PROGRAMS OF STUDY

The philosophy of Cerro Coso Community College is that the educational program of students should be composed of courses of study meaningful to them and appropriate to their unique life goals. Cerro Coso Community College offers the following certificate and degree programs:

- Associate in Arts and Associate in Science degrees can be used to obtain necessary skills for a range of possible careers, or they may be used to transfer to a four-year institution.

- Certificates of Achievement are awarded to students who complete formal instructional programs that are designed to prepare them for a specific field of endeavor, typically a career field with prospects of employment. These programs most often consist of at least 18 units but some are as low as 12.

- Job Skills Certificates are awarded upon the satisfactory completion of coursework less than 18 units in a specific area of study.

Associate degrees can be attained in specific majors offering specialization and depth of instruction. Students earning these major degrees must complete 60 total units in some combination of major coursework with a "C" or better and general education requirements.
Students who do not wish to pursue a specialization can still attain an Associate in Liberal Arts by taking 18 units in a designated Area of Emphasis. Liberal Arts options are offered in the areas of Arts &

Humanities, Social & Behavioral Sciences, and Mathematics & Science. All of the prescribed coursework within each of these degrees is baccalaureate-applicable and considered appropriate for students who plan to continue their education at a 4-year college or university.

Students should discuss the lower division requirement of specific transfer institutions with a counselor or educational advisor.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

The AA-T and AS-T Degrees for Transfer offered by Cerro Coso are clearly designated in the pages that follow. Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

Note: Not all of the majors or programs described in this section are offered at all Cerro Coso Community College sites. Please consult with a counselor or staff member in the Counseling Center or with the counselor/educational advisor at the site where you are enrolled when selecting a degree objective or other program of study.

All programs offered by the college are approved by the Kern Community College Board of Trustees and the California Community College Chancellor's Office.

Administration of Justice Associate in Science Degree for Transfer (AS-T)

The Associate in Science Degreein Administration of Justice for Transfer (60 units total, 18 units in the major) prepares students for transfer to complete work for a bachelor's degree in criminal justice or economic crime investigation. Students will be able to describe the individual functions and components of the modern criminal justice system; use introductory concepts of legal research to locate, analyze, and discuss the content of statutory and case law; and explain the underlying cause of antisocial and criminal behavior. Proper selection of curriculum electives further enables students to study other academic disciplines, such as political science, sociology, and public administration. This program is appropriate for students considering law school as well as certain careers in law enforcement. To complete the degree, students must fulfill both of 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 or area of emphasis, as determined by the Kern Community College District Board of Trustees.

2. Obtainment of a minimum grade point average of 2.0

Please note that our local Cerro Coso general education pattern MAY NOT be used to fulfill the requirements of this degree and that all required courses for the degree must be transferable to CSU.

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

- Describe the individual functions and integrations of the components of the criminal justice system: police, courts, and corrections.

- Use legal research skills to locate, analyze, and discuss the content of statutory and case law.

- Examine criminal justice and/or social science data and explain their significance.

- Explain the underlying causes of antisocial and criminal behavior.

- Apply Constitutional principles to the practice of criminal justice.

- Articulate, either orally or in writing, concepts or theories applicable to the criminal justice system.

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.

Area A - Complete the following courses:

ADMJ C101	Introduction to Administration of Justice	3 Units
ADMJ C105	Concepts of Criminal Law	3

Area B - Select at least 6 units from the following courses:

ADMJ C115	Legal Aspects of Evidence	3 Units
ADMJ C121	Community Relations	3
ADMJ C125	Principles of Investigation	3
ADMJ C131	Juvenile Procedures	3
ADMJ C151	Introduction to Corrections	3
ADMJ C230	Forensic Crime Scene Investigation	4

Area C - Select at least 6 units from the following courses:

MATH C121	Elementary Probability and Statistics	4 Units
or MATH C121H	Elementary Probability and Statistics – Honors	5
PSYC C101	General Psychology	3
or PSYC C101H	General Psychology – Honors	4
SOCI C101	Introduction to Sociology	3

Complete one of the following general education patterns:

OPTION B	CSU General Education Breadth
OPTION C	IGETC - Intersegmental General Education Transfer Curriculum

Administration of Justice Associate in Science Degree

The Administration of Justice Associate in Science Degree (60 units total, 21 units in the major) prepares students for careers in the criminal justice field. This course of study offers a broad base of knowledge, which is designed to provide the foundation for the pursuit of advanced studies in criminal justice.

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 from 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," "C," or "P" 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 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.

Completion of the Cerro Coso local General Education Pattern DOES NOT prepare a student for transfer. If you are planning to transfer to a four-year school, depending on your transfer goal, you should select Option B or C only. For more information refer to the general education section of the catalog.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Identify and apply communications skills when interacting with all people.

- Identify the need for understanding diverse populations in the criminal justice field and establish strategies for effectively communicating with those diverse populations.

- Identify the cultural differences found in most communities and apply methods of effectively bridging those differences.

- Demonstrate and apply critical thinking skills in dealing with ethical decision making within the criminal justice system.

- Demonstrate the ability to locate resources which enable the resolution of problems within the community and the participants of the criminal justice system.

- Recognize the major impact ethics and morality has on the citizens the law enforcement profession serves and the daily interactions with others within the criminal justice system.

- Develop effective writing skills to properly document law enforcement priorities.

- Demonstrate an understanding of the theory and application of law enforcement rules, regulations, and applicable laws.

- Demonstrate the ability to make the correct decision during critical life-threatening situations.

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:

ADMJ C101	Introduction to the Administration of Justice	3 Units
ADMJ C105	Concepts of Criminal Law	3
ADMJ C111	Principles and Procedures of the Justice System	3
ADMJ C115	Legal Aspects of Evidence	3
ADMJ C121	Community Relations	3

Select 6 units from the following courses:

ADMJ C125	Principles of Investigation	3 Units
ADMJ C131	Juvenile Procedures	3
ADMJ C151	Introduction to Corrections	3
ADMJ C205	California Vehicle Code	3
ADMJ C211	Concepts of Enforcement Services	3
ADMJ C215	Patrol Procedures	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

Administration of Justice Certificate of Achievement

Administration of Justice Certificate of Achievement (21 units): Any student completing the courses required for the major qualifies for a certificate in Administration of Justice.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Identify and apply communications skills when interacting with all people.

- Identify the need for understanding diverse populations in the criminal justice field and establish strategies for effectively communicating with those diverse populations.

- Identify the cultural differences found in most communities and apply methods of effectively bridging those differences.

- Demonstrate and apply critical thinking skills in dealing with ethical decision making within the criminal justice system.

- Demonstrate the ability to locate resources which enable the resolution of problems within the community and the participants of the criminal justice system.

- Recognize the major impact ethics and morality have on the citizens the law enforcement profession serves and the daily interactions with others within the criminal justice system.

- Develop effective writing skills to properly document law enforcement priorities.

- Demonstrate an understanding of the theory and application of law enforcement rules, regulations, and applicable laws.

- Demonstrate the ability to make the correct decision during critical life-threatening situations.

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:

ADMJ C101	Introduction to the Administration of Justice	3 Units
ADMJ C105	Concepts of Criminal Law	3
ADMJ C111	Principles and Procedures of the Justice System	3
ADMJ C115	Legal Aspects of Evidence	3
ADMJ C121	Community Relations	3

Select 6 units from the following courses:

ADMJ C125	Principles of Investigation	3 Units
ADMJ C131	Juvenile Procedures	3
ADMJ C151	Introduction to Corrections	3
ADMJ C205	California Vehicle Code	3
ADMJ C211	Concepts of Enforcement Services	3
ADMJ C215	Patrol Procedures	3

Disclosures
Gainful Employment information for this program may be found at **http://www.cerrocoso.edu/academic-programs/**.

Business Administration Associate in Arts Degree

The Business Administration Associate in Arts Degree (60 units total, 21 units in the major) is designed to prepare students for transfer at the junior level to California State University programs and colleges offering Bachelor's degrees in Business, Business Administration, Management Information Systems, or other related degrees.

Upon completion of this degree the student will be able to demonstrate a general understanding of business and apply critical thinking skills to technical and economic issues in a global business environment.

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," "C," or "P" 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 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.

Completion of the Cerro Coso local General Education Pattern DOES NOT prepare a student for transfer. If you are planning to transfer to a four-year school, depending on your transfer goal, you should select Option B or C only. For more information refer to the general education section of the catalog.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate a general understanding of the nature of business.

- Apply critical thinking skills (analysis, synthesis, evaluation) to technical and economic issues in a business environment.

- Recognize skills necessary to function effectively in the global economy.

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:

BSAD C101	Financial Accounting	4 Units
BSAD C102	Managerial Accounting	4
CSCI C101	Introduction to Computer Information Systems	3
ECON C102	Macroeconomics	3
ECON C103	Microeconomics	3
MATH C121	Elementary Probability and Statistics	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

Business Associate in Science Degree

The Business Associate in Science Degree (60 units total, 25 units in the major) is designed to develop skills for an increasingly challenging business environment. This degree is intended to provide a student with a broad preparation for a career in business. Upon completion of this degree, the student will be able to demonstrate a general understanding of business, apply critical thinking skills to technical issues, make legal and ethical decisions in a business environment, analyze issues involved in operating a business in complex, diverse, and international environments, and demonstrate an understanding of financial management.

This degree is not specifically designed for transfer. Students wishing to transfer are advised to consider the Business Administration AA degree.

Courses required for the Associate degree major at Cerro Coso Community College may not be the same as those required for a major at a four-year school. If you do plan to transfer, 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," "C," or "P" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate a general understanding of the nature of business.

- Apply critical thinking skills (analysis, synthesis, evaluation) to technical issues in a business environment.

- Make legal and ethical decisions in a business context.

- Analyze the issues involved in operating a business in complex, diverse, and international environments.

- Demonstrate an understanding of financial management.

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:

BSAD C100	Introduction to Business	3 Units
BSAD C101	Financial Accounting	4
BSAD C110	Introduction to Personal Finance	3
BSAD C131	Business Law	3
BSAD C141	Human Relations in Business	3
BSAD C152	Managing Diversity in the Workplace	3
BSAD C251	Principles of Management and Organization	3
CSCI C101	Introduction to Computer Information Systems	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

Business Certificate of Achievement

The Business Certificate of Achievement (25 units) is designed to provide non-degree seeking students with a broad preparation for a career in business. Upon completion of this certificate, the student will be able to demonstrate a general understanding of business, apply critical thinking skills to technical issues, make legal and ethical decisions in a business environment, analyze issues involved in operating a business in complex, diverse, and international environments, and demonstrate an understanding of financial management.

Complete each course to be applied toward the certificate with a "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate a general understanding of the nature of business.

- Apply critical thinking skills (analysis, synthesis, evaluation) to technical issues in a business environment.

- Make legal and ethical decisions in a business context.

- Analyze the issues involved in operating a business in complex, diverse, and international environments.

- Demonstrate an understanding of financial management.

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:

BSAD C100	Introduction to Business	3 Units
BSAD C101	Financial Accounting	4
BSAD C110	Introduction to Personal Finance	3
BSAD C131	Business Law	3
BSAD C141	Human Relations in Business	3
BSAD C152	Managing Diversity in the Workplace	3
BSAD C251	Principles of Management and Organization	3
CSCI C101	Introduction to Computer Information Systems	3

Disclosures
Gainful Employment information for this program may be found at **http://www.cerrocoso.edu/academic-programs/**.

Business Office Technology Associate in Science Degree

The Business Office Technology Associate in Science Degree (60 units total, 30 units in the major) prepares learners for employment in challenging positions as administrative assistants and office managers through courses in communication, industry standard computer applications, business, and bookkeeping in order to meet the needs of the technologically dynamic office.

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," "C," or "P" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Program Learning Outcomes

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

- Achieve business standards for efficiency, time management, and quality of work while projecting a professional image including ethical standards with respect to privacy, confidentiality, and personal behavior both independently and in group situations.

- Apply fundamental principles of spelling, grammar, and punctuation to a wide variety of business communication messages, documents, and reports appropriate for the intended audience.

- Select, apply, and adapt computer software tools such as word processing, spreadsheet, data base, accounting, presentation, and desktop publishing, to business related tasks and assess the logic of the results.

- Analyze and record a variety of business financial transactions such as petty cash, bank deposits, accounts receivable, and accounts payable.

- Apply standard records management procedures when establishing and maintaining systems to classify, organize, store, and retrieve hard copy and electronic files.

- Demonstrate active listening skills to accurately condense and record verbal information, instructions, and ideas.

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:

BSAD C070	Business Mathematics	3 Units
BSAD C072	Introduction to Accounting	3
BSAD C145	Business Communication	3
BSAD C100	Introduction to Business	3
BSOT C127	MS PowerPoint	1
BSOT C131	Basic Computer Keyboarding	1
BSOT C154	Office Personnel Seminar	3
CSCI C070	Computer Literacy	1
CSCI C121	Beginning	1
CSCI C151	Intermediate Word	1
CSCI C123	Beginning Excel	1
CSCI C153	Intermediate	1
CSCI C125	Beginning Access	1
CSCI C155	Intermediate Access	1
CSCI C161	Advanced Word	1
CSCI C171	Introduction to the Internet and the World Wide Web	1

Select 4 units from the following courses:

CSCI C129	Microsoft Outlook	1
CSCI C135	Beginning Adobe Acrobat	1
CSCI C163	Advanced Exce	1
CSCI C165	Advanced Access	1
WEXP C101	Introduction to Work Experience	1
WEXP C102	Occupation and Career Work Experience I	1-3

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

Business Office Technology Certificate of Achievement

The Business Office Technology Certificate of Achievement (30 units) is designed to prepare learners for employment in challenging positions as administrative assistants and office managers through courses in communication, industry standard computer applications, business, office procedures, and bookkeeping in order to meet the needs of the technologically dynamic office.

Complete each course to be applied toward the certificate with a "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes

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

- Achieve business standards for efficiency, time management, and quality of work while projecting a professional image including ethical standards with respect to privacy, confidentiality, and personal behavior both independently and in group situations.

- Apply fundamental principles of spelling, grammar, and punctuation to a wide variety of business communication messages, documents, and reports appropriate for the intended audience.

- Select, apply, and adapt computer software tools such as word processing, spreadsheet, data base, accounting, presentation, and desktop publishing, to business related tasks and assess the logic of the results.

- Analyze and record a variety of business financial transactions such as petty cash, bank deposits, accounts receivable, and accounts payable.

- Apply standard records management procedures when establishing and maintaining systems to classify, organize, store, and retrieve hard copy and electronic files.

- Demonstrate active listening skills to accurately condense and record verbal information, instructions, and ideas.

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:

BSAD C070	Business Mathematics	3 Units
BSAD C072	Introduction to Accounting	3
BSAD C145	Business Communication	3
BSAD C100	Introduction to Business	3
BSOT C100	Introduction to Business Office Technology	3
BSOT C127	MS PowerPoint	1
BSOT C131	Basic Computer Keyboarding	1
BSOT C131	Intermediate Computer Keyboarding	1
BSOT C154	Office Personnel Seminar	3
CSCI C070	Computer Literacy	1
CSCI C121	Beginning Word	1
CSCI C151	Intermediate Word	1
CSCI C123	Beginning Excel	1
CSCI C153	Intermediate Excel	1
CSCI C125	Beginning Access	1
CSCI C155	Intermediate Access	1
CSCI C161	Advanced Word	1
CSCI C171	Introduction to the Internet and the World Wide Web	1

Select 4 units from the following courses:

CSCI C129	Microsoft Outlook	1
CSCI C135	Beginning Adobe Acrobat	1
CSCI C163	Advanced Excel	1
CSCI C165	Advanced Access	1
WEXP C101	Introduction to Work Experience	1
WEXP C102	Occupation and Career Work Experience I	1-3

Disclosures

Gainful Employment information for this program may be found at **http://www.cerrocoso.edu/academic-programs/**.

Business Office Technology Office Assistant Certificate of Achievement

Business Office Technology Office Assistant Certificate of Achievement (18 units): This course of study equips the student with the range of skills necessary to perform the duties of an entry level administrative assistant in today's technological office. Completers master skills in communication, bookkeeping, office skills, and an essential selection of intermediate computer applications for business. Those completing the Office Assistant Certificate may choose to continue with the

Business Office Technology Associate in Science Degree.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Achieve business standards for efficiency, time management, and quality of work while projecting a professional image including ethical standards with respect to privacy, confidentiality, and personal behavior both independently and in group situations.

- Apply fundamental principles of spelling, grammar, and punctuation to a wide variety of business communication messages, documents, and reports, appropriate for the intended audience.

- Demonstrate intermediate skills and problem solving ability in the use of industry standard applications and technology such as Microsoft Word, Excel, Access, and PowerPoint, to office related tasks.

- Analyze and record a variety of business financial transactions such as petty cash, bank deposits, accounts receivable, and accounts payable.

- Apply standard records management procedures when establishing and maintaining systems to classify, organize, store, and retrieve hard copy and electronic files.

- Demonstrate active listening skills to accurately condense and record verbal information, instructions, and ideas.

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:

BSAD C070	Business Mathematics	3 Units
BSAD C072	Introduction to Accounting	3
BSAD C145	Business Communication	3
BSOT C100	Introduction to Business Office Technology	3

BSOT C132	Intermediate Computer Keyboarding	1
CSCI C121	Beginning Word	1
CSCI C151	Intermediate Word	1
CSCI C123	Beginning Excel	1
CSCI C153	Intermediate Excel	1
CSCI C129	Microsoft Outlook	1
or CSCI C125	Beginning Access	1
or CSCI C135	Beginning Adobe Acrobat	1

Business Office Technology Business Office Clerk Certificate of Achievement

Business Office Technology Office Clerk Certificate of Achievement (12 units): This course of study prepares the student to perform basic competencies as an entry level office clerk whether or not the individual has previous office experience. This certificate of achievement is a foundation for the Office Assistant Certificate and the Business Office Technology Certificate or Associate of Science Degree.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Achieve business standards for efficiency, time management, and quality of work while projecting a professional image including ethical standards with respect to privacy, confidentiality, and personal behavior both independently and in group situations.

- Demonstrate introductory skills in the use of software tools such as Microsoft Word, Excel, and Access, to entry level office related tasks such as letter and report creation, basic spreadsheet creation/edit, and data entry.

- Apply standard records management procedures when establishing and maintaining systems to classify, organize, store, and retrieve hard copy and electronic files.

- Demonstrate active listening skills to accurately condense and record verbal information, instructions, and ideas.

- Demonstrate accuracy and efficiency using a desktop calculator to perform business mathematics calculations appropriate for routine office tasks requiring calculation.

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:

BSAD C070	Business Mathematics	3 Units
BSOT C100	Introduction to Business Office Technology	3
BSOT C127	MS PowerPoint	1
BSOT C131	Basic Computer Keyboarding	1
CSCI C070	Computer Literacy	1
CSCI C121	Beginning Word	1
CSCI C123	Beginning Excel	1
CSCI C125	Beginning Access	1

Child Development Associate in Arts Degree

The Child Development Associate in Arts Degree (60 units total, 30 units in the major) is designed for students interested in infant, toddler, preschool or school-age education. Students may earn an AA degree in Child Development or an Associate Teacher Certificate, Teacher Certificate, Master Teacher Certificate or Site Supervisor Certificate for completing a defined course of study that requires fewer units than the AA degree. The California Child Development Permit Matrix requirements are reflected in our program allowing students to qualify for the permits required 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.

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.

The requirements for this program are complex.

You MUST meet with a Child Development faculty member AND a counselor.

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," "C," or "P" 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.

Completion of the Cerro Coso local General Education Pattern DOES NOT prepare a student for transfer. If you are planning to transfer to a four-year school, depending on your transfer goal, you should select Option B or C only. For more information refer to the general education section of the catalog.

Program Learning Outcomes

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

- Understand, observe, analyze development from a theoretical perspective including the realms of physical, socio-emotional, and cognitive development from conception through adolescence.

- Develop curriculum appropriate to the individual developmental needs of children from infancy through school-age and across a variety of categories: aesthetic, affective, cognitive, language, physical, and social.

- Demonstrate classroom management skills, working with both small and large groups of children.

- Demonstrate an understanding of the health, safety, and nutrition requirements of programs and children from infancy through school age.

- Analyze assessment techniques commonly used in the field of Child Development.

- Assess and practice a variety of program models.
- Address diversity issues, including special needs, with children, families, and programs in a constructive way.

- Take a leadership role in both the profession of Child Development and the in the community through an understanding of advocacy.

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:

CHDV C100	Principles and Practices of Teaching	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 C111	Principles of Child Guidance	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

Select 3 units from the following courses:

CHDV C145	Language and Literature	3 Units
CHDV C149	Play and Meaning	3

Observation: Students will be required to observe children in group settings. Students are encouraged to do their observations in licensed centers or licensed family child care homes in their community. Licensed-exempt facilities are acceptable.

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

Advisory: Level 1 Reading and Writing Advisories:

Students are expected to read a college level textbook, search articles from professional journals, and assigned readings. Reading Level 1 skills prepare students to succeed in CHDV classes by ensuring that they have the skills to read textbooks, journal articles, and assigned readings and are able to make connections between regulations, theory and best practice. The ability to make these connections adequately prepares students to participate in discussions, formulate answers for quizzes and exams, and summarize materials read. Reading Level 1 skills also ensure that students will have the ability to identify central points, evaluate sources, distinguish fact from opinion, identify bias, and draw inferences.

Students are expected to write summaries of text chapters, journal articles, and assigned readings, as well as to complete a research paper. Writing Level 1 skills prepare students to succeed in CHDV classes by ensuring they are able to write short essays that synthesize lectures and assigned readings and that are free of major spelling and grammatical errors. Writing Level 1 skills ensure that students are able to compose a formal research paper from multiple sources including finding, evaluating, organizing, synthesizing college-level reading materials, and to construct a detailed outline and annotated bibliography that projects the structure of the research paper and reflects the extent of their literature search and the relevance of the sources chosen. Writing Level 1 skills prepare students to use the corrected proof of their outline to draft a research paper that is properly formatted, written in clear and grammatically-correct prose.

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 at **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.

Child Development Associate Teacher Job Skills Certificate

The Child Development Associate Teacher Job Skills Certificate (12 units) is designed to provide students with the minimal level of education to

work with children in a group setting and includes required classes in the core areas (development; child, family, and community; curriculum).

The California Child Development Permit Matrix requirements are reflected in our program allowing students to qualify for the permits required or 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 and Associate Teacher.

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.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

The requirements for this program are complex. You MUST meet with a Child Development faculty member AND a counselor.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Understand, observe, analyze development from a theoretical perspective including the realms of physical, socio-emotional, and cognitive development from conception through adolescence.

- Develop curriculum appropriate to the individual developmental needs of children from infancy through school-age and across a variety of categories: aesthetic, affective, cognitive, language, physical, and social.

- Demonstrate classroom management skills working with both small and large groups of children.

- Assess and practice a variety of program models.

- Address diversity issues, including special needs, with children, families, and programs in a constructive way.

- Take a leadership role in both the profession of Child Development and the in the community through an understanding of advocacy.

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:

CHDV C100	Principles and Practices of Teaching	3 Units
CHDV C102	Introduction to Materials and Curriculum	3
CHDV C104	Child, Family, and Community	3
CHDV C106	Child Growth and Development	3

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 at **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.

Associate Teacher Permit: Associate Teacher Certificate of Proficiency requirements plus experience requirement of 50 days of 3+ hours per day within 2 years.

Child Development Teacher Certificate of Achievement

The Child Development Teacher Certificate of Achievement (24 units) is designed to provide students with the minimal level of education to work with children in a group setting and includes required classes in the core areas (development; child, family, and community; curriculum).

The California Child Development Permit Matrix requirements are reflected in our program allowing students to qualify for the permits required 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, and Teacher 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.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

The requirements for this program are complex. You MUST meet with a Child Development faculty member AND a counselor.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Understand, observe, analyze development from a theoretical perspective including the realms of physical, socio-emotional, and cognitive development from conception through adolescence.

- Develop curriculum appropriate to the individual developmental needs of children from infancy through school-age and across a variety of categories: aesthetic, affective, cognitive, language, physical, and social.

- Demonstrate classroom management skills; working with both small and large groups of children.

- Demonstrate an understanding of the health, safety, and nutrition requirements of programs and children from infancy through school age.

- Analyze assessment techniques commonly used in the field of Child Development.

- Assess and practice a variety of program models.

- Address diversity issues, including special needs, with children, families, and programs in a constructive way.

- Take a leadership role in both the profession of Child Development and the in the community through an understanding of advocacy.

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:

CHDV C100	Principles and Practices of Teaching	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 C111	Principles of Child Guidance	3
CHDV C121	Health, Safety and Nutrition	3
CHDV C125	Diversity in Education	3

Select 3 units from the following:

CHDV C200	Observation and Assessment	3 Units
CHDV C203	Practicum - Field Experience	3

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.

Teacher Permit Requirements: Teacher Certificate requirements plus experience of 175 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.

Disclosures
Gainful Employment information for this program may be found at **http://www.cerrocoso.edu/academic-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 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 and Master Teacher 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.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

The requirements for this program are complex. You MUST meet with a Child Development faculty member AND a counselor.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Understand, observe, analyze development from a theoretical perspective including the realms of physical, socio-emotional, and cognitive development from conception through adolescence.

- Develop curriculum appropriate to the individual developmental needs of children from infancy through school-age and across a variety of categories: aesthetic, affective, cognitive, language, physical, and social.

- Demonstrate classroom management skills working with both small and large groups of children.

- Demonstrate an understanding of the health, safety, and nutrition requirements of programs and children from infancy through school age.

- Analyze assessment techniques commonly used in the field of Child Development.

- Assess and practice a variety of program models.

- Address diversity issues, including special needs, with children, families, and programs in a constructive way.

- Take a leadership role in both the profession of Child Development and in the community through an understanding of advocacy.

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:

CHDV C100	Principles and Practices of Teaching	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 C111	Principles of Child Guidance	3
CHDV C121	Health, Safety and Nutrition	3
CHDV C125	Diversity in Education	3
CHDV C281	Adult Supervision	3

Select 3 units from the following:

CHDV C200	Observation and Assessment	3 Units
CHDV C203	Practicum - Field Experience	3

Complete 6 specialization units*:

Infant Care Specialization

CHDV C105	Introduction to Infant Development	3 Units
CHDV C205	Infant and Toddler Curriculum	3

OR
School Age Care Specialization

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

OR
Diversity Specialization

CHDV C125	Diversity in Education	3 Units
HMSV C102	Cultural Competence in Human Services	3

OR Children with Exceptional Needs Specialization

| CHDV C125 | Diversity in Education | 3 Units |
| CHDV C241 | The Exceptional Child | 3 |

*Other specializations can be developed. Please contact the Child Development Faculty Chair.

Permit

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Master Teacher Permit: Teacher Permit requirements 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.

Child Development Site Supervisor Certificate of Achievement

The Child Development Site Supervisor Certificate of Achievement (33 units) is designed to provide students with a complete educational foundation to work as an administrator of programs serving children in a group setting and includes required classes in the core areas (development; child, family, and community; curriculum); six administration units; 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 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 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.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

The requirements for this program are complex. You MUST meet with a Child Development faculty member AND a counselor.

Program Learning Outcomes

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

- Understand, observe, analyze development from a theoretical perspective including the realms of physical, socio-emotional, and cognitive development from conception through adolescence.

- Develop curriculum appropriate to the individual developmental needs of children from infancy through schoolage and across a variety of categories: aesthetic, affective, cognitive, language, physical, and social.

- Demonstrate classroom management skills working with both small and large groups of children.

- Demonstrate an understanding of the health, safety, and nutrition requirements of programs and children from infancy through school age.

- Analyze assessment techniques commonly used in the field of Child Development.

- Assess and practice a variety of program models.

- Address diversity issues, including special needs, with children, families, and programs in a constructive way.

- Take a leadership role in both the profession of Child Development and the in the community through an understanding of advocacy.

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:

CHDV C100	Principles and Practices of Teaching.....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 C111	Principles of Child Guidance....................3	
CHDV C121	Health, Safety and Nutrition....................3	
CHDV C125	Diversity in Education................................3	
CHDV C251	Administration of Child Development Programs I..............3	
CHDV C252	Administration of Child Development Programs II.............3	
CHDV C281	Adult Supervision..3	

Select 3 units from the following:

CHDV C200	Observation and Assessment..................3 Units	
CHDV C203	Practicum - Field Experience...................3	

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 at **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.

Site Supervisor Permit: Teacher Certificate requirements plus experience of 350 days of 3+ hours per day within 4 years including at least 100 days supervising adults plus 16 general education units in English/Language Arts, Math/Science, Social Sciences, and Humanities/Fine Arts.

Computer Information Systems Associate in Science Degree

The Computer Information Systems Associate in Science Degree (60 units total, 28 units in the major) is designed for students pursuing professional employment in computer information systems for business. Students are prepared to pursue a career in network, systems, or database administration; technical and applications support; and computer programming. 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 CIS AS degree are prepared to transfer to a baccalaureate program in Computer Information Systems, Management Information Systems, or related programs.

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," "C," or "P" 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.

Completion of the Cerro Coso local General Education Pattern DOES NOT prepare a student for transfer. If you are planning to transfer to a four-year school, depending on your transfer goal, you should select Option B or C only. For more information refer to the general education section of the catalog.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate sufficient understanding and application of business and related information technology concepts for entry level employment and advancement in the field. This includes an understanding of the fundamentals of computers and computer nomenclature and why they are essential components in business and society.

- Demonstrate an understanding of the global system in which computer information systems are practiced including the role of ethics and the impact on society as well as contemporary issues.

- Demonstrate preparedness for entry level employment in the field of information technology. This includes areas of focus such as computer hardware, software, networks, and security, or programming.

- Demonstrate a basic understanding of relational databases and concepts, including design, creation, and data manipulation.

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:

BSAD C100	Introduction to Business	3 Units
CSCI C101	Introduction to Computer Information Systems	3
CSCI C241	Introduction to Telecommunications	3
CSCI C251	Introduction to Visual Basic Programming	3
CSCI C270	Introduction to Database Design and Management	3
MATH C130	Finite Mathematics	4
or MATH C121	Elementary Probability and Statistics	4
or MATH C131	Business Calculus	4

Select at least 9 units from the following courses:

CSCI C140	A+ Essential Skills for Computers	2 Units
CSCI C141	A+ Standard Skills for IT Technicians	2
CSCI C143	Network + Fundamentals of Network Technologies	3
CSCI C146	Security + Fundamentals of Network Security	3
CSCI C265	Introductory C++ Programming	3
CSCI C267	Introduction to Java Programming	3
CSCI C280	Web Application Development Using PHP	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

Computer Information Systems Certificate of Achievement

The Computer Information Systems Certificate of Achievement (28 units) is designed for students pursuing professional employment in computer information systems for business. This certificate provides students with skills to enter the job market as help desk providers, computer support specialists, or entry level programmers.

Complete each course to be applied toward the certificate with a "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes

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

- Demonstrate sufficient understanding and application of business and related information technology concepts for entry level employment and advancement in the field. This includes an understanding of the fundamentals of computers and computer nomenclature and why they are essential components in business and society.

- Demonstrate an understanding of the global system in which computer information systems are practiced including the role of ethics and the impact on society as well as contemporary issues.

- Demonstrate preparedness for entry level employment in the field of information technology. This includes areas of focus such as computer hardware, software, networks, and security, or programming.

- Demonstrate a basic understanding of relational databases and concepts, including design, creation, and data manipulation.

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:

BSAD C100	Introduction to Business	3 Units

CSCI C101   Introduction to
             Computer Information Systems 3
CSCI C241   Introduction to Telecommunications ... 3
CSCI C251   Introduction to Visual
             Basic Programming 3
CSCI C270   Introduction to Database
             Design and Management 3
MATH C130   Finite Mathematics 4
 or MATH C131 Business Calculus 4
 or MATH C121 Elementary Probability and Statistics ... 4

Select at least of 9 units from the following courses:

CSCI C140   A+ Essential Skills for Computers .... 2 Units
CSCI C141   A+ Standard Skills for IT Technicians 2
CSCI C143   Network + Fundamentals of
             Network Technologies 3
CSCI C146   Security + Fundamentals of
             Network Security 3
CSCI C265   Introductory C++ Programming 3
CSCI C267   Introduction to Java Programming 3
CSCI C280   Web Application Development
             Using PHP 3

Disclosures

Gainful Employment information for this program may be found at **http://www.cerrocoso.edu/academic-programs/**.

Computer Science Associate in Science Degree

The Computer Science Associate in Science Degree (60 units total, 31 units in the major) is designed to prepare students for transfer to a four-year institution to continue studies in Computer Science or comparable programs. Upon completion of the degree, the student will be able to demonstrate an understanding of the fundamental mathematical and scientific principles underlying computing and information processing, apply knowledge of the principles of computer science to a variety of problems, and understand the fundamentals of computer organization, architecture and data structures.

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," "C," or "P" 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.

Completion of the Cerro Coso local General Education Pattern DOES NOT prepare a student for transfer. If you are planning to transfer to a four-year school, depending on your transfer goal, you should select Option B or C only. For more information refer to the general education section of the catalog.

Program Learning Outcomes

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

- Demonstrate an understanding of the fundamental mathematical, statistical, and scientific principles underlying computing and information processing.

- Apply knowledge of the principles of computer science to a variety of problems.

- Understand the fundamentals of computer organization, architecture and data structures.

- Discuss social computing issues.

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:

CSCI C252   Introduction to Computer Science .... 3 Units
CSCI C265   Introductory C++ Programming 3
or CSCI C267 Introduction to Java Programming 3
MATH C151   Analytic Geometry and Calculus I 5
MATH C152   Analytic Geometry and Calculus II 5
MATH C251   Analytic Geometry and Calculus III 5
PHYS C111   Mechanics 5
PHYS C113   Electricity and Magnetism 5

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

Engineering Associate in Science Degree

The Engineering Associate in Science Degree (60 units total, 33 units in the major) is designed to lay the foundation in mathematics and physics needed for transfer to a broad range of engineering programs, while providing flexibility to tailor additional course of study to a particular 4-year degree program. Students will apply the scientific method to physics and engineering problems, as well as analyse and use basic engineering problem solving methods. See a counselor and consult **http://www.assist.org/** for the complete list of courses required for your engineering field and university—the requirements typically total many more than 33 units and the general education areas are often modified.

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," "C," or "P" 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 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.

Completion of the Cerro Coso local General Education Pattern DOES NOT prepare a student for transfer. If you are planning to transfer to a four-year school, depending on your transfer goal, you should select Option B or C only. For more information refer to the general education section of the catalog.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate math and physics preparation for upper division Engineering courses.

- Apply the scientific method to physics and engineering problems.

- Analyze and use basic engineering problem solving methods required in various engineering disciplines.

- Perform hands-on laboratory and/or field experiments of all Engineering classes safely.

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:

ENGR C110	Introduction to Engineering	4 Units
MATH C151	Analytic Geometry and Calculus I	5
MATH C152	Analytic Geometry and Calculus II	5
PHYS C111	Mechanics	5
PHYS C113	Electricity and Magnetism	5

Select at least 9 units from the following courses:

CHEM C111	General Inorganic Chemistry I	5 Units
CSCI C265	Introductory C++ Programming	3
DMA C129	3D Solids Modeling with Solid Works	3
ENGR C120	Introduction to Materials Science	4
ENGR C185	Digital Logic and Design	4
ENGR C210	Engineering Mechanics: Statics	3
ENGR C230	Engineering Circuit Analysis	4
MATH C251	Analytic Geometry and Calculus III	5
MATH C255	Ordinary Differential Equations	4
PHYS C211	Waves, Optics and Modern Physics	5

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

Fire Technology Associate in Science Degree

The Fire Technology Associate in Science Degree (60 units total, 33 units in the major) offers the student the opportunity to develop the professional skills and knowledge necessary to serve as an effective leader and manager in the public safety environment. The program is built around a "core" of courses that focus on broad knowledge and principles central to any fire-related situation - urban, suburban, rural, wildlands or industrial. The program covers the various aspects of the profession, provides content knowledge, and improves employment opportunities in the field, as well as prepares students for entry level management responsibilities and increases technical knowledge necessary for diverse public and private leadership situations.

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," "C," or "P" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Program Learning Outcomes

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

- Identify minimum qualifications and entry-level skills for fire fighter hiring and description the following elements: application process, written exam process, physical agility exam, oral interview, chief 's interview, background investigation, and fire fighter probationary process.

- Demonstrate the ability to analyze, appraise, and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including size-up, report on conditions, Incident Command System, RECEO;

10 Standard Firefighting Orders, 18 Situations that Shout "Watch Out", and common factors associated with injuries and line of duty deaths.

- Identify and comprehend laws, regulations, codes, and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.

- Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.

- Calculate flow requirements for fire apparatus, diagram a pump and plumbing schematic for fire apparatus, and apply mathematics formulae to hydraulics problems.

- Identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment.

- Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety.

- Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system, and identify alarm system components and their operations.

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:

FIRE C101	Fire Protection Organization	3 Units
FIRE C105	Fire Prevention Technology	3
FIRE C111	Fire Protection Equipment and Systems	3
FIRE C115	Building Construction for Fire Protection	3
FIRE C121	Fire Behavior and Combustion	3
FIRE C125	Fire Hydraulics	3
FIRE C131	Wildland Fire Control	3

Select 12 units from the following courses:

FIRE C211	Fire Management	3 Units

FIRE C252	Fire Command 1a	3
FIRE C253	Fire Command 1b	3
FIRE C254	Fire Prevention 1a	3
FIRE C255	Fire Prevention 1b	3
FIRE C261	Fire Investigation	3
FIRE C265	Fire Instructor 1a	3
FIRE C266	Fire Instructor 1b	3
FIRE C275	Emergency Vehicle Operation (Driver - Operator)	3
FIRE C276	Fire Pump Operation (Driver - Operator)	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

Fire Technology Certificate of Achievement

Fire Technology Certificate of Achievement (33 units): Any student completing the courses required for the major qualifies for a certificate in Fire Technology.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Identify minimum qualifications and entry-level skills for fire fighter hiring and description the following elements: application process, written exam process, physical agility exam, oral interview, chief 's interview, background investigation, and fire fighter probationary process.

- Demonstrate the ability to analyze, appraise, and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including size-up, report on conditions, Incident Command System, RECEO, 10 Standard Firefighting Orders, 18 Situations that Shout "Watch Out", and common factors associated with injuries and line of duty deaths.

- Identify and comprehend laws, regulations, codes, and standards that influence fire department operations, and identify regulatory and advisory organizations that create and

mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.

- Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.

- Calculate flow requirements for fire apparatus, diagram a pump and plumbing schematic for fire apparatus, and apply mathematics formulae to hydraulics problems.

- Identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment.

- Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety.

- Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system, and identify alarm system components and their operations.

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:

FIRE C101	Fire Protection Organization	3 Units
FIRE C105	Fire Prevention Technology	3
FIRE C111	Fire Protection Equipment and Systems	3
FIRE C115	Building Construction for Fire Protection	3
FIRE C121	Fire Behavior and Combustion	3
FIRE C125	Fire Hydraulics	3
FIRE C131	Wildland Fire Control	3

Select 12 units from the following courses:

FIRE C211	Fire Management	3 Units
FIRE C252	Fire Command	3
FIRE C253	Fire Command 1b	3
FIRE C254	Fire Prevention 1a	3
FIRE C255	Fire Prevention 1b	3
FIRE C261	Fire Investigation	3
FIRE C265	Fire Instructor 1a	3
FIRE C266	Fire Instructor 1b	3
FIRE C275	Emergency Vehicle Operation (Driver – Operator)	3

FIRE C276   Fire Pump Operation
                (Driver - Operator) 3

Disclosures

Gainful Employment information for this program may be found at **http://www.cerrocoso.edu// academic-programs/**.

General Sciences Associate in Arts Degree

The General Sciences Associate in Arts Degree (60 units total, 20-25 units in the major) is designed to prepare students for upper-division course work after transfer to a four-year science degree program. There are several emphases to the General Sciences Degree in order to meet the needs of students interested in biology, chemistry, and physical sciences. Students will demonstrate mastery of the scientific method, including experimental and empirical methodologies characteristic of modern science.

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," "C," or "P" 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.

Completion of the Cerro Coso local General Education Pattern DOES NOT prepare a student for transfer. If you are planning to transfer to a four-year school, depending on your transfer goal, you should select Option B or C only. For more information refer to the general education section of the catalog.

Program Learning Outcomes

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

- Demonstrate proficient preparation for upper division science courses at the appropriate transfer institution in the chosen emphasis: biology, chemistry, or physical science.

- Perform hands-on laboratory and/or field experiments of all science classes safely.

- Demonstrate mastery of the Scientific Method, including the experimental and empirical methodologies characteristic of science and the modern methods and tools used in scientific inquiry.

- Demonstrate an ability to communicate scientific results, including as appropriate graphically, verbally and in writing.

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.

BIOLOGY EMPHASIS: The biology emphasis provides students with the core science courses needed for transfer to a four-year institution. Graduates with a biology emphasis are prepared for further studies which allow work in a variety of fields including: biochemistry, biotechnology, botany, ecology, entomology, genetics, health, immunology, medicine, molecular biology, oceanography, pharmacy, teaching, wildlife management, zoology and related clinical fields. Physics requirements for biology majors can vary among institutions. Students should check with a counselor concerning requirements for specific transfer institutions.

Complete all of the following courses:

BIOL C111   General Biology ....5 Units
BIOL C112   General Biology II..5
CHEM C111   General Inorganic Chemistry I 5
CHEM C113   General Inorganic Chemistry II 5

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

CHEMISTRY EMPHASIS: This emphasis provides students who are planning on majoring in chemistry, materials science, or chemical engineering at a four-year university with the first

two years of their core chemistry classes. Students should check with a counselor concerning requirements for specific transfer institutions.

Complete all of the following courses:

CHEM C111	General Inorganic Chemistry I	5 Units
CHEM C113	General Inorganic Chemistry II	5
CHEM C221	Organic Chemistry I	5
CHEM C223	Organic Chemistry II	5

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

PHYSICAL SCIENCES EMPHASIS: Provides students who are planning on majoring in physics, geology, astronomy, or other physical sciences with the necessary lower division courses in mathematics and physics. The Math, Chemistry, and Physics requirements for transfer vary among institutions and students should check with a counselor for the specific requirements.

Complete all of the following courses:

MATH C151	Analytic Geometry and Calculus I	5 Units
MATH C152	Analytic Geometry and Calculus II	5
PHYS C111	Mechanics	5
PHYS C113	Electricity and Magnetism	5
PHYS C211	Waves, Optics and Modern Physics	5

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

Human Services Associate in Science Degree

The Human Services Associate in Science Degree (60 units total, 27 units in the major) prepares students for employment in a broad range of human services settings. It consists of seven core courses and two additional specialized electives courses to develop competencies for specific employment settings. Although some individual courses are offered online, the full certificate is currently not available in online environments.

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," "C," or "P" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Articulate the board concerns and practices of human services industries.

- Demonstrate three core sets of human services skills: conducting an interview, writing an incident report, participate in team meetings, and provide necessary support and referrals to consumers.

- Assess situations for appropriate entry level professional, legal, and ethical responses.

- Use supervisory feedback for improved performance.

- Analyze the cultural components of a human services situation and recommend culturally appropriate interventions.

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:

HMSV C101	Introduction to Human Services	3 Units
HMSV C102	Cultural Competence in Human Services	3
HMSV C103	Preparation for Field Work in Human Services	3
HMSV C104	Field Work in Human Services	4

HMSV C116 Case Management 3
CSCI C070 Computer Literacy......................................1
ENGL C101 Freshman Composition 4

Select 6 units from the following courses:

CHDV C106 Child Growth and Development............3 Units
CHDV C241 The Exceptional Child................................3
HMSV C113 Intervention Skills in Human Services..3
PSYC C101 General Psychology 3
PSYC C112 Introduction to Substance
      Abuse Issues 3
PSYC C211 Lifespan Development 3
PSYC C241 Abnormal Psychology...............................3
SPCH C105 Interpersonal Communication 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

Human Services Worker Certificate of Achievement

Human Services Worker Certificate of Achievement (27 units): Any student completing the courses required for the Human Services major qualifies for a certificate in Human Services Worker. The program prepares students for employment in a broad range of human services careers. Certificate consists of seven core courses and two electives. Although individual courses are offered online, the full certificate is currently not available in online environments.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Articulate the board concerns and practices of human services industries.

- Demonstrate three core sets of human services skills: conducting an interview, writing an incident report, participate in team meetings, and provide necessary support and referrals to consumers.

- Assess situations for appropriate entry level professional, legal, and ethical responses.

- Use supervisory feedback for improved performance.

- Analyze the cultural components of a human services situation and recommend culturally appropriate interventions.

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:

HMSV C101 Introduction to Human Services............3 Units
HMSV C102 Cultural Competence in
      Human Services...3
HMSV C103 Preparation for Field Work in
      Human Services...3
HMSV C104 Field Work in Human Services.................4
HMSV C116 Case Management 3
CSCI C070 Computer Literacy......................................1
ENGL C101 Freshman Composition 4

Select 6 units from the following courses:

CHDV C106 Child Growth and Development............3 Units
CHDV C241 The Exceptional Child................................3
HMSV C113 Intervention Skills in Human Services..3
PSYC C101 General Psychology 3
PSYC C112 Introduction to Substance
      Abuse Issues 3
PSYC C211 Lifespan Development 3
PSYC C241 Abnormal Psychology...............................3
SPCH C105 Interpersonal Communication 3

Disclosures
Gainful Employment information for this program may be found at **http://www.cerrocoso.edu/academic-programs/**.

Liberal Arts: Arts & Humanities Associate in Arts Degree

The Liberal Arts: Arts & Humanities Associate in Arts Degree (60 units total, 18 units in the area of emphasis) is designed for students who wish to have a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis." This emphasis allows students to satisfy general education requirements as well as focus

on transferable course work. It is ideal for students who plan on transferring to California State University (CSU) or University of California (UC) for a major in education or for a major that Cerro Coso does not offer. Please consult with a counselor for information regarding your intended major at the specific college or university of your choice.

Courses in the Liberal Arts: Arts & Humanities AA degree emphasize the study of cultural, literary, and humanistic activities, and artistic expression of human beings. Students evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments. This degree is appropriate for students intending to transfer into such majors as Art History, English, Humanities, and Philosophy. If you have questions about whether this degree is an appropriate choice for your major, please consult with a counselor or educational advisor.

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 area of emphasis and general education requirements, with an overall GPA of 2.0 or better, and a grade of "A," "B," "C," or "P" in all courses of the area of emphasis. A minimum of 12 units must be completed at Cerro Coso Community College.

Your transfer institution may require some of the 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.

Completion of the Cerro Coso Local General Education Pattern DOES NOT prepare a student for transfer. If you are planning to transfer to a four-year school, depending on your transfer goal, you should select Option B or C only. Please consult with a counselor or educational advisor if you have any questions about which option is right for you.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Describe how people throughout the ages and in different cultures have responded to themselves and the world around them in artistic and cultural creation.

- Evaluate the significance of artistic and cultural constructions.

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.

Select at least 18 units from the following courses:

Course	Title	Units
ART C101	Introduction to Art	3 Units
ART C105	History of Western Art I	3
ART C106	History of Western Art II	3
or ART C106H	History of Western Art II – Honors	4
ART C111	Two Dimensional Design	3
ART C115	3-Dimensional Design	3
ART C121	Drawing I	3
ART C131	Painting I	3
ART C141	Ceramics I	3
ART C151	Sculpture I	3
ART C165	Photography I	3
ASL C100	Deaf History	3
ASL C101	American Sign Language I	4
ASL C102	American Sign Language II	4
ASL C201	Intermediate American Sign Language I	4
ASL C202	Intermediate American Sign Language II	4
ENGL C102	Critical Thinking Through Literature	3
or ENGL C102H	Critical Thinking Through Literature – Honors	4
ENGL C111	Introduction to Types of Literature	3
or ENGL C111H	Introduction to Types of Literature – Honors	4
ENGL C141	Creative Writing: Fiction and Poetry	3
ENGL C190	Art of Fiction	3
ENGL C221	World Literature I	3
or ENGL C221H	World Literature I – Honors	4
ENGL C222	World Literature II	3
or ENGL C222H	World Literature II – Honors	4
ENGL C231	Survey of British Literature I: Beginnings-1785	3
or ENGL C231H	Survey of British Literature I: Beginnings-1785 – Honors	4
ENGL C232	Survey of British Literature II: 1785-Present	3
or ENGL C232H	Survey of British Literature II: 1785-Present – Honors	4
ENGL C235	Introduction to Shakespeare	3

or ENGL C235H	Introduction to Shakespeare–Honors	4
ENGL C241	Survey of American Literature I: Beginnings-1865	3
or ENGL C241H	Survey of American Literature I: Beginnings-1865 – Honors	4
ENGL C242	Survey of American Literature II: 1865-Present	3
or ENGL C242H	Survey of American Literature II: 1865-Present – Honors	4
ENGL C245	Women's Literature	3
or ENGL C245H	Women's Literature – Honors	4
ENGL C249	Multi-Ethnic Literature	3
or ENGL C249H	Multi-Ethnic Literature – Honors	4
FILM C211	Hispanic Cinema	3
FREN C101	Beginning French I.	5
HIST C103	Western Civilization	3
or HIST C103H	Western Civilization I – Honors	4
HIST C104	Western Civilization II	3
or HIST C104H	Western Civilization II – Honors	4
LATN C101	Elementary Latin I	4
LATN C102	Elementary Latin II	4
LATN C201	Intermediate Latin I	4
LATN C202	Intermediate Latin II	4
MUSC C101	Music Appreciation	3
or MUSC C101H	Music Appreciation – Honors	4
MUSC C118	History of American Popular Music	3
MUSC C121	Piano I	2
MUSC C122	Piano II	2
MUSC C126	Guitar	2
MUSC C131	Orchestra I	2
MUSC C132	Orchestra II	2
MUSC C141	Community Band I	2
MUSC C142	Community Band II	2
MUSC C151	Choir I	2
MUSC C152	Choir II	2
MUSC C173	Appreciation of Jazz	3
PHIL C101	Introduction to Philosophy	3
PHIL C141	Ethics	3
PHIL C161	Introduction to Religious Studies	3
PHIL C164	Survey of World Religions	3
PHIL C205	Critical and Comparative Reasoning	4
PHIL C215	History of Western Philosophy	3
SOCI C210	Diversity and Film	3
SOCI C220	Perspectives on Race, Class and Gender	3
SPAN C100	Basic Conversational Spanish	3
SPAN C101	Elementary Spanish I	5
SPAN C102	Elementary Spanish II	5
SPAN C110	Review of Elementary Spanish	5
SPAN C171	Intermediate Conversation	3
SPAN C180	Spanish for Native Speakers	3
SPAN C201	Intermediate Spanish I	5
SPAN C202	Intermediate Spanish II	5
SPAN C211	Hispanic Cinema	3
SPCH C101	Elements of Speech	3
SPCH C105	Interpersonal Communication	3
THEA C101	Introduction of Theatre	3
THEA C103	Introduction to Play Reading	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

Liberal Arts: Mathematics & Science Associate in Arts Degree

Liberal Arts: Mathematics & Science Associate in Arts Degree (60 units total, 18 units in the area of emphasis): The Liberal Arts degrees are designed for students who wish to have a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis". This emphasis allows students to satisfy general education requirements as well as focus on transferable course work. It is ideal for students who plan on transferring to California State University (CSU) or University of California (UC) for a major in education or for a major that Cerro Coso does not offer. Please consult with a counselor for information regarding your intended major at the specific college or university of your choice.

Courses in the Liberal Arts: Mathematics & Science AA Degree emphasize the natural sciences which examine the physical universe, its life forms, and its natural phenomena. Courses in math emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students completing this degree may be able to transfer to a four-year degree program in teaching, various health career programs, or environmental studies.

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 area of emphasis and general education requirements, with an overall GPA of 2.0 or better, and a grade of "A," "B," "C," or "P" in all courses of the area of emphasis. 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.

Completion of the Cerro Coso local General Education Pattern DOES NOT prepare a student for transfer. If you are planning to transfer to a four-year school, depending on your transfer goal, you should select Option B or C only. For more information refer to the general education section of the catalog.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate a general understanding of the nature of science, the methods applied in scientific investigations, and the value of those methods in developing a rigorous understanding of the physical world.

- Apply multiple approaches to problem solving, using algebraic, graphical, and numerical methods to solve applied problems in other areas of mathematics, natural sciences, computer graphics, and computer animation.

- Demonstrate mastery of the Scientific Method, including the experimental and empirical methodologies characteristic of science and the modern methods and tools used in scientific inquiry.

- Perform hands-on laboratory and/or field experiments of all science classes safely.

- Identify the difference between science and other fields of knowledge. Perform a critical analysis of a topic in order to determine science from pseudoscience.

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.

Select at least 18 units from the following courses. At least one course must be from Mathematics and at least two courses from the sciences, including one laboratory or field experience course (*).

ANTH C121   Physical Anthropology..............................3 Units

BIOL C101	Principles of Biology	3
or BIOL C101H	Principles of Biology – Honors	4
BIOL C102*	Principles of Biology Laboratory	1
BIOL C105*	Concepts of Biology	4
or BIOL C105H*	Concepts of Biology – Honors	5
BIOL C111*	General Biology	5
or BIOL C111H*	General Biology I – Honors	6
BIOL C112 *	General Biology II	5
or BIOL C112H*	General Biology II – Honors	6
BIOL C125 *	Survey of Anatomy and Physiology	4
or BIOL C121	Survey of Anatomy and Physiology Lecture	3
BIOL C122 *	Survey of Anatomy and Physiology Laboratory	1
BIOL 145 *	Environmental Studies	4
or BIOL C141	Environmental Studies Lecture	3
BIOL C142 *	Environmental Studies Laboratory	1
BIOL C251 *	Human Anatomy	4
BIOL C255 *	Human Physiology	4
BIOL C261 *	General Microbiology	4
CHEM C101 *	Introduction to Chemistry	4
CHEMC111 *	General Inorganic Chemistry I	5
CHEM C113 *	General Inorganic Chemistry II	5
or CHEM C113H*	General Inorganic Chemistry II – Honors	6
CHEM C221 *	Organic Chemistry I	5
CHEM C223 *	Organic Chemistry II	5
or CHEM C223H*	Organic Chemistry II – Honors	6
GEOG C101	Physical Geography Lecture	3
GEOG C102 *	Physical Geography Laboratory	1
GEOG C111 *	Physical Geography	4
GEOL C111 *	Physical Geology	4
GEOL C131	Environmental Geology	3
MATH C121	Elementary Probability and Statistics	4
or MATH C121H	Elementary Probability and Statistics – Honors	5
MATH C130	Finite Mathematics	4
MATH C131	Business Calculus	4
MATH C141	College Algebra	4
MATH C142	Trigonometry	4
MATH C151	Analytic Geometry and Calculus I	5
MATH C152	Analytic Geometry and Calculus II	5
MATH C251	Analytic Geometry and Calculus III	5
MATH C255	Ordinary Differential Equations	4
MATH C257	Linear Algebra	4
PHSC C105 *	General Earth Sciences	4
or PHSC C101	General Earth Sciences Lecture	3
PHSC C102 *	General Earth Sciences Laboratory	1
PHSC C115 *	Physical Science	4
or PHSC C111	Concepts of Physical Science	3
PHSC C112*	Physical Science Laboratory	1
PHSC C121	Elementary Astronomy	3
PHSC C122*	Elem. Astronomy Laboratory	1
PHSC C125*	Astronomy	4
PHSC C131	Introduction to Meteorology	3
PHSC C132*	Introduction to Meteorology Laboratory	1
PHYS C111*	Mechanics	5
PHYS C113*	Electricity and Magnetism	5
PHYS C211*	Waves, Optics and Modern Physics	5
CSCI C251	Introduction to Visual Basic Programming	3
CSCI C252	Introduction to Computer Science	3
CSCI C265	Introductory C++ Programming	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

Liberal Arts: Social & Behavioral Sciences Associate in Arts Degree

The Liberal Arts: Social & Behavioral Sciences Associate in Arts Degree (60 units total, 18 units in the area of emphasis) is designed for students who wish to have a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis." This area of emphasis would be an ideal choice for students who plan on transferring to the California State University (CSU) or University of California (UC) as students can satisfy general education requirements, plus focus on transferable course work that relates to majors at these institutions. Please consult with a counselor for information regarding your intended major at the specific college or university of your choice.

Courses in the Liberal Arts: Social & Behavioral Sciences AA degree emphasize the perspectives, concepts, theories and methodologies of the disciplines that comprise study in the Social and Behavioral Sciences. Students study about themselves and others as members of a larger society. Topics and discussion to stimulate critical thinking about ways people have acted in response to their societies allow students to evaluate how societies and social subgroups operate. This area of emphasis is appropriate for students intending to transfer into such majors as Anthropology, Economics, History, Political Science, and Sociology. If you have questions about whether this Area of Emphasis is an appropriate choice for your major, please consult with a counselor or educational advisor.

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. 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 area of emphasis and general education requirements, with an overall GPA of 2.0 or better, and a grade of "A," "B," "C," or "P" in all courses of the area of emphasis. A minimum of 12 units must be completed at Cerro Coso Community College.

Your transfer institution may require some of the major course 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 preparation courses.

Completion of the Cerro Coso Local General Education pattern DOES NOT prepare a student for transfer. If you are planning to transfer to a four-year school depending on your transfer goal you should select Option B or C only. Please consult with a counselor or educational advisor if you have any questions about which option is right for you.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Identify and apply methods, such as observation, hypothesis development, experimentation, evaluation of evidence, or measurement and data collection, used by social scientists to study human behavior.

- Identify and analyze theories explaining the individual, social, historical, political, or economic activities of men and women.

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.

Select at least 18 units from the following courses:

ADMJ C101	Introduction to Administration of Justice	3 Units
ANTH C111	Cultural Anthropology	3
ANTH C121	Physical Anthropology	3
ANTH C131	Archaeology	3
CHDV C104	Child, Family and Community	3
CHDV C105	Introduction to Infant Development	3
CHDV C106	Child Growth and Development	3
ECON C101	Introduction to Economics	3

ECON C102   Macro-Economics.......................................3
ECON C103   Micro-Economics 3
GEOG C131   World Regional Geography.....................3
HIST C103   Western Civilization I.................................3
or HIST C103H   Western Civilization I – Honors 4
HIST C104   Western Civilization II................................3
or HIST C104H   Western Civilization II – Honors.............4
HIST C131   History of United States I 3
or HIST C131H   History of United States I – Honors 4
HIST C132   History of United States II........................3
or HIST 132H   History of United States II – Honors......4
HIST C209   History of Mexico......................................3
HIST C218   California History 3
MATH C121   Elementary Probability and Statistics...4
POLS C101   American Government 3
or POLS C101H   American Government – Honors...........4
POLS C102   Comparative Government.......................3
POLS C204   United States Foreign Policy...................3
PSYC C101   General Psychology 3
or PSYC C101H   General Psychology – Honors 4
PSYC C211   Lifespan Development 3
PSYC C231   Health Psychology....................................3
PSYC C241   Abnormal Psychology..............................3
PSYC C251   Human Sexuality.......................................3
SOCI C101   Introduction to Sociology........................3
SOCI C131   Sociology of Women 3
SOCI C210   Diversity and Film......................................3
SOCI C220   Perspectives on Race,
              Class and Gender..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

Machine Tool Technology Associate in Science Degree

The Machine Tool Technology Associate in Science Degree (60 units total, 20 units in the major) is designed to provide the student with the basic skills and knowledge necessary to enter the machine shop trades and other related fields. This program includes both traditional and "high tech" machine set up and operation training.
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," "C," or "P" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate safe work habits and be conscious of safety when working with machinery.

- Read blueprints, interpret drawings, understand specifications, and work within stated tolerances.

- Apply mathematics in the machine tool trade (speeds, feeds, thread measurement, sine bar, related to computer Numerical Controlled equipment (CNC)).

- Operate abrasive cutting machines such as surface, cylindrical internal, and form grinding equipment.

- Demonstrate skills in quality control, inspection, gauging methods, and production control as they relate to manufacturing, design, and production.

- Function on multi-disciplinary teams and communicate effectively in an industrial setting.

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:

DRFT C111   Engineering Drawing I...............................3 Units
MCTL C111   Beginning Machine Shop 3
MCTL C112   Intermediate Machine Shop....................3
MCTL C211   Advanced Machine Shop.........................3
MCTL C212   Advanced Machine Shop and
             Tool Problems 3
WELD C101   Oxyacetylene Welding..............................3
WEXP C101   Introduction to Work Experience...........1
WEXP C102   Occupational/Career
             Work Experience 1-3

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

Machine Tool Technology Certificate of Achievement

Machine Tool Technology Certificate of Achievement (20 units): Any student completing the courses required for the major qualifies for a certificate in Machine Tool Technology.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate safe work habits and be conscious of safety when working with machinery.
- Read blueprints, interpret drawings, understand specifications, and work within stated tolerances.
- Apply mathematics in the machine tool trade (speeds, feeds, thread measurement, sine bar, related to computer Numerical Controlled equipment (CNC)).
- Operate abrasive cutting machines such as surface, cylindrical internal, and form grinding equipment.
- Demonstrate skills in quality control, inspection, gauging methods, and production control as they relate to manufacturing, design, and production.
- Function on multi-disciplinary teams and communicate effectively in an industrial setting.

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:

DRFT C111 Engineering Drawing I ....3 Units
MCTL C111 Beginning Machine Shop 3
MCTL C112 Intermediate Machine Shop 3

MCTL C211 Advanced Machine Shop..........................3
MCTL C212 Advanced Machine Shop and Tool Problems 3
WELD C101 Oxyacetylene Welding 3
WEXP C101 Introduction to Work Experience...........1
WEXP C102 Occupational/Career Work Experience 1-3

Disclosures
Gainful Employment information for this program may be found at **http://www.cerrocoso.edu/academic-programs/**.

Management Associate in Science Degree

The Management Associate in Science Degree (60 units total, 32 units in the major) is designed to provide students with the management skills necessary to succeed in today's technological business environment. Upon completion of this degree, the student will be able to demonstrate a general understanding of business, apply critical thinking skills to technical and managerial issues, make ethical decisions in a managerial context, and apply management, supervision, and leadership skills in a diverse and complex environment.

This degree is not specifically designed for transfer. Students wishing to transfer are advised to consider the Business Administration AA degree.

Courses required for the Associate degree major at Cerro Coso Community College may not be the same as those required for a major at a four-year school. If you do plan to transfer, 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," "C," or "P" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate a general understanding of the nature of business.

- Apply critical thinking skills (analysis, synthesis, evaluation) to technical and managerial issues in a business environment.

- Demonstrate the ability to make ethical decisions in a managerial context.

- Recognize skills necessary to provide management, supervision, and leadership in a diverse and complex environment.

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:

BSAD C100	Introduction to Business	3 Units
BSAD C101	Financial Accounting	4
BSAD C102	Managerial Accounting	4
BSAD C131	Business Law	3
BSAD C145	Business Communication	3
BSAD C155	Human Resource Management	3
BSAD C220	Principles of Project Management	3
BSAD C222	Problem Solving and Computer Applications in Management	3
BSAD C251	Principles of Management and Organization	3
CSCI C101	Introduction to Computer Information Systems	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

Management Certificate of Achievement

The Management Certificate of Achievement (32 units) is designed to provide the non-degree seeking student with the management skills necessary to succeed in today's technological business environment. Upon completion of this certificate, the student will be able to demonstrate a general understanding of business, apply critical thinking skills to technical and managerial issues, make ethical decisions in a managerial context, and apply management, supervision, and leadership skills in a diverse and complex environment.

Complete each course to be applied toward the certificate with a "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes

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

- Demonstrate a general understanding of the nature of business.

- Apply critical thinking skills (analysis, synthesis, evaluation) to technical and managerial issues in a business environment.

- Demonstrate the ability to make ethical decisions in a managerial context.

- Recognize skills necessary to provide management, supervision, and leadership in a diverse and complex environment.

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:

BSAD C100	Introduction to Business	3 Units
BSAD C101	Financial Accounting	4
BSAD C102	Managerial Accounting	4
BSAD C131	Business Law	3
BSAD C145	Business Communication	3
BSAD C155	Human Resource Management	3
BSAD C220	Principles of Project Management	3
BSAD C222	Problem Solving and Computer Applications in Management	3
BSAD C251	Principles of Management and Organization	3
CSCI C101	Introduction to Computer Information Systems	3

Mathematics Associate in Arts Degree for Transfer (AA-T)

The Associate in Arts Degree in Mathematics for Transfer (60 units total, 22 units in major) prepares students for transfer to the CSU System to earn a baccalaureate in applied or theoretical mathematics, mathematics education, statistics, engineering, natural or physical science, or economics. Upon successful completion of the program students will be able to apply advanced mathematical concepts such as extending the concepts of derivatives, differentials, and integrals to include multiple independent variables, solving simple differential equations of the first and second order, and analyzing and modeling the behaviors of physical phenomena using calculus. Baccalaureate options for students include General Mathematics, Applied Mathematics, Mathematics Education, Statistics, Physics, Chemistry, Biology, Computer Science, Engineering, Computer Information Systems, Management Information Systems, and Economics. To complete the degree, students must fulfill both of 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 or area of emphasis, as determined by the Kern Community College District Board of Trustees.

2. Obtainment of a minimum grade point average of 2.0

Please note that our local Cerro Coso general education pattern MAY NOT be used to fulfill the requirements of this degree and that all required Courses for the degree must be transferable to CSU.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Use the Cartesian, polar, cylindrical, and spherical coordinate systems effectively.

- Use scalar and vector products in applications.

- Use vector-valued functions to describe motion in space.

- Extend the concepts of derivatives, differentials, and integrals to include multiple independent variables.

- Solve simple differential equations of the first and second order.

- Analyze and model the behaviors of physical phenomena by applying advanced calculus concepts.

- Apply broad mathematical concepts to practical applications.

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 the following courses:

MATH C151	Analytic Geometry and Calculus I	5 Units
MATH C152	Analytic Geometry and Calculus II	5
MATH C251	Analytic Geometry and Calculus III	5

Choose a minimum of 7 units from below with at least 4 units from Area A:

Area A

MATH C255	Ordinary Differential Equations	4 Units
MATH C257	Linear Algebra	4

Area B

MATH C121	Elementary Probability and Statistics	4 Units
or MATH C121H	Elementary Probability and Statistics – Honors	5
PHYS C111	Mechanics	5
CSCI C251	Introduction to Visual Basic Programming	3
CSCI C252	Introduction to Computer Science	3
CSCI C265	Introductory C++ Programming	3

Complete one of the following general education patterns:

OPTION B	CSU General Education Breadth
OPTION C	IGETC - Intersegmental General Education Transfer Curriculum

Mathematics Associate in Arts Degree

The Mathematics Associate in Arts Degree (60 units total, 29 - 31 units in the major) prepares students for transfer to four-year universities to pursue a Bachelor degree. Bachelor degree options include but are not limited to: General Mathematics, Applied Mathematics, Mathematics Education, Statistics, Physics, Chemistry, Biology, Computer Science, Engineering, Computer Information Systems, Management Information Systems, and Economics.

The degree consists of five required courses comprising 23 units, and another two elective courses comprising six, seven, or eight units, depending on the student's elective preferences. For example, two computer science electives comprise six units, one computer science elective and one mathematics elective comprise seven units, and two mathematics electives comprise eight units.

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," "C," or "P" 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 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.

Completion of the Cerro Coso local General Education Pattern DOES NOT prepare a student for transfer. If you are planning to transfer to a four-year school, depending on your transfer goal, you should select Option B or C only. For more information refer to the general education section of the catalog.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate preparation for upper division mathematics, statistics, science, engineering, or economics courses at the appropriate institution. In particular, students should demonstrate a working knowledge of Calculus I, II, and III, Differential Equations, and Linear Algebra.

- Demonstrate an understanding of academic skills (research, critical thinking, and scientific methods) needed to master specialized fields.

- Demonstrate a general ability to understand and communicate scientific and mathematical information.

- Demonstrate an understanding of the structure of mathematics and its application in the sciences.

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 the following courses:

MATH C151	Analytic Geometry and Calculus I	5 Units
MATH C152	Analytic Geometry and Calculus II	5
MATH C251	Analytic Geometry and Calculus III	5
MATH C255	Ordinary Differential Equations	4
MATH C257	Linear Algebra	4

Select 6-8 units from the following courses:

CSCI C251	Introduction to Visual Basic Programming	3 Units
CSCI C265	Introductory C++ Programming	3
CSCI C267	Introduction to Java Programming	3
MATH C121	Elementary Probability and Statistics	4
MATH C130	Finite Mathematics	4
MATH C131	Business Calculus	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

Paralegal Studies Associate in Science Degree

The Paralegal Studies Associate in Science Degree (60 units total, 31 units in the major) is designed to prepare students for work in the legal environment as either professional paralegals or legal assistants. Students receive training in all aspects of the legal system including the court system, legal research, client interviews, legal briefs, and court procedures. This course of study is employment preparation for career opportunities with private attorneys, local court jurisdictions, corporate law offices, and self-employment as an independent paralegal.

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," "C," or "P" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Analyze data and information to assist attorneys with client's case throughout the legal process.

- Locate and analyze relevant primary and secondary legal sources in electronic and print media.

- Apply investigative functions and techniques to gather information from witnesses and other sources.

- Process legal documents and maintain legal schedules.

- Draft and organize legal documents and records including pretrial preparation.

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:

BSAD C131	Business	3 Units
PARA C101	Introduction to Paralegal Studies	3
PARA C105	Legal Ethics	3
PARA C112	Legal Research and Writing I	3
PARA C122	Legal Research and Writing II	3
PARA C130	Civil Litigation and Procedure I	3
PARA C140	Civil Litigation and Procedure II	3
PARA C290	Paralegal Studies Internship	2

Select at least 8 units from the following courses:

PARA C150	Law Office Management	3 Units
PARA C220	Bankruptcy Law	3
PARA C230	Probate Law	3
PARA C240	Criminal Law and Procedure	3
PARA C250	Family Law	3
PARA C260	Personal Injury and Tort Litigation	3
PARA C270	Real Property Law	2
PARA C280	Worker's Compensation Law	2

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

Paralegal Studies Certificate of Achievement

Paralegal Studies Certificate Of Achievement (31 units): Any student completing the courses required for the Paralegal Studies major qualifies for a certificate in Paralegal Studies. This course of study is employment preparation for career opportunities with private attorneys, local court jurisdictions, corporate law offices, and self-employment as an independent paralegal.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Analyze data and information to assist attorneys with client's case throughout the legal process.

- Locate and analyze relevant primary and secondary legal sources in electronic and print media.

- Apply investigative functions and techniques to gather information from witnesses and other sources.

- Process legal documents and maintain legal schedules.

- Draft and organize legal documents and records including pretrial preparation.

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:

BSAD C131	Business Law	3 Units
PARA C101	Introduction to Paralegal Studies	3
PARA C105	Legal Ethics	3
PARA C112	Legal Research and Writing I	3
PARA C122	Legal Research and Writing II	3
PARA C130	Civil Litigation and Procedure I	3
PARA C140	Civil Litigation and Procedure II	3
PARA C290	Paralegal Studies Internship	2

Select at least 8 units from the following courses:

PARA C150	Law Office Management	3 Units
PARA C220	Bankruptcy Law	3
PARA C230	Probate Law	3
PARA C240	Criminal Law and Procedure	3
PARA C250	Family Law	3
PARA C260	Personal Injury and Tort Litigation	3
PARA C270	Real Property Law	2
PARA C280	Worker's Compensation Law	2

Disclosures

Gainful Employment information for this program may be found at **http://www.cerrocoso.edu/academic-programs/**.

Small Business Management/ Entrepreneurship Associate in Science Degree

The Small Business Management/Entrepreneurship Associate in Science Degree (60 units total, 30 units in the major) is designed to provide students with key entrepreneurial skills to succeed in a small business environment. Upon completion of this degree, the student will be able to demonstrate a general understanding of small business management, apply critical thinking skills to technical issues, and solve problems in a small business environment.

This degree is not specifically designed for transfer. Students wishing to transfer are advised to consider the Business Administration AA degree.

Courses required for the Associate degree major at Cerro Coso Community College may not be the same as those required for a major at a four-year school. If you do plan to transfer, 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," "C," or "P" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Program Learning Outcomes

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

- Demonstrate a general understanding of the nature of business

- Apply critical thinking skills (analysis, synthesis, evaluation) to technical issues in a business environment.

- Recognize skills necessary to solve problems in a small business environment.

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:

BSAD C100	Introduction to Business	3 Units
BSAD C101	Financial Accounting	4
BSAD C110	Introduction to Personal Finance	3
BSAD C125	Computerized Accounting Practice	2
BSAD C131	Business Law	3
BSAD C145	Business Communication	3
BSAD C171	Introduction to Marketing	3
BSAD C180	Entrepreneurship: Small Business Management	3
BSAD C211	E-Commerce	3
CSCI C101	Introduction to Computer Information Systems	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

Small Business Management/Entrepreneurship Certificate of Achievement

The Small Business Management/Entrepreneurship Certificate Of Achievement (30 units) is designed to provide non-degree seeking students with key entrepreneurial skills to succeed in a small business environment. Upon completion of this certificate, the student will be able to demonstrate a general understanding of small business management, apply critical thinking skills to technical issues, and solve problems in a small business environment.

Complete each course to be applied toward the certificate with a "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate a general understanding of the nature of business.

- Apply critical thinking skills (analysis, synthesis, evaluation) to technical issues in a business environment.

- Recognize skills necessary to solve problems in a small business environment.

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:

BSAD C100	Introduction to Business	3 Units
BSAD C101	Financial Accounting	4
BSAD C110	Introduction to Personal Finance	3
BSAD C125	Computerized Accounting Practice	2
BSAD C131	Business Law	3
BSAD C145	Business Communication	3
BSAD C171	Introduction to Marketing	3
BSAD C180	Entrepreneurship: Small Business Management	3
BSAD C211	E-Commerce	3
CSCI C101	Introduction to Computer Information Systems	3

Disclosures
Gainful Employment information for this program may be found at **http://www.cerrocoso.edu/academic-programs/**.

Vocational Nursing Associate in Science Degree

Vocational Nursing Associate in Science Degree (60 units total, 45.5 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 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 in 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,""C," or "P" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Identify the etiology, pathophysiology, and signs and symptoms of disorders of all body systems and stages of development.

- Demonstrate an understanding of the nursing process.

- Take a leadership role in both the profession of Vocational Nursing and in the community.

- Successfully pass the State Mandated NCLEX-PN Boards.

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 C101 Vocational Nursing: Medical-Surgical Nursing 1 ......8 Units
HCRS C111 Vocational Nursing: Clinical Practice 1 6

HCRS C070 CPR for the Healthcare Provider......0.5
or EMTC C070 CPR for the Healthcare Provider......0.5

Semester II

HCRS C102 Vocational Nursing: Medical-Surgical Nursing 2 ......8 Units
HCRS C112 Vocational Nursing: Clinical Practice 2 6

Semester III

HCRS C201 Vocational Nursing: Medical-Surgical Nursing 3 ......8 Units
HCRS C211 Vocational Nursing: Clinical Practice 3 6

Select 3 units from the following courses:

HCRS C230 Pharmacology for the Health Professional......3 Units
HCRS C240 Nutrition and Diet Therapy for Health Professionals 3
HCRS C250 Cultural Diversity and Health Care 3
HCRS C255 Basic Cardiac Rhythm Interpretation....3
HCRS C260 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
CSCI C070 Computer Literacy......1
HCRS C055 Certified Nursing Assistant......5
HCRS C150 Medical Terminology for the Health Professional 3
PSYC C101 General Psychology 3

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.

Vocational Nursing Certificate of Achievement

Vocational Nursing Certificate of Achievement (45.5 units): Any student completing the courses

required for the Vocational Nursing major qualifies for a certificate in Vocational Nursing.

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 in the program, interested students should contact the Counseling Center or the Director of Vocational Nursing Program.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Identify the etiology, pathophysiology, and signs and symptoms of disorders of all body systems and stages of development.

- Demonstrate an understanding of the nursing process.

- Take a leadership role in both the profession of Vocational Nursing and in the community.

- Successfully pass the State Mandated NCLEX-PN Boards.

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 C101	Vocational Nursing: Medical-Surgical Nursing 1	8 Units
HCRS C111	Vocational Nursing: Clinical Practice 1	6
HCRS C070	CPR for the Healthcare Provider	0.5
or EMTC C070	CPR for the Healthcare Provider	0.5

Semester II

HCRS C102	Vocational Nursing: Medical-Surgical Nursing 2	8 Units
HCRS C112	Vocational Nursing: Clinical Practice 2	6

Semester III

HCRS C201	Vocational Nursing: Medical-Surgical Nursing 3	8 Units
HCRS C211	Vocational Nursing: Clinical Practice 3	6

Select 3 units from the following courses:

HCRS C230	Pharmacology for the Health Professional	3 Units
HCRS C240	Nutrition and Diet Therapy for Health Professionals	3
HCRS C250	Cultural Diversity and Health Care	3
HCRS C255	Basic Cardiac Rhythm Interpretation	3
HCRS C260	Ethics for the Health Professional	3

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
CSCI C070	Computer Literacy	1
HCRS C055	Certified Nursing Assistant	5
HCRS C150	Medical Terminology for the Health Professional	3
PSYC C101	General Psychology	3

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.

Disclosures
Gainful Employment information for this program may be found at **http://www.cerrocoso.edu/academic-programs/**.

Web Design Associate in Science Degree

The Web Design Associate in Science Degree (60 units total, 34 units in the major) is designed to prepare students for a career in the web industry by emphasizing creative problem solving, standards-based coding and scripting, visual design, usability, accessibility, technical communication, media production, and project management. The curriculum has the objective of developing technical and design skills, a combination of competencies that employers and clients value. Students develop realistic

expectations about work conditions through individual and collaborative work-based projects and by learning in the same technological environment in which they will eventually work.

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 a major at a four-year school. If you do plan to transfer, 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," "C," or "P" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Program Learning Outcomes

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

- Demonstrate technical and creative mastery of the creation of web media, such as graphics, motion graphics, and interactive media.

- Use valid markup, cascading style sheets, semantic encoding, accessibility compliance, and error-free scripting in the creation of web content.

- Apply design principles to solve visual communication problems.

- Demonstrate life-long learning skills in effective collaboration, leadership, written communication, management, and information search and retrieval.

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:

DMA C102	Digital Imaging with Photoshop	3 Units
DMA C111	Fundamentals of Web Development	3

or CSCI C181	Fundamentals of Web Development	3
DMA C113	Accessibility and Usability	3
DMA C115	Interactivity and Interface Design with Flash	4
DMA C117	Web Design with Dreamweaver	3
DMA C211	Web Scripting with JavaScript	3
DMA C280	Web Production Management	3
ENGL C151	Technical Communication	3

Select at least 9 units from the following courses:

ART C111	Two Dimensional Design	3 Units
ART C121	Drawing I	3
BSAD C211	E-Commerce	3
CSCI C251	Introduction to Visual Basic Programming	3
CSCI C265	Introductory C++ Programming	3
CSCI C267	Introduction to Java Programming	3
DMA C103	Digital Photo Enhancement with Photoshop	2
DMA C107	Illustration and Design with Illustrator	3
DMA C108	Advanced Digital Imaging and Illustration	3
DMA C109	Desktop Publishing with InDesign	3
DMA C121	Principles of Animation with Flash	3
DMA C130	Introduction to Podcasting	1.5
DMA C131	Digital Video Production	3
DMA C133	Motion Graphics with After Effects	3
DMA C135	Digital Cinematography	3
DMA C213	Web Development with PHP and MySQL	3
DMA C217	PHP Site Management and Theme Design	3
MUSC C183	Fundamentals of Sound Design for Media	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

Web Design Certificate of Achievement

The Web Design Certificate of Achievement (34 units) prepares students for a career in the web industry by emphasizing creative problem solving, standards-based coding and scripting, visual design, usability, accessibility, technical communication, media production, and project management. The curriculum has the objective of developing technical and design skills, a combination of competencies that employers and clients value. Students develop realistic expectations about work conditions through

individual and collaborative work-based projects and by learning in the same technological environment in which they will eventually work.

Students earn the Certificate in Web Design by completing 34 units, including 25 units of core courses and at least 9 units among the specified electives.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes

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

- Demonstrate technical and creative mastery of the creation of web media, such as graphics, motion graphics, and interactive media.

- Use valid markup, cascading style sheets, semantic encoding, accessibility compliance, and error-free scripting in the creation of web content.

- Apply design principles to solve visual communication problems.

- Demonstrate lifelong learning skills in effective collaboration, leadership, written communication, management, and information search and retrieval.

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:

DMA C102	Digital Imaging with Photoshop	3 Units
DMA C111	Fundamentals of Web Development	3
or CSCI C181	Fundamentals of Web Development	3
DMA C113	Accessibility and Usability	3
DMA C115	Interactivity and Interface Design with Flash	4
DMA C117	Web Design with Dreamweaver	3
DMA C211	Web Scripting with JavaScript	3
DMA C280	Web Production Management	3
ENGL C151	Technical Communication	3

Select at least 9 units from the following courses:

ART C111	Two Dimensional Design	3 Units
ART C121	Drawing I	3
BSAD C211	E-Commerce	3
CSCI C251	Introduction to Visual Basic Programming	3
CSCI C265	Introductory C++ Programming	3
CSCI C267	Introduction to Java Programming	3
DMA C103	Digital Photo Enhancement with Photoshop	2
DMA C107	Illustration and Design with Illustrator	3
DMA C108	Advanced Digital Imaging and Illustration	3
DMA C109	Desktop Publishing with InDesign	3
DMA C121	Principles of Animation with Flash	3
DMA C130	Introduction to Podcasting	1.5
DMA C131	Digital Video Production	3
DMA C133	Motion Graphics with After Effects	3
DMA C135	Digital Cinematography	3
DMA C213	Web Development with PHP and MySQL	3
DMA C217	PHP Site Management and Theme Design	3
MUSC C183	Fundamentals of Sound Design for Media	3

Disclosures

Gainful Employment information for this program may be found at **http://www.cerrocoso.edu/academic-programs/**.

Welding Technology Associate in Science Degree

The Welding Technology Associate in Science Degree (60 units total, 21 units in the major) trains students in multiple welding processes and is designed to prepare them for an entry-level welding position in diverse fields. Safe and clean work habits are practiced and personal protective equipment is required. Career areas in which welders work include: mining, manufacturing, marine welding, ship building, metal art sculpting, machine shops, construction, railroads, automotive, as well as the aircraft, aerospace and renewable energy industries.

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,

PROGRAMS OF STUDY

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," "C," or "P" in all courses for the major. A minimum of 12 units must be completed at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate competency in major welding processes used in industry.
- Apply welding processes and the use of hand tools and shop equipment to fabricate projects.
- Recognize and interpret technical drawings in the planning and fabrication of projects.
- Demonstrate appropriate workplace safety policies and procedures during welding and fabrication operations.
- Apply mathematical concepts to solve problems related to an industrial/technical environment.

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:

DRFT C108	Reading Technical Drawings	3 Units
or INDT C108	Reading Technical Drawings	3
MCTL C107	Basic Hand Tools	2
MATH C056	Technical Math for Trades	4
WELD C101	Oxyacetylene Welding	3
WELD C102	Shielded Metal Arc Welding (SMAW	2
WELD C200	Gas Metal Arc Welding (GMAW)	2
WELD C201	Welding Fabrication	3
WELD C203	Gas Tungsten Arc Welding (GTAW)	2

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

Welding Technology Certificate of Achievement

Welding Technology Certificate of Achievement (21 units): This course of study trains students in multiple welding processes and is designed to prepare them for an entry-level welding position in diverse fields. Safe and clean work habits are practiced and personal protective equipment is required. Any student completing the Courses required for the Welding Technology major qualifies for a certificate in Welding Technology.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate competency in major welding processes used in industry.
- Apply welding processes and the use of hand tools and shop equipment to fabricate projects.
- Recognize and interpret technical drawings in the planning and fabrication of projects.
- Demonstrate appropriate workplace safety policies and procedures during welding and fabrication operations.
- Apply mathematical concepts to solve problems related to an industrial/technical environment.

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:

DRFT C108	Reading Technical Drawings	3 Units
or INDT C108	Reading Technical Drawings	3
MCTL C107	Basic Hand Tools	2
MATH C056	Technical Math for Trades	4
WELD C101	Oxyacetylene Welding	3
WELD C102	Shielded Metal Arc Welding (SMAW)	2
WELD C200	Gas Metal Arc Welding (GMAW)	2
WELD C201	Welding Fabrication	3
WELD C203	Gas Tungsten Arc Welding (GTAW)	2

Welding Processes Certificate of Achievement

Welding Processes Certificate of Achievement (12 units): This certificate provides a focus on the major welding and cutting processes for building or upgrading skills and is also a foundation for the two-year degree.

Complete each course to be applied toward the certificate with a grade of "C" or better. Complete a minimum of 12 units in residence at Cerro Coso Community College.

Program Learning Outcomes
Upon successful completion of the program, the student will be able to

- Demonstrate competency in major welding processes used in industry.

- Apply welding processes and the use of hand tools and shop equipment to fabricate projects.

- Accurately fabricate items from technical drawings using appropriate math skills.

- Apply and practice workplace safety policies and procedures while learning welding and related skills.

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:

WELD C101	Oxyacetylene Welding	3 Units
WELD C102	Shielded Metal Arc Welding (SMAW)	2
WELD C200	Gas Metal Arc Welding (GMAW)	2
WELD C201	Welding Fabrication	3
WELD C203	Gas Tungsten Arc Welding (GTAW)	2