relations, Other	6.1100
Management Information Systems, Other	6.1200
Management Science, Other	6.1300
Marketing Management and Research, Other	6.1400
Marketing Management and Decision Making; Marketing Studies; Merchandising and Sales Management	6.1411
Organizational Behavior, Other	6.1500
Personnel Management, Other	6.1600
Small Business Management and Ownership, Other	6.1800
Small Business Management	6.1811

CSSC course title and alternate titles	CSSC code
Trade and Industrial Supervision and Management, Other	6.2000
Business and Management, Other	6.9900
Office Supervision and Management, Other	7.0400
Personnel and Training Programs, Other	7.0500
Entrepreneurship, Other	8.0300
Starting Your Own Business	8.0311
Junior Achievement; Student-Operated Company	8.0321

Business Finance

Accounting, Other	6.0200
Accounting/Business Management Careers—Integrated Curriculum	6.0211
Banking and Finance, Other	6.0300
Financial Careers	6.0311
Real Estate Finance	6.0321
Consumer Lending	6.0331
Insurance and Risk Management, Other	6.0800
Insurance Careers	6.0811
Investments and Securities, Other	6.1000
Investments and Taxation	6.1011
Taxation, Other	6.1900
Accounting, Bookkeeping, and Related Programs, Other	7.0100
Bookkeeping 1; Bookkeeping, Beginning	7.0111
Bookkeeping 2; Bookkeeping, Advanced	7.0112
Accounting 1; Clerical Accounting 1	7.0121
Accounting 2; Accounting, Advanced; Accounting Careers; Clerical Accounting 2	7.0122
Accounting, College	7.0131
Bookkeeping and Accounting 1	7.0141
Bookkeeping and Accounting 2	7.0142
Banking and Related Financial Programs, Other	7.0200
Banking and Financial Careers	7.0201
Bank Teller	7.0211
Bank Proof Operator	7.0231
Bank Data Entry Occupations	7.0241
Banking and Financial Careers—Cooperative Education	7.0251

Engineering Technologies

Architectural Technologies, Other	15.0100
Structural Engineering Technician	15.0111
Civil Technologies, Other	15.0200
Surveying	15.0211

CSSC course title and alternate titles	CSSC code
Civil Engineering Technician	15.0221
Electrical and Electronic Technologies, Other	15.0300
Audio Electronics	15.0311
Electrical Technology	15.0321
Electronic Technology 1	15.0331
Electronic Technology 2	15.0332
Electronics Fabrication	15.0333
Electrical/Electronics Engineering Technician	15.0341
Electromechanical Instrumentation and Maintenance Technologies, Other	15.0400
Electromechanical Technology 1; Robotics Technology	15.0411
Electromechanical Technology 2	15.0412
Instrumentation Technology	15.0421
Computer-Assisted Design/Drafting (CAD)	15.0431
Environmental Control Technologies, Other	15.0500
Environmental Control Technologies	15.0511
Industrial Production Technologies, Other	15.0600
Industrial Research & Development; Product Creation/Improvement	15.0601
Industrial Production Technology 1; Manufacturing Process Technology 1	15.0611
Industrial Production Technology 2; Manufacturing Process Technology 2	15.0612
Chemical Manufacturing Technology	15.0621
Optics Technology	15.0631
Quality Control and Safety Technologies, Other	15.0700
Quality Control Technology	15.0711
Mechanical and Related Technologies, Other	15.0800
Automotive Design & Technology	15.0811
Mechanical Engineering Technology	15.0821
Mining and Petroleum Technologies, Other	15.0900
Mining Technology	15.0911
Petroleum Technology	15.0921
Engineering and Engineering-Related Technologies, Other	15.9900
Biological Technologies, Other	41.0100
Nuclear Technologies, Other	41.0200
Physical Science Technologies, Other	41.0300
Science Technologies, Other	41.9900
Drafting, Other	48.0100
Drafting 1; Mechanical Drawing 1; Projection Theory; Drafting Fundamentals	48.0111
Drafting 2; Mechanical Drawing 2; Projection, Applied; Drafting, Technical	48.0112
Drafting 3; Mechanical Drawing 3; Machine Drawing; Illustration, Technical	48.0113
Drafting 4; Mechanical Drawing 4	48.0114
Engineering Drawing 1; Engineering Drafting; Engineering Graphics 1	48.0131
Engineering Drawing 2; Engineering Graphics 2	48.0132

CSSC course title and alternate titles	CSSC code
Blueprint Reading; Sketching and Blueprint Reading	48.0141
Drafting 1, Cooperative	48.0151
Drafting 2, Cooperative	48.0152
Architecture	
Architecture and Environmental Design, Other General	4.0100
Architecture, Other	4.0200
Architecture, Introduction	4.0211
Architecture, Advanced	4.0212
Architectural Theory	4.0221
City, Community, and Regional Planning, Other	4.0300
Environmental Design, Other	4.0400
Landscape Architecture, Other	4.0600
Urban Design, Other	4.0700
Architecture and Environmental Design, Other	4.9900
Architectural Drawing 1; Architectural Drafting	48.0121
Architectural Drawing 2	48.0122
Architectural Drawing 3	48.0123
Architectural Drawing 4; Architectural Model Building	48.0124
Construction	
Electricity 1; Electrical Trades; Electricity, Basic	21.0113
Electricity 2; Electrical Trades, Advanced; Electrical Wiring Practices	21.0114
Electricity—Cooperative Education 1	21.0130
Electricity—Cooperative Education 2	21.0131
Brickmasonry, Stonemasonry, and Tile Setting, Other	46.0100
Bricklaying and Masonry 1; Masonry 1	46.0111
Bricklaying and Masonry 2; Masonry 2; Masonry, Advanced	46.0112
Masonry 3	46.0113
Tile Setting and Plastering	46.0121
Concrete Technician	46.0131
Carpentry, Other	46.0200
Carpentry 1	46.0211
Carpentry 2; Structural Woods; Carpentry, Advanced	46.0212
Carpentry 3	46.0213
Housewiring 1; Residential Wiring	46.0311
Housewiring 2	46.0312
Miscellaneous Construction Trades, Other	46.0400
Building Construction 1; House Construction; Building Trades 1; Home Mechanics; Manufactured Housing Assembly 1	46.0411

CSSC course title and alternate titles	CSSC code
Building Construction 2; Building Trades 2; Manufactured Housing Assembly 2	46.0412
Building Construction 3; Building Trades 3; Manufactured Housing Assembly 3	46.0413
Painting and Decorating	46.0421
Flooring Installation	46.0422
Building Maintenance	46.0431
Building/Facilities Maintenance 2	46.0432
Building Construction—Cooperative Education 1; Construction Trades—Cooperative Education 1	46.0451
Building Construction—Cooperative Education 2; Construction Trades—Cooperative Education 2	46.0452
Plumbing, Pipefitting, and Steamfitting, Other	46.0500
Plumbing 1	46.0511
Plumbing 2	46.0512
Construction Trades, Other	46.9900
General Construction Trades 1	55.8011
General Construction Trades 1, not for credit	55.8019
General Construction Trades 2	55.8021
General Construction Trades 2, not for credit	55.8029
General Construction Trades 3	55.8031
General Construction Trades 3, not for credit	55.8039
Brickmasonry, Stonemasonry, and Tile Setting 1	55.8111
Brickmasonry, Stonemasonry, and Tile Setting 1, not for credit	55.8119
Brickmasonry, Stonemasonry, and Tile Setting 2	55.8121
Brickmasonry, Stonemasonry, and Tile Setting 2, not for credit	55.8129
Carpentry 1	55.8211
Carpentry 1, not for credit	55.8219
Carpentry 2	55.8221
Carpentry 2, not for credit	55.8229
Plumbing 1	55.8311
Plumbing 1, not for credit	55.8319
Plumbing 2	55.8321
Plumbing 2, not for credit	55.8329
Construction Trades Work Study 1	55.8411
Construction Trades Work Study 1, not for credit	55.8419
Construction Trades Work Study 2	55.8421
Construction Trades Work Study 2, not for credit	55.8429
Construction Trades Work Experience 1	55.8511
Construction Trades Work Experience 1, not for credit	55.8519
Construction Trades Work Experience 2	55.8521
Construction Trades Work Experience 2, not for credit	55.8529

CSSC course title and alternate titles	CSSC code
Manufacturing	
Clothing 7	20.0131
Clothing 8	20.0132
Clothing 1; Sewing, Introduction; Sewing 1; Textiles and Clothing 1; Clothing Construction	20.0133
Clothing 2; Sewing, Intermediate; Sewing 2; Textiles and Clothing 2; Clothing Construction, Intermediate	20.0134
Clothing 3; Sewing 3; Textiles and Clothing 3	20.0135
Clothing 4; Sports Wear; Alterations	20.0136
Tailoring	20.0137
Clothing, Apparel, and Textiles Management, Production, and Services, Other	20.0300
Clothing Occupations 1; Fashion Design and Clothing Occupations; Profitable Sewing 1	20.0311
Clothing Occupations 2; Profitable Sewing 2	20.0312
Clothing Occupations 3	20.0313
Clothing Occupations—Cooperative Education 1	20.0314
Clothing Occupations—Cooperative Education 2	20.0315
Commercial Garment and Apparel Construction	20.0331
Custom Apparel Construction	20.0341
Custom Tailoring and Alteration	20.0351
Textiles Testing	20.0381
Clothing Production Management	20.0391
Custom Drapery and Window Treatment Design	20.0551
Custom Slipcovering and Upholstering	20.0561
Electronics 1; Electronics, Basic; Circuits, Fundamental	21.0115
Electronics 2; Electronics, Digital	21.0116
Electronics 3	21.0117
Electronics 4	21.0118
Electricity and Electronics, Introduction	21.0119
Electricity and Electronics, Advanced	21.0120
Machine Shop 1; Machine Lab; Industrial Machine	21.0121
Machine Shop 2	21.0122
Machine Shop 3	21.0123
Machine Shop 4	21.0124
Electronics—Cooperative Education 1	21.0140
Electronics—Cooperative Education 2	21.0141
Electricity/Electronics—Cooperative Education 1	21.0150
Electricity/Electronics—Cooperative Education 2	21.0151
Industrial Electricity	47.0161
Industrial Electronics	47.0171
Shoe Repair and Orthopedics 1	47.0431

CSSC course title and alternate titles	CSSC code
Shoe Repair and Orthopedics 2	47.0432
Leatherworking and Upholstering, Other	48.0300
Leatherwork 1	48.0311
Leatherwork 2	48.0312
Upholstery	48.0321
Upholstery, Advanced	48.0322
Auto Upholstery	48.0331
Precision Metal Work, Other	48.0500
Metal 1; Metal Class; Metal Lab; Metalwork; Metal Trades; Machine Metals	48.0511
Metal 2; Metalwork, Advanced	48.0512
Metal 3	48.0513
Metal 4	48.0514
Welding 1	48.0521
Welding 2	48.0522
Welding 3	48.0523
Welding—Cooperative Education	48.0524
Sheet Metal 1	48.0531
Sheet Metal 2	48.0532
Metal Restoration	48.0541
Foundry 1	48.0551
Foundry 2	48.0552
Precision Work, Assorted Materials, Other	48.0600
Plastics 1	48.0611
Plastics 2	48.0612
Spaceage Plastics	48.0621
Woodworking, Other	48.0700
Woodworking 1; Wood 1; Woodworking, Basic	48.0711
Woodworking 2; Wood 2; Machine Woodworking; Wood Products	48.0712
Woodworking 3; Wood 3; Woodworking, Advanced	48.0713
Woodworking 4; Wood 4	48.0714
Furniture Refinishing	48.0721
Cabinetmaking 1; Millwork	48.0731
Cabinetmaking 2	48.0732
Precision Production, Other	48.9900
Aviation Technology 1; Aviation, General; Avionics Technology	49.0121
Aviation Technology 2	49.0122
Aviation Technology 3	49.0123
Aviation Technology 4	49.0124
Boat Building	49.0321
Adaptive Foundry EMH	52.0107
Clothing and Textiles 1	55.4211
Clothing and Textiles 1, not for credit	55.4219

CSSC course title and alternate titles	CSSC code
Clothing and Textiles 2	55.4221
Clothing and Textiles 2, not for credit	55.4229
Leatherwork and Upholstery 1	55.7211
Leatherwork and Upholstery 1, not for credit	55.7219
Leatherwork and Upholstery 2	55.7221
Leatherwork and Upholstery 2, not for credit	55.7229
Precision Production Work Study 1	55.7411
Precision Production Work Study 1, not for credit	55.7419
Precision Production Work Study 2	55.7421
Precision Production Work Study 2, not for credit	55.7429
Precision Production Work Experience 1	55.7511
Precision Production Work Experience 1, not for credit	55.7519
Precision Production Work Experience 2	55.7521
Precision Production Work Experience 2, not for credit	55.7529

Mechanics and Repair

General Services Occupations 1	12.0511
General Services Occupations 2	12.0512
General Services Occupations 3	12.0513
General Services Occupations 4	12.0514
Building & Grounds Maintenance Occ 1	12.0521
Building & Grounds Maintenance Occ 2	12.0522
Building & Grounds Maintenance Occ 3	12.0523
Industrial Maintenance/Mechanics 1	12.0531
Industrial Maintenance/Mechanics 2	12.0532
Electrical and Power Transmission Installation, Other	46.0300
Electric Power and Communications Lineworker	46.0321
Electrical and Electronic Equipment Repair, Other	47.0100
Small Appliance Repair	47.0111
Radio and TV Repair 1; Television Repair; Electronic Servicing	47.0121
Radio and TV Repair 2	47.0122
Radio and TV Repair 3	47.0123
Telecommunications Technician	47.0124
Appliance Repair 1; Major Appliance Repair	47.0131
Appliance Repair 2; Appliance Repair, Advanced	47.0132
Vending Machine Repair	47.0141
Business Machine Repair; Office Machine Repair	47.0151
Food Processing Machine Maintenance Technician/Repair	47.0181
Heating, Air Conditioning, and Refrigeration Mechanics, Other	47.0200
Air Conditioning, Refrigeration, and Heating; Refrigeration and Air Conditioning 1; Commercial Heating and Air Conditioning	47.0211

CSSC course title and alternate titles	CSSC code
Air Conditioning, Refrigeration, and Heating, Advanced; Refrigeration and Air Conditioning 2	47.0212
Air Conditioning, Refrigeration, and Heating 3	47.0213
Industrial Equipment Maintenance and Repair, Other	47.0300
Industrial Mechanics 1; Heavy Equipment Mechanics; Industrial Equipment Mechanics	47.0311
Industrial Mechanics 2	47.0312
Diesel Mechanics	47.0321
Industrial Maintenance Mechanics 1	47.0331
Industrial Maintenance Mechanics 2	47.0332
Petroleum Drilling Equipment Operation and Maintenance 1	47.0341
Petroleum Drilling Equipment Operation and Maintenance 2	47.0342
Petroleum Drilling Equipment Operation and Maintenance 3	47.0343
Miscellaneous Mechanics and Repairers, Other	47.0400
Musical Instrument Repair	47.0411
Instrument Maintenance and Repair	47.0421
Watch and Clock Repair	47.0433
Bicycle Repair	47.0434
Stationary Energy Sources, Other	47.0500
Power Mechanics 1; Power Conversion 1; Power Technology 1; Energy and Transportation 1	47.0511
Power Mechanics 2; Power Technology 2; Energy and Transportation 2	47.0512
Power Mechanics 3	47.0513
Power Mechanics 4	47.0514
Hydraulics and Pneumatics	47.0521
Vehicle and Mobile Equipment Mechanics and Repairers, Other	47.0600
Small Engine Repair 1; Small Engine Maintenance; Mechanics Trades; Small Gas Maintenance; Motorcycle and Recreational Vehicle Repair	47.0611
Small Engine Repair 2; Mechanics Trades, Advanced	47.0612
Auto Mechanics 1; Auto Repair; Auto Engines; Vehicle Power	47.0621
Auto Mechanics 2; Automotive Technology; Auto Tuneup	47.0622
Auto Mechanics 3; Auto Mechanics, Advanced	47.0623
Auto Mechanics—Cooperative Education 1	47.0624
Auto Mechanics—Cooperative Education 2	47.0625
Auto Body 1; Auto Body and Fender; Auto Body Repair; Body and Fender	47.0631
Auto Body 2; Auto Body Repair, Advanced	47.0632
Auto Body 3	47.0633
Auto Service 1; Auto Maintenance	47.0641
Auto Service 2	47.0642
Airframes 1	47.0661
Airframes 2	47.0662
Aviation Powerplant 1	47.0671
Aviation Powerplant 2	47.0672

CSSC course title and alternate titles	CSSC code
Aviation Powerplant 3	47.0673
Aviation Powerplant 4	47.0674
Aviation Quality Control 1	47.0681
Aviation Quality Control 2	47.0682
Aircraft Sheetmetal 1	47.0691
Aircraft Sheetmetal 2	47.0692
Mechanics and Repairers, Other	47.9900
Aircraft Parts Management 1	49.0141
Aircraft Parts Management 2	49.0142
Marine Engine and Boat Repair 1; Marine Mechanics, Basic	49.0311
Marine Engine and Boat Repair 2; Marine Mechanics, Advanced	49.0312
Aquatic Occupations; Marine Diving	49.0341
Auto Service 1	55.9011
Auto Service 1, not for credit	55.9019
Auto Service 2	55.9021
Auto Service 2, not for credit	55.9029
Auto Service Work Experience 1	55.9111
Auto Service Work Experience 2, not for credit	55.9119
Auto Service Work Experience 2	55.9121
Auto Service Work Experience 2, not for credit	55.9129

Transportation

Warehousing Industrial and Wholesale Material Handling	8.0761
Air Transportation, Other	49.0100
Aeronautics 1; Aerospace for Today	49.0111
Aeronautics 2	49.0112
Vehicle and Equipment Operation, Other	49.0200
Forklift Operator	49.0211
Tractor-Trailer Truck Driving	49.0212
Heavy Vehicle Operation/Earth Moving Equipment	49.0213
Bus Driver/Chauffeur	49.0214
Water Transportation, Other	49.0300
Navigation	49.0331
Transportation Technology 1; Introduction to Transportation Industry	49.0411
Transportation Technology 2	49.0412
Transportation/Traffic Technician	49.0421
Transportation and Material Moving, Other	49.9900

Consumer Services

Animal Grooming; Pet Grooming	1.0521
Tourism Services	8.1111

CSSC course title and alternate titles	CSSC code
Entertainment Park/Tourism—Cooperative Education	8.1121
Drycleaning and Laundering Services, Other	12.0100
Dry Cleaning 1	12.0111
Dry Cleaning 2	12.0112
Entertainment Services, Other	12.0200
Funeral Services, Other	12.0300
Personal & Other Services, Other	12.0400
Cosmetology; Care of the Nails and Skin; Esthetician; Creative Coiffure and Shaping and Conditioning Hair	12.0411
Cosmetology 2; Cosmetology, Advanced; Wigology and the Professional Business of Cosmetology	12.0412
Cosmetology 3	12.0413
Cosmetology - Cooperative Educ. 2 (<i>1?</i>)	12.0414
Cosmetology - Cooperative Educ. 2	12.0415
Barbering 1	12.0421
Barbering 2	12.0422
Barbering 3	12.0423
Personal & Other Services Occupations	12.0431
Consumer, Personal, and Miscellaneous Services, Other	12.9900
Family and Community Services, Other	19.0300
Child Development 8	20.0121
Child Development 1	20.0122
Child Development 2	20.0123
Child Development 3	20.0124
Child Development 4	20.0125
Current Issues in Child Development	20.0126
Home Economics Occupations 1, Exploratory; Home Economics Job Training Exploration	20.0151
Home Economics Occupations 2, Exploratory	20.0152
Home Economics Laboratory Assistant	20.0153
Home Economics Leadership	20.0154
Family Health 1; Family Nursing	20.0161
Family Health 2; Family Nursing, Advanced	20.0162
Home Economics—Cooperative Education 1	20.0193
Home Economics—Cooperative Education 2	20.0194
Child Care and Guidance Management and Services, Other	20.0200
Child Care Services; Early Childhood Workshop; Child Development Services; Nursery School Training	20.0211
Child Care Aide	20.0221
Child Care Management	20.0231
Family Care Services; Foster Care and Family Care	20.0241
Child Care—Cooperative Education 1	20.0261
Child Care—Cooperative Education 2	20.0262

CSSC course title and alternate titles	CSSC code
Clothing Maintenance Aide	20.0321
Wedding and Specialty Consulting	20.0361
Fashion and Fabric Coordination	20.0371
Home Furnishings and Equipment Management, Production, and Services, Other	20.0500
Home Furnishings Aide	20.0541
Home-Service Assisting 1	20.0571
Home-Service Assisting 2	20.0572
Home-Service Asst—Cooperative Education 1	20.0573
Home-Service Asst—Cooperative Education 2	20.0574
Institutional, Home Management, and Supporting Services, Other Custodial Services	20.0600
Executive Housekeeping	20.0611
Homemaker's Aide; Homemaker's Assistant, Home Management	20.0621
Geriatrics 1; Companion to the Aged	20.0631
Geriatrics 2	20.0641
Geriatrics—Cooperative Education 1	20.0642
Geriatrics—Cooperative Education 2	20.0643
Consumer Aide	20.0644
Therapeutic Recreation Aide	20.0651
Institutional, Home Management Support Services—Cooperative Education	20.0661
Vocational Home Economics, Other	20.0671
Parks and Recreation, Other General	20.9900
Winter/Ski Resort Operation	31.0100
Parks and Recreation Management, Other	31.0211
Water Resources, Other	31.0300
Parks and Recreation, Other	31.0400
Air Travel Service Occupations	31.9900
Child Development 1	49.0131
Child Development 1, not for credit	55.4111
Child Development 2	55.4119
Child Development 2, not for credit	55.4121
Cosmetology/Barber 1	55.4129
Cosmetology/Barber 1, not for credit	55.6111
Cosmetology/Barber 2	55.6119
Cosmetology/Barber 2, not for credit	55.6121
Custodial and Housekeeping Services 1	55.6129
Custodial and Housekeeping Services 1, not for credit	55.6211
Custodial and Housekeeping Services 2	55.6219
Custodial and Housekeeping Services 2, not for credit	55.6221
Miscellaneous Services 1	55.6229
Miscellaneous Services 1, not for credit	55.6411
	55.6419

CSSC course title and alternate titles	CSSC code
Miscellaneous Services 2	55.6421
Miscellaneous Services 2, not for credit	55.6429
Service Occupations Work Study 1	55.6511
Service Occupations Work Study 1, not for credit	55.6519
Service Occupations Work Study 2	55.6521
Service Occupations Work Study 2, not for credit	55.6529
Service Occupations Work Experience 1	55.6611
Service Occupations Work Experience 1, not for credit	55.6619
Service Occupations Work Experience 2	55.6621
Service Occupations Work Experience 2, not for credit	55.6629

Culinary Arts

Nutrition; Fitness Foods	20.0188
Food Production, Management, and Services, Other	20.0400
Food Service Training 1; Culinary Arts 1; Commercial Foods, Basic; Restaurant Occupations 1; Chef Class	20.0411
Food Service Training 2; Culinary Arts 2; Commercial Foods, Advanced; Restaurant Occupations 2	20.0412
Food Services/Restaurant Management	20.0413
Food Service Cooperative Training; Food Service, Vocational	20.0421
Baking	20.0431
Chef	20.0441
Catering	20.0451
Food Testing	20.0471
Cafeteria Assistant; School Food Service	20.0481
Meatcutting 1	48.0411
Meatcutting 2	48.0412
Adaptive Foods EMH	52.0106
Food Services 1	55.6311
Food Services 1, not for credit	55.6319
Food Services 2	55.6321
Food Services 2, not for credit	55.6329
Meatcutting 1	55.7311
Meatcutting 1, not for credit	55.7319
Meatcutting 2	55.7321
Meatcutting 2, not for credit	55.7329

Education

Education, Other General	13.0100
Bilingual/Bicultural Education, Other	13.0200
Curriculum and Instruction, Other	13.0300

CSSC course title and alternate titles	CSSC code
Education Administration, Other	13.0400
Educational Media, Other	13.0500
Evaluation and Research, Other	13.0600
International and Comparative Education, Other	13.0700
School Psychology, Other	13.0800
Social Foundations, Other	13.0900
Special Education, Other	13.1000
Student Counseling and Personnel Services, Other	13.1100
Teacher Education, General Programs, Other	13.1200
Teacher Training (Lecture & Observation)	13.1201
Teacher Training (Active Practice/Practicum)	13.1202
Teacher Education, Specific Subject Areas, Other	13.1300
Teaching English as a Second Language/Foreign Language, Other	13.1400
Education, Other	13.9900
Teacher Aide/Elementary	20.0251
Teacher Aide/Secondary	20.0252
Library Science	
Library and Archival Sciences, Other General	25.0100
Library Science; Library Skills	25.0111
Archival Science, Other	25.0200
Library Assisting, Other	25.0300
Library Assistant; Library Aide	25.0311
Library Science, Other	25.0400
Museology, Other	25.0500
Library and Archival Sciences, Other	25.9900
Public Administration	
Public Affairs, Other General	44.0100
Community Services, Other	44.0200
Public Administration, Other	44.0400
Public Policy Studies, Other	44.0500
Public Works, Other	44.0600
Social Work, Other	44.0700
Human Services	44.0711
Public Affairs, Other	44.9900
Legal Services	
Court Reporter	7.0662
Prosecutorial Science, Other	18.2100

CSSC course title and alternate titles	CSSC code
Protective Services	
Criminal Justice, Other	43.0100
Law Enforcement; Police Science; Criminal Justice	43.0111
Law Science; Forensic Studies	43.0121
Fire Protection, Other	43.0200
Fire Fighting Practices; Fire Science	43.0211
Security Services, Other	43.0300
Security Guard	43.0311
Protective Services, Other	43.9900
Criminology, Other	45.0400

APPENDIX I: SPECIFIC COURSES FROM THE 1998 SECONDARY SCHOOL TAXONOMY (SST) THAT WERE MOVED INTO DIFFERENT CATEGORIES IN THE 2007 SST

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Family and Consumer Science		
Home Maintenance and Repair	46.0441	Construction
Auto Owner Maintenance; Consumer Auto	47.0651	Mechanics & Repair
Home Economics Work Study 1	55.4411	Personal and Other Services
Home Economics Work Study 1, not for credit	55.4419	Personal and Other Services
Home Economics Work Study 2	55.4421	Personal and Other Services
Home Economics Work Study 2, not for credit	55.4429	Personal and Other Services
Home Economics Work Experience 1	55.4511	Personal and Other Services
Home Economics Work Experience 1, not for credit	55.4519	Personal and Other Services
Home Economics Work Experience 2	55.4521	Personal and Other Services
Home Economics Work Experience 2, not for credit	55.4529	Personal and Other Services
2007 SST Category: General Labor Market Preparation		
Industrial Occupations 2; Industrial Cooperative Training, Advanced	21.0110	(PP) Other precision production
Industrial Cooperative Work Experience	21.0111	(PP) Other precision production
Industrial Cooperative Work Experience, Advanced	21.0112	(PP) Other precision production
Industrial Education Management Trainee	21.0125	(PP) Other precision production
Industrial Arts Research; Industrial Arts, Independent Study	21.0126	(PP) Other precision production
Keyboarding	7.0361	Business Services
Computer Appreciation; Computer Literacy; Computers, Introduction	11.0111	Computer Technology
Cooperative Education 1; Vocational Cooperative Program; Cooperative Training, Diversified	32.0106	SLMP, Unidentified
Cooperative Education 2	32.0107	SLMP, Unidentified
Off-Campus Vo Tech Training—Unspecified	32.0121	SLMP, Unidentified
Introduction to Internet and the World Wide Web	11.0112	code added to CSSC since 1998
Multimedia Computer Applications	11.0152	code added to CSSC since 1998
Desktop Computer Application Suites	11.0161	code added to CSSC since 1998
Coordinated Vocational and Academic Education	32.0131	code added to CSSC since 1998
Joint Effort Training	32.0141	code added to CSSC since 1998

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Agriculture and Natural Resources		
Precision Food Production, Other	48.0400	(PP) Other precision production
2007 SST Category: Communications and Design		
Graphic and Printing Communications, Other	48.0200	(PP) Drafting/Graphics/Printing
Commercial Art 1; Advertising Design	48.0211	(PP) Drafting/Graphics/Printing
Commercial Art 2; Advertising and Illustration, Advanced	48.0212	(PP) Drafting/Graphics/Printing
Commercial Art 3; Advanced Commercial Art	48.0214	(PP) Drafting/Graphics/Printing
Graphic Arts 1; Printing, Introduction; Production Printing; Graphic Communications 1	48.0221	(PP) Drafting/Graphics/Printing
Graphic Arts 2; Printing, Advanced; Graphic Communications 2	48.0222	(PP) Drafting/Graphics/Printing
Graphic Arts 4	48.0224	(PP) Drafting/Graphics/Printing
Sign Painting 1; Lettering	48.0231	(PP) Drafting/Graphics/Printing
Sign Painting 2	48.0232	(PP) Drafting/Graphics/Printing
Sign Painting 3	48.0233	(PP) Drafting/Graphics/Printing
Bindery	48.0241	(PP) Drafting/Graphics/Printing
Electronic Composition	48.0251	(PP) Drafting/Graphics/Printing
Copy Editing	48.0261	(PP) Drafting/Graphics/Printing
Design, Other	50.0400	(PP) Drafting/Graphics/Printing
Graphic Design	50.0411	(PP) Drafting/Graphics/Printing
Graphic Arts Technology, Other	50.0800	(PP) Drafting/Graphics/Printing
Computer Graphics Design; Computer Art	50.0811	(PP) Drafting/Graphics/Printing
Graphic and Printing Communications 1	55.7111	(PP) Drafting/Graphics/Printing
Graphic and Printing Communications 1, not for credit	55.7119	(PP) Drafting/Graphics/Printing
Graphic and Printing Communications 2	55.7121	(PP) Drafting/Graphics/Printing
Graphic and Printing Communications 2, not for credit	55.7129	(PP) Drafting/Graphics/Printing
Photography, Commercial; Photojournalism	10.0131	(PP) Other precision production
Advanced Commercial Photography	10.0132	(PP) Other precision production
Commercial Art, Cooperative	48.0213	(PP) Other precision production
Graphic Arts 3; Printing Production—Cooperative	48.0223	(PP) Other precision production
Desktop Publishing	48.0271	Business Services
Fashion Design and Illustration	8.0121	Marketing & Distribution
Advertising, Other	9.0200	Marketing & Distribution
Advertising	9.0211	Marketing & Distribution
Interior Design, Other	4.0500	Personal and Other Services

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Communications and Design—continued		
Interior Design	4.0511	Personal and Other Services
Housing and Interior Design 1; Homes and Interiors; Home Furnishings; Living Environments	20.0511	Personal and Other Services
Housing and Interior Design 2	20.0512	Personal and Other Services
Interior Design Occupations; Home Environment Occupations	20.0513	Personal and Other Services
Floral Design	20.0521	Personal and Other Services
Home Decorating	20.0531	Personal and Other Services
Digital Design 1	48.0281	code added to CSSC since 1998
Digital Design 2	48.0282	code added to CSSC since 1998
Digital Design 3	48.0283	code added to CSSC since 1998
2007 SST Category: Computer and Information Sciences		
AP Computer Science A	11.0143	code added to CSSC since 1998
AP Computer Science AB	11.0144	code added to CSSC since 1998
C Programming	11.0272	code added to CSSC since 1998
C++ Programming	11.0273	code added to CSSC since 1998
Computer Programming and Website Design, Other	11.0600	code added to CSSC since 1998
HTML	11.0601	code added to CSSC since 1998
Jave, Java Script	11.0602	code added to CSSC since 1998
Web Site Design, Development	11.0603	code added to CSSC since 1998
Network Administration/Management	11.0604	code added to CSSC since 1998
PC Operating Systems; PC Hardware; PC Repair; A+ Certification	15.1001	code added to CSSC since 1998
2007 SST Category: Health Sciences		
Veterinary Science; Veterinary Aide	17.0571	Agriculture & Renew Resources
Veterinary Medicine, Other	18.2400	Agriculture & Renew Resources
Medical Records Secretary	17.0541	Business Services
Chemical Technology 1; Chemistry Lab; Chemistry, Qualitative	17.0321	Other Technology
Chemical Technology 2	17.0322	Other Technology

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Marketing		
Hotel and Motel Training	6.0712	Food Service & Hospitality
Food Marketing/Distribution—Overview	8.0611	Food Service & Hospitality
Orientation to Hospitality Careers	8.0911	Food Service & Hospitality
Hospitality Sales 1	8.0921	Food Service & Hospitality
Hospitality Sales 2	8.0922	Food Service & Hospitality
E-Commerce	8.0331	code added to CSSC since 1998
2007 SST Category: Business Support		
Telephone Service Representative	8.0781	Marketing & Distribution
2007 SST Category: Business Management		
Institutional Management, Other	6.0700	Marketing & Distribution
Marketing Management and Research, Other	6.1400	Marketing & Distribution
Marketing Management and Decision Making; Marketing Studies; Merchandising and Sales Management	6.1411	Marketing & Distribution
Entrepreneurship, Other	8.0300	Marketing & Distribution
Starting Your Own Business	8.0311	Marketing & Distribution
Hotel and Motel Management	6.0711	Food Service & Hospitality
Junior Achievement; Student-Operated Company	8.0321	General Labor Market Prep
IB Business Management	6.0151	code added to CSSC since 1998
2007 SST Category: Business Finance		
Accounting, Other	6.0200	Business Management
Accounting/Business Management Careers— Integrated Curriculum	6.0211	Business Management
Banking and Finance, Other	6.0300	Business Management
Financial Careers	6.0311	Business Management
Real Estate Finance	6.0321	Business Management
Consumer Lending	6.0331	Business Management
Investments and Securities, Other	6.1000	Business Management
Investments and Taxation	6.1011	Business Management
Taxation, Other	6.1900	Business Management
Banking and Financial Careers	7.0201	Business Management
Banking and Financial Careers—Cooperative Education	7.0251	Business Management
Accounting, Bookkeeping, and Related Programs, Other	7.0100	Business Services
Bookkeeping 1; Bookkeeping, Beginning	7.0111	Business Services
Bookkeeping 2; Bookkeeping, Advanced	7.0112	Business Services

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Business Finance—continued		
Accounting 1; Clerical Accounting 1	7.0121	Business Services
Accounting 2; Accounting, Advanced; Accounting Careers; Clerical Accounting 2	7.0122	Business Services
Accounting, College	7.0131	Business Services
Bookkeeping and Accounting 1	7.0141	Business Services
Bookkeeping and Accounting 2	7.0142	Business Services
Banking and Related Financial Programs, Other	7.0200	Business Services
Bank Teller	7.0211	Business Services
Bank Proof Operator	7.0231	Business Services
Bank Data Entry Occupations	7.0241	Business Services
Insurance and Risk Management, Other	6.0800	Marketing & Distribution
Insurance Careers	6.0811	Marketing & Distribution
2007 SST Category: Engineering Technologies		
Architectural Technologies, Other	15.0100	Other Technology
Structural Engineering Technician	15.0111	Other Technology
Civil Technologies, Other	15.0200	Other Technology
Surveying	15.0211	Other Technology
Civil Engineering Technician	15.0221	Other Technology
Electrical Technology	15.0321	Other Technology
Electronic Technology 1	15.0331	Other Technology
Electronic Technology 2	15.0332	Other Technology
Electromechanical Instrumentation and Maintenance Technologies, Other	15.0400	Other Technology
Electromechanical Technology 1; Robotics Technology	15.0411	Other Technology
Electromechanical Technology 2	15.0412	Other Technology
Instrumentation Technology	15.0421	Other Technology
Environmental Control Technologies, Other	15.0500	Other Technology
Environmental Control Technologies	15.0511	Other Technology
Industrial Production Technologies, Other	15.0600	Other Technology
Industrial Research & Development; Product Creation/Improvement	15.0601	Other Technology
Industrial Production Technology 1; Manufacturing Process Technology 1	15.0611	Other Technology
Industrial Production Technology 2; Manufacturing Process Technology 2	15.0612	Other Technology
Chemical Manufacturing Technology	15.0621	Other Technology
Optics Technology	15.0631	Other Technology
Quality Control and Safety Technologies, Other	15.0700	Other Technology

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Engineering Technologies—continued		
Quality Control Technology	15.0711	Other Technology
Mechanical and Related Technologies, Other	15.0800	Other Technology
Automotive Design & Technology	15.0811	Other Technology
Mechanical Engineering Technology	15.0821	Other Technology
Mining and Petroleum Technologies, Other	15.0900	Other Technology
Mining Technology	15.0911	Other Technology
Petroleum Technology	15.0921	Other Technology
Engineering and Engineering-Related Technologies, Other	15.9900	Other Technology
Biological Technologies, Other	41.0100	Other Technology
Nuclear Technologies, Other	41.0200	Other Technology
Physical Science Technologies, Other	41.0300	Other Technology
Science Technologies, Other	41.9900	Other Technology
Computer-Assisted Design/Drafting (CAD)	15.0431	(PP) Drafting/Graphics/Printing
Drafting, Other	48.0100	(PP) Drafting/Graphics/Printing
Drafting 1; Mechanical Drawing 1; Projection Theory; Drafting Fundamentals	48.0111	(PP) Drafting/Graphics/Printing
Drafting 2; Mechanical Drawing 2; Projection, Applied; Drafting, Technical	48.0112	(PP) Drafting/Graphics/Printing
Drafting 3; Mechanical Drawing 3; Machine Drawing; Illustration, Technical	48.0113	(PP) Drafting/Graphics/Printing
Drafting 4; Mechanical Drawing 4	48.0114	(PP) Drafting/Graphics/Printing
Engineering Drawing 1; Engineering Drafting; Engineering Graphics 1	48.0131	(PP) Drafting/Graphics/Printing
Engineering Drawing 2; Engineering Graphics 2	48.0132	(PP) Drafting/Graphics/Printing
Blueprint Reading; Sketching and Blueprint Reading	48.0141	(PP) Drafting/Graphics/Printing
Drafting 1, Cooperative	48.0151	(PP) Other precision production
Drafting 2, Cooperative	48.0152	(PP) Other precision production
Electrical and Electronic Technologies, Other	15.0300	Computer Technology
Audio Electronics	15.0311	Computer Technology
Electronics Fabrication	15.0333	Computer Technology
Electrical/Electronics Engineering Technician	15.0341	Computer Technology

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Architecture		
Architecture and Environmental Design, Other General	4.0100	(PP) Drafting/Graphics/Printing
Architecture, Other	4.0200	(PP) Drafting/Graphics/Printing
Architecture, Advanced	4.0212	(PP) Drafting/Graphics/Printing
Architectural Theory	4.0221	(PP) Drafting/Graphics/Printing
City, Community, and Regional Planning, Other	4.0300	(PP) Drafting/Graphics/Printing
Environmental Design, Other	4.0400	(PP) Drafting/Graphics/Printing
Landscape Architecture, Other	4.0600	(PP) Drafting/Graphics/Printing
Urban Design, Other	4.0700	(PP) Drafting/Graphics/Printing
Architecture and Environmental Design, Other	4.9900	(PP) Drafting/Graphics/Printing
Architectural Drawing 1; Architectural Drafting	48.0121	(PP) Drafting/Graphics/Printing
Architectural Drawing 2	48.0122	(PP) Drafting/Graphics/Printing
Architectural Drawing 3	48.0123	(PP) Drafting/Graphics/Printing
Architectural Drawing 4; Architectural Model Building	48.0124	(PP) Drafting/Graphics/Printing
Architecture, Introduction	4.0211	(PP) Other precision production
2007 SST Category: Construction		
Building/Facilities Maintenance 2	46.0432	code added to CSSC since 1998
2007 SST Category: Manufacturing		
Machine Shop 1; Machine Lab; Industrial Machine	21.0121	(PP) Metal/Wood/Plastics
Machine Shop 2	21.0122	(PP) Metal/Wood/Plastics
Machine Shop 3	21.0123	(PP) Metal/Wood/Plastics
Machine Shop 4	21.0124	(PP) Metal/Wood/Plastics
Precision Metal Work, Other	48.0500	(PP) Metal/Wood/Plastics
Metal 1; Metal Class; Metal Lab; Metalwork; Metal Trades; Machine Metals	48.0511	(PP) Metal/Wood/Plastics
Metal 2; Metalwork, Advanced	48.0512	(PP) Metal/Wood/Plastics
Metal 3	48.0513	(PP) Metal/Wood/Plastics
Metal 4	48.0514	(PP) Metal/Wood/Plastics
Welding 1	48.0521	(PP) Metal/Wood/Plastics
Welding 2	48.0522	(PP) Metal/Wood/Plastics
Welding 3	48.0523	(PP) Metal/Wood/Plastics
Sheet Metal 1	48.0531	(PP) Metal/Wood/Plastics
Sheet Metal 2	48.0532	(PP) Metal/Wood/Plastics
Metal Restoration	48.0541	(PP) Metal/Wood/Plastics
Foundry 1	48.0551	(PP) Metal/Wood/Plastics

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Manufacturing		
Foundry 2	48.0552	(PP) Metal/Wood/Plastics
Precision Work, Assorted Materials, Other	48.0600	(PP) Metal/Wood/Plastics
Plastics 1	48.0611	(PP) Metal/Wood/Plastics
Plastics 2	48.0612	(PP) Metal/Wood/Plastics
Spaceage Plastics	48.0621	(PP) Metal/Wood/Plastics
Woodworking, Other	48.0700	(PP) Metal/Wood/Plastics
Woodworking 1; Wood 1; Woodworking, Basic	48.0711	(PP) Metal/Wood/Plastics
Woodworking 2; Wood 2; Machine Woodworking; Wood Products	48.0712	(PP) Metal/Wood/Plastics
Woodworking 3; Wood 3; Woodworking, Advanced	48.0713	(PP) Metal/Wood/Plastics
Woodworking 4; Wood 4	48.0714	(PP) Metal/Wood/Plastics
Furniture Refinishing	48.0721	(PP) Metal/Wood/Plastics
Cabinetmaking 1; Millwork	48.0731	(PP) Metal/Wood/Plastics
Cabinetmaking 2	48.0732	(PP) Metal/Wood/Plastics
Adaptive Foundry EMH	52.0107	(PP) Metal/Wood/Plastics
Electronics 1; Electronics, Basic; Circuits, Fundamental	21.0115	(PP) Other precision production
Electronics 2; Electronics, Digital	21.0116	(PP) Other precision production
Electronics 3	21.0117	(PP) Other precision production
Electronics 4	21.0118	(PP) Other precision production
Electricity and Electronics, Advanced	21.0120	(PP) Other precision production
Electronics—Cooperative Education 1	21.0140	(PP) Other precision production
Electronics—Cooperative Education 2	21.0141	(PP) Other precision production
Leatherworking and Upholstering, Other	48.0300	(PP) Other precision production
Leatherwork 1	48.0311	(PP) Other precision production
Leatherwork 2	48.0312	(PP) Other precision production
Upholstery	48.0321	(PP) Other precision production
Upholstery, Advanced	48.0322	(PP) Other precision production
Auto Upholstery	48.0331	(PP) Other precision production
Welding—Cooperative Education	48.0524	(PP) Other precision production
Precision Production, Other	48.9900	(PP) Other precision production
Leatherwork and Upholstery 1	55.7211	(PP) Other precision production
Leatherwork and Upholstery 1, not for credit	55.7219	(PP) Other precision production
Leatherwork and Upholstery 2	55.7221	(PP) Other precision production
Leatherwork and Upholstery 2, not for credit	55.7229	(PP) Other precision production
Precision Production Work Study 1	55.7411	(PP) Other precision production
Precision Production Work Study 1, not for credit	55.7419	(PP) Other precision production

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Manufacturing—continued		
Precision Production Work Study 2	55.7421	(PP) Other precision production
Precision Production Work Study 2, not for credit	55.7429	(PP) Other precision production
Precision Production Work Experience 1	55.7511	(PP) Other precision production
Precision Production Work Experience 1, not for credit	55.7519	(PP) Other precision production
Precision Production Work Experience 2	55.7521	(PP) Other precision production
Precision Production Work Experience 2, not for credit	55.7529	(PP) Other precision production
Clothing, Apparel, and Textiles Management, Production, and Services, Other	20.0300	Personal and Other Services
Clothing Occupations 1; Fashion Design and Clothing Occupations; Profitable Sewing 1	20.0311	Personal and Other Services
Clothing Occupations 2; Profitable Sewing 2	20.0312	Personal and Other Services
Clothing Occupations 3	20.0313	Personal and Other Services
Clothing Occupations—Cooperative Education 1	20.0314	Personal and Other Services
Clothing Occupations—Cooperative Education 2	20.0315	Personal and Other Services
Commercial Garment and Apparel Construction	20.0331	Personal and Other Services
Custom Apparel Construction	20.0341	Personal and Other Services
Custom Tailoring and Alteration	20.0351	Personal and Other Services
Textiles Testing	20.0381	Personal and Other Services
Clothing Production Management	20.0391	Personal and Other Services
Custom Drapery and Window Treatment Design	20.0551	Personal and Other Services
Custom Slipcovering and Upholstering	20.0561	Personal and Other Services
Clothing and Textiles 1	55.4211	Personal and Other Services
Clothing and Textiles 1, not for credit	55.4219	Personal and Other Services
Clothing and Textiles 2	55.4221	Personal and Other Services
Clothing and Textiles 2, not for credit	55.4229	Personal and Other Services
Clothing 7	20.0131	Family & Consumer Sci. Educ.
Clothing 8	20.0132	Family & Consumer Sci. Educ.
Clothing 1; Sewing, Introduction; Sewing 1; Textiles and Clothing 1; Clothing Construction	20.0133	Family & Consumer Sci. Educ.
Clothing 2; Sewing, Intermediate; Sewing 2; Textiles and Clothing 2; Clothing Construction, Intermediate	20.0134	Family & Consumer Sci. Educ.
Clothing 3; Sewing 3; Textiles and Clothing 3	20.0135	Family & Consumer Sci. Educ.
Clothing 4; Sports Wear; Alterations	20.0136	Family & Consumer Sci. Educ.

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Manufacturing—continued		
Tailoring	20.0137	Family & Consumer Sci. Educ.
Aviation Technology 1; Aviation, General; Avionics Technology	49.0121	Transp. & Material Moving
Aviation Technology 2	49.0122	Transp. & Material Moving
Aviation Technology 3	49.0123	Transp. & Material Moving
Aviation Technology 4	49.0124	Transp. & Material Moving
Boat Building	49.0321	Transp. & Material Moving
Industrial Electricity	47.0161	Mechanics & Repair
Industrial Electronics	47.0171	Mechanics & Repair
Shoe Repair and Orthopedics 1	47.0431	Mechanics & Repair
Shoe Repair and Orthopedics 2	47.0432	Mechanics & Repair
Electricity/Electronics—Cooperative Education 1	21.0150	Construction
Electricity/Electronics—Cooperative Education 2	21.0151	Construction
Electricity and Electronics, Introduction	21.0119	General Labor Market Prep
2007 SST Category: Mechanics and Repair		
General Services Occupations 1	12.0511	Personal and Other Services
General Services Occupations 2	12.0512	Personal and Other Services
General Services Occupations 3	12.0513	Personal and Other Services
General Services Occupations 4	12.0514	Personal and Other Services
Building & Grounds Maintenance Occ 1	12.0521	Personal and Other Services
Building & Grounds Maintenance Occ 2	12.0522	Personal and Other Services
Building & Grounds Maintenance Occ 3	12.0523	Personal and Other Services
Aircraft Parts Management 1	49.0141	Transp. & Material Moving
Aircraft Parts Management 2	49.0142	Transp. & Material Moving
Marine Engine and Boat Repair 1; Marine Mechanics, Basic	49.0311	Transp. & Material Moving
Marine Engine and Boat Repair 2; Marine Mechanics, Advanced	49.0312	Transp. & Material Moving
Aquatic Occupations; Marine Diving	49.0341	Transp. & Material Moving
Electrical and Power Transmission Installation, Other	46.0300	Construction
Electric Power and Communications Lineworker	46.0321	Construction
Telecommunications Technician	47.0124	Communications Technology
2007 SST Category: Transportation		
Warehousing Industrial and Wholesale Material Handling	8.0761	Marketing & Distribution

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Consumer Services		
Current Issues in Child Development	20.0126	Child Care & Education
Child Care and Guidance Management and Services, Other	20.0200	Child Care & Education
Child Care Services; Early Childhood Workshop; Child Development Services; Nursery School Training	20.0211	Child Care & Education
Child Care Aide	20.0221	Child Care & Education
Child Care Management	20.0231	Child Care & Education
Family Care Services; Foster Care and Family Care	20.0241	Child Care & Education
Child Care—Cooperative Education 1	20.0261	Child Care & Education
Child Care—Cooperative Education 2	20.0262	Child Care & Education
Child Development 1	55.4111	Child Care & Education
Child Development 1, not for credit	55.4119	Child Care & Education
Child Development 2	55.4121	Child Care & Education
Child Development 2, not for credit	55.4129	Child Care & Education
Family and Community Services, Other	19.0300	Family & Consumer Sci. Educ.
Child Development 8	20.0121	Family & Consumer Sci. Educ.
Child Development 1	20.0122	Family & Consumer Sci. Educ.
Child Development 2	20.0123	Family & Consumer Sci. Educ.
Child Development 3	20.0124	Family & Consumer Sci. Educ.
Child Development 4	20.0125	Family & Consumer Sci. Educ.
Home Economics Laboratory Assistant	20.0153	Family & Consumer Sci. Educ.
Home Economics Leadership	20.0154	Family & Consumer Sci. Educ.
Family Health 1; Family Nursing	20.0161	Family & Consumer Sci. Educ.
Family Health 2; Family Nursing, Advanced	20.0162	Family & Consumer Sci. Educ.
Animal Grooming; Pet Grooming	1.0521	Agriculture & Renew Resources
Parks and Recreation, Other General	31.0100	Agriculture & Renew Resources
Parks and Recreation Management, Other	31.0300	Agriculture & Renew Resources
Water Resources, Other	31.0400	Agriculture & Renew Resources
Parks and Recreation, Other	31.9900	Agriculture & Renew Resources
Tourism Services	8.1111	Marketing & Distribution
Entertainment Park/Tourism—Cooperative Education	8.1121	Marketing & Distribution
Entertainment Services, Other	12.0200	Food Service & Hospitality
Winter/Ski Resort Operation	31.0211	Business Management
Air Travel Service Occupations	49.0131	Transp. & Material Moving Moving

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Culinary Arts		
Food Production, Management, and Services, Other	20.0400	Food Service & Hospitality
Food Service Training 1; Culinary Arts 1; Commercial Foods, Basic; Restaurant Occupations 1; Chef Class	20.0411	Food Service & Hospitality
Food Service Training 2; Culinary Arts 2; Commercial Foods, Advanced; Restaurant Occupations 2	20.0412	Food Service & Hospitality
Food Services/Restaurant Management	20.0413	Food Service & Hospitality
Food Service Cooperative Training; Food Service, Vocational	20.0421	Food Service & Hospitality
Baking	20.0431	Food Service & Hospitality
Chef	20.0441	Food Service & Hospitality
Catering	20.0451	Food Service & Hospitality
Food Testing	20.0471	Food Service & Hospitality
Cafeteria Assistant; School Food Service	20.0481	Food Service & Hospitality
Adaptive Foods EMH	52.0106	Food Service & Hospitality
Food Services 1	55.6311	Food Service & Hospitality
Food Services 1, not for credit	55.6319	Food Service & Hospitality
Food Services 2	55.6321	Food Service & Hospitality
Food Services 2, not for credit	55.6329	Food Service & Hospitality
Meatcutting 1	48.0411	(PP) Other precision production
Meatcutting 2	48.0412	(PP) Other precision production
Meatcutting 1	55.7311	(PP) Other precision production
Meatcutting 1, not for credit	55.7319	(PP) Other precision production
Meatcutting 2	55.7321	(PP) Other precision production
Meatcutting 2, not for credit	55.7329	(PP) Other precision production
Nutrition; Fitness Foods	20.0188	Family & Consumer Sci. Educ.
2007 SST Category: Education		
Teacher Training (Lecture & Observation)	13.1201	code added to CSSC since 1998
Teacher Training (Active Practice/Practicum)	13.1202	code added to CSSC since 1998

CSSC course title and alternate titles	CSSC code	1998 SST category
2007 SST Category: Library Science		
Library and Archival Sciences, Other General	25.0100	Child Care & Education
Library Science; Library Skills	25.0111	Child Care & Education
Archival Science, Other	25.0200	Child Care & Education
Library Assisting, Other	25.0300	Child Care & Education
Library Assistant; Library Aide	25.0311	Child Care & Education
Library Science, Other	25.0400	Child Care & Education
Museology, Other	25.0500	Child Care & Education
Library and Archival Sciences, Other	25.9900	Child Care & Education
2007 SST Category: Public Administration		
Public Affairs, Other General	44.0100	Public/Protective Services
Community Services, Other	44.0200	Public/Protective Services
Public Administration, Other	44.0400	Public/Protective Services
Public Policy Studies, Other	44.0500	Public/Protective Services
Public Works, Other	44.0600	Public/Protective Services
Social Work, Other	44.0700	Public/Protective Services
Human Services	44.0711	Public/Protective Services
Public Affairs, Other	44.9900	Public/Protective Services
2007 SST Category: Legal Services		
Court Reporter	7.0662	Business Services
Prosecutorial Science, Other	18.2100	Health Care
2007 SST Category: Protective Services		
Security Services, Other	43.0300	code added to CSSC since 1998

APPENDIX J: STANDARD ERRORS FOR SUMMARY MEASURES OF PUBLIC HIGH SCHOOL GRADUATES' PARTICIPATION IN CAREER/TECHNICAL EDUCATION, USING THE 2007 SST: 2005

Table J-1. Standard errors for the summary measures of public high school graduates' participation in career/technical education, using the 2007 Secondary School Taxonomy (SST): 2005

Category	Average credits earned	Percentage of graduates earning any credits	Percentage of graduates earning 3.0 or more credits
Career/technical education, total	0.06	0.28	0.80
Family and Consumer Sciences Education	0.01	1.10	0.12
General Labor Market Preparation	0.03	1.09	0.43
Occupational, total	0.04	0.46	0.76
Agriculture and Natural Resources	0.01	0.54	0.21
Communications and Design	0.01	0.79	0.17
Computer and Information Sciences	0.01	0.91	0.12
Health Sciences	0.01	0.66	0.19
Marketing	0.01	0.54	0.13
Business Support	0.01	1.13	0.09
Business Management	0.01	0.79	0.10
Business Finance	0.01	0.42	0.06
Engineering Technologies	0.01	0.53	0.13
Architecture	0.00	0.20	0.21
Construction	0.01	0.30	0.11
Manufacturing	0.01	0.82	0.16
Mechanics and Repair	0.01	0.37	0.20
Transportation	0.00	0.21	0.01
Consumer Services	0.01	0.53	0.09
Culinary Arts	0.01	0.74	0.08
Education	0.01	0.30	0.06
Library Science	0.00	0.18	0.01
Public Administration	0.00	0.08	0.03
Legal Services	0.00	0.00	0.00
Protective Services	0.01	0.48	0.10

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Transcript Study, 2005.