Fire Technology

#### COPPER MOUNTAIN COLLEGE 2021-2022 ASSOCIATE DEGREE NON-TRANSFER

Μ	IP	N	degree applicable units, including major requirem ("C") grade point average is required in all course or area of emphasis must be satisfactorily comple <b>LEGEND:</b> <i>Courses without prerequisites are italicia</i> +Transfer credit may be limited by UC, CSU or bo	zed *Courses that appear in multiple areas below, th. Consult with a counselor. <b>M</b> = Met/Completed <b>AREA C1 NATURAL SCIENCES</b> 3 Semester units minimum	uired for the Associate Degree. At least a 2.0 at count toward the Associate Degree major can only be counted in one area. IP = In Progress N = Need to Complete
			A 001 <i>Descriptive Astronomy</i> (3) A 001L Descriptive Astronomy Lab (1) ANTH 001 Introduction to Physical Anthropology (3) BI 004 <i>Elements of Biology</i> (3) BI 004L Elements of Biology Lab (1) BI 005 Molecular & Cellular Biology (5) (Effective Fall 2013) BI 006 Biology of Organisms (5) (Effective Fall 2013)	BI 015 General Microbiology (5) BI 022 Human Anatomy (4) BI 023 Human Physiology (5) CH 001A General Chemistry (5) CH 001B General Chemistry (5) CH 003 Introductory General Chemistry (4) G 001 <i>Physical Geology</i> (4)	G 005 Environmental Geology (4) G 010 The Earth Sciences (4) GEOG 001 Physical Geography (3) NR 001 Conservation of Natural Resources (3) PH 001 Introductory Physics (4) PH 004A Physics for Scientists & Engineers (4) PH 004B Physics for Scientists & Engineers (4) PH 004C Physics for Scientists & Engineers (4)
			<ul> <li>ANTH 002 Cultural Anthropology (3)</li> <li>ANTH 003 Archaeology: An Introduction to Prehistory (3)</li> <li>CD 010 Child Development (4) (Effective Fall 2010)</li> <li>CD 012 Child, Family, &amp; Community (3) (Effective Fall 2012)</li> <li>^CD 074 Living and Teaching in a Diverse Society (3) <ul> <li>(Effective Fall 2021)</li> </ul> </li> <li>CJ 001 Introduction to Criminal Justice (3)</li> <li>CJ 002 Criminal Law (3) (Effective Spring 2011)</li> <li>CJ 010 Juvenile Delinquency (3) (Effective Spring 2011)</li> <li>CJ 032 Introduction to Criminology (3) (Effective Spring 2011)</li> <li>ECON 001 Principles of Macroeconomics (3)</li> <li>*ECON 002 Principles of Microeconomics (3)</li> <li>*ECON 014 Introduction to Race and Ethnicity (3)</li> </ul>	3 Semester units minimum         GEOG 002 Cultural Geography (3)         GEOG 007 World Regional Geography (3) (Effective Fall 2015)         HS 001 Personal and Community Health (3)         HS 013 General Nutrition (3)         HIST 003 History of World Civilizations I (3)         HIST 004 History of World Civilizations II (3)         HIST 017 U.S. History Through Reconstruction (3)         HIST 018 U.S. History from Reconstruction to Present (3)         HIST 019 California History (3)         ^HIST 020 Native American Studies (3)         PHIL 013 Perspectives on Death & Dying (3)         PS 001 Introduction to Government (3)         PS 002 Introduction to Comparative Governments. (3)	PS 004 Introduction to International Relations (3) PSY 001 General Psychology (3) PSY 003 Developmental Psychology (3) PSY 012 Human Sexuality (3) (Effective Fall 2013) PSY 033 Personal & Social Adjustment (3) SOC 001 Introduction to Sociology (3) SOC 002 Social Problems (3) *SOC 010 Introduction to Marriage & Family (3) ^SOC 014 Introduction to Race and Ethnicity (3) STDV 65 <i>College and Personal Success</i> (3) (Effective Fall 2018)
			^EGSJ 020 Native American Studies (3) ^EGSJ 074 Living and Teaching in a Diverse Society (3)	PS UUZ Introduction to Comparative Governments. (3)	<sup>^</sup> CD 074 and EGJS 074; HIST 020 and EGSJ 020; SOC 014 and EGSJ 014 are comparable courses. Therefore, credit is awarded for only one course.

AREA C3 HUMANITITES					
3 Semester units minimum					
M	IP	N	<ul> <li>ART 003A Introduction to Two-Dimensional Design (3)</li> <li>ART 010 Introduction to Art (3)</li> <li>ART 033 History of Photography (3)</li> <li>ART 050 History of Western Art: Prehistory - Middle Ages (3)</li> <li>ART 051 Western Art History: Renaissance to Contemporary (3)</li> <li>ART 052 History of Art: Modern to Contemporary Art with a Global Perspective (3)</li> <li>ART 053 Intro to the Visual Arts of Non-western Cultures (3)</li> <li>ASL 001* Elementary American Sign Language I (5)</li> <li>ASL 003* Intermediate American Sign Language I (4)</li> <li>ASL 004* Intermediate American Sign Language II (4)</li> </ul>	<ul> <li>ENG 001B Composition &amp; Literature (3)</li> <li>ENG 010A American Literature I (3)</li> <li>ENG 010B American Literature II (3)</li> <li>ENG 011A Survey of English Literature: Old English to 18<sup>th</sup> Century (3)</li> <li>ENG 011B Survey of English Literature: Romantic-Postmodernism (3)</li> <li>ENG 012A World Literature I: Beg-1650 (3)</li> <li>ENG 012B World Literature II: The Modern World (1650-Present) (3)</li> <li>HIST 003* History of World Civilizations I (3)</li> <li>HIST 017* U.S. History Through Reconstruction (3)</li> <li>HIST 018*U.S. History from Reconstruction to Present (3)</li> </ul>	<ul> <li>MUS 005 History of Rock 'N' Roll (3)</li> <li>MUS 010 Introduction to Music (3)</li> <li>PHIL 006 Introduction to Philosophy (3)</li> <li>PHIL 008 Philosophy from Ancient Times to the Renaissance (3)</li> <li>PHIL 012* Religions of the World (3)</li> <li>PHIL 013 Perspectives on Death &amp; Dying (3)</li> <li>PHIL 014 Introduction to Ethics (3)</li> <li>SPAN 001 Elementary Spanish (5)</li> <li>SPAN 002* Elementary Spanish (5)</li> <li>SPAN 003* Intermediate Spanish (4)</li> <li>SPAN 004* Intermediate Spanish (4)</li> <li>TA 001 Introduction to Theatre (3)</li> <li>TA 002 Acting I (3)</li> </ul>
	L		AR	EA C4-LANGUAGE AND RATIONALITY	
				1 course from A, 1 course from B	
		T	A ENGLISH COMPOSITION (1 course 3 – semester units): EN	•	
			B COMMUNICATION, MATHEMATICS, AND CRITICAL		Algebra (4) or higher: BUMA 012 Personal Finance (3)
	1			REA C5 TRADITIONS AND CULTURES	
				Minimum of 3 semester units.	
			ANTH 001 Introduction to Physical Anthropology (3) ANTH 002 Cultural Anthropology (3) ART 010 Introduction to Art (3) ASL 001,002* <i>Elementary American Sign Language</i> (5)(5) ASL 003, 004* Intermediate American Sign Language (4)(4) ^CD 074 Living and Teaching in a Diverse Society (3) (Effective Fall 2021) CJ 005A Community & the Justice System (3) ENG 010B Composition & Literature (3) ENG 010B American Literature I (3) ENG 010B American Literature I (3) ENG 011A Survey of English Literature: Old English to 18th Century (3) ENG 011B Survey of English Literature: Romantic Through Postmodernism (3) ENG 012A World Literature I: Beginnings Through 1650 (3)	<ul> <li>ENG 012B World Literature II: The Modern World (1650-Present) (3)</li> <li>^EGSJ 014 Introduction to Race and Ethnicity (3)</li> <li>^EGSJ 020 Native American Studies (3)</li> <li>^EGSJ 074 Living and Teaching in a Diverse Society (3)</li> <li>GEOG 002 Cultural Geography (3)</li> <li>HS 001 Personal &amp; Comm. Health (3)</li> <li>HIST 003 History of World Civilizations I (3)</li> <li>HIST 004 History of World Civilizations II (3)</li> <li>HIST 019 California History (3)</li> <li>^HIST 020 Native American Studies (3)</li> <li>MUS 005 History of Rock 'N' Roll (3)</li> <li>PHIL 006 Introduction to Philosophy (3)</li> <li>PHIL 012 Religions of the World (3)</li> <li>PHIL 014 Introduction to Ethics (3)</li> </ul>	<ul> <li>PS 004 Introduction to International Relations (3)</li> <li>PSY 01 General Psychology (3)</li> <li>^PSY 010 Introduction to Marriage and Family (3)</li> <li>PSY 012 Human Sexuality (3)</li> <li>PSY 033 Personal and Social Adjustment (3)     <ul> <li>(Effective Fall 2018)</li> </ul> </li> <li>SOC 001 Introduction to Sociology (3)</li> <li>SOC 002 Social Problems (3)</li> <li>SOC 004 Sociological Analysis &amp; Critical Thinking (3)</li> <li>^SOC 010 Introduction to Race &amp; Ethnicity (3)</li> <li>SPAN 001, 002 Elementary Spanish (5) (5)</li> <li>SP 001 Interpretation of Literature (3)</li> <li>SP 015 Intercultural Communication (3)</li> <li>And all Languages other than English courses</li> </ul>
					^ CD 074 and EGJS 074; HIST 020 and EGSJ 020; SOC 014 and EGSJ 014; PSY 10 and SOC 10 are comparable courses. Therefore, credit is awarded for only one cours

Fire	Techno	ology	AA

_	Semester: Spring Year:	
	COURSE	UNITS
	FIRE 4	3.00
	FIRE 5	3.00
	MATH 40	4.00
	SP 4	3.00
	HS 13	3.00
	TOTAL UNITS	16.00

Semester: Fall	Year:	
COURSE		UNITS
FIRE 1		3.00
FIRE 3		3.00
EMR 1		3.00
CIS 70A		3.00
ENG 3A		3.00
7074		45.00

## TOTAL UNITS 15.00

Semester: Spring Ye	ear:
COURSE	UNITS
FIRE 2	3.00
FIRE 7	3.00
FIRE 8	3.00
SOC 14	3.00
FIWE 82	3.00
TOTAL UN	IITS 15.00

Semester: Fall Yea	r:
COURSE	UNITS
FIRE 61	3.00
FIRE 6	3.00
PHIL 13	3.00
PHIL 14	3.00
NR 1	3.00

# TOTAL UNITS 15.00

# **FIRE TECHNOLOGY**

Copper Mountain College offers courses in the Fire Technology field that will count toward a certificate or Associate of Science Degree. These courses are designed for students who plan to transfer to a four-year institution, gain employment in the fire service, or as a refresher for those individuals currently employed in any area of the fire service. The approved list of courses include those that meet the National Fire Academy Fire & Emergency Service Higher Education (FESHE) core curriculum requirements and include those accredited by the California Fire Service Training and Educational System for State Board of Fire technology certification.

#### **Program Student Learning Outcomes**

Upon successful completion of this program students will be able to:

- 1. Upon completion of the Fire Technology Program, the student will identify minimum qualifications and entry-level skills for fire fighter hiring. The student will be able to describe the following elements: application process; written exam process; physical agility exam, oral interview, chief's interview; background investigation; and fire fighter probationary process. Students will identify fire service history, culture and diversity. (Institutional SLOs: Personal Development)
- 2. Upon completion of the Fire Technology Program, the student will 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. (Institutional SLOs: Communication, Critical Thinking, and Personal Development)
- 3. Upon completion of the Fire Technology Program, the student will be able to 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. (Institutional SLOs: Information Competency)
- 4. Upon completion of the Fire Technology Program the student will be able to 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. (Institutional SLOs: Critical Thinking)
- 5. Upon completion of the Fire Technology Program, the student will be able to calculate flow requirements for fire apparatus, diagram a pump and plumbing schematic for fire apparatus, and apply mathematic formulae to hydraulics problems. (Institutional SLOs: Critical Thinking)
- 6. Upon completion of the Fire Technology Program, the student will identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment. (Institutional SLOs: Personal Development)
- 7. Upon completion of the fire technology program, the student will identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety. (Institutional SLOs: Critical Thinking)
- 8. Upon completion of the Fire Technology Program the student will 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. (Institutional SLOs: Critical Thinking)

# Associate in Science in FIRE TECHNOLOGY

with emphasis on employment preparation

Dept. /No.	Title	Units
Required Cou	irses:	
FIRE 001	Fire Protection Organizations	
FIRE 002	Fire Prevention	
FIRE 003	Fire Protection Equipment and Systems	
FIRE 004 FIRE 005	Building Construction for Fire Protection Fire Behavior and Combustion	
FIRE 007	Principles of Fire and Emergency Services Safety Survival	y &
EMT 084	Emergency Medical Technician I or	
EMR 001	Emergency Medical Responder	3-6.5
FIRE 006, FIRE	t thirteen (13) units from t <mark>he follo</mark> wing: <mark>- 008, FIRE 010, FIRE 058, <mark>FIRE 061,</mark> FIRE 081, <mark>'E 080 - 083.</mark></mark>	13
Select at least BI 022, BI 023	t eight (8) units from the following: , CH 003, <mark>CIS 070A,</mark> CJ 003, <mark>PHIL 013, SP 004</mark>	8
Total Units for	r the Major Education Requirement	42
	EGREE UNITS	
Advisor:		00
/ 00/1301.	J. DIGICOM	

### CERTIFICATE OF ACHIEVEMENT IN FIRE TECHNOLOGY

with emphasis on employment preparation

Dept./ No.	Title	Units
Required Co	urses:	
FIRE 001	Fire Protection Organizations	3
FIRE 002	Fire Prevention	
FIRE 003	Fire Protection Equipment and Systems	
FIRE 004	Building Construction for Fire Protection	
FIRE 005	Fire Behavior and Combustion	
FIRE 007	Principles of Fire and Emergency Services Safet Survival	ty & 3
EMT 084	Emergency Medical Technician I or	
EMR 001	Emergency Medical Responder	. 3-6.5
FIRE 006, FIR	st six (6) units from the following: RE 008, FIRE 010, FIRE 058, FIRE 061, FIRE 081, VE 080 - 083	6
Select at leas BI 022, BI 02	st three (3) units from the following: 3, CH 003, CIS 070A, CJ 003, PHIL 013, SP 004	3
MINIMUM C	CERTIFICATE UNITS	
Advisor:	J. Brakebill	

Students must complete the required courses for their major. General education units, transferable electives, and total degree units will vary for each student. Some considerations include the courses (and their respective units) chosen to complete a general education area or transferable elective, and if required courses for your major also count toward a general education area. Please see your academic counselor to help you reach your education goals. 95