

# Career and Technical Education (CTE)

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Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

## **CTE 3101. Principles of Career and Technical Education. 3 Credit Hours.**

For prospective career and technical education teachers and technical trainers. Provides an in-depth analysis of the context in which contemporary career and technical programs operate. Emphasis is placed on the philosophical concepts underlying career and technical education, an examination of issues and problems in present programs and how research on teaching practice drives curricular change. NOTE: General familiarity with internet searching and navigation necessary. Some course assignments will be posted on Blackboard. Students are to inquire with the program for technical equipment requirements.

**College Restrictions:** Must be enrolled in one of the following Colleges: Education & Human Development.

**Repeatability:** This course may not be repeated for additional credits.

## **CTE 3102. Teaching Strategies in Career and Technical Education. 3 Credit Hours.**

This course focuses on developing teaching competence. The following will be addressed: models of teaching for achieving instructional outcomes in career and technical areas; using performance standards to prepare and present content lessons; evaluation of instructional outcomes; integration of technology in instruction; serving students with special needs; creating an environment for student learning, differentiated instruction. NOTE: General familiarity with internet searching and navigation necessary. Some course assignments will be posted on Blackboard. Students are to inquire with the program for technical equipment requirements.

**College Restrictions:** Must be enrolled in one of the following Colleges: Education & Human Development.

**Repeatability:** This course may not be repeated for additional credits.

## **CTE 3103. Curriculum in Career and Technical Education. 3 Credit Hours.**

Develop strategies for designing, implementing, and evaluating curriculum in career and technical education. Acquire knowledge, skills, and methods to validate a curriculum. Develop the skill to analyze an occupation in terms of duty and tasks performed; develop the skill to prepare valid performance objectives; determine scope and sequence schedules; aligning content, learning experiences, assessment and performance standards. NOTE: General familiarity with internet searching and navigation necessary. Some course assignments will be posted on Blackboard. Students are to inquire with the program for technical equipment requirements.

**College Restrictions:** Must be enrolled in one of the following Colleges: Education & Human Development.

**Repeatability:** This course may not be repeated for additional credits.

## **CTE 3241. Methods of Teaching Business Education, Marketing Education, and Computer Applications. 3 Credit Hours.**

Instructional strategies in the teaching of Business, Computers, and Information Technology and Marketing are analyzed and demonstrated. Students are required to prepare lesson plans, teach demonstration lessons, develop a unit plan, participate in our profession, and complete the Intermediate Performance Assessment (IPA; if not completed before). The high expectations of this course will be met by all students to include English language learners and special education students. Lessons will integrate appropriate PA Standards for Business, Computers, and Information Technology or comparable standards, such as those for the National Business Education Association and the Temple College of Education Standards for Effective Teaching. Emphasis is placed on professionalism, and planning and skillful teaching that meet the needs of all students, including those with special needs, diverse, socio-cultural backgrounds, and English language learners. Demonstration lessons will be integrated with the course work to encourage developing teaching competency through a series of presentations appropriate to the student's certification interests.

**College Restrictions:** Must be enrolled in one of the following Colleges: Education & Human Development.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: EDCNDCY.

**Repeatability:** This course may not be repeated for additional credits.

## **CTE 3372. Project-based Learning for Today's CTE. 3 Credit Hours.**

The course is designed to help pre-educators and in-service educators plan and apply learning theory and principles of project-based learning to the development of Career and Technical Education and Business/Marketing related instruction in the classroom.

**College Restrictions:** Must be enrolled in one of the following Colleges: Education & Human Development.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 3389. Supervised Work Experience. 1 to 6 Credit Hour.**

This course provides certification candidates with education in the workplace experiences, including practical technical experience to supplement classroom instruction. An individualized training plan for the workplace is developed for each student. Staff visitations and joint supervision occur at the placement site.

**College Restrictions:** Must be enrolled in one of the following Colleges: Education & Human Development.

**Repeatability:** This course may be repeated for additional credit.

**CTE 4285. Industry Education Capstone and Field Experience for Work-Based Learning. 1 to 6 Credit Hour.**

Evaluation of field work, including in-service education and/or technical experiences that can enhance a candidate's occupational specialty, certification program, and/or strategies for connecting school and real world experiences.

**College Restrictions:** Must be enrolled in one of the following Colleges: Education & Human Development.

**Repeatability:** This course may be repeated for additional credit.

**CTE 4300. Wkshp Vocational Ed. 1 to 6 Credit Hour.**

**Repeatability:** This course may be repeated for additional credit.

**CTE 4315. Credit by Examination. 1 to 24 Credit Hour.**

Credit by examination is limited to students matriculated in the undergraduate Career and Technical Education (Industrial Education majors) degree program and who have met the following conditions: (a) completed 90 s.h. of approved course work, and (b) have received approval to have credit awarded toward their degree based on the successful completion of an Occupational Competency Assessment in a PDE Certification area.

**College Restrictions:** Must be enrolled in one of the following Colleges: Education & Human Development.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 4324. Industry-Based Coordination Methods for Work-Based Learning. 3 Credit Hours.**

The history, development, and operation of cooperative education programs are addressed in this course. Also covered are the development and promotion of a workplace-learning program, the development of workplace learning partnerships, workplace learning sites, safety considerations for students in the workplace, and connecting work-based and school-based learning. NOTE: This course is offered in a blended instructional format through a combination of online instruction and some face-to-face, whole class meetings. Students are to inquire with the program for technical equipment requirements.

**College Restrictions:** Must be enrolled in one of the following Colleges: Education & Human Development.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 4331. Industry-Based Instructional Methods for Work-Based Learning. 3 Credit Hours.**

This course covers the role of the teacher-coordinator in conducting and teaching procedures and activities necessary for providing successful supervised field experiences for students in the workplace. Also covered are methods of establishing contact with students, employers, teachers, parents, and community leaders, career and technical student organizations, and students with special needs, as well as developing and understanding labor laws and other legal requirements affecting student workers/interns. NOTE: This course is offered in a blended instructional format through a combination of online instruction and some face-to-face, whole class meetings. Students are to inquire with the program for technical equipment requirements.

**College Restrictions:** Must be enrolled in one of the following Colleges: Education & Human Development.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 4416. Professionalism, Evaluation, and Assessment in Secondary Education. 3 Credit Hours.**

This course is designed to build a knowledge base for educational assessment and evaluation, Career and Technical Education curriculum development, and professional development, providing the opportunity to apply this knowledge in an actual classroom/laboratory setting. This course will also consider teaching strategies for the success of all learners, including special population students.

**College Restrictions:** Must be enrolled in one of the following Colleges: Education & Human Development.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 5401. Current Problems in Career and Technical Education. 1 to 6 Credit Hour.**

This seminar covers selected school and training topics, including workforce development, training, managing information systems, diversity issues, school-industry partnerships, and performance evaluation.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

**CTE 5411. Evaluation in Career and Technical Education. 3 Credit Hours.**

Students learn how to develop and use a variety of evaluation methods to monitor student academic and occupational achievement as well as teaching effectiveness. Special emphasis is placed on relating evaluations to occupational curricula and instruction. Students learn about standardized tests and other diagnostic tools frequently encountered and/or used by classroom teachers. Particular attention is given to adapting assessments to meet the needs of all students. Contemporary issues related to testing, grading, evaluation, and accountability are addressed.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 5423. Leadership in Career and Technical Education. 3 Credit Hours.**

This course provides an overview of school leadership and the principles of leading in a career and technical education setting, examining them with specific reference to the roles of the administrative director and comprehensive supervisor. These particular roles are analyzed with an emphasis on inspiring staff to improve students' academic and technical achievement.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 5425. Advanced Concepts and Practices in Career and Technical Education. 3 Credit Hours.**

Designed as a survey course, this offering will focus on advanced topics relating to classroom assessment, career and technical education curriculum development, and continuous professional development. The topics selected for inclusion have been identified as skills that serve as solid predictors of a successful classroom educator. The successful educator is one who examines and places clear focus on their students' performance in and out of the classroom. Activities and strategies performed by the educator are certainly important but unless these actions result in raised performance levels and identified learning by the students then these efforts can be classified as having no educational value. The topics included in this course, if utilized by the educator, will provide significant information and assist the educator in making better educational decisions on improving student performance.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 5426. Professionalism and Staff Development. 3 Credit Hours.**

This course focuses on teacher professionalism and staff development and how schools can build capacity to maintain these systems. The course deals with the national standards for professional development; the process, content, and context of staff development; and the development of reflective practices.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 5431. Concepts in Career and Technical Education Programs. 3 Credit Hours.**

This course aligns with Temple University's standards for caring and skillful teaching and professionalism. This course is a requirement for intern teachers employed in a secondary career and technical education setting and is designed to develop an understanding of effective teaching theories and practices. This course is designed for students to develop an understanding of effective curriculum concepts and practices related to developing, implementing, and evaluating curriculum in career and technical education areas. Topics include the development of project and/or problem based learning and laboratory based experiences for students. Emphasis is placed on defining all aspects of diversity and providing accommodations and curriculum to meet the learning needs of a broad spectrum of diverse students. Additionally, the role and integration of student organizations into the curriculum is examined. Note: To enroll in this course, students must be admitted to the CTE certification program. The course is a field-based course which means candidates are required to apply all competencies with students in an actual teaching situation. Candidates are full-time "Intern" teachers employed by a local school district or Career and Technical Education Center (CTC). The course, thereby, satisfies the PA Department of Education's (PDE) field experience requirements.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 5605. Models of Teaching. 3 Credit Hours.**

This course aligns with Temple University's standards for caring and skillful teaching and professionalism. This course is a requirement for intern teachers employed in a secondary career and technical education setting and is designed to develop an understanding of effective teaching theories and practices. Students will examine concepts and practices related to curriculum and instructional strategies and develop the knowledge and skills for effective teaching. Emphasis is placed on how federal, state, and industry standards and community and individual needs are used for program and instructional development, and how "best practices" might be employed to deliver coherent instruction that is designed to promote critical thinking in real world contexts. Note: To enroll in this course, students must be admitted to the CTE certification program. The course is a field-based course which means candidates are required to apply all competencies with students in an actual teaching situation. Candidates are full-time "Intern" teachers employed by a local school district or Career and Technical Education Center (CTC). The course, thereby, satisfies the PA Department of Education's (PDE) field experience requirements.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 5669. Project-Based Learning. 3 Credit Hours.**

The course is designed to help educators plan and apply learning theory and principles of project-based learning to the development of business-related instruction in the elementary school classroom.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 5887. Pedagogical Competence. 3 to 15 Credit Hours.**

Prospective career and technical teachers/technical trainees are placed in supervised public school/industrial experiences and assisted in developing specialized teaching strategies through individualized instruction and seminar activities. (This constitutes an alternative delivery system equivalent to the professional requirement.)

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

**CTE 8324. Coordination Methods for Work-Based Learning. 3 Credit Hours.**

The history, development, and operation of cooperative education programs are covered. Also explored are the development and promotion of a workplace-learning program, the development of workplace-learning partnerships, workplace-learning sites, safety considerations for students in the workplace, and connecting work-based and school-based learning.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 8331. Instructional Methods for Work-Based Learning. 3 Credit Hours.**

This course covers the role of the teacher-coordinator in conducting and teaching procedures and activities necessary for providing successful supervised field experiences for students in the workplace. Also covered are methods of establishing contact with students, employers, teachers, parents, and community leaders; career and technical student organizations; and students with special needs. The course also explores developing and understanding labor laws and other legal requirements affecting student workers/interns.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 8501. Curriculum Development for Programs of Study in Career and Technical Education. 3 Credit Hours.**

Students study and analyze curriculum theories and the practical application of a systems approach in the analysis, design, development, implementation, and evaluation of technical education and training programs. Students learn about back-to-front design, performance and standards-based education, standards-aligned curriculum systems, and curriculum frameworks associated with program articulation, including "programs of study."

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 8507. The Role of Career and Technical Education in Workforce and Economic Development. 3 Credit Hours.**

This course explores the range of activities covered by state and federal career and technical (vocational) education laws; career and technical education as an integral part of the public school and workforce development systems; and the development of a point of view regarding the role of career and technical education in economic development.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 8521. Collaborative Processes for Effective Career and Technical Education Programs. 3 Credit Hours.**

This course focuses on the role of collaboration with both internal and external stakeholders of the CTE enterprise, including relationships with staff, parents, business and industry, government, professional associations and media groups. Students will learn the importance of partnerships and will examine ways to expand and enhance these partnerships for the ultimate purpose of improving student performance. The course is taught in a context of ethical leadership and decision making.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 8527. Program Planning, Evaluation, and Systems Alignment in Career and Technical Education. 3 Credit Hours.**

Students study the factors used to determine the vocational training needs of labor market areas, including local industrial expansion, recession, unemployment, aging workforce, and emerging technologies. Students also consider the organization, academic and skills standards, curriculum and instruction alignment, physical facilities, post-secondary connections and articulation, and scope and sequence of career and technical education programs. The course also focuses on conducting formative and summative program evaluations.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 8528. Creating a Culture of Teaching and Learning in Career and Technical Education Programs. 3 Credit Hours.**

This course is designed to prepare CTE leaders to empower and support professional staff to improve students' academic and technical performance. Candidates will learn how to implement clinical supervision, peer coaching, and apply formative and summative personnel evaluation methods in workforce education programs. In addition, school reform initiatives and best practices will be addressed that frame staff development as a system for continuous learning and improvement of the CTE curriculum and students' learning.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 8589. Managing Resources and Data Driven Decision Making in Career and Technical Education. 3 Credit Hours.**

CTE facilities are unique to education. They include industry-standard equipment and utilities that are not typically found in academic high schools. Prospective CTE leaders must understand and know how to apply systems to secure, maintain, and replace facility related items for technical curricula. These systems ensure the health and safety of students while providing the required resources to effectively prepare them for a variety of technical careers.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**CTE 8690. Problems in CTE. 1 to 3 Credit Hour.**

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

**CTE 8890. Special Topics/Problems in Career and Technical Education. 3 Credit Hours.**

The course focuses on contemporary issues and/or problems in workforce education. Enrollment is limited to master's degree students.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

**CTE 9389. Supervised Work Experience. 1 to 3 Credit Hour.**

Technical work experience in business and industry designed for all fields of career and technical education.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

**CTE 9482. Directed Independent Study. 1 to 6 Credit Hour.**

Problem-based topics related to vocational education or technical training are investigated.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

**CTE 9685. Internship in Career and Technical Education. 3 to 6 Credit Hours.**

Credit is given for a supervised internship within a specified field of CTE/technical training to provide the student with leadership development experiences.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.

**CTE 9885. Internship in Career and Technical Education. 3 to 12 Credit Hours.**

This supervised internship in a CTE setting provides the student, who is a candidate for system leader, with education leadership experiences.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may be repeated for additional credit.