Industrial Process Technician Certificate of Achievement

The Industrial Process Technician Certificate of Achievement (16 units) is designed to develop skills for a rewarding career as an Industrial Process Technician. Upon completion of this certificate, students will be able to demonstrate a general understanding of the equipment in an industrial environment, learn their role that applies to safety, health, and the environment, have a basic understanding of mathematical skills that apply to their daily duties, have the ability to read and comprehend basic blueprints and schematics, and develop an understanding of the proper use of tools used on the job. This program prepares students for careers in petrochemicals and refining, food and beverage processing, pharmaceuticals and bio-manufacturing, paper and pulp, oil and gas exploration, energy and power generation, water and waste water treatment, chemical and agricultural manufacturing, environmental safety, and brewing and distilling process industries.

Each course for this certificate must be completed with a grade of "C" or better.

Program Learning Outcomes

Upon successful completion of the program, the student will be able to:
- Apply important industry concepts and principles to draw conclusions about the roles and responsibilities of a process technician in an industry setting.
- Read and interpret industrial drawings.
- Apply important industry concepts and safe practices to draw conclusions about the roles and responsibilities of a process technician in an environmental setting.
- Solve trade-related word problems using algebra, geometry, and trigonometry.
- Identify tools and their appropriate use

Courses

Note: Some courses within the major may have a required prerequisite. If you feel you have equivalent knowledge and skills to those included in the prerequisite course through professional experience, licensure or certification, you have the opportunity to submit a Prerequisite Challenge to be reviewed by the faculty chair. For the Prerequisite Challenge to be considered, you must submit documentation/verification to substantiate the basis for the challenge. Please consult a counselor for more information regarding Prerequisite Challenge.

Complete all the following courses:

DRFT C108	Reading Technical Drawings	3 Units
INDE C060	Mathematical Applications for Trades	3
MCTL C107	Tool and Equipment Operation	2
PTEC C101X	Introduction to Process Technology	4
PTEC C110X	Industrial Safety, Health, & Environment	4

Information Technology Associate in Science Degree

The Information Technology Associate in Science Degree (60 units total, 22 units in the major) is designed for students pursuing professional employment in information technology for business. This degree program provides students with skills to enter the job market as help desk providers, computer support specialists, entry-level programmers, networking technicians, information assurance technicians, and cybersecurity technicians. Designed for both full and part-time students, this program is appropriate to both those currently employed and those seeking to enter this field. Students completing the IT AS degree are prepared to transfer to a baccalaureate program in Information Technology.

Courses required for the Associate degree major at Cerro Coso Community College may not be the same as those required for the corresponding major at a four-year school. Consult a counselor and visit http://www.assist.org to identify the courses needed for the major at your transfer school and to develop a plan that will best meet your goals.

You must complete a minimum of 60 units, including the courses listed in the major and general education requirements, with an overall GPA of 2.0 or better, and a grade of "A," "B," or "C" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Your transfer institution may require some of the major courses to be taken for a grade. Please consult a counselor and http://www.assist.org/ to determine any limitations on pass/no pass grading in major preparation courses.

Career opportunities in computer information systems: computer programmer, computer repair (A+ certified), computer operator, computer support specialist, network technician, help desk technician.

Program Learning Outcomes

Upon successful completion of the program, the student will be able to:
- Demonstrate competency in client computing and user support including the ability to configure, install, diagnose, and support hardware and software issues.
- Demonstrate competency in database and information management including the ability to design, implement, query, and manage relational databases.

Repeatability Status: Not repeatable
Grading Option: Standard letter only

54 hours lecture. This course includes principles and strategies for culturally and linguistically responsive teaching, building strong connections with families, classroom environments, curriculum, and authentic assessment. Students explore strategies to effectively support all dual language learners in an early childhood setting from infancy through preschool. Students are required to observe children in a group setting.

CHDV C281   A/CSU   3.00 Units
Adult Supervision and Mentoring in Early Care and Education

Advisory: ENGL C101, LIBR C100
Repeat Status: Not repeatable
Grading Option: Standard letter only

54 hours lecture. This course addresses the methods and principles of supervising student teachers, volunteers, staff, and other adults in early care and education settings. There is an emphasis on the roles and development of early education professionals as mentors and leaders. Students are required to observe licensed and license-exempt programs in their community. This course satisfies the adult supervision requirement for the Master Teacher level of the Child Development Permit Matrix.

College Success

COLL C052   A   1.00 Unit
Becoming a Successful Online Student

Repeat Status: Not repeatable
Grading Option: P/NP only

18 hours lecture. This course provides preparation for online course work by focusing on the fundamentals of the online educational environment. Topics include email use, online class interactions such as discussion groups, the differences between online and onsite courses, equipment needs, and other introductory information.

COLL C100   A/CSU   3.00 Units
Student Success Career Pathway

Advisory: ENGL C070
Repeat Status: Not repeatable
Grading Option: Standard letter with P/NP option

54 hours lecture. This classroom-based guidance experience teaches students a quantifiable decision-making process that helps them identify and plan for their education and career goals. Students explore academic interests, skills, values, and personality types, and research employers and industries. Students improve public speaking and interview skills through practice, familiarize themselves with college and job search tools, and learn goal setting. The culmination of this process is the development of an internet-based education and career ten-year plan that can be used for advisory and academic coaching purposes and updated as needed.

COLL C101   A/UC/CSU   3.00 Units
Foundations for Success in College and Life

Advisory: ENGL C101
Repeat Status: Not repeatable

Grading Option: Standard letter with P/NP option

54 hours lecture. This course emphasizes effective strategies that can be applied in college and life. It focuses on lifelong understanding and development of the self in physical, social, and psychological aspects. Course content includes time management, note-taking, memory skills, reading comprehension, and exam preparation. Topics such as goal setting, decision making, career choice, transfer preparation, and healthy lifestyles are also explored. The course introduces a variety of campus and internet resources. Note: University of California grants a maximum of 3 semester units for COLL C101 and COLL C102 combined.

COLL C102   A/UC/CSU   2.00 Units
Tools for College Success

Advisory: ENGL C070
Repeat Status: Not repeatable
Grading Option: Standard letter with P/NP option

36 hours lecture. This course introduces students to the process of academic and career planning by means of personal and group exercises. Skills such as thinking critically, using college resources, developing personal awareness, and identifying motivational factors are explored, and topics of diversity are addressed. Note: University of California grants a maximum of 3 semester units for COLL C101 and COLL C102 combined.

COLL C131   A/CSU   1.00 Unit
Making Transfer Easy

Advisory: ENGL C070
Repeat Status: Not repeatable
Grading Option: Standard letter with P/NP option

18 hours lecture. This course provides an introduction to majors and careers, goal setting and major selection, the transfer research and application process, and long-term educational planning. Transfer agreements, application completion, housing, and supportive services for public and private colleges and universities, particularly in California, are evaluated.

Commercial Truck Driving

CTD C800   NC   0.00 Units
CDL: Upgrade from Class B to Class A

Limitations on Enrollment: Before taking the Commercial Learner's Permit exam, students must be over 18 years of age and hold a valid Class B CDL.
Repeat Status: Repeatable
Grading option: Standard letter with P/NP option

40 hours lecture. This course prepares students to take the knowledge test required to upgrade from a Class B Commercial Driver's License (CDL) to a Class A CDL. Curriculum follows Federal Motor Carrier Safety Administration's (FMCSA) requirement for Entry-level Driver Training (ELDT). In accordance with FMCSA and ELDT standards, students must score a minimum of 80% on written exams for all theory portions of instruction.

CTD C801   NC   0.00 Units
Commercial Truck Driving: Theory and Permit Preparation

Limitations on Enrollment: Before taking the Commercial Learner's Permit exam, students must be over 18 years of age and hold a valid California's Driver's License.

Repeat Status: Repeatable
Grading option: Standard letter with P/NP option

56 hours lecture. The Commercial Truck Driving Theory course prepares students to take the knowledge test required to obtain a California Commercial Learner's Permit. Curriculum follows Federal Motor Carrier Safety Administration's (FMCSA) requirement for Entry Level Driver Training (ELDT). In accordance with FMCSA and cg ELDT standards, students must score a minimum of 80% on written exams for all theory portions of instruction.

CTD C802	NC	0.00 Units

Commercial Truck Driving: Behind-the-Wheel

Limitations on Enrollment: Students must: 1. Present a current California CDL Learner's Permit 2. submit an authorized Medical Examination report 3. submit a 10-year driving history from DMV 4. submit a clear drug and alcohol screening test at a Cerro Coso Community College approved medical provider.
Repeat Status: Repeatable
Grading option: Standard letter with P/NP option

162 hours laboratory. This course prepares students to take the road test required to obtain a California Commercial Driver's License Class A or B. Curriculum follows Federal Motor Carrier Safety Administration's (FMCSA) requirement for Entry Level Driver Training (ELDT). Upon completion of the course and passing the road test, students are prepared for an entry-level position in the trucking industry.

CTD C803	NC	0.00 Units

Hazardous Materials Endorsement

Limitations on Enrollment: In accordance with provisions of the USA PATRIOT ACT of 2001, students must be 21 years of age to apply for the H endorsement. Students must also hold a valid CDL.
Repeat Status: Repeatable
Grading option: Standard letter with P/NP option

12 hours lecture. This course prepares students to take the knowledge test required to obtain a California Commercial Driver's License Hazardous Materials (H) endorsement. Curriculum follows Federal Motor Carrier Safety Administration's (FMCSA) requirement for Entry-level Driver Training (ELDT). The H endorsement is required by federal law to transport hazardous materials. In accordance with FMCSA and ELDT standards, students must score a minimum of 80% on written exams for all theory portions of instruction.

CTD C804	NC	0.00 Units

Passenger Endorsement

Limitations on Enrollment: Before taking the written California PV endorsement exam, students must hold a valid California's Driver's License.
Repeat Status: Repeatable
Grading option: Standard letter with P/NP option

24 hours lecture. This course prepares students to take the knowledge test required to obtain a California Commercial Motor Vehicle PV endorsement. Curriculum follows Federal Motor Carrier Safety Administration's (FMCSA) requirement for Entry Level Driver Training (ELDT). In accordance with FMCSA and ELDT standards, students must score a minimum of 80% on written exams for all theory portions of instruction.

CTD C805	NC	0.00 Units

Passenger Endorsement Behind the Wheel

Limitations on Enrollment: Before taking the PV endorsement exam, students must be over 18 years of age and hold a valid California's Driver's License.
Repeat Status: Repeatable
Grading option: Standard letter with P/NP option

20 hours lecture. This course prepares students to take the road test required to obtain a California Commercial Driver's License Passenger (PV) endorsement. Curriculum follows Federal Motor Carrier Safety Administration's (FMCSA) requirement for Entry-level Driver Training (ELDT). Upon completion of the course and passing the road test, students are prepared for an entry-level position in the light trucking industry.

CTD C806	NC	0.00 Units

School Bus Endorsement

Limitations on Enrollment: Before taking the written California SCH endorsement exam, students must hold a valid California's Driver's License and have at least 10 years of a clean driving record.
Repeat Status: Repeatable
Grading option: Standard letter with P/NP option

16 hours lecture. This course prepares students to take the knowledge test required to obtain a California Commercial Motor Vehicle School Bus (SCH) endorsement. Curriculum follows Federal Motor Carrier Safety Administration's (FMCSA) requirement for Entry-level Driver Training (ELDT). In accordance with FMCSA and ELDT standards, students must score a minimum of 80% on written exams for all theory portions of instruction.

CTD C807	NC	0.00 Units

School Bus Endorsement Behind the Wheel

Limitations on Enrollment: Prior to licensure, the student must complete the California Highway Patrol Special Certification Application 295, MCSA 575 and 576 medical examination, first aid certificate, Department of Justice Livescan, and have 10 years of a clean DMV report.
Repeat Status: Repeatable
Grading option: Standard letter with P/NP option

20 hours lecture. This course prepares students to take the road test required to obtain a California Commercial Driver's License School Bus (SCH) endorsement. Curriculum follows Federal Motor Carrier Safety Administration's (FMCSA) requirement for Entry-level Driver Training (ELDT). Upon completion of the course and passing the road test, students are prepared for an entry-level position in the light trucking industry.

Computer Science

CSCI C252	A/UC/CSU	3.00 Units

Introduction to Computer Science

C-ID: COMP 122 Programming Concepts and Methodology I

Prerequisite: MATH C055
Advisory: IT C101
Repeat Status: Not repeatable
Grading Option: Standard letter with P/NP option

36 hours lecture/54 hours laboratory. This course explores topics that provide students with a foundation in computer science. This course covers the fundamental issues of algorithms, computer

submit for waiver of prerequisites of this course. Must submit experience through counseling for evaluation.
Repeat Status: Not repeatable
Grading Option: Standard letter with P/NP option

This non-credit course is an advanced certificate course for the clinical medical assistant. Students must have practical clinical medical assisting coursework completed or experience to be eligible for enrollment. This advanced course is designed to provide education and training specific to dermatology and aesthetics. Topics include common skin disorders, laser and other light treatments, basal cell carcinomas, minor surgical procedures, chemical peels, and cosmeceuticals.

Health Science

HSCI C101   A/UC/CSU   3.00 Units
Principles of Health Education

Advisory: ENGL C101
Repeat Status: Not repeatable

Grading Option: Standard letter with P/NP option

54 hours lecture. This course addresses contemporary public health issues and examines the development of strategies to live a healthy lifestyle. The course offers an overview of chronic and infectious diseases, injury prevention, chemical dependency, nutrition, body composition, fitness, psychological wellness, fertility awareness, conflict resolution, and life transitions.

Heavy Machinery

HEAV C802   NC   0.00 Units
Forklift Certification

Grading Option: Standard letter with P/NP option

9 hours laboratory. This is a noncredit course. This course is designed to give the student both practical experience and classroom interaction when it comes to the fundamentals of forklift operations. Curriculum follows OSHA guideline 1910-178 forklift, forklift safety, and forklift training, and results in OSHA certification.

History

HIST C103   A/UC/CSU   3.00 Units
Western Civilization - Antiquity to the Renaissance

C-ID: HIST 170 Western Civilization I

Advisory: ENGL C101
Repeat Status: Not repeatable
Grading Option: Standard letter with P/NP option

54 hours lecture. This course covers the growth of European civilization. Social, political, and cultural developments are integrated with the introduction of ideas and institutions basic to the understanding of one's own heritage. This course also covers the development of Western Civilization from the earliest times to the close of the Middle Ages.

HIST C103H   A/UC/CSU   4.00 Units
Western Civilization - Antiquity to the Renaissance: Honors

C-ID: HIST 170 Western Civilization I

Prerequisite: ENGL C101
Limitation on Enrollment: Enrollment in this honors course is limited to students enrolled in the associated course. Students will be required to read and comprehend challenging materials and analyze in depth a chosen topic appropriate for intensified study and must be able to maintain a minimum standard of coursework at the honors level.
Repeat Status: Not repeatable
Grading Option: Standard letter with P/NP option

72 hours lecture. This course covers the growth of European civilization. Social, political, and cultural developments are integrated with the introduction of ideas and institutions basic to the understanding of one's own heritage. This course also covers the development of Western Civilization from the earliest times to the close of the Middle Ages. The honors course provides more content and requires greater intensity and depth of study than the non-honors course; the honors course also requires at least one extra research assignment.

HIST C104   A/UC/CSU   3.00 Units
Western Civilization - Renaissance to the Modern Era

C-ID: HIST 180 Western Civilization II

Advisory: ENGL C101
Repeat Status: Not repeatable
Grading Option: Standard letter with P/NP option

54 hours lecture. This course covers the growth and development of European Civilization from the Renaissance to the present, integrating social, political, and cultural developments of European and the Western heritage.

HIST C104H   A/UC/CSU   4.00 Units
Western Civilization - Renaissance to the Modern Era: Honors

C-ID: HIST 180 Western Civilization II

Prerequisite: ENGL C101
Limitation on Enrollment: Enrollment in this honors course is limited to students enrolled in the associated course. Students will be required to read and comprehend challenging materials and analyze in depth a chosen topic appropriate for intensified study and must be able to maintain a minimum standard of coursework at the honors level.
Repeat Status: Not repeatable
Grading Option: Standard letter with P/NP option

72 hours lecture. This course covers the growth and development of European Civilization from the Renaissance to the present, integrating social, political, and cultural developments of European and the Western heritage. The honors course provides more content and requires greater intensity and depth of study than the non-honors course; the honors course also requires at least one extra research assignment.

HIST C118   A/UC/CSU   3.00 Units
California History

Advisory: ENGL C101
Repeat Status: Not repeatable
Grading Option: Standard letter with P/NP option

54 hours lecture. The course covers the political, economic, social and cultural development of California from prehistory to the