



## **Template for Programs of Study**

Pennsylvania Department of Education  
Bureau of Career and Technical Education

Each Program of Study (POS) shall be developed in compliance with all of the following template elements:

1. Incorporate and align secondary and postsecondary programs:
  - a. Using Pennsylvania approved Standard Occupational Classification (SOC) Codes
  - b. By developing a competency list based on an occupational analysis using resources such as O\*NET, and Career and Technical Education Consortium of States (CTECS).
  - c. By aligning with Pennsylvania recognized industry based credentials or certifications
  - d. By securing validation of the occupational Advisory Committee.
2. Include coherent and rigorous academic content aligned with the Pennsylvania Academic Standards and relevant career and technical education content integrated in a coordinated, non-duplicative progression of courses that align secondary and postsecondary education to adequately prepare students to succeed in careers.
3. Include the opportunity for secondary education students to earn postsecondary education credits through dual or concurrent enrollment, articulated credit, or other avenues which lead to a Pennsylvania recognized, industry based credential, credit bearing certificate or associate or baccalaureate degree.
4. Establish all new career and technical education programs based upon the current Pennsylvania Department of Labor and Industry's high priority occupations list.
5. Develop articulation agreements between secondary and postsecondary institutions which shall include:
  - a. Content specified in courses offered by the secondary institution that aligns with course content at the postsecondary institution. Syllabi and/or competency lists of courses from the institutions involved must be maintained in the appropriate offices.
  - b. The operational procedures and responsibilities of each party involved in the implementation of the articulation agreement.
  - c. A student evaluation plan and process including descriptions of required proficiency levels and criteria for measurement.
  - d. An evaluation plan that includes an annual review and a renewal date not to exceed three years.
  - e. A description of student admission requirements.

- f. Signatures of authorized representatives of participating institutions.
- g. On an individual basis, provide options for out of county students to articulate without sanction if equivalent articulation elements are satisfied.

## **Program of Study Definitions**

### **Bureau of Career and Technical Education Classification of Instructional Programs (CIP) Codes**

#### **Federal CIP Codes**

The purpose of the Classification of Instructional Programs (CIP) is to provide a taxonomic scheme that will support the accurate tracking, assessment, and reporting of fields of study and program completion activity. CIP codes were originally developed by the U.S. Department of Education's National Center for Education Statistics in 1980, with revisions occurring in 1985 and 1990. The 2000 edition (CIP 2000) is the third revision of the taxonomy and presents an updated taxonomy of instructional program classifications and descriptions.

#### **Dual or Concurrent Enrollment**

This articulated program allows students to earn college credit and attend high school at the same time. Dual enrollment is a locally administered program that allows a secondary student to concurrently enroll in postsecondary courses and to receive both secondary and postsecondary credit for the coursework. Local programs are run through partnerships between school entities and eligible postsecondary institutions.

#### **High Priority Occupations**

These occupations include job categories that are in demand by employers, have higher skill needs, and are most likely to provide family sustaining wages. Category is used as a strategic process to identify training programs and dollars spent. A high priority occupation's Standard Occupations Classifications System (SOC)/CIP crosswalk search is located on the Pennsylvania Department of Education website.

#### **Occupational Advisory Committee**

This committee is comprised of representatives from local business and industry who are actively involved in the occupation for which training is being provided. Representation should also include management and labor personnel, homemakers, career and technical education students, recent graduates, postsecondary faculty, home school and career and technical center counselors, and members of the community. This committee shall provide advice on program content and performance objectives to the classroom teacher. The classroom teacher will set performance objectives.

## O\*NET

Developed by the U.S. Department of Labor, O\*NET provides information pertaining to SOC codes. O\*NET lists job descriptions, tasks, and information on related occupations, occupations with similar codes, and detailed work activities.

## Pennsylvania Academic Standards

The Pennsylvania State Board of Education has approved educational standards, which include the literary, artistic, career education and work, conventional, and/or theoretical knowledge, but not including technical or professional studies.

## SOC Codes

The 2000 Standard Occupational System (SOC) is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of over 820 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 23 major groups, 96 minor groups, and 449 broad occupations. Each broad occupation includes detailed occupations requiring similar job duties, skills, education, or experience. General questions concerning the SOC may be discussed by telephone at 202-691-6500, or via fax at 202-691-6444.

Crosswalk searches are available, comparing the following: Standard Occupational Classifications, Military Occupational Classifications, Classification of Instruction Programs, Registered Apprenticeship System, and the Dictionary of Occupational Titles.

## CTECS (formerly VTECS)

The Career and Technical Education Consortium of States is a group of states whose members pool resources to develop competency based career and technical education products that are validated by business, industry, and labor. These industry based resources and services are used for the improvement of career and technical education and workforce development instruction, assessment, certification, and delivery.

## Pennsylvania recognized industry based credentials or certifications

The Pennsylvania Department of Education, Bureau of Career and Technical Education, has compiled this resource guide which lists industry recognized certifications for career and technical programs in Pennsylvania's career clusters. The goal of the resource guide is to assist schools with identifying organizations that provide industry recognized certifications that relate to Pennsylvania CIP codes for program approval.