

**The following information was developed by the Pennsylvania Department of Education to outline the requirements of the skills and knowledge to be taught in the career & technical education (CTE) teacher certification programs. CTE teacher certification programs are offered by the three approved universities (Indiana University of PA, Penn State, Temple University). The design of each of the three universities' CTE teacher certification coursework must meet all requirements by the completion of their CTE Instructional II certificate. Note: The centers may address knowledge and standards by providing separate courses that address specific knowledge and standards and/or they may choose to integrate knowledge and standards in multiple courses.**

## **Pennsylvania Requirements**

### **Career and Technical Teacher Instructional Certification**

#### **(Trade and Industrial Education**

#### **Health Occupations Education)**

Career and Technical Instructional I certification require passage of an occupational examination, at least two years of wage earning experience in the occupation (four years of wage earning experience if going the intern route) and the completion of an approved program of at least 18 semester hours in the areas of general, professional and career and technical professional education. A minimum of 50 percent of the program must be in career and technical professional education. Career and Technical Instructional II certification require the completion of 60 hours in an approved program and three years of satisfactory teaching on a Career and Technical Instructional I certificate.

### **I. Knowing the Content**

The professional education program shall require the candidates to demonstrate their knowledge of the fundamental concepts and skills in the specific career and technical/occupational area and competence in applying developmentally appropriate instruction to meet the diverse needs of secondary school students (7- 12) including:

I.A. History, philosophy, and objectives of general and career and technical education

I.B. General education and occupation-related subject matter including:

- social and behavioral sciences,
- natural or life sciences,
- English composition, public speaking, and communication,
- mathematics

I.C. Technical content expertise and basic principles, practices, and aspects of the industry including:

- production skills,
- principles of technology and applications,
- risk management and market information,

- financing, promoting, purchasing, and selling,
- product/service planning,
- technology utilization

#### I.D. Program administration in Career and technical Education

- career and technical-technical education curricular components (e.g., objectives, content, implementation, assessment, and lesson design) and relationship to Pennsylvania Academic Standards,
- measurement fundamentals, formal and informal assessment strategies, and their applications (e.g., students, instruction, and programs in career and technical education),
- identifying and selecting appropriate materials for students, including special needs students,
- school and community resources, occupational advisory committees,
- occupational experience programs

## II. Performances

The professional education program provides evidence of the candidate's participation in sequential and developmental field experiences, under the supervision of college personnel and cooperating teachers who are well trained., have interpersonal skills and demonstrated competence in career and technical education. The program also provides evidence that the criteria and competencies for exit from the career and technical education certification program require the candidates to demonstrate their knowledge and competence in fostering student learning through:

II.A. Creating a positive learning environment for career and technical education students based upon:

- adolescent psychology and developmental needs,
- physical, emotional, and intellectual characteristics of youth, young adults, and special needs students,
- social and cultural factors that influence school attendance

II.B. Managing the instructional environment including:

- establishing and maintaining rapport with students, through mentoring and advising,
- communicating challenging learning expectations to each student,
- establishing and maintaining consistent standards of classroom behavior,
- making the physical environment safe

II.C. Planning instruction in collaboration with other professionals based upon:

- current occupational analysis and practical occupational experiences,
- instructional systems and technology,
- integrated general and career and technical curriculum approaches,

- Pennsylvania Academic Standards

II.D. Adapting and implementing effective instructional strategies, curriculum resources and technologies in collaboration with other professionals including:

- team teaching and interdisciplinary projects,
- individual and group presentations and performances,
- integrating mathematics, communication, and occupational skills,
- intensive scheduling, cooperative career and technical experiences, internships

II.E. Selecting, analyzing, and modifying instructional materials and communication modes in order to address the needs and instructional levels of a diverse student population including:

- adapting curriculum materials to the reading and instructional level of learners,
- achieving knowledge of special education terminology and addressing exceptionalities,
- correcting cultural and gender biases and stereotyping

II.F. Assessing students' understanding of content, adjusting instruction, and providing feedback to students, parents and other professionals including:

- formal and informal assessments and evaluations,
- written and oral tests and demonstrations,
- individual and group projects and exhibitions

### **III. Professionalism**

The professional education program provides evidence that career and technical education certification candidates demonstrate knowledge and competencies that foster professionalism in school and community settings including:

III.A. History, philosophy and current trends in career and technical education

III.B. Professional organizations, literature, and student organizations

III.C. Integrity and ethical behavior, professional conduct as stated in Pennsylvania's Code of Professional Practice and Conduct for Educators; and local, state, and federal laws and regulations

III.D. Communicating effectively with the school and business community to improve school climate and facilitate student learning and career choices

III.E. Collaborating with school colleagues, organizations and other community agencies to improve student learning.