CERRO COSO
COMMUNITY COLLEGE

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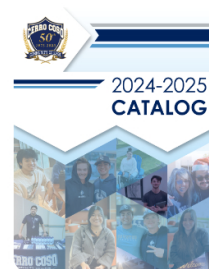Degrees & Certificates

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The 2024-2025 College Catalog is available to students online.

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Catalog Rights

Students graduating within five (5) academic years of initial enrollment shall have the option of completing either: (a) the degree requirements of the College catalog in effect at the time of initial enrollment; or (b) any set of revised degree requirements published in a subsequent Cerro Coso catalog. Students graduating more than five (5) academic years

after initial enrollment must adhere to the specific degree requirements in effect in any Cerro Coso catalog within the five-year period prior to the students' graduation. To maintain catalog rights, the student must maintain continuous enrollment during the five (5) year period. Continuous enrollment means the student must earn a grade of "A", "B", "C", "D", "F", "NP", "P", "I", "IP", "RD", "W", "MW" or "EW" in at least one course each academic year. For the purposes of continuous enrollment, an academic year begins with the Fall semester and includes the following Spring and Summer terms. Petitions for exceptions should be directed to the Vice President of Student Services.

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2023-2024 Catalog Addendum

Cerro Coso Community College

3000 College Heights Blvd.
Ridgecrest, CA 93555

760-384-6100

www.cerrocoso.edu

Cerro Coso Community College is a member
of the Kern Community College District

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its programs, tuitions and fees, admission and graduation
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regulations stated in this catalog without notice.

Publication Staff

Corey Marvin, *Vice President, Instruction*
Steven Bowman, *Graphic Designer*
Jaime McClure, *Instruction Office Specialist*

Accreditation

Cerro Coso Community College is accredited by the

Western Association of Schools and Colleges

and is fully approved by the Board of Governors,

California Community Colleges

and other state and federal agencies.

The University of California,

California State Universities

and other Universities and colleges

grant credit to lower division transfer courses

completed at Cerro Coso Community College.

Table of Contents

Changes are marked with <u>Underlined Red Text</u>.

General Catalog Updates

---Change to Catalog page: 34, under "Additional Policies and Practices"

Added statement: "Cerro Coso Community College is approved by the California State Approving Agency to enroll veterans and other eligible persons. GI Bill(R) is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at **https://www.benefits.va.gov**/gibill."

--- New transferability code added to the "Course Levels and Transfer Codes" (currently page 116) for Baccalaureate-level classes:

B   Applicable to a Baccalaureate program offered by Cerro Coso Community College

Summary of Local GE Revisions

Area 2: Social & Behavioral Science

          Add SOCI C115

Area 6:

          Change from Area 6: Diversity, One of the following courses or any diversity general education class (D).

          Change to Area 6: Ethnic Studies, One of the following courses or any Ethnic Studies general education (E).

          Remove all classes, keeping: ANTH C141, ETHN C141, ETHN C210, and SOCI C210.

New Courses

Child Development

CHDV C133 A/CSU 3.00 Units
Trauma and Early Childhood Development

Advisory: CHDV C104, CHDV C106, ENGL C101, LIBR C100
Repeat Status: Not repeatable
Grading option: Standard Letter Only

54 hours lecture. This course provides an overview of the impact of early childhood traumatic experiences on physical, cognitive, and social-emotional development. Students explore the correlation between socialization and the impact of trauma on the developing child, factors that influence the effects of trauma on the child, and the role of partnering with families in supporting children's overall well-being. Students are required to observe children and/or environments where children are in a group setting.

CHDV C233 A/CSU 3.00 Units
Trauma-informed Care in Early Childhood Education

Advisory: CHDV C100, CHDV C133, ENGL C101, LIBR C100
Repeat Status: Not repeatable
Grading option: Standard Letter Only

54 hours lecture. This course explores the concept of trauma-informed care in early care and education settings. Students investigate how to create safe environments, so children feel comfortable to learn and explore, with special attention given to room design, materials, and routines. The course provides clear strategies for building trusting relationships with children and families. Students are required to observe children and/or environments where children are in a group setting.

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.

English

ENGL C301 B 4.00 Units
Technical Writing for Professionals

Limitations on Enrollment: Acceptance into a Bachelor's program at Cerro Coso.
Prerequisite: ENGL C101
Repeat Status: Not repeatable
Grading option: Standard Letter Only

72 hours lecture. This is an upper-division general education course designed to introduce students to the study of technical writing and written communication within specific professional discourse communities. Specifically, the course focuses on the practice and study of different types of discourse, cyber and otherwise, employed in a variety of workplace situations and helps prepare students for various kinds of technical writing, such as audience-driven or context-sensitive texts. To that end, students examine rhetorical issues related to documents found and used in professional contexts, particularly how differing rhetorical situations alter purpose, audience, writer, and text. Additionally, through the rhetorical process, students discover, examine, and respond to various formats with detail, precision, and clarity to produce technical and business-related documents. Finally, throughout the course, students engage in the writing process, including invention activities, drafting, revising, peer evaluation, group discussions, editing, and project collaboration.

ENSL C801 NC 0.00 Units
ESL: Reading and Writing for the Workforce

Repeat Status: Repeatable
Grading option: P/NP only

54 hours lecture. This is a non-credit course. This course covers communication skills for the workplace for English as a Second Language (ESL). Using both spoken and written drills and exercises, students learn and practice the reading and writing skills necessary for a workplace environment. Cultural, sociolinguistic, and non-verbal communication strategies and norms for a U.S. workplace setting are identified, analyzed, and practiced.

ENSL C802 NC 0.00 Units
ESL: Listening and Speaking for the Workforce

Repeat Status: Repeatable
Grading option: P/NP only

54 hours lecture. This is a non-credit course. This course covers communication skills for the workplace for English as a Second Language (ESL). Using both spoken and written drills and exercises, students learn and practice the listening and speaking skills necessary for a workplace environment. Cultural, sociolinguistic, and non-verbal communication strategies and norms for a U.S. workplace setting are identified, analyzed, and practiced.

Fire Fighter Technology

FFT C070 A 0.25 Units
Advanced Incident Command Systems

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

4 hours lecture/4 hours laboratory. This course is the second of the Incident Command System (ICS) courses and includes higher-level ICS training for leadership positions. This course describes the history, features, principles, and organizational structure of the Incident Command System. It also explains the relationship between ICS and the National Incident Management System (NIMS) for integrated systems command.

FFT C072 A 1.00 Unit
Portable Pumps and Water Use

Advisory: FFT C054
Repeat Status: Not repeatable
Grading option: P/NP only

16 hours lecture/4 hours laboratory. This course provides knowledge and skills to design, set up, operate, troubleshoot, and shut down portable water delivery systems. It meets National Wildfire Coordinating Group (NWCG) S-211 course requirements. Topics include portable water delivery systems, equipment, roles

and responsibilities, and system design and hydraulics. The course includes a field exercise in which students apply concepts learned in the classroom

FFT C073   A   1.00 Unit
Wildland Fire Chainsaw

Advisory: FFT C050, FFT C051, FFT C052, FFT C053, FFT C054
Repeat Status: Not repeatable
Grading option: P/NP only

20 hours lecture/10 hours laboratory. The course provides an introduction to the function, maintenance, and use of internal combustion engine powered chainsaws and their tactical wildland fire application. Field exercises support entry-level training for firefighters with little or no previous experience in operating a chainsaw, providing hands-on cutting experience in surroundings similar to fireline situations. This course meets the requirements of S-212 by National Wildfire Coordination Group.

FFT C074   A   1.00 Unit
Advanced Firefighter Training

Prerequisite: FFT C054
Repeat Status: Not repeatable
Grading option: P/NP only

8 hours lecture/8 hours laboratory. This course is designed to satisfy the National Wildfire Coordination Group (NWCG) requirements of S-131. The intent of this course is to train experienced firefighters in the advanced skills needed to perform fire suppression and fuel management duties in adverse climate, fuel, and terrain conditions. This course aligns with the NWCG Incident Position Descriptions (IPDs) that serve as the single authoritative source for the essential duties and responsibilities of an NWCG incident position. IPDs ensure the connection between the position and established operational standards.

Health Careers

HCRS C060   A   3.50 Units
Certified Phlebotomy Technician

Limitations on Enrollment: Immunizations necessary for clinical rotations as outlined by CDPH.
Repeat Status: Not repeatable
Grading option: Standard letter with P/NP option

45 hours lecture/54 hours laboratory. This course is designed to train individuals to properly collect and process blood and other clinical specimens for laboratory testing and to interact with health care personnel, clients, and the general public. The program encompasses emerging and innovative technology in preparation for a healthcare career as a phlebotomy technician. The curriculum is designed to meet the standards established by the California Department of Public Health, Laboratory Field Services, Clinical Laboratory Improvements Act 88 (CLIA), Clinical Laboratory Standards Institute (CLSI), OSHA, and Joint Commission Review Committee.

HCRS C147X   A   3.00 Units
Dermatology Assistant

Prerequisite: HCRS C136, HCRS C137, HCRS C138, HCRS C139
Advisory: HCRS C143
Repeat Status: Not repeatable
Grading option: Standard letter with P/NP option

54 hours lecture. This 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.

HCRS C810   NC   0.00 Units
Introduction to Public Health

Repeat Status: Repeatable
Grading option: Ungraded

54 hours lecture. This course provides an overview of the field of public health, including core public health concepts and evidence-based approaches to understanding the role of public health in society, and the importance of prevention in promoting and protecting community health. Students learn about the interdisciplinary nature of the field of public health through an introduction to the basic principles and functions of social and behavioral health, environmental health, health policy, epidemiology, and biostatistics.

Information Technology

IT C121   A/CSU   3.00 Units
Microsoft Word

C-ID: BSOT 111 X MS Word I, BSOT 121 X MS Word II

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

36 hours lecture/54 hours laboratory. This course provides the learner with skills in word processing with Microsoft Word including document creation, formatting, editing, and inserting illustrations; table creation and formatting; using themes, styles, templates, and micros; and managing resources and using office collaborative features.

IT C123   A/CSU   3.00 Units
Microsoft Excel

C-ID: BSOT 112 X MS Excel I, BSOT 122 X MS Excel II

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

36 hours lecture/54 hours laboratory. This course provides understanding of Microsoft Excel features with spreadsheet design, creation, revision, formatting, and printing a workbook. Basic and intermediate formulas, functions, and syntax are introduced along with charts and graphs. The course also covers data analysis, multiple worksheets and functions, pivot tables, conflict resolution, change-tracking, data validation, chart formatting, template usage, and macro-operation.

IT C125   A/CSU   3.00 Units
Microsoft Access

C-ID: BSOT 113 X MS Access I, BSOT 123 X MS Access II

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

36 hours lecture/54 hours laboratory. This hands-on computer course provides a beginning understanding of databases using the Microsoft Access database management program. Topics include fundamental relational database design and management as well as building and editing basic tables, forms, queries, and reports.

IT C127 — A/CSU — 3.00 Units
Microsoft PowerPoint

C-ID: BSOT 114 X MS PowerPoint I, BSOT 124 MS PowerPoint II

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

36 hours lecture/54 hours laboratory. This course provides the learner with experience in planning, creating, editing, viewing, and printing PowerPoint presentations. Included is the development of skills to add and modify text, photographs, graphics, charts, audio, video, transitions, animations, templates, and speaker notes. Students also acquire skills in recording and delivering presentations effectively and collaborating with others about the content of a presentation.

IT C130X — A — 3.00 Units
Professional Information Management Tools

C-ID: BSOT 106 X MS Outlook

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

36 hours lecture/54 hours laboratory. This course provides the learner with skills in using and integrating Microsoft Outlook, Microsoft OneNote, Teams, Google applications, Google Drive, SharePoint, Smartsheet, and other cloud computing tools for the purpose of enhancing productivity in the business and information technology environment. Learners develop skills in evaluating which tool(s) are appropriate to meet a specific objective or solve a particular problem.

IT C135 — A/CSU — 2.00 Units
Adobe Acrobat

C-ID: BSOT 125 X Adobe Acrobat

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

18 hours lecture/54 hours laboratory. This course provides the learner with skills in creating, editing, combining, organizing, and protecting Portable Document Format (PDF) files. Students learn how to convert a PDF document into a fillable form, prepare for signatures, solicit comments, scan for optical character reading, and evaluate for accessibility. The course also discusses the role of PDF documents in the business environment

IT C257 — A/CSU — 3.00 Units
Computer Forensics Fundamentals

C-ID: ITIS 165: Digital Forensics Fundamentals

Prerequisite: IT C101, IT C142, IT C143, IT C146
Repeat Status: Not repeatable
Grading option: Standard letter with P/NP option

36 hours lecture/54 hours laboratory. This course is an introduction to the methods used to properly conduct a computer forensics investigation beginning with a discussion of ethics, while mapping to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Topics include an overview of computer forensics as a profession, the computer investigation process, operating systems' boot processes and disk structures, data acquisition and analysis, technical writing, and review of familiar computer forensics tools.

IT C260X — A — 3.00 Units
IT Professional

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

36 hours lecture/54 hours laboratory. This is a capstone course that provides students with skills to enter the workforce and be successful in an organization. Students focus on the preparation of job applications, as well as interviewing for employment in a business environment. Types of business organizations, cultures, procedures, processes, chain of command, communication, and ethics are explored to provide students with the soft skills to be successful once on the job.

IT C320 — B — 3.00 Units
Systems Logs and Event Management

Prerequisite: IT C101, IT C146, IT C248
Limitations on Enrollment: Acceptance to Bachelor of Science in Cyber Security Degree and completion of prerequisites
Repeat Status: Not repeatable
Grading option: Standard letter with P/NP option

36 hours lecture/54 hours laboratory. This course develops familiarity with security information and event management (SIEM) tools, processes, and techniques and their role in securing business systems. Focus is on deploying log and event management tools along with understanding the sources for proper cybersecurity analysis. Students develop a deeper understanding of the data collected with a real-world emphasis on extraction of actionable event intelligence.

IT C330 — B — 3.00 Units
Network and Systems Security

Limitations on Enrollment: Acceptance to Bachelor of Science in Cyber Security Degree
Repeat Status: Not repeatable
Grading option: Standard letter only

36 hours lecture/54 hours laboratory. This course prepares the student to pass the Microsoft AZ-800: Administering Windows Server Hybrid Core Infrastructure certifications. This course also provides the knowledge required to secure networks and the systems that run over the network, focusing on access and system hardening. This course also covers security in the Cloud as well as working with Microsoft Azure and Active Directory.

IT C350 — B — 3.00 Units
Windows Forensics

Limitations on Enrollment: Acceptance to Bachelor of Science in Cyber Security Degree and completion of prerequisites
Prerequisite: IT C255, IT C257
Repeat Status: Not repeatable
Grading option: Standard letter only

36 hours lecture/54 hours laboratory. This is an in-depth course in computer forensics for the Windows family of operating systems. Students learn to triage a running Windows computer for evidence of malicious behavior, analyze the File Allocation Table (FAT) and New Technology File System (NTFS) filesystems,

and identify and analyze a variety of forensic artifacts. Emphasis is placed on evidence types and locations related to incident response including Windows event logs and artifacts of program execution.

IT C400　　　　　B　　　　　3.00 Units
Cyber Incident Response

Limitations on Enrollment: Acceptance to Bachelor of Science in Cyber Security Degree.
Prerequisite: IT C320, IT C330
Repeat Status: Not repeatable
Grading option: Standard letter only

36 hours lecture/54 hours laboratory. This course places an emphasis on multiple aspects of cyber security and incident response. Topics include foundational areas of risk management, detection and response, and disaster recovery, reinforcing key concepts of cyber security governance and applying the appropriate knowledge and skillset as required by an incident handler. This course will include up-to-date information from the National Institute of Science and Technology, as well as international standards from the International Organization of Standardization.

IT C420　　　　　B　　　　　3.00 Units
Operational Security Architecture

Limitations on Enrollment: Acceptance to Bachelor of Science in Cyber Security Degree.
Repeat Status: Not repeatable
Grading option: Standard letter only

36 hours lecture/54 hours laboratory. In this course, emphasis is placed on advanced technical skills and knowledge to implement, monitor, and secure technology infrastructure. Topics include security operations and administration, access controls, risk identification, monitoring and analysis, incident response and recovery, cryptography, network and communications security, and systems and application security. This course is aligned with the (ISC)2 Systems Security Certified Practitioner (SSCP) certification.

IT C430　　　　　B　　　　　3.00 Units
Cyber Threat Intelligence

Limitations on Enrollment: Acceptance to Bachelor of Science in Cyber Security Degree.
Prerequisite: IT C400
Repeat Status: Not repeatable
Grading option: Standard letter only

54 hours lecture. This course covers basic principles of cyber threat intelligence such as the intelligence lifecycle, requirements, collection and sources, and types of intelligence. Students develop an understanding of tactical, operational, and strategic threat intelligence. Cyber threat intelligence is explored within the context of threat modeling, the cyber kill chain, and the MITRE ATT&CK Framework. Emphasis is placed on intelligence terminology, concepts, and application of threat intelligence to incident response, security operations, and preventative controls. Topics include planning and requirements development, threat actors, threat modeling, analysis of incident data, and acting on threat intelligence to improve cyber security.

IT C450　　　　　B　　　　　3.00 Units
System and Network Auditing

Limitations on Enrollment: Acceptance to Bachelor of Science in Cyber Security Degree.
Prerequisite: IT C101, IT C146, IT C248
Repeat Status: Not repeatable
Grading option: Standard letter only

36 hours lecture/54 hours laboratory. This course develops familiarity with system and network auditing tools, processes, and techniques to develop and implement an audit analytics strategy. Focus is on applying risk analysis techniques to be able to conduct technical audits of information systems. Students develop a deeper understanding of thedata analytics and continuous monitoring of networks and information systems.

IT C460　　　　　B　　　　　3.00 Units
Enterprise Security Architecture

Limitations on Enrollment: Acceptance to Bachelor of Science in Cyber Security Degree.
Prerequisite: IT C330
Repeat Status: Not repeatable
Grading option: Standard letter only

54 hours lecture. This course focuses on the enterprise security architecture used in military and government organizations. The emphasis is on identifying and managing enterprise information technology (IT) risk and implementing and maintaining information security controls. Topics include the Risk Management Framework (RMF), enterprise security architecture and operations, integration of enterprise security, and research, development, and collaboration methodologies.

IT C470　　　　　B　　　　　3.00 Units
Penetration Testing

Limitations on Enrollment: Acceptance to Bachelor of Science in Cyber Security Degree.
Prerequisite: IT C255, IT C330, IT C350
Repeat Status: Not repeatable
Grading option: Standard letter only

36 hours lecture/54 hours laboratory. This course provides training that prepares the student to pass the CompTIA PenTest+ certification, as well as have the knowledge and skills to plan and scope a penetration testing engagement, including vulnerability scanning, while understanding the legal and compliance requirements. With this knowledge, the student analyzes the information and writes a written report, effectively communicating the results of the engagement.

IT C480　　　　　B　　　　　3.00 Units
Cloud Security

Limitations on Enrollment: Acceptance to Bachelor of Science in Cyber Security Degree.
Prerequisite: IT C280
Repeat Status: Not repeatable
Grading option: Standard letter only

36 hours lecture/54 hours laboratory. This course is designed to help students gain an intermediate knowledge of cyber security principles and services for cloud computing through a guided, hands-on approach. Topics include cloud security design, implementation, architecture, operations, controls, and compliance with regulatory frameworks. This course includes demonstrations, instructional guides, and real-life scenarios.

Paralegal Studies

PARA C300   B   3.00 Units
Law and Ethics in Cyber Security

Limitations on Enrollment: Acceptance to Bachelor of Science in Cyber Security Degree.
Prerequisite: IT C101, IT C146, IT C255
Repeat Status: Not repeatable
Grading option: Standard letter only

54 hours lecture. This course focuses on ethical theory and professional ethics in cyber security. Topics include relativism, utilitarianism, and deontological theories; methods and tools for analysis in ethical arguments; legal bases for the right to privacy and freedom of expression; and various legislation and regulations that impact the Internet and cyber technology.

Psychology

PSYC C300   B   3.00 Units
Industrial and Organizational Psychology

Prerequisite: PSYC C101
Advisory: ENGL C101
Repeat Status: Not repeatable
Grading option: Standard letter only

54 hours lecture. This course introduces students to the application of psychological principles and theories to the workplace. This includes an introduction to the methods, practices, research, and theories necessary to the scientific study of the attitudes and behaviors of employees and employers; interpersonal relationships in the workplace; the structure of organizations and organizational policies; the complex processes of motivation and leadership; individual and organizational performance; and the match between people and jobs.

Sociology

SOCI C115   A/UC/CSU   3.00 Units
Social Issues and Action in American Society

C-ID: SOCI 115 Social Problems

Advisory: ENGL C101, LIBR C100
Repeat Status: Not repeatable
Grading option: Standard letter with P/NP option

54 hours lecture. This course teaches identification and analysis of contemporary social problems in the United States, including the role of power and ideology in the definition of social problems, their causes and consequences, evaluations of proposed solutions, and methods of intervention. Approved for Local GE Area 2.

Revised Courses

Modifications in course name or number, title, unit value, prerequisite, repeat status, hours, or general education applicability

Addiction Studies

ADST C110X   A   4.50 Units
Addiction Studies Field Experience

C-ID: ADS 200 X Field Work/Internship in Addiction Studies

Prerequisite: ADST C101, ~~ADST C102X, ADST C103X, ADST C104X,~~ ADST C105X, ADST C106X, ~~ADST C107X,~~ ADST C108X, ADST C109X
Corequisite: ADST C111X
Repeat Status: Not repeatable
Grading option: Standard letter only

255 hours laboratory. This course provides experience in the field of addiction counseling, enabling students to practice skills they have learned. Supervised field experience in a community organization, agency, or institution allows students to apply knowledge and learn new skills outside of the classroom environment. This course is designed to provide students with an opportunity to develop skills that would facilitate gaining employment in the addiction or human services field. Minimum of 255 hours of field experience. (Note: more hours may be required if student is paid). Participation in a placement setting requires drug and background screening.

ADST C111X   A   2.50 Units
Addiction Studies Field Experience Seminar

C-ID: ADS 210 X Addiction Studies Field Experience Seminar

Prerequisite: ADST C101, ~~ADST C102X, ADST C103X, ADST C104X,~~ ADST C105X, ADST C106X, ~~ADST C107X,~~ ADST C108X, ADST C109X
Corequisite: ADST C110X
Repeat Status: Not repeatable
Grading option: Standard letter only

45 hours lecture. This course is a study of substance use disorder treatment with an emphasis on developing the skills and abilities of the student-as-intern. Emphasis is placed on supporting students enrolled in an addiction studies internship. Throughout this course, students engage in critical analysis of their strengths and weaknesses as interns and as potential professionals in the field. Students must be accepted for an internship at an approved substance abuse treatment facility. This course is intended for students only in their final semester of an Addiction Counseling Studies program. Students are expected to create a weekly journal reflecting feedback, issues, and concerns arising during the fieldwork experience, as well as a final reflective essay.

Chemistry

CHEM C221   A/UC/CSU   5.00 Units
Organic Chemistry

C-ID: CHEM 150 Organic Chemistry for Science Majors I, with Lab
C:ID: CHEM 160 S Organic Chemistry for Science Majors Sequence A

Prerequisite: CHEM ~~C111~~ C113 OR C113H
Repeat Status: Not repeatable
Grading Option: Standard letter with P/NP option

72 hours lecture/54 hours laboratory. This course covers structure and bonding, polar bonds, alkanes, cycloalkanes, stereochemistry, synthesis, structure and reactivity of alkenes, synthesis, structure and reactivity of alkynes, handedness in chemistry, synthesis, structure and reactivity of alkyl halides, carbocations, the concept of resonance, nucleophilic substitutions and eliminations, basic biochemistry, mass spectrometry, infrared, nuclear magnetic resonance and ultraviolet spectroscopy and aromaticity. This Organic Chemistry I course is taught according to standards developed by the American Chemical Society. Approved for IGETC Area 5A & 5C, CSU GE Area B1 & B3, Local GE Area 1.

English

ENGL C101   A/UC/CSU   4.00 Units
Freshman Composition

C-ID: ENGL 100 College Composition

Prerequisite: Eligibility for college-level composition as determined by placement through high school transcript information OR skills equivalent to those taught in ENGL C070.
Repeat Status: Not repeatable
Grading option: Standard letter with P/NP option

72 hours lecture. This introductory course offers instruction in expository and argumentative writing, appropriate and effective use of language, close reading, cogent thinking, research strategies, information literacy, and documentation. Students critically read and write primarily expository and argumentative texts that respond to a variety of rhetorical situations and contexts and incorporate college-level research. Reading selections include a group of culturally diverse writers. (Total: 5,000 words).

Ethnic Studies

ETHN C151   A/UC/CSU   3.00 Units
Perspectives on Race and Ethnicity

Advisory: ENGL C101, LIBR C100
Repeat Status: Not repeatable
Grading option: Standard letter with P/NP option

54 hours lecture. In this multidisciplinary course, students apply critical reasoning skills to the analysis of race, ethnicity, and racism. The course covers the cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, including white supremacy, colonialism, eurocentrism, equity, self-determination, and liberation. Through multiple and varied readings and knowledge produced by Native American, African American, Asian American, and Latina and Latino American communities, students discover the interrelatedness of concepts such as race, class, and gender, as well as the roots and future of our "melting pot" society. This course is cross-listed with SOCI C151. Approved for IGETC Area 4, CSU GE Area D, Local GE Area 2 or 3~~, & 6.~~

Ethnic Studies

ETHN C151   A/UC/CSU   3.00 Units
Perspectives on Race and Ethnicity

Advisory: ENGL C101, LIBR C100
Repeat Status: Not repeatable
Grading option: Standard letter with P/NP option

54 hours lecture. In this multidisciplinary course, students apply critical reasoning skills to the analysis of race, ethnicity, and racism. The course covers the cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, including white supremacy, colonialism, eurocentrism, equity, self-determination, and liberation. Through multiple and varied readings and knowledge produced by Native American, African American, Asian American, and Latina and Latino American communities, students discover the interrelatedness of concepts such as race, class, and gender, as well as the roots and future of our "melting pot" society. This course is cross-listed with SOCI C151. Approved for IGETC Area 4, CSU GE Area D, Local GE Area 2 or 3, & 6.

Health Careers

HCRS C142   A/CSU   1.50 Units
Administrative Medical Assistant Externship

Prerequisite: HCRS C133, HCRS C134, HCRS C135 or concurrent enrollment
Repeat Status: Not repeatable
Grading option: P/NP only

90 hours volunteer work experience. This course is a practical application of the theory and skills learned in the classroom. The student participates in front office procedures in a virtual clinic performing the duties of a front office medical assistant in a simulated environment. (Formerly Medical Assistant Administrative Externship)

Physical Science

PHSC C101   A/UC/CSU   3.00 Units
General Earth Sciences Lecture

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

54 hours lecture. This lecture course covers the study of the Earth as an integrated system, including Earth surface processes, tectonics and mountain building, surface water and groundwater, Earth-Sun relationships and motions, weather, climatic types, soil types, natural hazards, resource management, landforms, and the ocean. An emphasis is placed on understanding geologic issues important to society. Not open to students who have completed PHSC C105. Approved for IGETC Area 5A, CSU GE Area B1, Local GE Area 1.

Sociology

SOCI C151   A/UC/CSU   3.00 Units
Perspectives on Race and Ethnicity

C-ID: SOCI 150 Introduction to Race and Ethnicity

Advisory: ENGL C101, LIBR C100

Repeat Status: Not repeatable
Grading option: Standard letter with P/NP option

54 hours lecture. In this multidisciplinary course, students apply critical reasoning skills to the analysis of race, ethnicity, and racism. The course covers the cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, including white supremacy, colonialism, eurocentrism, equity, self-determination, and liberation. Through multiple and varied readings and knowledge produced by Native American, African American, Asian American, and Latina and Latino American communities, students discover the interrelatedness of concepts such as race, class, and gender, as well as the roots and future of our "melting pot" society. This course is cross-listed with ETHN C151. Approved for IGETC Area 4, CSU GE Area D, Local GE Area 2 or 3, & 6.

Speech

SPCH C101   A/UC/CSU   3.00 Units
Elements of Speech

C-ID: COMM 110 Public Speaking

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

54 hours lecture. In this speech course for transfer to four-year institutions, students learn to make effective oral presentations by gathering and selecting information, arranging materials, analyzing audience and occasion, and controlling expression and delivery. Approved for IGETC Area 1C, CSU GE Area A1.

Social Work and Human Services

SWHS (formerly HMSV) C102   A/CSU   3.00 Units
Cultural Competence in Social Work and Human Services

Advisory: ENGL C040 C101
Repeat Status: Not repeatable
Grading option: Standard letter with P/NP option

54 hours lecture. This course explores the themes of dominant culture and subcultures in relation to social work and human services, with special emphasis on the cultural complexities of individuals and communities and culturally skillful interventions. Previous title: HMSV C102 Cultural Competence in Human Services. Approved for Local GE Area 6.

SWHS (formerly HMSV) C116   A/CSU   3.00 Units
Case Management

Advisory: ENGL C070 C101
Repeat Status: Not repeatable
Grading option: Standard letter with P/NP option

54 hours lecture. This course introduces students to the different models of case management in the social work and human services field, the core skills which make up case management, the decision-making processes of case management, and the role of the case manager as a social work and human services worker and collaborator with other persons, human services agencies, and organizations.

Re-added Courses

Administration of Justice

ADMJ C062   A   1.00 Unit

Special Topics in Administration of Justice

Repeat Status: Not repeatable

This is a 1 unit course with variable hours: 0-18 hours lecture/0-54 hours laboratory. This course is designed to update current peace officers training with current laws, procedures, and practices. This course does not fulfill core or elective requirements for a certificate or degree in the field of Administration of Justice.

ADMJ C063   A   0.50 Units

Special Topics in Administration of Justice

Repeat Status: Not repeatable

This is a 0.50 unit course with variable hours: 0-9 hours lecture/0-27 hours laboratory. This course is designed to update current peace officers training with current laws, procedures, and practices. This course does not fulfill core or elective requirements for a certificate or degree in the field of Administration of Justice.

Minor Course Edits

ADST C108X	Case Management ~~of~~ in Addiction Counseling
CHDV C205	~~Care and Education for Infants and Toddlers~~ Infant and Toddler Curriculum
CHEM C223H	Organic Chemistry II~~: Honors Undergraduate Laboratory Research~~ – Honors
ENGL C221H	World Literature: Antiquity to 17th Century~~:~~ - Honors
ENGL C222H	World Literature: 17th Century to Present~~:~~ - Honors
HCRS C134	~~Basic~~ Medical Insurance and Billing
HIST C131H	History of the ~~U.S.~~ United States to 1877: Honors
SWHS C102	Cultural Competence in Social Work and Human Services

Deleted Courses

HMSV C113	Case Management

New Programs

Nutrition and Dietetics Associate of Science Degree for Transfer (AS-T)

The Associate of Science Degree for Transfer in Nutrition and Dietetics (60 units total, 23-26 in the major) is designed to prepare students for transfer to baccalaureate institutions. Upon successful completion of the program students will be able to identify the macronutrients and major micronutrients, their main sources, functions, and signs of toxicity and deficiency; evaluate safety and sanitation practices and appropriate techniques in the preparation and cooking of a variety of foods; describe applied areas of psychology, including clinical counseling and community, organization, and school health; and explain the driving force behind chemical bonding, be able to classify bonds as ionic, covalent or both, apply bonding theories to predict structure and properties of substances.

These skills can be applied to careers in the fields of nutrition science, medical nutrition therapy, community nutrition, or food management and production.

To complete the degree, students must fulfill the following requirements:

1. Completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:

   a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth requirements.

   b. A minimum of 18-semester units in a major, as determined by the Kern Community College District Board of Trustees.

2. Obtainment of a minimum grade point average of 2.0.

3. Completion of all courses for the major with a "C" or better. A "P" (Pass) grade is not an acceptable grade for courses in the major.

Program Learning Outcomes

Upon successful completion of the program, the student will be able to:

- Identify the macronutrients and major micronutrients, their main sources, functions, and signs of toxicity and deficiency.
- Evaluate safety and sanitation practices and appropriate techniques in the preparation and cooking of a variety of foods.
- Describe applied areas of psychology, including clinical counseling and community, organization, and school health.
- Explain the driving force behind chemical bonding, be able to classify bonds as ionic, covalent or both, apply bonding theories to predict structure and properties of substances.
- Compare and contrast different mechanisms used by various pathogens to invade host organ systems and cause disease.
- Apply concepts of anatomy, physiology, chemistry, or statistics.

Courses

Required Core (16-17): Complete all of the following courses:

CHEM C111	General Inorganic Chemistry I	5 Units
HCRS C121	Nutrition	3
BIOL C262	General Microbiology	5
PSYC C101H	General Psychology: Honors	4
or PSYC C101	General Psychology	3

LIST A: Select at least 1 course (4-6 units) from the following:

CHEM C221	Organic Chemistry I	5 Units
BIOL C255	Human Physiology	4
BIOL C251	Human Anatomy	4
CHEM C113	General Inorganic Chemistry II	5
or CHEM C113H	General Inorganic Chemistry II: Honors Undergraduate Laboratory Research	6
MATH C121	Elementary Probability and Statistics	4
or MATH C121H	Elementary Probability and Statistics - Honors	5

LIST B: Select at least 1 course (3 units) from the following:

HCRS C122	Principles of Food Preparation	3 Units

Revised Programs

Child Development Master Teacher Certificate of Achievement

The Child Development Master Teacher Certificate of Achievement (33 units) is designed to provide students with a complete educational foundation to work as a curriculum specialist with children in a group setting and includes required classes in the core areas (development; child, family, and community; curriculum); six specialization units in the curriculum area of the student's choice, and adult supervision units.

The California Child Development Permit Matrix requirements are reflected in our program allowing students to qualify for the permits required or for teaching in programs governed by Title V and funded by contracts with the State of California. Permits are issued by the State Department of Education, California Commission on Teacher Credentialing (not Cerro Coso) and include Assistant Teacher, Associate Teacher, Teacher, Master Teacher, and Site Supervisor Permits.

All professionals working with children are required to have a clean criminal record, to demonstrate freedom from tuberculosis (TB), and to demonstrate the physical ability to perform all of the duties of a professional position working directly with children.

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:

- Examine teaching and care practices that provide a developmentally appropriate program to support children's growth, development, and learning.
- Identify one's own values, experiences, and philosophies and how they guide and inform practice.
- Integrate understandings of children's development and needs to maintain healthy, safe, supportive, and challenging learning environments that demonstrate culturally relevant, inclusive, age-appropriate, and anti-bias approaches respectful of children, families, and early learning professionals.
- Develop professional expertise in a specialized area of knowledge.

Courses

Note: Some courses within the major may have a required prerequisite. The requirements for this program are complex. You MUST meet with a Child Development faculty member, or a counselor.

Required Core (24): Complete all of the following courses:

CHDV C100	Principles and Practices of Teaching Young Children	3 Units
CHDV C102	Introduction to Materials and Curriculum	3
CHDV C104	Child, Family, and Community	3
CHDV C106	Child, Growth, and Development	3
CHDV C121	Health, Safety, and Nutrition	3
CHDV C125	Diversity in Education	3
CHDV C200	Observation and Assessment	3
CHDV C203	Practicum - Field Experience	3

Required Courses (8):

CHDV C281	Adult Supervision	3 Units

Complete 6 units in one of the following specializations:

Infant ~~Care~~ Toddler Specialization

CHDV C105	Infant and Toddler Development	3 Units
CHDV C205	~~Care and Education for Infants and Toddlers~~ Infant and Toddler Curriculum	

School Age Specialization

CHDV C107	School Age Development	3 Units
CHDV C207	School Age Curriculum	3

~~Children with Exceptional~~ Special Needs Specialization

CHDV C141	Introduction to Children with Special Needs	3 Units
CHDV C241	Curriculum and Strategies for Children with Special Needs	3

Curriculum Specialization

CHDV C111	Principles of Child Guidance	3 Units
CHDV C145	Language and Literature	3
or CHDV C149	Play and Meaning	3

Dual Language Learner Specialization

CHDV C156	Introduction to Dual Language in Early Childhood	3 Units
CHDV C256	Strategies and Curriculum for Dual Language Learners in Early Childhood	3

Trauma Informed Care Specialization

CHDV C133	Trauma and Early Childhood Development	3 Units
CHDV C233	Trauma-Informed Care in Early Childhood Education	3

Total Units 33

Permit

STATE OF CALIFORNIA CHILD DEVELOPMENT PERMIT: The California Commission on Teacher Credentialing grants permits in accordance with the Child Development Permit Matrix. Applications are separate from Cerro Coso Community College and must be submitted to California Commission on Teacher Credentialing. Contact any Child Development faculty member or visit the California Commission on Teacher Credentialing website http://www.ctc.ca.gov for more information regarding the Permit Matrix and Professional Growth Advisors. For all Permits, all course work must be completed with a grade of "C" or better.

Master Teacher Permit: 24 units ECE/CD including core courses, plus 2 units Adult Supervision plus 6 specialization units, plus experience of 350 days of 3+ hours per day within 4 years plus 16 general education units in English/Language Arts, Math/Science, Social Sciences, and Humanities/Fine Arts.

Cyber Security Associate of Science (AS)

The Cyber Security Associate in Science Degree (60 units total, 31 units in the major) prepares students for careers as information assurance technicians, information security analysts, network security professionals and cyber security technicians. Designed for both full-time and part-time students, this program is appropriate to both those currently employed and those seeking to enter the field. This degree program is also transferable to California State University at San Bernardino. Courses required for the major at Cerro Coso Community College may not be the same as those required for the major at a four-year school. Students who plan to transfer should consult a counselor or advisor and http://www.assist. org/ to identify the courses needed for the major at the transfer school and to develop an educational plan. Students 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. Completion of the Cerro Coso local general education pattern does not prepare students for transfer. Students should consult with a counselor or educational advisor regarding general education options. 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.

Program Learning Outcomes

Upon successful completion of the program, the student will be able to:

- Configure, install, diagnose, and support hardware and software issues.
- Utilize identifying tools and methodologies that hackers use to break into a network computer and defend a computer and local area network against a variety of different types of security attacks using a number of hands-on techniques.
- Design, analyze, and support computer networks.
- Apply problem solving, programming, and application development including the ability to design, test, debug, and implement complex computer programs.
- Operate servers, storage, and virtualization including implementing and evaluating network security solutions.
- Read and interpret technical information, as well as communicate with and write clearly for wide ranges of audiences.

Required Courses:

IT C101	Introduction to Computer Information Systems	3 Units
IT C142	Information & Communication Technology Essentials	4
IT C143	Computer Network Fundamentals	3
IT C146	Introduction to Information Systems Security	3
IT C248	System and Network Administration	3
IT C251	Introduction to Programming Concepts and Methodologies	3

IT C255	Introduction to Cybersecurity: Ethical Hacking	3
IT C257	Computer Forensics Fundamentals	3
IT C259	Introduction to Systems Analysis and Design	3
IT C260X	IT Specialist Professional	3

Total Units 31

Complete one of the following courses:

MATH C121	Elementary Probability and Statistics	4 Units
or MATH C121H	Elementary Probability and Statistics: Honors	5
MATH C130	Finite Mathematics	4
MATH C131	Basic Functions and Calculus for Business.	4

Complete one of the following general education patterns:

OPTION A	Cerro Coso Local General Education Pattern
OPTION B	CSU General Education Breadth
OPTION C	IGETC - Intersegmental General Education Transfer Curriculum

Cyber Security Certificate of Achievement

The Cyber Security Certificate of Achievement (31 units) is designed to develop skills for information security for business. Upon completion of this certificate, students will be able to enter the job market as information assurance technicians, information security analysts, network security professionals and cyber security technicians. Designed for both full-time and part-time students, this certificate is appropriate to both those currently employed and those seeking to enter the field.

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:

- Configure, install, diagnose, and support hardware and software issues.
- Utilize identifying tools and methodologies that hackers use to break into a network computer and defend a computer and local area network against a variety of different types of security attacks using a number of hands-on techniques.
- Design, analyze, and support computer networks.
- Apply problem solving, programming, and application development including the ability to design, test, debug, and implement complex computer programs.
- Operate servers, storage, and virtualization including implementing and evaluating network security solutions.
- Read and interpret technical information, as well as communicate with and write clearly for wide ranges of audiences.

Required Courses:

IT C101	Introduction to Computer Information Systems	3 Units
IT C142	Information & Communication Technology Essentials	4
IT C143	Computer Network Fundamentals	3

IT C146	Introduction to Information Systems Security 3
IT C248	System and Network Administration.........3
IT C251	Introduction to Programming Concepts and Methodologies...3
IT C255	Introduction to Cybersecurity: Ethical Hacking..3
IT C257	Computer Forensics Fundamentals 3
IT C259	Introduction to Systems Analysis and Design 3
IT C260X	IT Specialist Professional............................3

Total Units 31

Information Technology Associate of Science (AS)

Information Technology Associate of Science (60 units total, 28 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 major at Cerro Coso Community College may not be the same as those required for the major at a four-year school. Students who plan to transfer should consult a counselor or advisor and **http://www.assist.org/** to identify the courses needed for the major at the transfer school and to develop an education plan.

Students 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.

Completion of the Cerro Coso local general education pattern does not prepare students for transfer. Students should consult with a counselor or educational advisor regarding general education options.

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:

- Configure, install, diagnose, and support hardware and software issues related to client and user needs.
- Design, implement, query, and manage relational databases.
- Design, analyze, and support computer networks.
- Execute problem-solving, programming, and application development including the ability to design, test, debug, and implement complex computer programs.
- Implement and evaluate network security solutions for servers, storage, and virtualization.
- Read, analyze, and evaluate technical information to communicate appropriately for internationally and culturally diverse communities and business cultures.

Required 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.

IT C101	Introduction to Computer Information Systems..3 Units
IT C142	Information & Communication Technology Essentials 4
IT C143	Computer Network Fundamentals 3
IT C146	Introduction to Information Systems Security 3
IT C251	Introduction to Programming Concepts and Methodologies...3
IT C260X	IT Specialist Professional............................3
IT C270	Introduction to Database Design/Management.................................3

Total Units 28

Select 4-5 units or one course from the following:

MATH C121	Elementary Probability and Statistics ....4 Units
or MATH C121H	Elementary Ptobability and Statistics: Honors 5
MATH C130	Finite Mathematics.....................................4
MATH C131	Basic Functions and Calculus for Business.4
MATH C151	Analytic Geometry and Calculus I..............4

Complete one of the following general education patterns:

OPTION A	Cerro Coso Local General Education Pattern
OPTION B	CSU General Education Breadth
OPTION C	IGETC - Intersegmental General Education Transfer Curriculum

Information Technology Certificate of Achievement

Information Technology Certificate of Achievement (28 units) is designed for students pursuing professional employment in information technology for business. This certificate 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.

Complete each course to be applied toward the certificate with a "C" or better.

This program prepares students for careers 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:

- Configure, install, diagnose, and support hardware and software issues related to client and user needs.

- Design, implement, query, and manage relational databases.
- Design, analyze, and support computer networks.
- Execute problem-solving, programming, and application development including the ability to design, test, debug, and implement complex computer programs.
- Implement and evaluate network security solutions for servers, storage, and virtualization.
- Read, analyze, and evaluate technical information to communicate appropriately for internationally and culturally diverse communities and business cultures.

Required 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.

IT C101	Introduction to Computer Information Systems	3 Units
IT C142	Information & Communication Technology Essentials	4
IT C143	Computer Network Fundamentals	3
IT C146	Introduction to Information Systems Security	3
IT C251	Introduction to Programming Concepts and Methodologies	3
IT C260X	IT Specialist Professional	3
IT C270	Introduction to Database Design/Management	3

Total Units 28

Select 4-5 units or one course from the following:

MATH C121	Elementary Probability and Statistics	4 Units
or MATH C121H	Elementary Ptobability and Statistics: Honors	5
MATH C130	Finite Mathematics	4
MATH C131	Basic Functions and Calculus for Business	4
MATH C151	Analytic Geometry and Calculus I	4

Liberal Arts Social and Behavioral Sciences Associate in Arts (AA)

Courses added to the major:

SOCI C115	Social Issues and Action in American Society	3

Vocational Nursing Associate of Science (AS)

Vocational Nursing Associate in Science Degree (60 units total, 43 units in the major): This course of study is an intensive program totaling 1,662 hours approved by the Board of Vocational Nursing and Psychiatric Technicians. The hours include anatomy and physiology, psychology, certified nursing aide (CNA), nursing theory, and supervised clinical nursing experiences. Concepts integrated throughout the first semester of the program include: fundamentals of nursing, geriatrics, nutrition, and pharmacology. Nursing care of clients with various adult medical-surgical conditions is integrated throughout three semesters

of the program. Course content also includes concepts of growth and development, normal obstetrics and pediatrics. After successful completion of the program, the student is eligible to take the licensure examination provided by the National Council of State Board of Nursing (NCLEX-PN).

All prerequisites must be successfully completed with a grade of "C" or better before entering the program.

For information regarding the process of application and admission to the program, interested students should contact the Counseling Center or the Director of Vocational Nursing Program.

This degree is not specifically designed for transfer. Courses required for the associate degree major at Cerro Coso Community College may not be the same as those required for the major at a four-year school. If you plan to transfer, consult a counselor and **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.

This program prepares students for careers in vocational nursing. Vocational Nurses work in physician offices, acute care settings, and long-term care settings.

Program Learning Outcomes

Upon successful completion of the program, the student will be able to:

- Identify the etiology, pathophysiology, and sign and symptoms of disorders of all body systems and stages of development.
- Assess patient needs and implement proper nursing practices.
- Take a leadership role in both the profession of Vocational Nursing and in the community.
- Apply client-centered critical thinking skill, planning, and problem solving for nursing care in clinical practice.

Required 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 of the following courses:
Semester I

HCRS C100	Fundamentals of Nursing	3 Units
HCRS C103	Medical Surgical Nursing	3
HCRS C107	Basic Pharmacology Vocational Nursing	2
HCRS C113	Vocational Nursing Lab I	6
EMTC C070	CPR for the Healthcare Provider	0.5

Semester II

HCRS C204	Medical Surgical Nursing II	9 Units
HCRS C214	Clinical Nursing II	6

Semester III

HCRS C205   Medical Surgical Nursing III........................3.5 Units
HCRS C206   Maternal/Child Nursing 3
HCRS C207   Advanced Pharmacology 1
HCRS C208   Critical Thinking and Leadership for the
                Vocational Nurse.......................................1.5
HCRS C216   Clinical Nursing III 6

Select 3 units from the following courses:

HCRS ~~C230~~ C180 Pharmacology for ~~the~~ Health
                Professionals..3 Units
HCRS ~~C250~~ C181 Cultural Diversity in Health Care................3
HCRS C255   Basic Cardiac Rhythm Interpretation.........3
HCRS ~~C260~~ C183 Ethics for the Health Professional..............3

Complete one of the following general education patterns:

OPTION A   Cerro Coso Local General Education Pattern
OPTION B   CSU General Education Breadth
OPTION C   IGETC - Intersegmental General Education Transfer
                Curriculum

Conditions of Enrollment

Vocational nursing requires the completion of prerequisite courses for entrance into the program.

BIOL C125   Survey of Anatomy and Physiology............4 Units
or BIOL C251   Human Anatomy..4
and BIOL C255 Human Physiology 4
~~BSOT C075~~   ~~Computer Literacy ....1~~
~~HCRS C055~~   ~~Certified Nursing Assistant ....5~~
~~HCRS C132~~   ~~Electronic Health Records...........................1.5~~
HCRS C150   Medical Terminology ~~for Health~~ 3
PSYC C101   General Psychology....................................3
or PSYC C101H General Psychology: Honors 4

Enrollment is through counseling only.

Vocational Nursing Certificate of Achievement

Vocational Nursing Certificate of Achievement (43 units): This course of study is an intensive program totaling 1,662 hours approved by the Board of Vocational Nursing and Psychiatric Technicians. The hours include anatomy and physiology, psychology, ~~certified nurse aide (CNA),~~ nursing theory, and supervised clinical nursing experiences. Concepts integrated throughout the first semester of the program include: fundamentals of nursing, geriatrics, nutrition, and pharmacology. Nursing care of clients with various adult medical-surgical conditions is integrated throughout three semesters of the program. Course content also includes concepts of growth and development, normal obstetrics and pediatrics. After successful completion of the program, the student is eligible to take the licensure examination provided by the National Council of State Board of Nursing (NCLEX-PN).

All prerequisites must be successfully completed with a grade of "C" or better before entering the program. Students must also possess a current CNA certificate.

For information regarding the process of application and admission to the program, interested students should contact the Counseling Center or the Director of Vocational Nursing Program.

This program prepares students for careers in vocational nursing. Vocational nurses work in physician offices, acute care settings, and long-term care settings.

Program Learning Outcomes

Upon successful completion of the program, the student will be able to:

- Identify the etiology, pathophysiology, and sign and symptoms of disorders of all body systems and stages of development.
- Assess patient needs and implement proper nursing practices.
- Take a leadership role in both the profession of Vocational Nursing and in the community.
- Apply client-centered critical thinking skill, planning, and problem solving for nursing care in clinical practice.

Required 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 of the following courses:
Semester I

HCRS C100   Fundamentals of Nursing...........................3 Units
HCRS C103   Medical Surgical Nursing 3
HCRS C107   Basic Pharmacology Vocational Nursing....2
HCRS C113   Vocational Nursing Lab I 6
EMTC C070   CPR for the Healthcare Provider................0.5

Semester II

HCRS C204   Medical Surgical Nursing II........................9 Units
HCRS C214   Clinical Nursing II 6

Semester III

HCRS C205   Medical Surgical Nursing III........................3.5 Units
HCRS C206   Maternal/Child Nursing 3
HCRS C207   Advanced Pharmacology 1
HCRS C208   Critical Thinking and Leadership for the
                Vocational Nurse.......................................1.5
HCRS C216   Clinical Nursing III 6

Select 3 units from the following courses:

HCRS ~~C230~~ C180 Pharmacology for ~~the~~ Health
                Professionals..3 Units
HCRS ~~C250~~ C181 Cultural Diversity in Health Care................3
HCRS C255   Basic Cardiac Rhythm Interpretation.........3
HCRS ~~C260~~ C183 Ethics for the Health Professional..............3

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