

2016–2017 Catalog Addendum 3 January 2017

The College of the Desert Catalog Addendum represents course and program revisions made since the last publication of the Catalog. Included in this Addendum are modified certificates and degrees. These changes replace what is printed in the current Catalog and are effective as of the Spring 2017. Instructions for understanding this addendum are as follows: underline indicates new material, strikethrough indicates a deletion.

BOT Approved: 1/19/2017

PROGRAM REVISIONS effective Spring 2017

ADVANCED TRANSPORTATION TECHNOLOGIES A.S. DEGREE for Employment Preparation

This course of study equips the student with a range of knowledge and skills necessary to perform the duties of an entry level alternative fuels technician with a well-rounded background of the major vehicle systems. Completers will have met the current standards of the National Automotive Technicians Education Foundation (NATEF) related to: A6-Electrical/Electronic, A8-Engine Performance as well as a solid understanding of alternative fuels such as: Compressed Natural Gas (CNG) and hybrid/electric vehicles. Those completing this degree will have the requisite depth of advanced transportation knowledge and skills and the breadth of the general education which will accelerate their progress toward achieving their career goals in the advanced transportation industry.

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	Required Courses:	· · · · · · · · · · · · · · · · · · ·	
	AUTO-010	Intro Automotive Technology	4.0
	AUTO-011B	Auto Electronics/Electrical Systems	
	AUTO-011C	Adv. Auto Electrical Systems	5.0
	AUTO-014A	Auto Engine Management	
	AUTO-021A	Auto Diagnosis & Troubleshooting	2.0
	AUTO-040D	CNG/LPG Diagnosis & Repair	5.5
	AUTO-043A	Hybrid, Fuel-Cell & Electric Tech	3.0
	AUTO-045A	Intro to Alternative Fuel Vehicles	2.0
	AUTO-092A	Bio-diesel Char., Use & Production	
	AUTO-095A*	Automotive Work Experience	
	AUTO-099	Auto/Advanced Transportation Summation	1.0
	Electives - 8 units fro	om the following:	
	AUTO-014B	Advanced Engine Management	5
	AUTO-016	Manual Drive Train & Axles	
	AUTO-017	Auto Transmissions & Transaxles	4
	AUTO-018	Auto Heating & Air Conditioning	4
DELETE	AUTO-030A	Consumer Auto Technology	3
	AUTO-041	CNG/LPG Conversion/Installation	3
	AUTO-054C	Basic & Advanced Clean Air Car Course	
	AUTO-095A*	Automotive Work Experience (1 - 2 units in addition to required)	
	ACR-060	Air Conditioning/Refrigeration I	
	ACR-064	Air Cond/Refrigeration Electricity I	
	BUMA-094	Business Communications	3
	WELD-010	Oxy-Acetylene Gas Welding	3
	Required Courses		42.5
	COD General Educat	ion Pattern	18.0
	Kinesiology Activities	3	2.0
	DEGREE TOTAL		62.5

^{*} For extenuating circumstances, as deemed by the automotive advisor, work experience may be fulfilled through a special shop project or an appropriate elective.

ARCHITECTURE TECHNOLOGY A.S. DEGREE for Employment Preparation

The Architectural Technology Associate of Science degree is intended to prepare students with a broad perspective of Architecture, design and local general education requirements to utilize in gaining employment in Architecture or any of the related fields in the building industry where they will be involved to produce plans, but may also contribute in the design and construction administration of various building typologies. Individuals completing this degree may also choose to continue their education toward a baccalaureate, or advanced degree in Architecture or related majors.

Advisor: Bert Bitanga (760) 776-7236; dbitanga@collegeofthedesert.edu

Required Courses:		
ARCH-001	Intro to Architectural Professions	3
ARCH-002	Materials of Construction	4
ARCH-003A	Architectural Practice I	3
ARCH-003B	Architectural Practice II	3

	ARCH-005A	Intro to Drawing & Perspective	3
	ARCH-005B	Architectural Delineation	3
	ARCH-008	Architectural Design Fund I	3
	ARCH-009	Architectural Design Fund I	
	ARCH-010	Environmental Control Systems	
	ARCH-011	Architectural Blueprint Reading	3
	DRA-001	Technical Drafting I	3
DELETE	DRA-008	AutoCAD Level I	2
DELETE	DRA 009	AutoCAD Level II	
ADD	DRA-002	AutoCAD	
	DRA-011	Intro to Sketch Up & Revit	3
	Required Subtotal		41
	COD General Education	Pattern	18
	Kinesiology Activities		
	DEGREE TOTAL		-

ARCHITECTURE TECHNOLOGY CERTIFICATE OF ACHIEVEMENT

The Architectural Technology Certificate of Achievement provides education and training for students seeking employment in Architecture or any of the related fields in the building industry where they may be involved in the production of working drawings for the construction and renovation of homes, offices, retail stores, and many other building typologies. Students earning the certificate may also choose to continue their education toward an associate, baccalaureate, or advanced degree in Architecture or related major.

Advisor: Bert Bitanga (760) 776-7236; dbitanga@collegeofthedesert.edu

	Required Courses:		
	ARCH-001	Intro to Architectural Professions	
	ARCH-002	Materials of Construction	. 4
	ARCH-003A	Architectural Practice I	. 3
	ARCH-003B	Architectural Practice II	. 3
	ARCH-005A	Intro to Drawing & Perspective	. 3
	ARCH-005B	Architectural Delineation	. 3
	ARCH-011	Architectural Blueprint Reading	. 3
	BIT-001	California Building Codes	. 3
	DRA-001	Technical Drafting I	. 3
DELETE	DRA-008	AutoCAD Level I	. 2
DELETE	DRA-009	AutoCAD Level II	. 2
ADD	DRA-002	AutoCAD	. 4
	DRA-010	Drafting/Design CAD Project	.2
	DRA-011	Intro to Sketch Up & Revit	
	CERTIFICATE TOTAL		37

AUTOMOTIVE TECHNOLOGY A.S. DEGREE for Employment Preparation

This course of study equips the student with a range of knowledge and skills necessary to perform the duties of an entry level automotive technician with a well-rounded background of the major vehicle systems. Completers will have met the current standards of the National Automotive Technicians Education Foundation (NATEF) related to: A1-Engine Repair, A4-Steeing & Suspension, A5-Brakes, A6-Electrical/Electronic, A8-Engine Performance and 6 additional units of automotive electives. Those completing this degree will have the requisite depth of automotive knowledge and skills and the breadth of the general education which will accelerate their progress toward achieving their career goals in the automotive industry.

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Required Courses:		
AUTO-010	Intro Automotive Technology	4
AUTO-011B	Auto Electronics & Electrical Sys	4
AUTO-011C	Adv. Auto Electrical Systems	5
AUTO-012A	Auto Steering & Suspension Sys	4
AUTO-013A	Auto Braking Systems	4
AUTO-014A	Auto Engine Management	

	AUTO-015 AUTO-020A	Auto Engine Diagnosis & Repair	4
	AUTO-020A AUTO-021A	Auto Diagnosis & Troubleshooting	
	AUTO-095A*	Automotive Work Experience	
	AUTO-099	Auto/Adv Transportation Summation	1
	Electives - 6 units f	rom the following:	
	AUTO-014B	Advanced Engine Management	5
	AUTO-016	Manual Drive Train & Axles	4
	AUTO-017	Auto Transmissions & Transaxles	
	AUTO-018	Auto Heating & Air Conditioning	4
DELETE	AUTO 030A	Consumer Auto Technology	3
	AUTO-043A	Hybrid, Fuel-Cell & Electric Tech	3
	AUTO-045A	Intro to Alternative Fuel Vehicles	
	AUTO-054C	Basic & Adv Clean Air Car Course	7
	AUTO-095A*	Automotive Work Experience (1 - 2 units in addition to required)	1-8
	ACR-060	Air Conditioning/Refrigeration I	3
	ACR-064	Air Cond/Refrigeration Electricity I	3
	WELD-010	Oxy-Acetylene Gas Welding	3
	Required Courses		43
	COD General Educa	ation Pattern	18
	Kinesiology Activitie	95	2
	DEGREE TOTAL		63

^{*} For extenuating circumstances, as deemed by the automotive advisor, work experience may be fulfilled through a special shop project or an appropriate elective.

AUTOMOTIVE AIR CONDITIONING CERTIFICATE OF ACHIEVEMENT

This course of study equips the student with a range of knowledge and skills necessary to perform the duties of an entry level Heating Ventilation & Air Conditioning (HVAC) automotive technician. Completers will have met the current standards of the National Automotive Technicians Education Foundation (NATEF) related to A7 Heating & Air Conditioning. Those completing this certificate may continue on toward an Associate of Science degree in Automotive or Advanced Transportation.

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Required Courses:

	AUTO-010	Intro Automotive Technology	
	AUTO-011B	Auto Electronics & Electrical Systems	
	AUTO-018	Auto Heating & Air Conditioning	
	AUTO-095A*	Automotive Work Experience	2
	Electives - 4 units from	om the following:	
	AUTO-013A	Auto Braking Systems	4
	AUTO-014A	Auto Engine Management	
	AUTO-014B	Advanced Engine Management	
	AUTO-016	Manual Drive Train & Axles	
	AUTO-017	Auto Transmissions & Transaxles	4
	AUTO-021A	Auto Diagnosis & Troubleshooting	2
DELETE	AUTO 030A	Consumer Auto Technology	
	AUTO-043A	Hybrid, Fuel-Cell & Electric Tech	3
	AUTO-054C	Basic & Adv Clean Air Car Course	7
	AUT-095A*	Auto Work Experience (1-2 units in addition to required)	1-8
	ACR-060	Air Conditioning/Refrigeration I	
	ACR-064	Air Cond/Refrigeration Electricity I	3
	WELD-010	Oxy-Acetylene Gas Welding	3
	CERTIFICATE TOTAL		18

^{*} For extenuating circumstances, as deemed by the automotive advisor, work experience may be fulfilled through a special shop project or an appropriate elective.

STEERING, SUSPENSION AND ALIGNMENT CERTIFICATE OF ACHIEVEMENT

This course of study equips the student with a range of knowledge and skills necessary to perform the duties of an entry level Steering & Suspension automotive technician. Completers will have met the current standards of the National Automotive Technicians Education Foundation (NATEF) related to A4 Steering & Suspension. Those completing this certificate may continue on toward an Associate of Science degree in Automotive or Advanced Transportation.

Advisors: Dorothy Anderson (760) 776-7368; doanderson@collegeofthedesert.edu

Douglas Redman (760) 776-7390; dredman@collegeofthedesert.edu

	Required Courses:		
	AUTO-010	Intro Automotive Technology	4
	AUTO-011B	Auto Electronics & Electrical Systems	
	AUTO-012A	Auto Steering & Suspension Systems	
	AUTO-095A*	Automotive Work Experience	2
	Electives - 4 units fron	n the following:	
	AUTO-013A	Auto Braking Systems	4
	AUTO-014A	Auto Engine Management	4
	AUTO-014B	Advanced Engine Management	5
	AUTO-016	Manual Drive Train & Axles	4
	AUTO-017	Auto Transmissions & Transaxles	4
	AUTO-018	Auto Heating & Air Conditioning	4
	AUTO-021A	Auto Diagnosis & Troubleshooting	
DELETE	AUTO 030A	Consumer Auto Technology	3
	AUTO-043A	Hybrid, Fuel-Cell & Electric Tech	3
	AUTO-054C	Basic & Advanced Clean Air Car Course	
	AUTO-095A*	Auto Work Experience (1-2 units in addition to required)	1-8
	ACR-060	Air Conditioning/Refrigeration I	3
	ACR-064	Air Cond/Refrigeration Electricity I	3
	WELD-010	Oxy-Acetylene Gas Welding	3
	CERTIFICATE TOTAL.		18

^{*} For extenuating circumstances, as deemed by the automotive advisor, work experience may be fulfilled through a special shop project or an appropriate elective.

COMPUTER INFORMATION SYSTEMS CERTIFICATE OF ACHIEVEMENT

Computer information systems (CIS) is the study of the tools and techniques used to effectively and efficiently transform raw data into useful information.

Career paths chosen by students pursuing certificate in CIS commonly include office administration, general business, web design, software installation and maintenance, electronic bookkeeping, and customer support.

Even students who choose not to major in CIS find that coursework in the field can improve their ability to think analytically, solve problems, organize thoughts and information, and utilize new technology more efficiently and effectively.

Our discussions with industry representatives indicate that in today's world employers expect and demand a certain minimum of computer skills as a given, much as they expect an employee to be able to read, write, and use basic math. College of the Desert's CIS curriculum includes course offerings that provide a general overview of the discipline, as well as courses dealing with more advanced software concepts, and tools used in the business environment.

The College offers appropriate certificates and degrees in computer information systems. In addition to the immediate employment benefits of certificates and associate degrees, coursework at College of the Desert prepares the way for further study at the Baccalaureate level within the California State Universities and University of California systems, and other colleges nationwide.

Advisor: Felix Marhuenda-Donate (760) 773-2523; fmarhuenda@collegeofthedesert.edu

	Required Courses: 5-6 units:				
	CIS-006	Business Research	1		
	<i>or</i> LIS-001	An Intro to Basic Research Skills (2)			
	CIS-010	Computer Literacy	4		
	Computer Applic	cations - Select 14 units from the following:			
ADD	CIS-003	Introduction to Microsoft Word	1		
ADD	CIS-004	PowerPoint	1		

CIS-005*	Computer Survival Skills	. 2
CIS-011	Current Topics/Technology	
CIS-012	Professional Office Procedures	
CIS-017	Records Business Data Management with Microsoft Access	. 4
CIS-020	Integrated Office Technology	. 4
CIS-072D	Excel	. 3
CIS-082C	Web Publishing I	. 3
CIS-085C	Web Programming	. 3
CIS-086	Visual Basic Programming	
Required Electives -	Select 12 units from the following:	
BUAC-020A	Financial Accounting	. 4
BUAC-066	Fundamentals of Bookkeeping	
BUMA-001	Principles of Management	
BUMA-010	Intro to Business	
BUMA-028	Small Business: Dev/Mgmt	. 3
BUMA-031	Business Calculations	
BUMA-032	Human Relations	
BUMA-094	Business Communications	
CIS-081A	Computer Graphics 1A	
CIS-081B	Computer Graphics 1B	. 3
CIS-083D	Computer Graphics 2	
CIS-095A	CIS Work Experience (maximum of 4 units may be used for work experience)1	
<i>or</i> BUAC-095A	Accounting Work Experience	
<u>or</u> BUMA-095A	Management Work Experience	L-8
Required Courses	F	5-6
Computer Application		
Required Electives		
CERTIFICATE TOTAL		
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^{*} No credit for CIS 5 if taken after CIS 10

CONSTRUCTION MANAGEMENT A.S. DEGREE and Transfer Preparation

The Construction Management Associate of Science degree is intended for students to gain a broad overview of construction and various related courses including a breadth of general education requirements in preparation toward transferring to CSU, UC, or private institutions that offer baccalaureate, or advanced degree in Construction Management or related majors.

Advisor: Bert Bitanga (760) 776-7236; dbitanga@collegeofthedesert.edu

	Required Courses:		
	ARCH-001	Intro to Architectural Professions	
	ARCH-002	Materials of Construction	4
	ARCH-003A	Architectural Practice I	3
	ARCH-005A	Intro to Drawing & Perspective	3
	BIT-001	California Building Code	3
	BIT-026	Building II & Fire Codes	3
	CM-001	Intro to Construction Mgmt	
	CM-002	Intro to Urban Planning	
DELETE	DRA 008	AutoCAD Level I	
ADD	DRA-002	AutoCAD	4
	Required Subtotal	<mark>26</mark>	28
	CSU General Education	on or IGETC Pattern	37-39
	Kinesiology Activities.		2
		65-67	

Note: Admission and General Education Requirements vary depending on transfer institution. Consult advisor and transfer institution's catalog for appropriate course selection.

CONSTRUCTION MANAGEMENT A.S. DEGREE for Employment Preparation

The Construction Management Associate of Science degree is intended to prepare students with a broad overview of construction, various related courses and local general education requirements to utilize in gaining employment in construction or any of the related fields in the building industry where they may be involved with the scheduling, estimating and construction of various projects. Individuals completing this degree may also choose to continue their education toward a baccalaureate, or advanced degree in Construction Management or related majors.

Advisor: Bert Bitanga (760) 776-7236; dbitanga@collegeofthedesert.edu

	Required Courses		
	ARCH-001	Intro to Architectural Professions	3
	ARCH-002	Materials of Construction	4
	ARCH-003A	Architectural Practice I	3
	ARCH-011	Architectural Blueprint Reading	
	BIT-001	California Building Code	
	BIT-026	Building II & Fire Codes	
	CM-001	Intro to Construction Mgmt	2
	CM-002	Intro to Urban Planning	
DELETE	DRA 008		
DELETE	DRA 009	AutoCAD Level II	
ADD	DRA-002	AutoCAD	4
	Electives - 12 unit	ts to be chosen from the following:	
	ARCH-003B	Architectural Practice II	3
	BIT-002	Building & Mechanical Codes	3
	BIT-003	Building & Plumbing Codes	3
	BIT-004	Building & Electrical Codes	
	CM-003	Site & Terrain Analysis	
	CM-004	Construction Law Survey	
	CM-005	Construction Planning	
	Required Subtotal		28
	COD General Educ	cation Pattern	18
		ies	

CONSTRUCTION MANAGEMENT CERTIFICATE OF ACHIEVEMENT

The Construction Management Certificate of Achievement provides education and training for students seeking employment in Construction or any of the related fields in the building industry where they may be involved in the procurement of documents and construction or renovation of homes, offices, retail stores, and many other building typologies. Students earning the certificate may also choose to continue their education toward an associate, baccalaureate, or advanced degree in Construction Management or related major.

Advisor: Bert Bitanga (760) 776-7236; dbitanga@collegeofthedesert.edu

	Required Courses:		
	ARCH-001	Intro to Architectural Professions	3
	ARCH-002	Materials of Construction	4
	ARCH-003A	Architectural Practice I	3
	ARCH-011	Architectural Blueprint Reading	3
	BIT-001	California Building Code	3
	BIT-026	Building II & Fire Codes	
	CM-001	Intro to Construction Mgmt	2
	CM-002	Intro to Urban Planning	3
DELETE	DRA 008	AutoCAD Level I	 2
DELETE	DRA-009	AutoCAD Level II	 2
ADD	DRA-002	AutoCAD	4
	CERTIFICATE TOTAL		28

EMERGENCY MEDICAL CARE CERTIFICATE OF ACHIEVEMENT

The Emergency Medical Care (EMC) Certificate of Achievement is designed to offer a full range of both required and elective courses that prepare students for immediate entry into the emergency medical care field. The certificate is structured to ensure gradual, systematic and comprehensive attainment of the practical knowledge, skills and abilities desired by both private and public organizations. It also provides an excellent foundation from which to pursue both paramedic and related degree programs.

Although job ready EMT certification is the overriding goal of the program, the courses offered take into account that many students experience significant difficulty in satisfactorily completing the core 6 unit EMT course without additional preparation. Therefore, a more fundamental 3 unit Emergency Medical Responder (EMR) course is provided as a prerequisite to the 6 unit EMT course, as well as a required Medical Terminology course. A basic anatomy and physiology course (*Your Living Body*) is also offered as an advisory to EMR in the list of electives. The certificate also assists both students and emergency medical care providers by offering an ambulance operations course that provides both operator information and driving skills training. Additionally, the certificate addresses today's communication/information and interpersonal relations work place needs by offering a variety of other highly relevant elective courses.

Advisor: Neil Lingle (760) 346-8041 ext 3083; nlingle@collegeofthedesert.edu

Required Courses: EMT-080* EMT-081 EMT-084 HS-061	Emergency Medical Responder Ambulance Operations Emergency Medical Technician Medical Terminology		
Electives - Select 4 c	ourses from the following:		
BUMA-094	Business Communications	3	
Or ENG-001A	English Composition		
CIS-005	Computer Survival Skills	2	
HS-013	General Nutrition	3	
HS-062*	Your Living Body		
KINE-010	Personal & Community Health		
PSY-001	Intro to Psychology		
Or PSY-029	Abnormal Psychology		
SP 1 COMM-009	Intro Interpersonal Communication	3	
Required Core Cours	es	12	
Elective Courses		11-13	
CERTIFICATE TOTAL	CERTIFICATE TOTAL		

^{*}EMT-080 is a prerequisite for EMT-084.

ENVIRONMENTAL SCIENCE A.S. DEGREE and Transfer Preparation

This program is designed for students who are interested in solving environmental problems from an interdisciplinary approach. This set of courses prepares the student to transfer to four- year institutions where they can choose a specialized track that could include many disciplines. For example, depending on the transfer institution selected, choices include Natural Resources Management, Climate Change, Soil and Biogeochemistry and many others. It is very important to consult an advisor and review transfer institution requirements.

Advisor: Nancy Moll (760) 776-7272; nmoll@collegeofthedesert.edu

Required Courses: BI-006 Biology of Organisms......5 CH-001A General Chemistry5 Physical Geology......4 G-001 MATH-001A Calculus 5 MATH-001B Calculus 5 4 PH-004A3A Engineering Physics5 ECON-001 **Electives:** 8 15 11-14 units from the following, confer with Advisor: BI-005 Molecular & Cell Biology......5 CH-001B General Chemistry II5 Introduction to Computer Science4 CS-007A G-005 Environmental Geology4 G-010 The Earth Sciences......4

^{*}HS-062 is an advisory for EMT-080

G-017	Intro to Oceanography		3
MATH-014	Statistical Methods		4
PH-004B3B	Engineering Physics	5	4
PH-017	Intro to Meteorology		
For other course se	elections confer with Advisor.		
Required Subtotal		32	29
	vith Advisor approval)		
	ation (confer with Counselor)		
Kinesiology Activitie	es		2
DEGREE TOTAL		60-67	60-63
Consult catalog of tran	sfer institution for specific requirements.		

FIRE TECHNOLOGY A.S. DEGREE for Employment Preparation

Fire technology is the study of the organization and function of fire prevention and suppression techniques; fire behavior and combustion, fire chemistry, extinguishing agents, hazardous and toxic material; fire protection systems; fire command and fire management (supervision).

Career paths chosen by students pursuing an undergraduate and/or baccalaureate degree in fire technology commonly include firefighter, fire engineer, paramedic, forest service worker, health and safety officer, fire prevention specialist, fire inspector, fire investigator, fire protection engineer and hazardous materials specialist.

College of the Desert's Fire Technology curriculum includes course offerings that provide a general overview of fire service disciplines, as well as specific courses in fire suppression, fire tactics and strategy, fire prevention, design and operation of fire detection and alarm systems, hazardous materials, fire protection building design and construction. In addition, Fire Service Training & Education Program (FSTEP) and California Fire Service Training & Education System (CFSTES) courses through the California State Fire Marshal's office are offered in this program.

College of the Desert is recognized by the California State Fire Marshal as an Accredited Regional Training Program offering a Firefighter 1 Basic Training Academy. The objective for this program is to develop teamwork, skills, attitudes and public service commitment necessary for employment in the fire service. Completion of this certificate satisfies the manipulative and academic training requirements as established by the California State Fire Marshal. Additional information on this program is available on the Public Safety Academy's website at collegeofthedesert.edu.

Students earning an associate's degree in Fire Technology may pursue positions as a firefighter, paramedic or firefighter/EMT or may choose to continue their study in fire technology or fire service toward a bachelor's degree.

Advisor: Allen Scott Ventura (760) 636-7996; asventura@collegeofthedesert.edu

	Required Courses:		
	FIRE-001	Principles of Emergency Services	3
	FIRE-002	Fire Prevention	3
	FIRE-003	Fire Protection Equipment/Systems	3
	FIRE-004	Building Construction/Fire Protection	
	FIRE-005	Fire Behavior & Combustion	
	FIRE-007	Principles of Fire & Emergency Services Safety & Survival	
	Electives - Choose 22	units from the following:	
	FIRE-006	Hazardous Materials/ICS	3.0
	FIRE-008	Firefighting Strategies & Tactics	
	FIRE-010	Wildland Fire Technology	3.0
	FIRE-BFFA-063A	Basic Fire Fighter I Academy (Part 1)	
	FIRE-BFFA-063B	Basic Fire Fighter I Academy (Part 1)	
	FIRECSFM-070	Confined Space-Awareness	0.5
DELETE	FIRE-072A	Trench Rescue	0.75
	FIRECSFM-077A	Fire Investigation 1A	
	FIRECSFM-077B	Fire Investigation 1B	
	FIRECSFM-078A	Training Instructor 1A	2.5
	FIRECSFM-078B	Training Instructor 1B	2.5
	FIRECSFM-078C	Training Instructor 1C	

DELETE	FIRE-079A	+ 100: Intro to ICS	0.5
	FIRECSFM-079B	I-200: Basic ICS	1.0
	FIRECSFM-079C	I-300: Intermediate ICS	
	FIRECSFM-079D	I-400: Advanced ICS	1.5
	FIRECSFM-082A	Fire Apparatus Driver/Operator 1A: Emergency Vehicle Ops	2.0
	FIRECSFM-082B	Fire Apparatus Driver/Operator 1B: Pump Operations	
	FIRECSFM-090A	Fire Prevention 1A	2.0
	FIRECSFM-091A	Fire Command 1A	2.0
	FIRECSFM-091B	Fire Command 1B	2.0
	FIRECSFM-091C	Fire Command 1C	2.5
	FIRECSFM-092	Fire Mgmt Supervision/Co. Officers	
	BIT-026	Building II and Fire Codes	3.0
	EMT-080	Emergency Medical Responder	
	EMT-084	Emergency Medical Technician I	6.0
	Required Courses		18
		approval)	
	COD General Education	n Pattern	
	Kinesiology Activities		2
	DEGREE TOTAL		60

FIRE TECHNOLOGY CERTIFICATE OF ACHIEVEMENT

Fire technology is the study of the organization and function of fire prevention and suppression techniques; fire behavior, combustible materials, extinguishing agents, hazardous and toxic material; fire protection techniques and systems; fire command and fire management (supervision).

The certificate of achievement is designed to provide students with skills necessary for employment or advancement as an entry level firefighter. Students earning the certificate may also choose to continue their study toward an associate or baccalaureate degree in the field.

Past recipients of the COD Certificate of Achievement in Fire Technology have obtained positions as firefighter, firefighter/EMT and paramedic.

This program follows the Fire and Emergency Services Higher Education (FESHE) model from the National Fire Academy in Emmitsburg, Maryland and is a component of accreditation from the California State Fire Marshal.

Advisor: Allen Scott Ventura (760) 636-7996; asventura@collegeofthedesert.edu

	Required Courses:		
	FIRE-001	Principles of Emergency Services	3
	FIRE-002	Fire Prevention	
	FIRE-003	Fire Protection Equipment/Systems	3
	FIRE-004	Building Construction/Fire Protection	
	FIRE-005	Fire Behavior & Combustion	3
	FIRE-007	Principles of Fire & Emergency Services Safety & Survival	3
	Electives - Choose 4 uni	ts from the following (with Advisor approval):	
	FIRE-006	Hazardous Materials/ICS	. 3.0
	FIRE-008	Firefighting Strategies & Tactics	. 3.0
	FIRE-010	Wildland Fire Technology	. 3.0
	FIRECSFM-070	Confined Space-Awareness	. 0.5
DELETE	FIRE 072A	Trench Rescue).75
	FIRECSFM-077A	Fire Investigation 1A	. 2.5
	FIRECSFM-077B	Fire Investigation 1B	. 2.5
	FIRECSFM-078A	Training Instructor 1A	
	FIRECSFM-078B	Training Instructor 1B	. 2.5
	FIRECSFM-078C	Training Instructor 1C	. 2.5
DELETE	FIRE-079A	I-100: Intro to ICS	. 0.5
	FIRECSFM-079B	I-200: Basic ICS	. 1.0
	FIRECSFM-079C	I-300: Intermediate ICS	. 1.5

FIRECSFM-079D	I-400: Advanced ICS	
FIRECSFM-090A	Fire Prevention 1A	2.0
FIRECSFM-091A	Fire Command 1A	2.0
FIRECSFM-091B	Fire Command 1B	2.0
FIRECSFM-091C	Fire Command 1C	2.5
FIRECSFM-092	Fire Mgmt Supervision/Co. Officers	2.0
BIT-026	Building II and Fire Codes	
EMT-080	Emergency Medical Responder	
EMT-084	Emergency Medical Technician I	
Required Courses		18
Elective Subtotal		
CERTIFICATE TOTAL		22

GOLF MANAGEMENT A.A. DEGREE for Employment Preparation

Golf management is the study of all aspects pertaining to the operation and the responsibilities of the golf professional in managing a public or private golf facility. Career paths chosen by students pursuing undergraduate studies in golf management commonly include marketing and management as part of their work load. Even students who choose not to major in golf management find that coursework in the field can improve their ability to clearly articulate relating to problem solving.

College of the Desert's golf management curriculum includes course offerings that provide a general overview of the discipline, as well as hands-on training that can be measured for industry needs and standards.

Students pursuing an Associate Degree in Golf Management may opt for entry level positions as apprentice PGA professionals or may choose to continue their studies in the discipline toward a bachelors or graduate degree. Generally starting into middle management in this industry is the outcome from the continuing education.

Advisor: Tony Manzoni (760) 341-2491; tmanzoni@collegeofthedesert.edu

Required Courses:	or, <u>analizotre sollogos al adda</u>		
GOLF-029	Methods of Teaching Golf2		
GOLF-030	Teaching the Short Game2		
GOLF-032	Teaching Lab2		
GOLF-036	Fund. And Rules of Golf2		
AGEH-004	Turf grass Management2		
AGEH-004L	Turf grass Management Lab1		
AGEH-030	Landscape Equipment2		
AGEH-034	Golf Course Management3		
BUMAGOLF-025	Golf Shop Operations2		
BUMA-029	Retail Merchandise Management3		
BUMA-094	Business Communications		
Required Subtotal	24		
·			
Recommended Elective	es – Select 18 units from the following:		
AGEH-024	Advanced Turf grass Management3		
BUAC-050	Accounting/Business Environment3		
BUAC-066	Fundamentals of Bookkeeping3		
BUMA-001	Principles of Management3		
BUMA-020A	Business Law I3		
BUMA-027	Marketing3		
BUMA-028	Small Business: Dev. & Mgmt 3		
BUMA-031	Business Calculations3		
BUMA-032	Human Relations/Workplace3		
BUMA-064	Human Resource Management3		
CIS-005	Computer Survival Skills2		
ECON-001	Principles of Macroeconomics3		
RE-001	Intro to Community Recreation & Sport Management3		
GOLF-095A	Golf Mgmt. Work Experience (Maximum of 3 units may be used for work experience) 1-8		
•	24		
	Pattern 18		
Kinesiology Activities	2		
DEGREE TOTAL			

GOLF MANAGEMENT CERTIFICATE OF ACHIEVEMENT

Golf management is the study of all aspects pertaining to the operation and the responsibilities of the golf professional in managing a public or private golf facility. Career paths chosen by students pursuing undergraduate studies in golf management commonly include marketing and management as part of their work load. Even students who choose not to major in golf management find that coursework in the field can improve their ability to clearly articulate relating to problem solving.

Golf Management Certificate of Achievement is designed to provide students with skills necessary for employment or advancement as entry level golf course employees. Past recipients of the COD Certificate of Achievement in Golf Management have obtained positions as directors of golf at golf facilities nationwide. Students earning the certificate may also choose to continue their study toward an associate, baccalaureate or advance degree in the field.

Advisor: Tony Manzoni (760) 341-2491; tmanzoni@collegeofthedesert.edu

Requirea Courses:		
GOLF-029	Methods of Teaching Golf	. 2
GOLF-030	Teaching the Short Game	. 2
GOLF-032	Teaching Lab	
GOLF-036	Fund. And Rules of Golf	. 2
AGEH-004	Turf grass Management	. 2
AGEH-004L	Turf grass Management Lab	. 1
AGEH-030	Landscape Equipment	
AGEH-034	Golf Course Management	. 3
BUMAGOLF-025	Golf Shop Operations	. 2
BUMA-029	Retail Merchandise Management	. 3
BUMA-094	Business Communication	
Electives - Select 3 unit		
AGEH-024	Advanced Turf grass Management	. 3
BUMA-001	Principles of Management	3
BUMA-027	Marketing	3
BUMA-028	Small Business: Dev. & Mgmt	3
BUMA-031	Business Calculations	3
BUMA-032	Human Relations/Workplace	3
BUMA-064	Human Resource Management	
RE-001	Intro to Community Recreation & Sport Management	3
GOLF 095A	Golf Mgmt. Work Experience (Maximum of 3 units may be used for work experience) 1	-8
OFFICIOATE TOTAL		٠,

GENERAL DRAFTING A.A. DEGREE for Employment Preparation

The General Drafting Associate of Arts degree is intended to prepare students with a broad perspective of drafting, design and local general education requirements to utilize in gaining employment in any of the related fields of the building industry where they will be involved to produce plans of various building typologies. Individuals completing this degree may also choose to continue their education toward a baccalaureate, or advanced degree in Architecture or related majors.

Advisor: Bert Bitanga (760) 776-7236; dbitanga@collegeofthedesert.edu

	Required Courses:		
	DRA-001	Technical Drafting I	3
DELETE	DRA 008	AutoCAD Level I	 2
DELETE	DRA 009	AutoCAD Level II	 2
ADD	DRA-002	AutoCAD	4
	DRA-010	Drafting/Design CAD Project	2
	DRA-011	Intro to Sketch Up and Revit	3
	ARCH-001	Intro to Architectural Professions	
	ARCH-002	Materials of Construction	
	ARCH-003A	Architectural Practice I	3
	ARCH-003B	Architectural Practice II	3
	ARCH-005A	Intro to Drawing & Perspective	3
	ARCH-005B	Architectural Delineation	
	ARCH-011	Architectural Blueprint Reading	3

BIT-001	California Building Codes	3
DDP-001A	Computer Graphics 1A	
	·	
Required Subtota	al	40
COD General Education Pattern		
(inesiology Activities		
DEGREE TOTAL		
DEGILL IOIAL		🗸

GENERAL DRAFTING CERTIFICATE OF ACHIEVEMENT

The General Drafting Certificate of Achievement provides education and training for students seeking employment in various related fields in the architectural, engineering or building industry where they may be involved in the production of working drawings for the construction and renovation of homes, offices, retail stores, and many other building typologies. Students earning the certificate may also choose to continue their education toward an associate degree in General Drafting.

Advisor: Bert Bitanga (760) 776-7236; dbitanga@collegeofthedesert.edu

Required Courses: Technical Drafting I 3 DRA-001 **DRA-008** AutoCAD Level I2 DELETE AutoCAD Level II 2 **DRA-009 DELETE** DRA-002 AutoCAD 4 **ADD** Drafting/Design CAD Project......2 DRA-010 DRA-011 ARCH-001 ARCH-002 Materials of Construction4 ARCH-003A ARCH-003B Architectural Practices II3 ARCH-005A Intro to Drawing & Perspective......3 ARCH-005B Architectural Delineation......3 ARCH-011

A.A. IN KINESIOLOGY FOR TRANSFER DEGREE (AA-T)

The Kinesiology program will stimulate learning and necessary skills for the different options of study in the practical field of kinesiology. After completion of the **Associate in Arts in Kinesiology for Transfer**, also called the Kinesiology AA-T Degree, the students' knowledge will be diverse in topics such as health and fitness, sports management, personal training, pedagogy, motor development and learning, physiology of exercise, athletic training, and pre-physical therapy. Students who complete the Kinesiology AA-T will receive "priority admission with junior status to the California State University system."

The Kinesiology AA-T Degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 21-25 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students must earn a "C" or better in all courses required for the major or area of emphasis. There are no additional graduation requirements. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Advisors: Wendy Ansley (760) 776-7203; wansley@collegeofthedesert.edu
Courtney Doussett (760) 776-7339; cdoussett@collegeofthedesert.edu

<u>!</u>	Required Core: (15 u KINE-008	Introduction to Kinesiology
	BI-013	Human Anatomy and Physiology I4
	BI-014	Human Anatomy and Physiology II5
		Courses3 n of one (1) course from any three (3) of the following areas, minimum three units:
	• Aquatics (1 uni	<i>t)</i>
Add	KINE-046, Endura	ance Training (Running/Swimming/Cardio-Respiratory)
	KINE-082, Swimr	ning
Add	KINE-083, Swimr	ning & Running for Triathletes
Add	KINE-084, Aquati	c Crosstraining

KINE-093, Water Fitness

Add

	• Combatives (1 unit)	
	KINE-077, Self-Defense/Martial Arts	
	KINE-078, Self-Defense/Fitness	
	• Dance (1 unit)	
	KINE-051, Dance, Aerobic	
Add	KINE-053, Dance, Jazz	
Add	KINE-056, Dance, Ballet	
	• Fitness (1 unit)	
Add	KINE-040, Aerobics, Total Body Fitness	
Add	KINE-041, Core Conditioning	
Add	KINE-046, Endurance Training (Running/Swimming/Cardio-Respiratory)	
Add	KINE-047, Body Sculpt & Tone	
	KINE-068, Jogging, Powerwalking and Running	
Add	KINE-071, Kickboxing Aerobics	
Add	KINE-072, Pilates Mat Work	
Add	KINE-073, Pilates for Dance	
Add	KINE-083, Swimming & Running for Triathletes	
Add	KINE-094, Personal Fitness	
	KINE-096, Weight Training	
	KINE-098, Yoga	
Add	KINE-099, Power Yoga	
	• Individual Sports (1 unit)	
	KINE-043, Badminton	
	KINE-057, Fencing	
	KINE-062, Golf	
Add	KINE-063, Golf: The Short Game	
	KINE-086, Tennis	
	• Team Sports (1 unit)	
	KINE-045, Basketball	
	KINE-079, Soccer	
Delete	KINE 080, Softball	
	KINE-091, Volleyball	
<u>Lis</u>	List A: Select two courses from the following	6-8
	KINE-001, First Aid and Safety (3)	
	PH-002A, College Physics (4)	
	SOC-003, Fundamental of Statistics (3)	
	Or MATH-014, Statistical Methods (4)	
	ed Subtotal	
	eneral Education or IGETC Pattern	37-39
ranstera	erable Electives* (as needed to reach 60 transferable units)	
NECDEE	E TATAL	60

¹ Units for the major may be double counted for CSU GE or IGETC, confer with Counselor.

² Elective units to reach 60-unit total must be CSU transferable, confer with Counselor.

A.S. IN MATHEMATICS FOR TRANSFER DEGREE (AS-T)

The Associate in Science in Mathematics for Transfer, also called the Mathematics AS-T, provides student with sufficient understanding of mathematical concepts, skills and application to attain upper division status in mathematics within the CSU system. This degree is intended for students who are interested in the theory of mathematics and are planning on transferring to a CSU and majoring in Mathematics, Physics, Engineering, Computer Science or Statistics. Students who complete the Mathematics AS-T will receive "priority admission with junior status to the California State University system."

This Mathematics AS-T degree requires students to meet 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:
 - The Intersegmental GE Transfer Curriculum (IGETC) or the California State University GE-Breadth Requirements (CSU GE-B).
 - A minimum of 18 semester units in a major or area of emphasis. All courses in the major or area of emphasis must be completed with a grade of "C" or better.
- (2) Obtainment of a minimum grade point average of 2.0.

There are no additional graduation requirements. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Required Core: MATH-001A	Calculus	.5. 4
MATH-001A		5 4
MATH-002A		5 4
PH-00 <mark>4A</mark> 3A		5 4
One course from the fol	llowing	4
MATH-002B	Linear Algebra (4)	
MATH-002C	Ordinary Differential Equations (4)	
Required Subtotal		24
	(as needed to reach 60 transferable	
DEGREE TOTAL	•	60
DEGILL TOTAL	***************************************	

¹ Units for the major may be double counted for CSU GE or IGETC, confer with Counselor.

A.A. IN POLITICAL SCIENCE FOR TRANSFER DEGREE (AA-T)

Political Science is the scientific study of politics, structure of governments at the national, state and local levels, policy making and policy makers. As such, it encompasses a wide range of interdisciplinary subjects, including economics, history, law, and philosophy. One major concern of political science is educating each generation to how democracy works, what are its benefits relative to other governmental systems. Lacking such knowledge can threaten our very existence since democracy is dependent upon a well-informed and civic-minded citizenry. This degree is an excellent general preparation for careers in conflict resolution, criminal justice, diplomacy, civil service, education, elections, journalism, the practice of law, public administration and public policy, public service, and research.

The Associate in Arts in Political Science for Transfer Degree, also called the Political Science AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Political Science. Students earning the Political Science AA-T Degree will be granted priority for admission as a Political Science major to a CSU, but not to a particular campus. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 18-19 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all courses required for the major or area of emphasis. There are no additional graduation requirements. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Advisor: Sara Butler (760) 776-7365; sbutler@collegeofthedesert.edu

Required Core:	(6-7 units)	
PS-001	Introduction to Government	3
SOC-003	Fundamentals of Statistics	3
<i>Or</i> MATH-014	Statistical Methods	4

² Elective units to reach 60-unit total must be CSU transferable, confer with Counselor.

	List A: Select	two courses from the following: (6 units)	
	PS-002	Introduction to Comparative Governments	3
ADD	PS-003	Introduction to Political Theory	
	PS-004	Introduction to International Relations	3
	List B: Select	t two courses from the following: (6 units)	
	ANTH-002	Cultural Anthropology	3
	ECON-001	Cultural AnthropologyPrinciples of Macroeconomics	3
	GEOG-002	Cultural Geography	3
	HIST-017	U.S. History through Reconstruction	3
	HIST-018	U.S. History from Reconstruction to Present	3
ADD	PS-005	The American Presidency	3
	PSY-001	General Psychology	3
	SOC-001	Introductory Sociology	3
	Doguirod Cul	ptotol	19.10
	CCU Cararal	btotalEducation or IGETC Pattern	10-19
			37-39
	ransferable	Electives* (as needed to reach 60 transferable units)	
	DEGREE TO	TAL	60

¹ Units for the major may be double counted for CSU GE or IGETC, confer with Counselor.

REAL ESTATE DEVELOPMENT CERTIFICATE OF ACHIEVEMENT

The Certificate of Achievement in Real Estate Development is designed to serve students seeking either to enter or enhance their careers in the Real Estate profession. The courses in the certificate program will provide the foundational knowledge for a person to enter the profession of Real Estate as a developer, manager or investor.

Career paths chosen by students pursuing undergraduate studies in real estate development include small business owners, residential or commercial real estate developers, construction managers and members of the trades. The student usually enters the real development field from the construction industry and advances either in a corporate or private pathway to management or entrepreneurship.

Advisor: Bert Bitanga (760); dbitanga@collegeofthedesert.edu

All courses must be completed with a grade of "C" or better.

	RED 90A RED 90B RED 90C RED 90D RED 90E RED 90F RED 91A RED 91B	Real Estate Roles	. 0.5 . 0.5 . 0.5 . 0.5 . 0.5 . 0.5 . 0.5 . 0.5
	RED 90B RED 90C RED 90D RED 90E RED 90F	Real Estate Enterprise Valuation	. 0.5 . 0.5 . 0.5 . 0.5 . 0.5
	RED 90B RED 90C RED 90D RED 90E	Real Estate Enterprise Valuation	. 0.5 . 0.5 . 0.5 . 0.5
	RED 90B RED 90C RED 90D	Real Estate Enterprise Valuation Feasibility of Development. The Value of Building Green	. 0.5 . 0.5 . 0.5
	RED 90C	Real Estate Enterprise Valuation Feasibility of Development. The Value of Building Green	. 0.5 . 0.5
	RED 90B	Real Estate Enterprise Valuation	. 0.5
	RED 90A	Real Estate Roles	. 0.5
DELETE	Elective Courses	3 units from the following:	
DELETE	WEG-095C	Work Experience	3
	ECON-001	Principles of Macroeconomic	3
	CIS-005	Computer Survival Skills	
	BUMA-027	Marketing	
	ARCH-011	Architectural Blueprint Reading	3
	ARCH-02	Materials of Construction	4
ADD	RED-030	Real Estate Development Fundamentals	3
	RED-020	Intro to Real Estate Development	3
	RED-010	Intro to Real Estate Professions	3
	Required Courses:		

² Elective units to reach 60-unit total must be CSU transferable, confer with Counselor.