PROGRAMS OF STUDY LEADING TO A SKILLS CERTIFICATE

Accounting - Bookkeeping
ACCOUNTING AND MANAGEMENT DEPARTMENT   **CERTIFICATE E0504**

The Accounting - Bookkeeping certificate provides the student with the basic skills and knowledge for entry-level positions within the clerical/ accounting field. Common duties performed in this field are posting transactions to journals/ledgers, accounts receivable, accounts payable, inventory tracking/reporting, bank reconciliation, expense reporting, and account analysis.

Requirements for the Certificate

Required courses:

BUSA 7	Principles of Accounting - Financial, *or*	5.0	CSU,UC
BUSA 72	Bookkeeping - Accounting	5.0	
BUSA 53	Ten-Key Calculations*, or*	2.0	
BUSA 81	Work Experience in Accounting	1.0	
BUSO 5	Business English*, or*	3.0	
BUSO 25	Business Communications	3.0	CSU

TOTAL UNITS   9.0 - 10.0

BUSA 7 can be substituted for BUSA 72 for those students pursuing a higher level certificate/degree or plan on taking a course for which BUSA 7 is a prerequisite.

Accounting - Payroll
ACCOUNTING AND MANAGEMENT DEPARTMENT   CERTIFICATE E0505

The Accounting - Payroll Certificate combines accounting skills with specialized training in payroll, preparing the student for entry-level positions within the payroll segment of accounting. Common duties performed include payroll tax reporting, maintenance of payroll accounting systems, and posting payroll transactions to journals/ledgers.

Requirements for the Certificate

Required courses:
Completion of Accounting-Bookkeeping Certificate as follows:

BUSA 7	Principles of Accounting - Financial, *or*	5.0	CSU,UC
BUSA 72	Bookkeeping - Accounting	5.0	
BUSA 53	Ten-Key Calculations, *or*	2.0	
BUSA 81	Work Experience in Accounting	1.0	
BUSO 5	Business English, *or*	3.0	
BUSO 25	Business Communications	3.0	CSU

Plus the following courses:

BUSA 70	Payroll and Tax Accounting	3.0
BUSA 75	Using Microcomputers in Financial Accounting, *or*	1.0
BUSA 81	Work Experience in Accounting	1.0
BUSA 76	Using Microcomputers in Managerial Accounting, *or*	1.0
BUSA 81	Work Experience in Accounting	1.0

TOTAL UNITS   14.0 - 15.0

Administrative Assistant - Level I
COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0516**

The Level I Certificate prepares students for entry-level clerical positions where keyboarding is the primary function.

Requirements for the Certificate

Required courses:

BUSO 5	Business English	3.0	
CISB 15	Microcomputer Applications	4.0	CSU,UC
CISI 11	Computer Keyboarding, *or*	3.0	CSU
CISI 11A	Computer Keyboarding, *and*	1.5	CSU
CISI 11B	Computer Keyboarding	1.5	CSU
CISI 41	Office Management Skills	3.0	
	TOTAL UNITS	**13.0**	

Athletic Trainer Aide I
PHYSICAL EDUCATION DEPARTMENT   **CERTIFICATE E0802**

The Athletic Trainer Aide I Certificate provides minimal experience necessary to assist High School Athletic Trainers and Athletic Health Care Providers in the community. Students desiring a Bachelor's Degree (transfer program) should consult with an advisor to discuss transferability of courses.

Requirements for the Certificate

Required courses:

PE 3	First Aid and CPR, *or*	3.0	CSU,UC
PE 5	Advanced First Aid/CPR/Emergency Response	3.0	CSU
PE 19	Introduction to Care/Prevention of Activity/Sports-Related Injuries	3.0	CSU,UC
PE 34	Fitness for Living	3.0	CSU,UC
PE 92	Work Experience - Athletic Training	2.0	
	TOTAL UNITS	**11.0**	

Business: Human Resource Management - Level I
ACCOUNTING AND MANAGEMENT DEPARTMENT   **CERTIFICATE E0531**

This introductory certificate exposes students to the business world and the role of human resources. Students become familiar with various approaches to business organization and the strategic nature of human resources. This certificate may aid the student's search for an entry-level job in the business world.

Requirements for the Certificate

Required courses:

BUSM 20	Principles of Business	3.0	CSU,UC
BUSM 61	Business Organization and Management	3.0	CSU
BUSM 62	Human Resource Management	3.0	
	TOTAL UNITS	**9.0**	

Special Information:

Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

Business: International - Level I
ACCOUNTING AND MANAGEMENT DEPARTMENT   CERTIFICATE E0527

This specialized business certificate is intended to prepare the student to work in the unique and dynamic environment of international business. This program also prepares the student as a business management generalist for companies conducting international trade. This program will afford career opportunities for entry-level employment in international sales and marketing.

Requirements for the Certificate

Required courses:

BUSM 20	Principles of Business	3.0	CSU,UC
BUSM 51	Principles of International Business	3.0	CSU
BUSS 36	Principles of Marketing	3.0	CSU
	TOTAL UNITS	**9.0**	

Special Information:

Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

Business: Management - Level I
ACCOUNTING AND MANAGEMENT DEPARTMENT   **CERTIFICATE E0525**

The Business Management - Level I Certificate is designed to introduce the student to the role of management in business. Management is the efficient use of human and capital resources to accomplish organizational objectives. Students will be exposed to the terms, trends, organizational structure, and opportunities inherent in business management. Upon completion of the Business: Management - Level I Certificate students may qualify for an entry-level management position in California's diverse economy.

Requirements for the Certificate

Required courses:

BUSM 20	Principles of Business	3.0	CSU,UC
BUSM 61	Business Organization and Management	3.0	CSU
BUSS 36	Principles of Marketing	3.0	CSU
	TOTAL UNITS	**9.0**	

Special Information:

Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

Business: Retail Management - Level I

ACCOUNTING AND MANAGEMENT DEPARTMENT   **CERTIFICATE E0500**

Introductory statement: This introductory certificate exposes students to the business world and the role of retail distribution. Students become familiar with careers in retail management, as well as the latest trends in this fast changing field. This certificate may aid the student's search for an entry-level job in retail management.

Requirements for the Certificate

Required courses:

BUSO 25	Business Communications	3.0	CSU
CISB 15	Microcomputer Applications	4.0	CSU,UC
FASH 62	Retail Store Management and Merchandising, *or*	3.0	CSU
BUSS 50	Retail Store Management and Merchandising	3.0	
	TOTAL UNITS	**10.0**	

Special Information:

Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

Business: Small Business Management - Level I
ACCOUNTING AND MANAGEMENT DEPARTMENT   **CERTIFICATE E0529**

Small Business has been described as the engine of change within the economy. The Business: Small Business Management - Level I Certificate exposes students to the fundamentals of managing and planning a small business. Upon completion students may qualify for an entry-level management position in a small business. Entrepreneurs may use this certificate as a means to plan and develop new business ventures.

Requirements for the Certificate

Required courses:

BUSM 20	Principles of Business	3.0	CSU,UC
BUSM 66	Small Business Management	3.0	CSU
BUSS 36	Principles of Marketing	3.0	CSU
	TOTAL UNITS	**9.0**	

Special Information:

Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

Children's Program Certificate: General - Level I
CHILD DEVELOPMENT   **CERTIFICATE E1326**

The Children's Program Certificate: General - Level I is designed for the student who desires general knowledge about child development and who has an interest or awareness of teaching young children. This certificate meets Title 22 education requirements for fully qualified teachers.

Requirements for the Certificate

Required courses:

CHLD 1	Child, Family and Community	3.0	CSU,UC
CHLD 5	Principles/Practices in Child Development Programs	3.0	CSU
CHLD 6	Survey of Child Development Curriculum	3.0	CSU
CHLD 10	Child Growth and Development, *or*	3.0	CSU,UC
CHLD 10H	Child Growth and Development - Honors	3.0	CSU,UC

TOTAL UNITS   12.0

CIS Professional Certificate in C# Programming

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0722**

This certificate is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program prepares the student to develop applications using C# for Windows or Web based programs.

Requirements for the Certificate

Required courses:

CISD 11	Database Management – Microsoft Access*, or*	4.0
CISD 21	Database Management – Microsoft SQL Server*, or*	4.0
CISD 31	Database Management – Oracle	4.0
CISP 10	Principles of Object-Oriented Design	2.0
CISP 41	Programming in C#	4.0
CISP 44	Advanced Programming in C#	4.0
	TOTAL UNITS	**14.0**

CIS Professional Certificate
in Database Management - Microcomputers

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0715**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to work and manage data using a PC-based Database Management System. The program covers the major topics of the Microsoft MOUS certification exam for Access.

Requirements for the Certificate

Required courses:

CISD 11	Database Management - Microsoft Access	4.0	CSU
CISD 14	Advanced Database	4.0	
	Management – Microsoft Access		
CISD 21	Database Management – Microsoft SQL Server	4.0	
CISD 40	Database Design	3.0	
	TOTAL UNITS	**15.0**	

CIS Professional Certificate in Object-Oriented Design & Programming

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0723**

This certificate will provide the basic knowledge for develop-ing a model and creating a design for business application programs using object-oriented approach and UML.

Requirements for the Certificate

Required courses:

CISP 10	Principles of Object-Oriented Design	2.0	
CISP 11	Programming in Visual Basic*, or*	4.0	CSU,UC
CISP 21	Programming in Java*, or*	4.0	CSU,UC
CISP 31	Programming in C++*, or*	4.0	CSU,UC
CISP 41	Programming in C#	4.0	
CISP 14	Advanced Visual Basic Programming*, or*	4.0	CSU,UC
CISP 24	Advanced Java Programming*, or*	4.0	
CISP 34	Advanced C++ Programming*, or*	4.0	CSU,UC
CISP 44	Advanced Programming in C#	4.0	
	TOTAL UNITS	**10.0**	

CIS Professional Certificate in Windows Operating System Administration

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0720**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to develop skills to install, manage/administer, and troubleshoot Microsoft Windows workstations and server operating system. The courses in this certificate cover the major topics of industry standard certification exams.

Requirements for the Certificate

Required courses:

CISN 21	Windows Operating System	4.0	CSU
CISN 24	Microsoft NT Network System Administration	4.0	CSU
	TOTAL UNITS	**8.0**	

CIS Professional Certificate in LINUX
COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0796**

This certificate is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to install, manage, and troubleshoot workstations, servers, and Local Area Networks using the Linux operating system. The certificate covers the major topics of an industry standard certification exam for Linux.

Requirements for the Certificate

Required courses:

CISN 31	Linux Operating System	4.0	CSU
CISN 34	LINUX Networking and Security	4.0	CSU
CISW 31	Web Servers	4.0	
	TOTAL UNITS	**12.0**	

CIS Professional Certificate in Network Security
COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0721**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program is aimed to help students develop skills to design, implement, and maintain secured networks. The courses examine Firewall and VPN in various environments and platforms, use network protocol analyzing technology as a security tool to protect the networks from attacks, and illustrate network vulnerabilities from a hacker's perspective. This program will prepare students to explain fundamental concepts of network security, identify network vulnerabilities and attacks, and use various protocol analyzers to detect network attack and troubleshoot network problems. Individual courses may assist students in preparing for related industry certification exams.

Requirements for the Certificate

Required courses:

CISS 21	Network Vulnerabilities and Countermeasures	4.0	CSU
CISS 23	Network Analysis and NIDS	4.0	CSU
CISS 25	Network Security and Firewalls	4.0	CSU
CISS 27	Defending Computer Systems Hands-On	1.0	
	TOTAL UNITS	**13.0**	

CIS Professional Certificate in SOA and Web Services

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0724**

This certificate is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will help the student understand the concepts and theories underlying service oriented architecture (SOA), XML technologies (DTD, XSD, XLST, XQuery and XPath), and Web services technologies (UDDI, WSDL and SOAP).

Requirements for the Certificate

Required courses:

CISW 41	XML Secure Programming	3.0
CISW 49	Service Oriented Architecture Concepts & Practice	3.0
	TOTAL UNITS	**6.0**

CIS Professional Certificate in SQL

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0730**

This certificate is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to view and update databases, create and maintain database objects, and develop programs to automate database functions.

Requirements for the Certificate

Required courses:

CISD 21	Database Management – Microsoft SQL Server	4.0
CISD 31	Database Management - Oracle	4.0
CISD 40	Database Design	3.0
	TOTAL UNITS	**11.0**

CIS Professional Certificate in C++ Programming

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0714**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to write applications in C++ and Visual C++ and provide a basic understanding of Object-Oriented Design.

Requirements for the Certificate

Required courses:

CISD 11	Database Management – Microsoft Access, or	4.0	
CISD 21	Database Management – Microsoft SQL Server, or	4.0	
CISD 31	Database Management – Oracle	4.0	
CISP 10	Principles of Object-Oriented Design	2.0	
CISP 31	Programming in C++	4.0	CSU,UC
CISP 34	Advanced C++ Programming	4.0	CSU,UC
	TOTAL UNITS	**14.0**	

CIS Professional Certificate in Java Programming

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0700**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to develop applications using Java and includes techniques in Object Oriented Programming, web-based applets, servlets, navigating databases, and JavaBeans.

Requirements for the Certificate

Required courses:

CISD 11	Database Management - Microsoft Access*, or*	4.0	CSU
CISD 21	Database Management – Microsoft SQL Server*, or*	4.0	
CISD 31	Database Management - Oracle	4.0	
CISP 10	Principles of Object-Oriented Design	2.0	
CISP 21	Programming in Java	4.0	CSU,UC
CISP 24	Advanced Java Programming	4.0	
	TOTAL UNITS	**14.0**	

CIS Professional Certificate in Networking

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0716**

This curriculum is designed to help students develop skills to administer and manage the heterogeneous corporate network. The courses examine and illustrate communication protocols with various industrial leading network operating systems. The main objective of the certificate is to integrate and enhance knowledge for network administration. However, individual courses may assist students in preparing for related certification exams.

Requirements for the Certificate

Required courses:

CISN 11	Telecommunications Networking	4.0	CSU
CISN 24	Windows Server Network And Security Administration	4.0	CSU
CISN 34	LINUX Networking and Security	4.0	CSU
CISN 51	Cisco CCNA Networking and Routing	4.0	CSU
	TOTAL UNITS	**16.0**	

CIS Professional Certificate in Oracle

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0717**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to install, create, manage, administer, and troubleshoot an Oracle database. The program covers the major topics of an industry standard certification exam for Oracle.

Requirements for the Certificate

Required courses:

Course	Title	Units
CISD 31	Database Management	4.0
CISD 32	Oracle Forms and Reports	3.0
CISD 40	Database Design	3.0
	TOTAL UNITS	**10.0**

CIS Professional Certificate in Telecommunications

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0718**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to develop a fundamental understanding of local area networks, wide area networks, and telecommunications.

Requirements for the Certificate

Required courses:

CISN 11	Telecommunications Networking	4.0	CSU
CISN 24	Windows Network System Administration	4.0	
CISN 51	CISCO Networking Fundamentals and Routing	4.0	
	TOTAL UNITS	**12.0**	

CIS Professional Certificate in Visual Basic Programming
COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0719**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to develop applications using Visual Basic for Windows or Web based systems.

Requirements for the Certificate

Required courses:

CISP 10	Principles of Object-Oriented Programming	2.0	
CISP 11	Programming in Visual Basic	4.0	CSU,UC
CISP 14	Advanced Visual Basic Programming	4.0	CSU,UC
CISD 11	Database Management – Microsoft Access, *or*	4.0	
CISD 21	Database Management – Microsoft SQL Server	4.0	
	TOTAL UNITS	**14.0**	

CIS Professional Certificate in Web Programming

COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0713**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to develop programming skills needed to create effective Web pages and websites using various scripting or markup languages like JavaScript, VBScript, HTML, DHTML, and XML. Includes practical knowledge of how to install, manage, and troubleshoot Web servers and access information from a database server. Helps students in obtaining programming jobs with companies with a Web presence.

Requirements for the Certificate

Required courses:

CISW 11	Internet Technologies	4.0	CSU
CISW 24	Advanced Web Programming	4.0	
CISW 31	Web Servers	4.0	
	TOTAL UNITS	**12.0**	

Coaching
PHYSICAL EDUCATION DEPARTMENT   **CERTIFICATE E0804**

This certificate program is intended to prepare students for employment as high school (walk-on) coaches, but is appropriate for coaches at various levels.

Requirements for the Certificate

Required courses:

PE 13	Sports Officiating	3.0	CSU,UC
PE 34	Fitness for Living	3.0	CSU,UC
PE 44	Theory of Coaching	3.0	CSU
PE 81	Work Experience for Coaching	2.0	
	TOTAL UNITS	**11.0**	

Exit Requirement: First Aid and CPR Certification

Computer Graphics Technology Proficiency

COMMERCIAL AND ENTERTAINMENT ARTS DEPARTMENT   **CERTIFICATE E0312**

The Proficiency Certificate provides students and professionals with a fast-track, 4-course training cluster covering the creation, editing, and application of digital imagery for personal use and interest, updating software skills, career preparation and applications, digital portfolios, or electronic publishing.

Requirements for the Certificate

Required courses:

GRAP 8	Fundamentals of Digital Media	3.0
GRAP 10	Photoshop Imagery	3.0
GRAP 15	InDesign Graphics	3.0
GRAP 16	Illustrator Graphics	3.0
	TOTAL UNITS	**12.0**

Recommended Electives:

GRAP 18	3D Graphics Imagery
GRAP 20	Multimedia Graphics

Culinary Arts - Level I
CONSUMER SCIENCE AND DESIGN TECHNOLOGIES   CERTIFICATE E1334

The Culinary Arts - Level I Certificate program will prepare students for food production job opportunities in the food service industry. The program emphasizes basic food preparation, commercial food production, and food safety and sanitation. Six units of elective courses allow the student to tailor the program to meet specific needs.

Requirements for the Certificate

Required courses:

HRM 52	Food Safety and Sanitation	1.5	CSU
HRM 54	Basic Cooking Techniques	3.0	CSU
HRM 91	Work Experience in Restaurant/Hospitality	1.0	CSU
NF 20	Principles of Foods with Lab	3.0	CSU

PLUS
Select six (6) units from:

HRM 61	Menu Planning	3.0	CSU
HRM 62	Catering	3.0	CSU
NF 61	Creative Foods	3.0	
NF 62	Meal Management	3.0	CSU

TOTAL UNITS	**14.5**	

Dance Teacher
DANCE DEPARTMENT   **CERTIFICATE E0313**

The Dance Teacher Certificate is intended to prepare students for careers as dance instructors in private dance studios, recreation centers and K-12 dance programs. Focus is on the genres of Ballet, Jazz and Modern Dance with pedagogical principles that can be applied to other dance forms. This certificate may aid the student's search for an entry-level job in the dance teaching world.

Requirements for the Certificate

Required courses:

DNCE 2B	Ballet II	0.5
DNCE 4	Choreography	0.5
DNCE 12B	Modern II	0.5
DNCE 14B	Jazz II	0.5
DNCE 24	Dance Production	1.0
DNCE 33	Improvisation	0.5
DNCE 35	Repertory	2.0
DNCE 39A	Alignment and Correctives I	0.5
DN-T 20	History and Appreciation of Dance	3.0
DN-T 38	Dance Teaching Methods	3.0
PE 24	Kinesiology	2.0
	TOTAL UNITS	**14.0**

Data Entry
COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0791**

This program is intended to prepare students for employment as data entry operators, customer service representatives, receptionists, or entry-level office support staff positions. Training in a variety of computer skills is emphasized. Students desiring a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Certificate

Required courses:

CISB 15	Microcomputer Applications	4.0	CSU,UC
CISI 12	Intermediate Computer Keyboarding	3.0	
CISI 21	Data Entry	3.0	
	TOTAL UNITS	**10.0**	

Electronic Assembly and Fabrication
ELECTRONICS AND COMPUTER TECHNOLOGY DEPARTMENT   **CERTIFICATE E0929**

The Electronic Assembly and Fabrication Certificate is intended to prepare students to enter the electronics field as assembly and fabrication technicians. The program provides a series of courses to meet the needs of industry in assembly, soldering/de-soldering skills and fabrication for both through-hole and surface mount devices (SMD). Included are skills for various types of cabling and connections.

Electronic fundamentals (test instruments, basic electrical measurements, color-codes, schematic symbols, device outlines, etc.) are provided in the introductory courses. Complete surface mount technology (SMT) skills are taught with a culmination in the IPC7711/IPC7721 rework and repair of electronic assemblies certification. Recertification is required every two years. ELEC 63 is a prep course for the recertification.

Requirements for the Certificate

Required courses:

ELEC 50A	Electronic Circuits (DC)	4.0	CSU
ELEC 50B	Electronic Circuits (AC), *or*	4.0	CSU
EST 50	Electrical Fundamentals for Cable Installations	4.0	
ELEC 61	Electronic Assembly and Fabrication	3.0	CSU
ELEC 62	Advanced Surface Mount Assembly and Rework	2.0	
	TOTAL UNITS	**13.0**	

Recommended Electives:

ELEC 63   Electronic Assemblies Recertification

Electronic Systems Technology - Level I
ELECTRONICS AND COMPUTER TECHNOLOGY DEPARTMENT   CERTIFICATE E0990

This is a fast-track certificate program within the fields of information and electronic technology. These fields are growing at rapid rates. The program provides job skills in the areas of low voltage cable and wire installations used in the telephone industry, computer networks (business and home), home theater, home automation, and home security systems (integrated home systems). Typical job titles in these areas are data or cable technician, low-voltage wiring technician, home theatre installer, consumer electronics service technician and security system installer. The program prepares the student for the California State Contractors C-7 Low Voltage Systems license. The program encompasses a total of 27-29 units comprising two levels of certification. The level I certification (15-16 units) develops skills in electrical fundamentals, fabrication techniques, cabling and wiring standards for voice, video and data, and basic computer skills in word processing, spreadsheets, database and the Internet. Level II certification (12-13 units) adds customer relations and advanced skills in the installation, calibration, setup, maintenance, and troubleshooting of home theater systems, home automation, and home security systems. Either a course on preparing for the C-7 license or troubleshooting digital TV with LCD, plasma, and DLP video displays is included.

Requirements for the Certificate

Required courses:

ELEC 11	Technical Applications in Microcomputers, *or*	3.0	CSU
CISB 15	Microcomputer Applications	4.0	CSU,UC
EST 50	Electrical Fundamentals for Cable Installations	4.0	
EST 52	Fabrication Techniques for Cable Installations	4.0	
EST 54	Cabling and Wiring Standards	4.0	

TOTAL UNITS   15.0 - 16.0

Emergency Medical Technician - Level I

MEDICAL SERVICES DEPARTMENT   **CERTIFICATE E1212**

Approved by the Los Angeles County and State Departments of Health. Emphasizes the development of skills to recognize symptoms of illnesses and injuries as well as the proper procedures of pre-hospital emergency care. Awards an EMT-I Course Completion Certificate necessary for many jobs in emergency care and is prerequisite for entry into a Paramedic program or most fire department jobs.

Requirements for the Certificate

Required courses:

EMT 90	Emergency Medical Technician I	10.5
	TOTAL UNITS	**10.5**

Special Information:

To remain in the program, students must maintain a grade of "C" or better in the course.

Completion of the required course, which includes both written and practical qualifying examinations, will award the student an EMT-I Course Completion Certificate. Students are then eligible for certification by taking and passing the National Registry EMT-I certifying exam. This course is a prerequisite for the Paramedic Program and is required by most fire departments before the student may be hired as a firefighter.

Application Requirements and Selection Procedures

Aplication Requirements:

a) Applicant must be 18 years of age upon entrance into the course.

b) High school graduate or equivalent.

c) File a College application and be accepted as a student at Mt. San Antonio College.

d) A physical examination, proof of certain immunizations, current certification in CPR, and a criminal background check are required of all students prior to entrance into the clinical setting. Forms and information will be provided upon entry into the course.

Selection Procedure:

The course is open to all students who meet the application requirements. All Applicants are required to meet the Essential Functions in the Emergency Medical Technician Program.

Physical Demands:

■ Perform prolonged, extensive, or considerable standing/walking, lifting positioning, pushing, and/or transferring patients

■ Possess the ability to perform fine motor movements with hands and fingers

■ Possess the ability for extremely heavy effort (lift and carry at least 125 pounds

■ Perform considerable reaching, stooping, bending, kneeling, and crouching

Sensory Demands:

■ Color vision: ability to distinguish and identify colors (may be corrected with adaptive devices)

■ Distance vision: ability to see clearly 20 feet or more

■ Depth perception: ability to judge distance and space relationships

■ Near vision: ability to see clearly 20 inches or less

■ Hearing: able to recognize a full range of tones

Working Environment:

■ May be exposed to infectious and contagious disease, without prior notification

■ Regularly exposed to the risk of blood borne diseases

■ Exposed to hazardous agents, body fluids and wastes

■ Exposed to odorous chemicals and specimens

- Subject to hazards of flammable, explosive gases
- Subject to burns and cuts
- Contact with patients having different religious, culture, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances
- Handle emergency or crisis situations
- Subject to many interruptions
- Requires decisions/actions related to end of life issues
- Exposure to products containing latex

English Language Skills:

Although proficiency in English is not a criteria for admission into the EMT program, students must be able to speak, write and read English to to ensure patient safety and to complete classes successfully.

Fashion Design - Computer-Aided
CONSUMER SCIENCE AND DESIGN TECHNOLOGIES   **CERTIFICATE E1329**

The Fashion Design - Computer-Aided certificate builds upon basic skills and provides students with intermediate technical and technological skills in fashion design and patternmaking. With a diversified skill base that includes CAD technology, students will be better prepared for above entry-level positions and/or advancement to new career opportunities.

Requirements for the Certificate

Required courses:

FASH 20	Illustration for Fashion and Costume Design	3.0	
FASH 21	Patternmaking I	3.0	CSU
FASH 24	Fashion Patternmaking by Computer	3.0	
FASH 25	Fashion Computer-Assisted Drawing	3.0	
FASH 26	Fashion Computer Assisted Design	2.0	
	TOTAL UNITS	**14.0**	

Fitness Specialist/Personal Trainer
PHYSICAL EDUCATION DEPARTMENT   **CERTIFICATE E0808**

The Fitness Specialist/Personal Trainer Certificate prepares students for careers as personal trainers, health/fitness professionals in corporate fitness facilities, wellness centers and public/private health clubs. The Fitness Specialist/Personal Trainer Certificate curriculum is designed to prepare students who wish to take exams offered by the American Council on Exercise (ACE), the American College of Sports Medicine (ACSM) and other nationally recognized organizations. Technical skills necessary for implementation of a safe, effective and motivational physical fitness program are presented.

Requirements for the Certificate

Required courses:

NF 10	Nutrition for Personal Health and Wellness	3.0	CSU
PE 15	Administration of Fitness Programs	2.0	
PE 24	Kinesiology	2.0	
PE 38	Physiology of Exercise for Fitness	3.0	
PE 39	Techniques of Fitness Testing	2.0	CSU
PE 40	Techniques of Teaching Cardiovascular Exercise	2.0	
PE 41	Techniques of Teaching Weight Training	2.0	
PE 85	Fitness Specialist Internship	1.0	
	TOTAL UNITS	**17.0**	

Recommended Electives:

DNCE 39A   Alignment and Correctives I

Gallery Design/Operation and Art Profession
FINE ARTS   **CERTIFICATE E1020**

This certificate is designed to provide students with the necessary theoretical and practical knowledge and skills to display an esthetically and conceptually effective art exhibition. Students will acquire the knowledge of various/diverse artistic media and develop a career-oriented artistic perspective.

Requirements for the Certificate

Required courses:

ARTG 20	Art, Artists and Society	3.0	CSU
ARTG 21A	Introduction to Exhibition Production	3.0	CSU
ARTG 21B	Intermediate Exhibition Production	3.0	CSU
ARTG 22A	Exhibition Design and Art Gallery Operation Work Experience *(off campus)*	1.0	
ARTG 22A	Exhibition Design and Art Gallery Operation Work Experience *(on campus)*	1.0	
ARTC 100	Graphic Design I	3.0	

PLUS
Select one (1) course from:

AHIS 5	History of Western Art: Renaissance through Modern	3.0	CSU,UC
AHIS 6	History of Modern Art	3.0	CSU,UC
	TOTAL UNITS	**17.0**	

Hospitality: Food Services

CONSUMER SCIENCE AND DESIGN TECHNOLOGIES   **CERTIFICATE E1390**

This certificate prepares the holder to enter the food service field as a skilled food service worker in either food preparation or service.

Requirements for the Certificate

Required courses:

HRM 51	Introduction to Hospitality	3.0	CSU
HRM 52	Food Safety and Sanitation	1.5	CSU
HRM 53	Dining Room Service Management	3.0	CSU
	TOTAL UNITS	**7.5**	

Hospitality: Hospitality Management - Level I
CONSUMER SCIENCE AND DESIGN TECHNOLOGIES   **CERTIFICATE E1332**

The Hospitality: Hospitality Management - Level I Certificate prepares the holder for an entry-level position within the hospitality industry.

Requirements for the Certificate

Required courses:

HRM 51	Introduction to Hospitality	3.0	CSU
HRM 53	Dining Room Service Management	3.0	CSU
HRM 70	Introduction to Lodging	3.0	CSU
HRM 91	Work Experience in Restaurant/Hospitality	1.0	CSU
	TOTAL UNITS	**10.0**	

Hospitality: Restaurant Management - Level I
CONSUMER SCIENCE AND DESIGN TECHNOLOGIES　　　　　　　　　　　　**CERTIFICATE E1333**

The Hospitality: Restaurant Management - Level I Certificate prepares the holder for an entry-level position within a restaurant.

Requirements for the Certificate

Required courses:

HRM 51	Introduction to Hospitality	3.0	CSU
HRM 52	Food Safety and Sanitation	1.5	CSU
HRM 53	Dining Room Service Management	3.0	CSU
HRM 91	Work Experience in Restaurant/Hospitality	1.0	CSU
	TOTAL UNITS	**8.5**	

Information and Operating Systems Security
COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0731**

This certificate will provide the fundamental knowledge needed to analyze the risk to one's network and systems and the steps necessary in order to select and deploy the appropriate countermeasures to reduce the computer's exposure to network threats.

Requirements for the Certificate

Required courses:

CISS 11	Practical Computer Security	2.0
CISS 13	Principles of Information Systems Security	4.0
CISS 15	Operating Systems Security	4.0
	TOTAL UNITS	**10.0**

Introduction to Computer Information Technology
COMPUTER INFORMATION SYSTEMS DEPARTMENT   **CERTIFICATE E0712**

This program is designed as a foundational introduction to the computer and informational technology environment. This program will introduce the student to computer concepts, microcomputer applications, web/computer programming, and the Internet.

Requirements for the Certificate

Required courses:

CISB 11	Computer Information Systems	3.5	CSU,UC
CISB 15	Microcomputer Applications	4.0	CSU,UC
CISW 11	Internet Technologies	4.0	CSU
	TOTAL UNITS	**11.5**	

LVN 30-Unit Option - Career Mobility Track
NURSING DEPARTMENT   **CERTIFICATE E1202**

In keeping with Section 1429 of the Board of Registered Nursing Rules and Regulations, completion of this certificate program entitles the student to apply for examination for licensure as a Registered Nurse in the State of California. This option is specifically designed for California licensees. Other states do not have this provision in their laws; therefore, endorsement for licensure may not be granted.

A certificate documenting completion is awarded at the end of the course of study. The student who elects to complete the 30-Unit Option track is not a graduate of the Associate in Science Degree Nursing Program at Mt. San Antonio College. Individuals who complete this track are not eligible to return to the college at a later date to complete a degree in nursing. LVN applicants must declare their educational goal at the time of application (30-Unit or Associate Degree). This decision is not subject to change at a later date.

Prerequisite Courses:

1. Human Anatomy, including a laboratory component, a minimum of four semester units.

2. Human Physiology, including a laboratory component, a minimum of four semester units.

3. Microbiology, including a laboratory component, a minimum of four semester units.

Non-course requirements:

1. An overall grade point average of 2.5 for the Human Anatomy, Human Physiology, and Microbiology prerequisite courses with no grade less than a "C" for each course and no more than one repetition of any one of these courses.

2. A cumulative grade point average (GPA) of 2.5 for all college coursework completed.

3. Eligibility for Math 51

4. High school graduation or GED or academic degree from an accredited college/university in the United States.

5. Possess a California Licensed Vocational Nurse license.

6. Criminal background check and drug screening must be completed prior to any patient contact.

7. A physical examination, including specific immunizations is required of candidates prior to the beginning of nursing classes.

8. Current Level C-Provider CPR certification

9. Nursing 70 Role Transition must be completed with a credit grade prior to entrance into the program. (NURS 70, Role Transition - Due to the clinical component of NURS 70, applicants must submit their names to the Nursing Office for approval prior to enrollment in this course. Applicants must have completed all prerequisite courses prior to taking NURS 70. Applicants must provide proof of current Vocational Nurse License, physical, CPR card, Background Check, and drug testing prior to the start of class.)

Requirements for the Certificate

Required courses:

NURS 5	Psychiatric Nursing	3.0	CSU
NURS 8	Medical-Surgical Nursing: Circulation and Oxygenation	5.0	CSU
NURS 9	Leadership in Nursing	1.0	CSU
NURS 10	Medical-Surgical Nursing: Integration/Regulation	4.0	CSU
NURS 11	Preceptorship in Nursing	2.0	CSU
	TOTAL UNITS	**15.0**	

PSYC 1A must be completed prior to entrance into NURS 5, Psychiatric Nursing.

Selection Process:

Beginning Fall 2006, students applying for admission to the Nursing Program will be required to see either a counselor or educational advisor to verify their eligibility to enter the Nursing program.

Procedure:

Students must complete all course prerequisites prior to requesting an appointment for certifying readiness to enter into the Nursing program. Once eligibility has been established, students will enter on a first come first served basis. The eligibility appointment:

a) Once a student has completed all course prerequisites, the student will then apply to the Nursing Department on an appointment basis.

b) Students who have completed coursework at other colleges must bring the following information to their eligibility appointment:

- Official transcripts of all college work completed at all colleges;
- If the prerequisite courses were completed at another college, a course description and a copy of the course syllabus;
- Students completing college coursework outside of the United States will need to have their transcripts evaluated by an approved international transcript evaluation agency and must bring the final evaluation to their appointment (students may be able to obtain a list of agencies from the Admissions Office).
- Due to specific college deadlines for International Student applications, please inform the Counselor/Educational Advisor that this applies to you.

c) All students will need to bring official proof of high school graduation, GED, or college graduation from an accredited institution in the United States.

APPOINTMENTS FOR ELIGIBILTY VERIFICATION WILL ONLY BE MADE DURING THE FOLLOWING MONTHS:

- September 1 - October 31
- March 1 - April 30

Students should also be aware that once they have been admitted to the Nursing program and before beginning the Clinical portion of the program, they will need to be able to pass both a criminal background check, including a screening by the Office of Inspector General for welfare or Social Security fraud, as well as testing negative for drug use.

ALL APPLICANTS ARE REQUIRED TO MEET THE ESSENTIAL FUNCTIONS FOR SUCCESS IN THE NURSING PROGRAM.

Physical Demands:

- Perform prolonged, extensive, or considerable standing/walking, lifting positioning, pushing, and/or transferring patients
- Possess the ability to perform fine motor movements with hands and fingers
- Possess the ability for extremely heavy effort (lift/carry 50 lbs. or more)
- Perform considerable reaching, stooping, bending, kneeling, and crouching.

Sensory Demands:

- Color vision: ability to distinguish and identify colors (may be corrected with adaptive devices).
- Distance vision: ability to see clearly 20 feet or more
- Depth perception: ability to judge distance and space relationships
- Near vision: ability to see clearly 20 inches or less
- Hearing: able to recognize a full range of tones

Working Environment:

- May be exposed to infectious and contagious disease, without prior notification
- Regularly exposed to the risk of blood borne diseases
- Exposed to hazardous agents, body fluids and wastes
- Exposed to odorous chemicals and specimens
- Subject to hazards of flammable, explosive gases
- Subject to burns and cuts
- Contact with patients having different religious, culture, ethnicity race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances
- Handle emergency or crisis situations
- Subject to many interruptions
- Requires decisions/actions related to end of life issues
- Exposure to products containing latex

English Language Skills:

Although proficiency in English is not a criteria for admission into the nursing program, students must be able to speak, write and read English to ensure patient safety and to complete classes successfully.

Machine Operator
AIRCRAFT MAINTENANCE TECHNICIAN & MANUFACTURING TECHNOLOGY   CERTIFICATE E0956

This certificate provides a foundation of basic skills for employment in a variety of entry-level manufacturing positions.

Requirements for the Certificate

Required courses:

MFG 10	Mathematics and Blueprint Reading for Manufacturing	3.0	
MFG 11	Manual and CNC Manufacturing Essentials	2.0	CSU
MFG 12	Advanced Manufacturing Processes	2.0	CSU
MFG 85	Manual Computerized Numerical Control (CNC) Programming	2.0	CSU

PLUS
Select one (1) course from:

MFG 38	MasterCAM I	2.0	CSU
MFG 39	SurfCAM I	2.0	CSU

TOTAL UNITS   11.0

MasterCAM
AIRCRAFT MAINTENANCE TECHNICIAN & MANUFACTURING TECHNOLOGY   CERTIFICATE E0927

This certificate provides a strong background in MasterCAM 2-D, 3-D, and Solids packages along with the necessary machine shop theory and practice to input sound functional data into the CAD/CAM system.

Requirements for the Certificate

Required courses:

MFG 11	Manufacturing Processes I	2.0	CSU
MFG 38	MasterCAM I	2.0	CSU
MFG 38B	MasterCAM II	2.0	CSU
MFG 85	Manual Computerized Numerical Controls(CNC) Programming	2.0	
	TOTAL UNITS	**8.0**	

Nutrition Program Assistant - Level I

CONSUMER SCIENCE AND DESIGN TECHNOLOGIES   **CERTIFICATE E1331**

This certificate prepares students to work for community agencies and programs as nutrition assistants.

Requirements for the Certificate

Required courses:

HRM 52	Food Safety and Sanitation	1.5	CSU
NF 20	Principles of Foods with Lab	3.0	CSU
NF 25	Essentials of Nutrition, *or*	3.0	CSU,UC
NF 25H	Essentials of Nutrition - Honors, *or*	3.0	CSU,UC
NF 10	Nutrition for Personal Health and Wellness	3.0	CSU
NF 28	Cultural and Ethnic Foods	3.0	CSU,UC
	TOTAL UNITS	**10.5**	

Nutrition Program Assistant
- Level II: Child Program Emphasis
CONSUMER SCIENCE AND DESIGN TECHNOLOGIES   **CERTIFICATE E1335**

This certificate prepares students to work for community agencies such as the Federal Supplemental Nutrition Program for Women, Infants and Children (WIC), Head Start, and School Food Service as nutrition assistants. Coursework is designed to provide basic skills and knowledge necessary to entry-level positions in nutrition programs that serve children.

Requirements for the Certificate

Required courses:
Level I as follows:

HRM 52	Food Safety and Sanitation	1.5	CSU
NF 20	Principles of Foods with Lab	3.0	CSU
NF 25	Essentials of Nutrition, *or*	3.0	CSU,UC
NF 25H	Essentials of Nutrition - Honors, *or*	3.0	CSU,UC
NF 10	Nutrition for Personal Health and Wellness	3.0	CSU

Plus the following courses:

NF 28	Cultural and Ethnic Foods	3.0	CSU,UC
CHLD 10	Child Growth and Development	3.0	CSU,UC
CHLD 64	Health, Safety and Nutrition of Young Children	3.0	CSU
	TOTAL UNITS	**16.5**	

Nutrition Program Assistant
- Level II: Weight Management Program Emphasis
CONSUMER SCIENCE AND DESIGN TECHNOLOGIES   **CERTIFICATE E1336**

This certificate prepares students to work as nutrition assistants in the public or private sector. Coursework is designed to provide the basic skills and knowledge necessary for entry-level positions in a variety of businesses, agencies and programs that focus on weight management.

Requirements for the Certificate

Required courses:
Level I as follows:

HRM 52	Food Safety and Sanitation	1.5	CSU
NF 20	Principles of Foods with Lab	3.0	CSU
NF 25	Essentials of Nutrition, *or*	3.0	CSU,UC
NF 25H	Essentials of Nutrition - Honors, *or*	3.0	CSU,UC
NF 10	Nutrition for Personal Health and Wellness	3.0	CSU
NF 28	Cultural and Ethnic Foods	3.0	CSU,UC

Plus the following courses:

NF 81	Cooking for Your Heart and Health	1.0	
PE 34	Fitness for Living	3.0	CSU,UC
SPCH 26	Interpersonal Communications	3.0	

                                        TOTAL UNITS   **17.5**

Parametric Solid Modeling
AIRCRAFT MAINTENANCE TECHNICIAN & MANUFACTURING TECHNOLOGY   CERTIFICATE E0923

With the strong relationship between AutoCAD and Manufacturing, this mini certificate glides the student through AutoDesk's 2-D, 3-D, Mechanical Desktop, and Inventors packages and relates them to real-life industrial usage.

Requirements for the Certificate

Required courses:

MFG 15	AutoCAD 2D	2.0
MFG 17	3-D CAD - Mechanical Modeling	2.0
MFG 19	Parametric Solid Modeling for Manufacturing	2.0
MFG 25	Advanced Parametric Solid Modeling for Manufacturing	2.0
MFG 27	Autodesk Inventor	2.0
	TOTAL UNITS	**10.0**

Pilates Professional Teacher Training Phase I: Mat and Reformer

DANCE DEPARTMENT   **CERTIFICATE E0315**

The Pilates Professional Teacher Training Certificate prepares students for careers as Pilate instructors/trainers in professional Pilates studios, dance studios, corporate fitness facilities, wellness centers, public/private health clubs and private training in a home studio. The certificate curriculum meets the standards of the Pilates Method Alliance and includes lecture, self-study, and teaching hours. Phase I covers Pilates theory and the Mat and Reformer repertoire of exercises.

Requirements for the Certificate

Required courses:

DN-T 27	Theory and Principles of Pilates	3.0
DN-T 28	Functional Anatomy for Pilates	2.0
DN-T 29	Teaching Pilates Mat Repertoire	1.5
DN-T 30	Teaching Pilates Reformer Repertoire	1.5
DN-T 31	Pilates Teaching - Mat and Reformer	3.0
PE 3	First Aid and CPR	3.0
PE 24	Kinesiology	2.0

Plus select two (2) courses from:

DNCE 39B	Alignment and Correctives II	0.5
DNCE 40	Conditioning Through Dance	0.5
PE-I 50A	Yoga	0.5
	TOTAL UNITS	**17.0**

Radio Broadcasting Fundamental — Behind-the-Scenes
COMMERCIAL AND ENTERTAINMENT ARTS   **CERTIFICATE E0316**

This introductory certificate is designed to equip students who have a goal of working Behind-the-Scenes in broadcasting with the basic skills needed to qualify for an entry-level job in the industry. Students will examine a variety of careers in the radio industry as well as learn the fundamentals of production, sales and promotion, management and programming, while gaining actual experience through an internship either at one of the campus radio stations or a commercial radio station.

Requirements for the Certificate

Required courses:

R-TV 01	Introduction to Broadcasting	3.0
R-TV 09	Broadcast Sales and Promotion	3.0
R-TV 10	Radio Management and Programming	3.0
R-TV 11A	Beginning Radio Production	3.0
R-TV 96	Campus Radio Station Lab	1.0 - 2.0
R-TV 97A	Radio/Entertainment Industry Seminar	1.0
R-TV 97B	Radio/Entertainment Industry Internship	1.0
	TOTAL UNITS	**15.0 - 16.0**

Radio Broadcasting Fundamental — On-Air

COMMERCIAL AND ENTERTAINMENT ARTS   **CERTIFICATE E0317**

This introductory certificate is designed to equip students with a goal to become On-Air professionals with the basic skills needed to qualify for an entry-level job in broadcasting. Students will examine a variety of careers in the radio industry as well as learn the fundamentals of on-air performance, production and gain actual experience through an internship either at one of the campus radio stations or a commercial radio station.

Requirements for the Certificate

Required courses:

R-TV 01	Introduction to Broadcasting	3.0
R-TV 02	On-Air Personality Development	3.0
R-TV 07	Beginning Commercial Voice-Overs	3.0
R-TV 11A	Beginning Radio Production	3.0
R-TV 96	Campus Radio Station Lab 1.0 - 2.0	
R-TV 97A	Radio/Entertainment Industry Seminar	1.0
R-TV 97B	Radio/Entertainment Industry Internship	1.0
	TOTAL UNITS	**15.0 - 16.0**

SurfCAM
AIRCRAFT MAINTENANCE TECHNICIAN & MANUFACTURING TECHNOLOGY   CERTIFICATE E0925

This certificate is a direct path for manufacturing students to write, edit, download and run Computerized Numerical Control (CNC) machines, and provides a strong background in the basics of both manual and CNC machines.

Requirements for the Certificate

Required courses:

MFG 11	Manufacturing Processes I	2.0	CSU
MFG 39	SurfCAM I	2.0	CSU
MFG 39B	SurfCAM II	2.0	CSU
MFG 85	Manual Computerized Numerical Control (CNC) Programming	2.0	CSU
	TOTAL UNITS	**8.0**	

Welding
AIR CONDITIONING, WATER & WELDING TECHNOLOGIES   **CERTIFICATE E0919**

This program is designed to prepare the student for employment in the broad field of welding and (1) leads to occupations in manufacturing and repair; and (2) helps prepare the student for positions in supervision.

Courses in the welding curriculum prepare students for welding certificates. The College is a testing agency for the City of Los Angeles, and is authorized to administer the performance test for the Structural Welding certificate. There is a $50 charge for students and $60 for non- students to take this test. Topics of the written portion of the test which is administered by the City are reviewed in various welding courses offered by the College.

Requirements for the Certificate

Required courses:

WELD 40	Introduction to Welding	2.0	CSU
WELD 70A	Beginning Arc Welding	3.0	
WELD 70B	Intermediate Arc Welding	3.0	
	TOTAL UNITS	**8.0**	

Note: Any higher level welding courses may be substituted for WELD 70A.

Recommended Electives:

MFG 70	Technical Mathematics - Manufacturing Applications
WELD 60	Print Reading and Computations for Welders
WELD 70C	Certification for Welders