



Guidelines for Instructional Programs in Workforce Education

June 2010

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Chapter One

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A. Purpose of the Guidelines

The *Guidelines for Instructional Programs in Workforce Education* (GIPWE) is the Coordinating Board's official policy manual for both credit and non-credit workforce education programs offered at public higher education institutions in Texas.

The manual provides guidelines for the effective design, development, operation, and evaluation of workforce education programs. The processes associated with these guidelines include applications for new program approval, revisions for currently approved programs, deactivation or reactivation of programs, closure of programs, and implementation of Tech Prep programs.

Throughout these guidelines, the word "must" is used to identify program requirements and the word "should" is used to identify characteristics that are strongly recommended.

B. Programs and Awards

The programs and awards covered in the Guidelines include:

1. Associate of Applied Science (AAS)/Associate of Applied Arts (AAA) degrees;
2. Certificates approved by the Coordinating Board and offered for continuing education units (CEU) or semester credit hours (SCH); and
3. Institutional certificates and marketable skills achievement awards

These guidelines do not apply to academic degrees and certificate programs such as the Associate of Arts (AA), Associate of Science (AS), the Associate of Arts in Teaching (AAT), or the academic core curriculum.

C. Changes in the Guidelines

The 2010 revision incorporates some notable changes from the 2008 edition. Notable changes include the following:

Chapter Two, General Requirements: No notable changes.

Chapter Three, Program Elements: Table 3.1, Program Areas by 2-digit and 6-digit CIP Code Level, has been updated to include the 2010 CIP codes published by the National Center for Education Statistics (NCES). Changes in Chapter Three also reflect the new program certification and the repeal of institutional effectiveness processes.

Chapter Four, Workforce Education Course Manual (WECM): No notable changes.

Chapter Five, New Program Approval: The 2010 revision of Chapter Five states the rules that were adopted by the Board in October 2009 regarding the certification of new associate of applied science degree and certificate programs.

Chapter Six, Program Revisions: No notable changes.

Chapter Eight, Institutional Effectiveness: Chapter 10 of Coordinating Board rules relating to Institutional Effectiveness in Public Two-Year Colleges was repealed by the Board at its October 2009 quarterly meeting. Consequently, Chapter Eight has been removed from the GIPWE.

Once adopted, new rules concerning the review of existing programs at public colleges and universities will be made available at: <http://www.thecb.state.tx.us/Rules/TAC.cfm>.

D. Effective Dates for the 2010 Guidelines

Applications for new workforce education programs are subject to the requirements of the 2010 Guidelines for Instructional Programs in Workforce Education beginning December 1, 2009.

E. Contact Us

A directory of Coordinating Board staff in the Career and Technical Programs Department is available from the THECB home page (www.thecb.state.tx.us) through Academic Affairs – Career Technical Programs.

Mailing address:

Career Technical Programs
Texas Higher Education Coordinating Board
P.O. Box 12788
Austin, Texas 78711
Telephone Number: 512-427-6200
Fax Number: 512-427-6168

To submit comments or suggestions for the next edition of the GIPWE, contact:

Susan E. Hetzler, Ph.D.
Director of Career Technical Programs
Texas Higher Education Coordinating Board
P.O. Box 12788
Austin, Texas 78711
Telephone Number: 512-427-6220
Fax Number: 512-427-6168
email: Susan.Hetzler@thecb.state.tx.us

Chapter Two
General Institutional and Personnel Requirements
for Workforce Education Programs

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A. Role, Mission, and Institutional Accreditation

Each workforce education program offered by a public community or technical college must be within the institution's role and mission as established by the Texas Legislature and approved by the institution's governing board.

To receive Coordinating Board approval for a workforce education program, a public technical or community college must comply with the *Principles of Accreditation of the Commission on Colleges of the Southern Association of Colleges and Schools Commission on Colleges (SACS/COC)*.

B. Program Coordination/Faculty

Each workforce education program must be directed by an administrator who has appropriate authority to ensure that the quality of the program is maintained and complies with all applicable laws, rules, and guidelines.

Each workforce education Associate of Applied Science (AAS)/Associate of Applied Arts (AAA) degree program must have at least one full-time faculty member whose primary teaching assignment is in that program. All certificate programs must have an assigned program coordinator who is a full-time employee of the college qualified in an occupational/technical area (but not necessarily assigned full-time to the certificate program). Certificate programs must have at least one appropriately credentialed part-time faculty member teaching in the subject area.

C. Program and Graduate Credentialing

Each program coordinator shall be familiar with state, federal, and national program accreditation, certification, or approval and credentialing requirements, i.e., licensure, certification, and/or registration, for graduates, both mandatory and optional.

Each institution must provide a system and a timeline to seek state or national program accreditation, certification, or equivalent recognition within 12 months after the first graduating class. The institution may also negotiate with the Coordinating Board and different time of accreditation or certification should it be necessary but must notify in ample time. Graduates must be eligible to seek credentialing upon graduation without additional work experience or verification of comparable education unless the additional experience and/or verification is required of all applicants for the credential.

For programs in which such accreditation or approval is not required for students to seek credentialing upon graduation and is not a common expectation of local industry, the institution may either obtain program accreditation or approval or clearly disclose to program applicants the eligible credentials to seek upon graduation. The institution must also communicate any limitations to the students resulting from the program's non-accreditation and how to contact a related credentialing agency.

D. Equipment, Facilities, Classrooms, and Laboratories

Facilities, classrooms, and laboratory space must be adequate and appropriate for the program to serve the anticipated number of students. Equipment should represent technology currently found in business and industry. Opportunities for students to gain additional hands-on experience using state-of-the-art equipment should be provided via external learning experiences. This applies to all out-of-district and off-campus, as well as on-campus, locations.

E. Career Development Services

Each institution must provide comprehensive career development services to students, including career information and planning; job placement; career counseling and assessment; and follow-up services.

F. Qualifications of Workforce Education Program Personnel

The minimum qualifications for all workforce education program personnel must be in compliance with current SACS principles. The following personnel qualifications information is provided to help colleges and schools ensure excellence in instruction and career development services for students as well as effective program and course administration:

1. Faculty

It is the responsibility of each institution to ensure that the qualifications of faculty teaching in state-funded workforce education programs and courses (credit and continuing education) are in compliance with the current requirements of the Commission on Colleges of the Southern Association of Colleges and Schools (SACS), regardless of the teaching circumstances (i.e., full time, part time, off-campus, out-of-district, distance learning, and third-party contractual).

Degrees and graduate credit hours held by faculty members, whether full-time or part-time, must have been earned at an institution accredited by an accreditor recognized by the Coordinating Board or its foreign equivalent. It is the responsibility of the institution to verify equivalency of degrees or credit hours granted by foreign institutions. Documentation of equivalency must be kept on file as long as the faculty member is employed by the institution.

Faculty must be recruited and appointed by the institution prior to the start of instruction. Institutional records must document academic preparation, work experience, other appropriate qualifications (i.e., certificates, licensure, etc.), and complete justification for any exceptions to the requirements of SACS.

2. Career Development Personnel

Career development personnel should have a combination of academic preparation and work experience.

- a. Guidance, counseling, and career development activities should be provided by professionally trained counselors. A master's degree in counseling or a closely related field is required or a master's degree with significant course work and experience in career development is acceptable. Examples of related academic graduate degree programs include student development counseling in higher education and mental health counseling. Professional credentials, such as state professional counseling licensure (LPC) or certification by the National Board for Certified Counselors (NBCC) are preferred.
- b. Career development personnel must meet the requirements of SACS and/or Federal Perkins regulations in accordance with their specific assignments.
- c. In exceptional cases, outstanding professional experience and demonstrated competency may substitute for the academic preparation mentioned above. This should include a combination of both exceptional course work and experience in career development. Institutions must verify these exceptions on an individual basis and keep supporting documentation on file.
- d. Paraprofessionals employed in specific areas, such as job placement, must demonstrate academic preparation and experience consistent with their assignments.

3. Administrators

The identification of qualifications for administrators of workforce education programs is the responsibility of the higher education institution in keeping with its defined mission, administrative organization, and accreditation standards. Workforce education administrators should possess credentials, experience, and demonstrated competency appropriate to their areas of responsibility.

G. Professional Development

An institution must provide workforce education program faculty, career development personnel, and administrators with an on-going opportunity to engage in professional development for the duration of their employment at the institution.

Professional development opportunities should include content that assists the college personnel in further developing their knowledge and skills related to their role in the institution and their professional development in general (i.e., instructional methods for faculty, approaches to advising diverse populations for advisors, advances in information management for administrators).

A record of all professional development activities completed by college personnel should be maintained for the duration of their employment.

H. Off-Campus Instruction

All off-campus instruction must adhere to Coordinating Board Rules, Chapter 4, Subchapter P, "Approval of Distance Education Courses and Programs for Public Institutions," and Chapter 4, Subchapter Q, "Approval of Off-Campus and Self-Supporting Courses and Programs for Public Institutions." The notification and approval procedures for distance education, off-campus, and on-campus extension programs and courses are posted on the Distance Education website, which is accessed from the THECB home page (www.thecb.state.tx.us) through Academic Affairs – Academic Programs – Distance Education, and include the following:

"2. Procedures for Off-Campus Course and Program Delivery and On-Campus Extension Course and Program Delivery

- (a) Procedures for Review and Approval of All Off-Campus Lower-Division Instruction (both formula funded and extension) and On-Campus Extension Lower-Division Instruction.
 - (1) Unless specifically exempted by the Board, all off-campus lower-division courses by universities, health-related institutions, public technical colleges, Lamar state colleges, or by public community colleges outside their service areas shall be reviewed by the higher education Regional Council containing each site proposed to receive instruction.
 - (2) Regional Council notification shall be made for all on-campus extension lower-division courses.
 - (3) A public community college planning to offer off-campus courses and programs outside its taxing district but inside its service area shall notify all potentially affected Regional Councils prior to offering the course or program.
 - (4) All institutions offering off-campus lower-division instruction shall submit an annual Off-Campus Instructional Plan to the appropriate Regional Councils and the Board on a schedule to be determined by the Commissioner. An Off-Campus Instructional Plan is an institution's listing by location of off-campus lower-division courses and programs planned to be taught during an academic year. For public community colleges, the Off-Campus Instructional Plan will contain both out-of-service area courses and programs that require Regional Council review and approval, and out-of-district but in-service-area courses and programs which merely require Regional Council notification.
 - (7) Procedures for submitting applications to the Board for authorization to offer off-campus lower-division courses are as follows:
 - (A) Each Regional Council shall review Off-Campus Instructional Plans affecting the Region proposed by all institutions, except for courses offered by community colleges in their designated service areas, and forward its recommendations for approval or disapproval to the Board.

(B) If proposed off-campus courses could affect an institution which is a member of another Regional Council, the Off-Campus Instructional Plan shall also be sent to that institution and to the Council to which it belongs. The full membership of that Council shall review the proposal and return a recommendation for approval or disapproval to the originating institution. This recommendation of the Regional Council and the institution's request shall both be sent to the Commissioner."

Chapter Three

Workforce Education Program Elements

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A. Workforce Education Programs: Defining Characteristics

Consistent with the U.S. Department of Education's 16 Career Clusters and the Texas Education Agency's *AchieveTexas* career pathways initiative (www.AchieveTexas.org), a workforce education program consists of a coherent sequence of courses designed to prepare students for employment in a career field. A workforce education program is developed by an institution working in close cooperation with business and industry to satisfy a need for timely and effective workforce education. Additionally, many workforce education programs today are articulated with secondary schools through dual credit or Tech Prep and four-year college programs to provide students the opportunity for a seamless transition and further education.

A workforce education program has a competency-based curriculum organized to educate industry-driven learning outcomes. These outcomes are measured in terms of appropriate skills, knowledge, and perspectives mastered by a student to enter a profession related to the program's career pathway. All workforce education programs must provide students with opportunities to attain competence in oral and written communication as well as math and computer skills. These skills may be demonstrated by the inclusion of either applications or assignments in multiple courses or by courses in these basic competencies.

A workforce education program may lead to a single award (degree or certificate) or contain a "career cluster" of multiple awards/exit options (degrees and/or certificates). A program is usually identified by a two-digit Classification of Instructional Programs (CIP) code (see Table 3-1) while an award is identified by a six-digit CIP code. When quite distinct disciplines are encompassed by the same two-digit CIP code, the program is defined by the four-digit or six-digit CIP code. In many instances such awards must meet industry and/or state/national accreditation, licensure, certification, or registration requirements. Some of these awards can be joined in career lattices (see Table 3-2 for some examples). If additional lattices are needed, institutions may provide evidence of local or market need to the Coordinating Board and request consideration of new lattices.

1. Explanation of CIP Codes

The Classification of Instructional Programs (CIP) is a federal taxonomy developed by the U.S. Department of Education's National Center for Education Statistics (NCES) (<http://nces.ed.gov>). The CIP taxonomy is used by state agencies and national associations to establish standard terminology, improve communication, and standardize record-keeping.

Generally, as more digits are added to a CIP code, the program becomes more specific. A two-digit CIP Code refers to a broad career field. A four-digit CIP code refers either to a career pathway or similar levels of training but possibly in differing occupations. A six-digit CIP code refers to a specific occupation or job title. For example, CIP code:

50	Visual and Performing Arts
50.04	Design and Applied Arts
50.0402	Commercial and Advertising Art

Table 3-1 lists program areas in the program CIP code column. The list of program names/awards that should be grouped at the two-digit level is reviewed periodically. While colleges' recommendations for CIP code assignments are given every consideration, CIP code assignments are ultimately based on definitions in the CIP code manual as determined by Coordinating Board staff.

Table 3-1. Program Areas by 2-digit and 6-digit CIP Code Level

Program CIP Code¹	Awards in Program	Program/Award Name
01.		<i>AGRICULTURE, AGRICULTURE OPERATIONS, AND RELATED SCIENCES</i>
	01.0000	Agriculture, General
	All 01.01xx	Agricultural Business and Management
	All 01.02xx	Agricultural Mechanization
	All 01.03xx	Agricultural Production Operations
	All 01.04xx	Agricultural and Food Products Processing Management
	All 01.05xx	Agricultural and Domestic Animal Services
	All 01.06xx	Applied Horticulture/Horticultural Business Services
	All 01.08xx	Agricultural Public Services
	All 01.09xx	Animal Sciences
	All 01.10xx	Food Science and Technology
	All 01.11xx	Plant Sciences
	All 01.12xx	Soil Sciences
03.		<i>NATURAL RESOURCES AND CONSERVATION</i>
	All 03.01xx	Natural Resources Conservation and Research
	All 03.02xx	Natural Resources Management and Policy
	All 03.03xx	Fishing and Fisheries Sciences and Management
	All 03.05xx	Forestry
	All 03.06xx	Wildlife and Wildlands Science and Management
09.		<i>COMMUNICATION, JOURNALISM, AND RELATED PROGRAMS</i>
	All 09.01xx	Communication and Media Studies
	All 09.04xx	Journalism
	All 09.07xx	Radio, Television, and Digital Communication
	All 09.09xx	Public Relations, Advertising, and Applied Communications
	All 09.10xx	Publishing
10.		<i>COMMUNICATIONS TECHNOLOGIES/TECHNICIANS AND SUPPORT SERVICES</i>
	All 10.01xx	Communications Technology/Technician
	All 10.02xx	Audiovisual Communications Technologies/Technicians
	All 10.03xx	Graphic Communications
11.		<i>COMPUTER AND INFORMATION SCIENCES AND SUPPORT SERVICES</i>
	All 11.01xx	Computer and Information Sciences, General
	All 11.02xx	Computer Programming
	All 11.03xx	Data Processing
	All 11.04xx	Information Science/Studies
	All 11.05xx	Computer Systems Analysis
	All 11.06xx	Data Entry/Microcomputer Applications

¹ Program sequence is indicated in parentheses, where applicable.

Program CIP Code¹	Awards in Program	Program/Award Name
	All 11.07xx	Computer Science
	All 11.08xx	Computer Software and Media Applications
	All 11.09xx	Computer Systems Networking and Telecommunications
	All 11.10xx	Computer/Information Technology Administration and Management
12.		<i>PERSONAL AND CULINARY SERVICES</i>
12.0300		Funeral Service and Mortuary Science
12.0400		Cosmetology and Related Personal Grooming Services
12.0500		Culinary Arts and Related Services
13.		<i>EDUCATION</i>
	All 13.05xx	Educational/Instructional Media Design
	All 13.15xx	Teaching Assistants/Aides
14.		<i>ENGINEERING</i>
	All 14.02xx	Aerospace, Aeronautical and Astronautical Engineering
15.		<i>ENGINEERING TECHNOLOGIES/TECHNICIANS</i>
15.0000		Engineering Technology, General
15.0100		Architectural Engineering Technology/Technicians
15.0200		Civil Engineering Technology/Technician
15.0300		Electrical and Electronic Engineering Technologies/Technicians
	15.0303	Electrical, Electronic and Communications Engineering Technology/Technician
	15.0305	Telecommunications Technology/Technician
	15.0306	Integrated Circuit Design
15.0304		Laser and Optical Technology/Technician
	15.0304	Laser and Optical Technology/Technician
15.0400		Electromechanical and Instrumentation and Maintenance Technologies/Technicians
15.0500		Environmental Control Technologies/Technicians
15.0600		Industrial Production Technologies/Technicians
15.0700		Quality Control and Safety Technologies/Technicians
15.0800		Mechanical Engineering Related Technologies/Technicians
15.0900		Mining and Petroleum Technologies/Technicians
15.1000		Construction Engineering Technology/Technician
15.1100		Engineering-Related Technologies
15.1200		Computer Engineering Technologies/ Technicians
15.1300		Drafting/Design Engineering Technologies/Technicians
15.1400		Nuclear Engineering Technologies/Technicians
15.1500		Engineering-Related Fields
15.1600		Nanotechnology
16.		<i>FOREIGN LANGUAGES, LITERATURES, AND LINGUISTICS</i>
	All 16.01xx	Linguistic, Comparative, and Related Language Studies and Services
	All 16.16xx	American Sign Language
19.		<i>FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES</i>
	All 19.00xx	Work and Family Studies
	All 19/01xx	Family and Consumer Sciences/Human Sciences, General
	All 19.02xx	Family and Consumer Sciences/Human Sciences Business Services
	All 19.04xx	Family and Consumer Economics and Related Studies
	All 19.05xx	Foods, Nutrition, and Related Services
	All 19.06xx	Housing and Human Environments

Program CIP Code¹	Awards in Program	Program/Award Name
	All 19.07xx	Human Development, Family Studies, and Related Services
	All 19.09xx	Apparel and Textiles
22.		<i>LEGAL PROFESSIONS AND STUDIES</i>
	All 22.03xx	Legal Support Services
23.		<i>ENGLISH LANGUAGE AND LITERATURE/LETTERS</i>
	23.1303	Professional, Technical, Business, and Scientific Writing
25.		<i>LIBRARY SCIENCE</i>
	25.0301	Library and Archives Assisting.
26.		<i>BIOLOGICAL AND BIOMEDICAL SCIENCES</i>
	All 26.11xx	Biomathematics, Bioinformatics, and Computational Biology
	26.1201	Biotechnology
	All 26.13xx	Ecology, Evolution, Systematics and Population Biology
31.		<i>PARKS, RECREATION, LEISURE, AND FITNESS STUDIES</i>
	All 31.05xx	Health and Physical Education/Fitness
41.		<i>SCIENCE TECHNOLOGIES/TECHNICIANS</i>
	All 41.01xx	Biology Technician/Biotechnology Laboratory Technician
	All 41.03xx	Physical Science Technologies/Technicians
43.		<i>SECURITY AND PROTECTIVE SERVICES</i>
43.0100		Criminal Justice and Corrections
43.0200		Fire Protection
43.03		Homeland Security
44.		<i>PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONS</i>
	All 44.04xx	Public Administration
	All 44.07xx	Social Work
45.		<i>SOCIAL SCIENCES</i>
	All 45.07xx	Geography and Cartography
46.		<i>CONSTRUCTION TRADES</i>
	All 46.01xx	Mason/Masonry
	All 46.02xx	Carpenters
	All 46.03xx	Electrical and Power Transmission Installers
	All 46.04xx	Building/Construction Finishing, Management, and Inspection
	All 46.05xx	Plumbing and Related Water Supply Services
47.		<i>MECHANIC AND REPAIR TECHNOLOGIES/TECHNICIANS</i>
47.0100		Electrical/Electronics Maintenance and Repair Technology
47.0200		Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology
47.0300		Heavy/Industrial Equipment Maintenance Technologies
47.0400		Precision Systems Maintenance and Repair Technologies
47.0600(00)		Vehicle and Mobile Equipment Mechanics and Repairers
	47.0603	Autobody/Collision and Repair Technology/Technician
	47.0604	Automobile/Automotive Mechanics Technology/Technician
	47.0605	Diesel Mechanics Technology/Technician
	47.0606	Small Engine Mechanics and Repair Technology/Technician
	47.0610	Bicycle Mechanics and Repair Technology/Technician
	47.0611	Motorcycle Maintenance and Repair Technology/Technician
	47.0612	Vehicle Emissions Inspection and Maintenance Technology/Technician

Program CIP Code¹	Awards in Program	Program/Award Name
	47.0613	Medium/Heavy Vehicle and Truck Technology/Technician
	47.0614	Alternative Fuel Vehicle Technology/Technician
	47.0615	Engine Machinist
	47.0616	Marine Maintenance/Fitter and Ship Repair Technology/Technician
	47.0617	High Performance and Custom Engine Technician/Mechanic
	47.0618	Recreation Vehicle (RV) Service Technician
47.0600(02)		Aviation Technology
	47.0607	Airframe Mechanics and Aircraft Maintenance Technology/Technician
	47.0608	Aircraft Powerplant Technology/Technician
	47.0609	Avionics Maintenance Technology/Technician
48.		<i>PRECISION PRODUCTION</i>
48.0300		Leatherworking and Upholstery
48.0500		Precision Metal Working
48.0700		Woodworking
48.0800		Boilermaking/Boilermaker
49.		<i>TRANSPORTATION AND MATERIALS MOVING</i>
	All 49.01xx	Air Transportation
	All 49.02xx	Ground Transportation
	All 49.03xx	Marine Transportation
50.		<i>VISUAL AND PERFORMING ARTS</i>
50.0400		Design and Applied Arts
	50.0401	Design and Visual Communications, General
	50.0402	Commercial and Advertising Art
	50.0404	Industrial Design
	50.0409	Graphic Design
	50.0410	Illustration
50.0406		Commercial Photography
	50.0406	Commercial Photography
50.0407		Fashion/Apparel Design
	50.0407	Fashion/Apparel Design
50.0408		Interior Design
	50.0408	Interior Design
50.0500		Dramatic/Theatre Arts and Stagecraft
50.0600		Film/Video and Photographic Arts
50.0700		Fine and Studio Art
50.0900		Music
50.1000		Arts, Entertainment, and Media Management
51.		<i>HEALTH PROFESSIONS AND RELATED CLINICAL SCIENCES</i>
51.0000		Health Services/Allied Health/Health Sciences, General.
51.0600		Dental Support Services and Allied Professions
	51.0601	Dental Assisting/Assistant
	51.0602	Dental Hygiene/Hygienist
51.0603		Dental Laboratory Technology/Technician
	51.0603	Dental Laboratory Technology/Technician

Program CIP Code¹	Awards in Program	Program/Award Name
51.0700(01)		Health and Medical Administrative Services
	51.0701	Health/Health Care Administration/Management
	51.0702	Hospital and Health Care Facilities Administration/Management
	51.0703	Health Unit Coordinator/Ward Clerk
	51.0704	Health Unit Manager/Ward Supervisor
51.0700(02)		Medical Office Management/Administration
	51.0705	Medical Office Management/Administration
	51.0706	Health Information/Medical Records Administration/Administrator
	51.0707	Health Information/Medical Records Technology/Technician
	51.0708	Medical Transcription/Transcriptionist
	51.0709	Medical Office Computer Specialist/Assistant
	51.0710	Medical Office Assistant/Specialist
	51.0711	Medical/Health Management and Clinical Assistant/Specialist
	51.0712	Medical Reception/Receptionist
	51.0713	Medical Insurance Coding Specialist/Coder
	51.0714	Medical Insurance Specialist/Medical Biller
	51.0715	Health/Medical Claims Examiner
	51.0716	Medical Administrative/Executive Assistant and Medical Secretary
	51.0717	Medical Staff Services
	51.0718	Long Term Care Administration/Management.
	51.0719	Clinical Research Coordinator
51.0801		Medical/Clinical Assistant
51.0802		Clinical/Medical Laboratory Assistant
51.0803		Occupational Therapist Assistant
51.0805		Pharmacy Technician/Assistant
51.0806		Physical Therapist Assistant
51.0808		Veterinary/Animal Health Technology/Technician and Veterinary Assistant
51.0901		Cardiovascular Technology/Technologist
51.0902		Electrocardiograph Technology/Technician
51.0903		Electroneurodiagnostic/Electroencephalographic Technology/Technologist
	51.0903 (01)	Electroneurodiagnostic/Electroencephalographic Technology/Technologist
	51.0903 (02)	Polysomnography Technology
51.0904		Emergency Medical Technology/Technician (EMT Paramedic)
51.0905		Nuclear Medical Technology/Technologist
51.0906		Perfusion Technology/Perfusionist
51.0907		Medical Radiologic Technology/Science / Radiation Therapist
51.0908		Respiratory Care Therapy/Therapist
51.0909		Surgical Technology/Technologist
51.0910		Diagnostic Medical Sonography/Sonographer and Ultrasound Technician
	51.0910 (01)	Diagnostic Medical Sonography/Sonographer and Ultrasound Technician
	51.0910 (02)	Diagnostic Sonographic Echocardiography
	51.0910 (03)	Diagnostic Sonographic Vascular Technology
51.0911		Radiologic Technology/Science - Radiographer
51.1004		Clinical/Medical Laboratory Technician
51.1008		Histologic Technician

Program CIP Code¹	Awards in Program	Program/Award Name
51.1009		Phlebotomy Technician/Phlebotomist
51.1500		Mental and Social Health Services and Allied Professions
	51.1501	Clinical/Medical Social Work
	51.1502	Psychiatric/Mental Health Services Technician
	51.1503	Clinical/Medical Social Work
51.1504		Community Health Services/Liaison/Counseling
	51.1504	Community Health Services/Liaison/Counseling
51.1800		Ophthalmic and Optometric Support Services and Allied Professions
51.2200		Public Health
51.2600		Health Aides/Attendants/Orderlies
51.3500		Somatic Bodywork and Related Therapeutic Services
	51.3501	Massage Therapy/Therapeutic Massage
51.3800		Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing
	51.3801	Registered Nursing/Registered Nurse
51.3900		Practical Nursing, Vocational Nursing and Nursing Assistants
	51.3901	Licensed Practical/Vocational Nurse Training
	51.3902	Nursing Assistant/Aide and Patient Care Assistant/Aide
52.		<i>BUSINESS MANAGEMENT, MARKETING, AND RELATED SUPPORT SERVICES</i>
	All 52.01xx	Business/Commerce, General
	All 52.02xx	Business Administration, Management and Operations
	All 52.03xx	Accounting and Related Services
	All 52.04xx	Business Operations Support and Assistant Services
	All 52.05xx	Business/Corporate Communications
	All 52.06xx	Business/Managerial Economics
	All 52.07xx	Entrepreneurial and Small Business Operations
	All 52.08xx	Finance and Financial Management Services
	All 52.09xx	Hospitality Administration/Management
	All 52.10xx	Human Resources Management and Services
	All 52.11xx	International Business
	All 52.12xx	Management Information Systems and Services
	All 52.13xx	Management Sciences and Quantitative Methods
	All 52.14xx	Marketing
	All 52.15xx	Real Estate
	All 52.16xx	Taxation
	All 52.17xx	Insurance
	All 52.18xx	General Sales, Merchandising, and Related Marketing Operations
	All 52.19xx	Specialized Sales, Merchandising, and Marketing Operations
	All 52.20xx	Construction Management
	All 52.21xx	Telecommunications Management

Table 3-2 provides a list of lattices consisting of programs in different CIP codes that lead to career pathways.

Table 3-2. Career Lattices

Lattice CIP Code	Programs in Lattice	Lattice/Program Name
51.0000 (01)		Medical/Clinical Assistant Lattice
51.0801*		Medical/Clinical Assistant
51.0700(02)		Health and Medical Administrative Services
51.0000 (02)		Medical Laboratory Technology Lattice
51.1004*		Clinical/Medical Laboratory Technician
51.1009		Phlebotomy/Phlebotomist
51.0802		Clinical/Medical Laboratory Assistant
51.0000 (03)		Registered Nurse Lattice
51.3801*		Registered Nursing/Registered Nurse
51.3803		Adult Health Nurse/Nursing
51.3806		Maternal/Child Health and Neonatal Nurse/Nursing
51.3812		Perioperative/Operating Room and Surgical Nurse/Nursing
51.3901		Licensed Practical/Vocational Nurse Training
51.3902		Nursing Assistant/Aide and Patient Care Assistant/Aide.
51.0000 (04)		Licensed Vocational Nurse Lattice
51.3901		Licensed Practical/Vocational Nurse Training
51.3902		Nursing Assistant/Aide and Patient Care Assistant/Aide.
51.2600		Health Aides/Attendants/Orderlies
51.2601		Health Aide
51.2602		Home Health Aide/Home Attendant
51.2603		Medication Aide
51.0900 (01)		Electroneurodiagnostic Technology Lattice
51.0903 (01)*		Electroneurodiagnostic/Electroencephalographic Technology/Technologist
Or 51.0903 (02)*		Polysomnography Technology
51.0902		Electrocardiograph Technology/Technician
51.0900 (02)		Respiratory Care Lattice
51.0908 *		Respiratory Care Therapy/Therapist
51.0903 (02)		Polysomnography Technology
* Designated award required for the program lattice. Other awards associated with the program lattice are optional.		

Additional guidelines for reasonable and flexible groupings of awards within programs are as follows:

- a. All awards must begin with the same program CIP code. Institutions will have the opportunity to provide feedback to the Coordinating Board on any necessary reclassification or division of existing programs.
- b. The Coordinating Board's official program inventory will list program titles that are based on the title of the CIP code to which the program or lattice belongs.

Institutions may choose their own award titles provided that the award clearly defines the nature of the award. Institutions are encouraged to use common award titles as specified in the CIP code manual to promote articulation in program offerings and awards that are granted by other institutions.

2. Types and Characteristics of Awards

Each program may have several awards. Generally, it is recommended that the number and type of awards in a program not exceed the following:

- a. One AAS or AAA degree;
- b. Two level-one certificates, each between 15-42 semester credit hours (SCH);
- c. One level-two certificate between 43-59 SCH;
- d. One enhanced skills certificate (if applicable) between 6-15 SCH;
- e. One or more continuing education certificates (if applicable) between 360 and 779 contact hours; and
- f. One or more marketable skills awards (if applicable) between 9-14 SCH or 144-359 contact hours.

In some disciplines, a broader array of awards may be warranted. The type and number of awards should provide the building blocks for students leading from basic to more advanced workplace competencies. Ideally, each award should enable students to build towards the associate degree. Under some circumstances, a program may also have an advanced technical certificate of 16-50 SCH.

In August 1998, Lynda Zimmerman of the American Association of Community Colleges (AACC) published a policy statement concerning the associate degree. The text of the statement may be accessed on the AACC website (<http://www.aacc.nche.edu>). The existence of several different degree titles for the same or highly similar programs inevitably results in confusion when potential employers evaluate the qualifications of workforce education program graduates. Zimmerman stated:

In recent years there has been a problem of titles for associate degrees. In certain states and in certain institutions, different degree titles are used due to tradition or local circumstances. But institutions should avoid degree title proliferation and the confusion which results, especially since students move from institution to institution and, upon graduation, to different areas of the nation. The use of multiple degree titles has been especially prevalent in occupational areas where some institutions offer many different degrees in specific technologies. In an attempt to reduce the number of these degrees and to avoid confusion about the level of academic achievement, it is highly recommended (that the applied associate degree) have a limited number of designations to denote special fields of study such as nursing, computer technology, or law enforcement. Institutions are encouraged to use nationally standardized nomenclature to ensure transferability and a common understanding of the associate degree. (p.2)

The report also recommends that in contrast to narrowly specialized programs, programs should be designed to educate students broadly within an occupation or

industry. Where applicable, certificates should follow the same guidelines using standard nomenclature and types of awards.

The limitation on multiple awards within defined subject areas is intended to protect against excessive award proliferation and to promote the successful progression of students toward program completion. The limitation does not prevent exceptions from being requested.

Approved applied associate degree and certificate programs shall appear on the workforce education program inventory maintained by the Coordinating Board. All programs will be subject to established statewide program evaluation procedures. Awards must be listed in an institution's catalog, appear on a student's transcript, and be subject to an institution's Graduate Guarantee policy.

a. Associate of Applied Science/Associate of Applied Arts Degrees

The degree options for a workforce education program are the Associate of Applied Science (AAS) degree and the Associate of Applied Arts (AAA) degree. Degrees must be limited to a total of 60-72 semester credit hours. Each workforce education program should have at least half of its coursework drawn from a common technical specialty identified by the program CIP code. This ensures that each degree or certificate program has a clearly defined subject matter focus and provides students with opportunities for employment and career advancement. These guidelines are not intended to establish an arbitrary number or percentage of specific courses that must be contained in a program; logical exceptions to the guidelines will be permitted.

An applied associate degree results in a formal award that indicates mastery of a prescribed series of competencies with defined employment outcomes. AAS and AAA degrees are technical in nature and are usually identified with a broad designation (e.g., AAS in Electronics and AAA in Music Performance).

The technical specialty component of an AAS or AAA degree should constitute 50 percent to 75 percent of the course credits. These may include both *Workforce Education Course Manual* (WECM) courses and academic courses that are directly related to the discipline. The use of WECM Special Topics in the curriculum is limited to three courses (see Chapter Four for details). In certain cases, there are parallel courses listed in the WECM and the *Lower-Division Academic Course Guide Manual* (ACGM). In these instances, the ACGM courses with WECM equivalents may count as part of the technical specialty component. The remaining 25 percent to 50 percent of an AAS or AAA degree should consist of support courses and general education courses.

In recent years, new career fields such as Biotechnology have emerged that may require extensive academic preparation for a student to enter the workforce. Such cases may warrant an exception to the general policy that 50 percent of the course credit be in technical course work, especially if some of the required course work has no WECM equivalent courses. In cases where the program would require a

preponderance of academic courses, the college must document that the additional academic course work was recommended by the program advisory committee and that it is directly related to the occupational field and/or to a Coordinating Board-approved Field of Study Curriculum.

Coordinating Board rules and guidelines are aligned with the *Principles of Accreditation: Foundations for Quality Enhancement* of the Commission on Colleges of the Southern Association of Colleges and Schools (SACS). To meet SACS guidelines, each degree must have a minimum of 15 semester hours in general education. The 15 hours of general education must include at least one course in each of the following three areas: humanities/fine arts, social/behavioral sciences, and mathematics/natural sciences. Each college should work with its SACS representative concerning courses that will be acceptable. General education courses must be transferable courses found in the ACGM or on the college's approved academic unique need course inventory. Examples of acceptable general education disciplines are listed in Table 3-3 below.

Table 3-3. Examples of General Education Courses by Area

Humanities/ Fine Arts*	Social/ Behavioral Science	Natural Science and Math
Humanities Literature History of Theater Art History Music Appreciation/ Music History Dance History Philosophy Cultural Studies Classical Languages Ethics	Government History Psychology Sociology Anthropology Economics	Biology Chemistry Physics College-level Math (must be academic, not applied) Geology

*Note: Use of Speech or English composition courses to satisfy the Humanities/Fine Arts requirement is not recommended. Some SACS teams have disapproved this practice at a number of colleges.

Each degree program must also include math, computer, and communication competencies. These competencies should be built into every course and program to the extent that they are appropriate and relevant. If an institution elects math, computer science, or communication courses as general education requirements, the courses must be academic transfer courses of a collegiate level and general nature, not geared to a specific occupation (e.g., welders, electricians, or administrative assistants).

In contrast, applied competencies should be built into the program. In other words, math for electricians might be an acceptable program course, but it is not a general education course.

Further, if a college chooses math as a general education requirement, it need not be college algebra. An acceptable course is college mathematics. College mathematics is a course which may include algebra and geometry, topics in sets, logic, number systems, number theory, functions, equivalence, congruence, measurement, other geometric concepts, and introduction to probability and statistics.

b. Program Specialties and Shortened Tracks

A program specialty is a variation within one AAS or AAA degree allowing students to take individual courses. A specialty does not result in a different AAS or AAA degree and is not listed on the Coordinating Board program inventory but may result in a separate certificate award. The specialty must match the program CIP code of the approved award and must have at least 50 percent of the technical specialty component (including WECM and academic courses) in common. Program specialties may be approved as revisions to the original degree. Institutions interested in program specialties should work closely with Coordinating Board staff. Examples of specialties include an AAS in Hospitality Management with a specialty in Hotel Management or Tourism. Another example is an AAS in Computer Information Technology with a specialty in Systems Security or Design and Media.

If an institution has both an associate degree (AAS or AAA) and a shortened track to the degree, only the final award is listed on the Coordinating Board's program inventory. For example, if a college has both an AAS in nursing and a Licensed Vocational Nursing (LVN) to Associate Degree Nursing (ADN) transition track, the final award, the AAS, would appear on the inventory. When there are two tracks transitioning to the same award, they need not be of the same length. However, any credit given for previous learning must be tied to specific courses. For example, the college's associate degree in nursing program may require 72 SCH for students who have not completed the LVN program and only a total of 60 SCH for LVN transition students (e.g., 45 SCH of course work and 15 SCH transferred from the LVN program).

c. Credit Certificate Programs

A credit certificate should constitute progression toward an AAS or an AAA degree. At least 50 percent of the course credits should be drawn from a focused technical specialty. The remaining courses may be technical or academic courses.

Credit certificates will be approved in four different categories or levels:

- (1) A level one certificate can be completed by a student in one calendar year or less. It must consist of at least 15 and no more than 42 SCH. Students in level one certificate programs are not required to take the Texas Success Initiative (TSI) as long as they take no more than 6 SCH outside the curriculum in a certificate program. All certificate programs should provide for local assessment and remediation of students. This award shall be identified on the CBM-009 (graduate/completer report) as CERT1. As a rule, the curriculum for a level one certificate is limited to one Special Topics course.

A Career Foundation Core (CFC) Certificate is a level one certificate (CERT1). This certificate is based upon the identification of a sequence of WECM courses and learning outcomes that represent a career foundation core within a specific career cluster. A CFC certificate must consist of at least 24 SCH and no more than 42 SCH. The intent of this award is to maximize an individual student's opportunity for immediate exit for employment with options to pursue the program's associate degree or to transfer to another higher education institution or technical college. This certificate also allows a student to pursue a second year in a specific Career Pathway program.

A certificate which exceeds 42 SCH in a profession requiring both external program accreditation and licensure or certification examination for practitioners (e.g., Licensed Vocational Nursing) may be approved by the Coordinating Board as TSI-waived if the program can be completed in one year or less, has a maximum of 48 SCH for the program including all admissions and course prerequisites, has a maximum of 18 SCH per fall or spring semester, and meets Board rules for shortened semesters.

Approval for a TSI waiver must be obtained by written request to the Academic Affairs and Research Division of the Coordinating Board. The request must identify the award and include the total number of SCH in the award, the number of SCH per semester, the name of the applicable accrediting, licensing or certifying agency/agencies, and a statement of assurance that the award with all of its prerequisites can reasonably be completed in one calendar year.

- (2) A level two certificate must consist of at least 43 SCH and no more than 59 SCH. Students in all level two certificates shall be subject to the requirements of the TSI. This award shall be identified on the CBM-009 as CERT2. As a rule, the curriculum for a level two certificate is limited to no more than two Special Topics courses.
- (3) An Enhanced Skills Certificate is a certificate associated with an AAS or AAA degree program. In some cases, a baccalaureate degree or junior-level standing in a baccalaureate degree program may be a prerequisite for the Enhanced Skills Certificate. The certificate must be clearly defined in course content and outcomes. It must consist of at least 6 SCH and no more than 15 SCH and may extend an AAS or AAA degree to an overall total that shall not exceed 87 SCH. This award shall be identified on the CBM-009 as CERT3. The award must not be used to circumvent the 72 SCH cap for degrees. It is intended to provide skills beyond career entry or where external mandates make it impossible for specified programs to meet the 72 SCH limit.
- (4) An Advanced Technical Certificate is a certificate that has a defined associate or baccalaureate degree as a prerequisite. In some cases, requiring junior-level standing may be used as a prerequisite for admission into the certificate. It must consist of at least 16 and no more than 50 SCH. It must be focused, clearly related to the prerequisite degree, and justifiable to meet industry or external

agency requirements. An advanced technical certificate attached to an AAS degree must be in the same program area as the AAS degree (see Tables 3.1-3.2). For an advanced technical certificate attached to a baccalaureate degree or to junior-level standing in a baccalaureate program, the college should consult with Coordinating Board staff for determination of an appropriate program area. This award shall be identified on the CBM-009 as ATC. As a rule, the curriculum for an advanced technical certificate together with the prerequisite associate degree is limited to no more than three Special Topics courses.

An AAS or AAA degree program that provides a shortened track of 16-50 SCH for students who hold a related degree may offer an advanced technical certificate for the shortened track. For example, an AAS degree program in Sonography may provide an advanced technical certificate in sonography for students who already hold an AAS in Echocardiography. In this case, the program inventory would list both an AAS in Sonography and an advanced technical certificate in Sonography.

d. Continuing Education Certificate Programs

All WECM, Special Topics, and Local Need courses currently approved for workforce continuing education contact hour reporting, regardless of length, shall be reported on the CBM-00C (Quarterly Class Report). Student-level data for workforce continuing education courses shall be reported on the revised CBM-00A (Students in Non-Semester Length Courses Report).

A coherent sequence of continuing education courses which total 360 or more contact hours must be submitted as a workforce education certificate program. Courses shall be considered part of a coherent sequence if they meet one of the following requirements:

- (1) include required and/or recommended prerequisites or co-requisites;
- (2) lead to an external credential (license, certification, or registration); or
- (3) are taken by a majority of students in sequence to meet occupational qualifications.

These certificate programs may award continuing education units (CEU) according to the guidelines in this manual. All Continuing Education certificate programs must be listed on the college's approved inventory of programs and must be transcribed. Workforce education programs of 780 contact hours or more must be offered for SCH only. An exception is made for Emergency Medical Technology/Paramedic continuing education programs, CIP 51.0904, which may have a maximum of 800 contact hours.

An institution must follow SACS guidelines when converting previously awarded CEU credits to students that wish to have them as college credit. (See "Advanced Standing" later in this chapter.) If the college converts CEU to SCH, it must have a policy and maintain documentation that the continuing education courses have met the same objectives, rigor, evaluation process, and faculty qualifications as the analogous credit courses. The documentation must demonstrate that individual

continuing education students have met the same competencies as the successful credit students prior to the granting of SCH retroactively for courses taken as continuing education.

e. Institutional Awards

(1) General

In addition to Coordinating Board recognized awards, colleges may offer institutional awards of fewer than 15 SCH or 360 continuing education contact hours reflecting a course or series of courses which:

- (a) represent achievement of an identifiable skill proficiency, or
- (b) meet a student's self-defined educational objective.

Institutional awards shall be based on existing WECM courses or courses that are part of the institution's approved Local Need course inventory. Institutional awards are not part of the Coordinating Board Program Inventory.

(2) Marketable Skills Achievement Awards

A Marketable Skills Achievement Award is a sequence of credit courses totaling 9-14 SCH or workforce continuing education courses of 144-359 contact hours. These awards meet the minimum standard for program length specified by the Texas Workforce Commission for the federal Workforce Investment Act (WIA) program. Characteristics of marketable skills achievement awards include the following:

- (a) The award is TSI-waived under Coordinating Board rule 4.54b;
- (b) The content of the award must fulfill one of two requirements: the program was recommended by an external workforce advisory committee, or it appears on the Local Workforce Development Board's Demand Occupations list;
- (c) In most cases, the award should be composed of WECM courses only, however, academic courses may be used occasionally if recommended by the external committee and if appropriate for the content of the award;
- (d) If the award does not have at least 50 percent of its course work in an approved program CIP code on the college's Coordinating Board inventory, the college must comply with the Single Course Delivery guidelines for WECM courses listed in Chapter Four of this manual; and
- (e) The institution should document that the marketable skills achievement award prepares students for employment in accordance with guidelines for the WIA.

Marketable Skills Achievement Awards do not require approval from the Coordinating Board. Students who complete the awards may be reported as completers on the CBM-00M report. (Refer to the Coordinating Board Reporting and Procedures Manual for more details.)

(3) Apprenticeship

(a) General Information

Apprenticeship is a structured system of job training designed to prepare individuals for occupations in skilled trades and crafts. It combines industry skill standards (on-the-job training) under the supervision of experienced journeyman-level workers with job-related classroom instruction. Traditional apprenticeship programs are in construction and manufacturing and include occupations such as electrician, plumber/pipefitter, carpenter, and sheet metal worker. The Department of Labor has approved some non-traditional occupations for apprenticeships. However, each institution considering a program in these occupations must determine whether state laws and regulations allow apprenticeships in non-traditional occupations such as child development and research technician.

All apprenticeship programs must be registered with the Bureau of Apprenticeship and Training (BAT) of the U.S. Department of Labor. These programs must be under the direction of the Apprenticeship Committee as described in Texas Education Code (TEC) Chapter 133. Program sponsors, i.e., individual employers, associations of employers, or groups of employers in cooperation with organized labor provide on-the-job training (OJT). Public school districts and postsecondary institutions may provide the related classroom instruction component necessary to fulfill the requirements of a Bureau of Apprenticeship (BAT) approved apprenticeship program. The related classroom instruction may provide SCH or continuing education units (CEU) and may be part of an applied associate degree or workforce certificate.

Institutions may participate in apprenticeship training either in an apprenticeship dedicated program approved and funded by the Texas Workforce Commission (TWC) or in the enrollment of apprentices in Coordinating Board approved and funded coursework open to any qualified student.

(b) State Funding Sources

State funds are available for job-related classroom instruction costs only, never for the on-the-job-training portion of an apprenticeship program. State funds may be accessed from either the TWC or the Texas Higher Education Coordinating Board, but not both.

Authorization for state funding of classroom costs of apprenticeship programs from the TWC is found in the Texas Education Code, Chapter 133. For further information on TWC processes, contact the TWC. Additional information is available at: <http://www.twc.state.tx.us/svcs/apprentice.html>.

Colleges may provide 144 hours of related instruction as CEU or SCH,

following CB rules for all degrees and certificate programs. The college may enroll regular as well as apprenticeship students in the course(s) and obtain regular contact hour funding for such course(s) from the Coordinating Board. These courses would be chosen from the *Workforce Education Course Manual (WECM)* as described in Chapter Four of these Guidelines. Tuition and fees apply (see Section 54.051 of the Texas Education Code and guidelines in this manual).

(c) College Credit

The 144 or more hours of job-related classroom instruction per year may be transcribed by colleges as CEU or as SCH, resulting in a maximum award of 14.4 CEU or approximately 6-9 SCH per year.

Of the total hours of on-the-job training acquired through apprenticeship, 1008 contact hours may be converted to CEU or SCH credits by the institution to apply towards the completion of a CE certificate, credit certificate, or the Associate of Applied Science (AAS) degree. (As noted above, on-the-job training hours do not qualify for state funding from either TWC or the Coordinating Board.)

The college should utilize the instructions for cooperative education courses to determine what courses to transcript and the CEUs or SCH to be awarded. For CE courses the ratio of one CEU to 10 contact hours would be used and could result in a maximum of 100.8 CEU. For credit courses the ratio of one SCH to 7-10 contact hours of apprenticeship training per week for 16 weeks could result in a program maximum of nine SCH for students.

Apprenticeship programs and colleges are encouraged to work together so that students are able to learn, earn, and acquire college credit. Colleges are also urged to explore partnership opportunities with secondary schools in creating Tech Prep AAS programs and with universities in articulating apprenticeship AAS programs with baccalaureate degrees. (Contact the Coordinating Board's Career Technical Programs Department staff for more information about apprenticeships and Tech Prep.)

(d) Summary

According to the Texas Education Code, apprenticeships are controlled by employers. If an apprentice takes college courses that are funded by the Coordinating Board as part of the apprenticeship, the following principles apply:

- (1) The college courses remain subject to the SACS Principles of Accreditation;
- (2) Courses funded by the Coordinating Board must be open to any eligible student, both apprentice and non-apprentice;
- (3) The college is in control of all classes with and without apprentices;
- (4) The Apprenticeship Committee, employers, and the BAT are in charge of

and responsible for the apprenticeship program, being sure the program meets the Department of Labor standards, and evaluating a student's completion of the program; and

- (5) If employers select a curriculum that coincides with the college's requirements for a degree or certificate as part of the apprenticeship program, then students may receive a collegiate award as part of the overall apprenticeship.

For additional information, refer to the Texas Education Code under Texas Statutes (<http://www.statutes.legis.state.tx.us>), Chapters 61 and 133; CB Rules (<http://www.thecb.state.tx.us/Rules/TAC.cfm>), Chapter 9; and the Texas Workforce Commission Rules ([Texas Administrative Code, Title 40 Part 20, TWC](#)), Chapter 837.

B. Program Requirements

Certain elements must be common to all workforce education programs. These include:

1. Program Demand

Using national, state, and local industry based trends, standards, and labor market information, the college must document the need for the program in the college's service area. See Chapter Five, New Program Approval Process, for more details.

2. Effective Use of Advisory Committees

Each institution must establish separate industry-based advisory committees for each workforce education program. The broad purposes of an advisory committee are 1) to help a college document the need for a workforce education program and 2) to ensure that the program has both adequate resources and a well designed curriculum to provide students with the skills, knowledge, and behaviors necessary to successfully meet the needs of business and industry. The advisory committee is one of the principal means of ensuring meaningful business and industry participation in program creation and revision.

a. Functions of an advisory committee include:

- (1) evaluating the goals and objectives of the program curriculum;
- (2) establishing workplace competencies for the program occupation(s);
- (3) suggesting program revisions as needed;
- (4) evaluating the adequacy of existing college facilities and equipment;
- (5) advising college personnel on the selection and acquisition of new equipment;
- (6) identifying local business/industry leaders who will provide students with external learning experiences, employment, and placement opportunities;
- (7) assisting in the professional development of the faculty;
- (8) assisting in promoting and publicizing the program to the community and to business and industry; and
- (9) representing the needs of students from special populations.

b. Advisory Committee Composition

- (1) Advisory committees must be composed of persons who broadly represent the demographics, including the ethnic and gender diversity of the institution's service area as well as the demographics of the occupational field. Committee members should be knowledgeable about the skills used in the occupation for which they are providing information and guidance.
- (2) Members should be drawn from both the private and public sectors with an emphasis on business, industry, and labor organizations.
- (3) Tech Prep program specific advisory committees must include members who represent secondary and higher education as well as business and industry.
- (4) Full-time faculty and staff of the college offering the program must not be members of the advisory committee, but they may serve in an ex-officio capacity. Part-time faculty who hold full-time positions within the career field may be members of the committee. Faculty and staff of senior institutions with whom the program may be articulated may also be members of the committee.

c. Advisory Committee Meetings/Minutes

- (1) Advisory committees of existing programs must meet in person a minimum of one time a year and should, if possible, have a quorum present. However, it is strongly recommended that contact with committees be maintained throughout the year via e-mail, fax, phone, or videoconference.
- (2) During the development of new programs, advisory committees must meet in person at least twice and communicate throughout the development and approval process. Minutes and documentation of communication must be available upon request.
- (3) All meetings of the advisory committee must be recorded in official minutes. The minutes must include:
 - (a) identification of committee members (name, title, and affiliation);
 - (b) an indication of the committee members' presence or absence from the meeting;
 - (c) the names and titles of others present at the meeting;
 - (d) the signature of the recorder; and
 - (e) evidence that industry partners have taken an active role in making decisions that affect the program.

Minutes must be maintained in college files and made available to the Coordinating Board staff upon request. A sample format for recording advisory committee meeting minutes may be found at the end of this chapter.

3. Identification of Program Competencies

A credit program must consist of a curriculum that integrates necessary academic and workforce knowledge and skills as identified in the professional literature, by program experts, by business and industry advisory committees, in recognized skill standards, and by other related professional organizations. Development of a competency-based curriculum requires identification of subject area-specific academic and workforce courses.

A continuing education program consists of workforce knowledge and skills identified in the same manner as those in credit programs. While continuing education programs do not contain academic courses, incorporation of appropriate academic skills is encouraged.

General academic and workforce skills necessary to attain entry-level employment for American workers is the topic of a 1991 report by the Secretary of Labor's Commission on Achieving Necessary Skills (SCANS) titled, "What Work Requires in Schools." The Commission conducted extensive research and interviews with business owners, public employers, union leaders, supervisors, and laborers in a wide variety of work settings. The findings stated that, "good jobs will increasingly depend on people who can put knowledge to work." Additionally, the Commission estimated that less than half of the students currently exiting high school possess the ability to find and keep good jobs. Findings also determined that "workplace know-how" consists of two elements: (1) foundation skills and (2) workplace competencies. (See "What Work Requires of Schools," June, 1991. See "Chart of SCANS Skills" and a sample "SCANS Occupational Assessment" model at end of this chapter.) Additional information may be found on the web at: <http://wdr.doleta.gov/SCANS>.

Institutions must demonstrate that each award, whether for credit or continuing education, addresses SCANS. Evidence of this may include a Program Competency Profile and a SCANS matrix, i.e., a matrix of the skills and knowledge competencies to be mastered by the student upon completion of the award, with a crosswalk from the competencies to the academic and/or workforce courses where the competencies will be achieved. (See samples of a "Program Competency Profile" and "SCANS Matrix Model" at the end of the chapter.)

4. Selection of Program Courses

To select program courses, faculty and administrators should refer to the WECM and the ACGM. These manuals describe established courses and guidelines for the creation of Special Topics, Local Need, or Academic Unique Need courses. See Chapter Four of this document for WECM Guidelines and the "Transfer, Core Curriculum and Field of Study Curricula" website (accessible from the Coordinating Board's main website www.theccb.state.tx.us under Academic Affairs – Academic Programs) for ACGM information.

Courses may be delivered by different types of instruction generally consisting of lectures and/or laboratories or external learning courses (see Chapter Four of these

Guidelines).

a. Choice of Prerequisites

- (1) All college-level, non-developmental courses which are required course prerequisites and/or requirements for entry into a degree or certificate must be included in the total hours for the award and must be clearly identified in the proposed curriculum plan. Developmental course hours must not be included in the total credit hours for the award.
- (2) An associate degree program must be structured so that it can be completed within two and one-half years of full-time attendance, including the prerequisites.
- (3) The following are examples of prerequisites which may be chosen by colleges and which must be included in a curriculum plan:
 - (a) WECM Course:
Machine Drawing -- This is a course in precision drawing of machine parts stressing correct procedures in making detail and assembly drawings.
Prerequisite: Beginning Technical Drafting.
 - (b) ACGM Course:
Anatomy and Physiology I -- This course examines cell structure and function; tissues; and the skeletal, muscular, and nervous systems. Emphasis is on structure, function, and the interrelationships of the human systems.
Prerequisite: General Biology
- (4) When there are alternative means to satisfy a course prerequisite, the prerequisite does not need to be included in a curriculum plan. However, if high school courses are used as prerequisites, the courses must be those taken by most or all high school students. Some examples of alternative means:
 - (a) Introductory Statistics -- This course is a study of collection and tabulation of data, bar charts, graphs, sampling, measures of central tendency and variability, correlation, index numbers, statistical distributions, probability, and application to various fields. Prerequisite: Two years of high school algebra or demonstrated competence as approved by the instructor. (Note: High school algebra can be reasonably expected of high school graduates.)
 - (b) Beginning Word Processing -- Development of applications and procedures for operating a word processing system. Provides hands-on training and self paced instruction on basic document creation, editing, and formatting.
Prerequisite: Typing skills of 30 words per minute, approval of instructor, or continuing education course in keyboarding.

b. Course Sequencing

All curricula submitted for approval must demonstrate appropriate course sequencing to promote student attainment of skills and competencies. (For example, prerequisite courses must not be in the same semester as the courses for which they

are the prerequisites unless the courses are compressed into less than a semester without an overlap in the sequenced courses.)

In designing a course sequence, institutions must ensure that credit curricula demonstrate integration of academic and technical competencies or courses.

c. Length of Semesters

To allow students sufficient time for reflection, semesters, both regular and compressed, should not award more than one SCH per week of instruction. For more information about courses in a shortened format, refer to Coordinating Board rules, Chapter Four, Subchapter A, 4.6(b).

Instruction should be scheduled in a manner that maximizes students' opportunities for success. When a program has a full-time, lock-step schedule, institutions are encouraged to provide alternative tracks such as part-time or other means to allow non-traditional students greater opportunities for success.

d. Advanced Standing

Advanced standing may include such activities as the following: the conversion of continuing education units to semester credit hours, the granting of credits to learning obtained from a non-collegiate source, experiential learning, and the granting of credits from another program that results in a shortened program at a higher level.

All advanced standing procedures must adhere to Coordinating Board rules and guidelines (particularly those in Chapter Nine of the rules pertaining to contractual agreements) and to the *Principles of Accreditation: Foundations for Quality Enhancement*, Commission on Colleges, Southern Association of Colleges and Schools, 2010, or its successor. The *Principles of Accreditation* states the following:

"3.4.4 The institution has a defined and published policy for evaluating, awarding, and accepting credit for transfer, experiential learning, advanced placement, and professional certificates that is consistent with its mission and ensures that course work and learning outcomes are at the collegiate level and comparable to the institution's own degree programs. The institution assumes responsibility for the academic quality of any course work or credit recorded on the institution's transcript. (See Commission policy, "The Transfer or Transcribing of Academic Credit.")"

"3.4.8 The institution awards academic credit for course work taken on a noncredit basis only when there is documentation that the noncredit course work is equivalent to a designated credit experience."

The SACS guidelines are intended to include both academic and technical course credit and do not distinguish between them. Each institution should have a policy to determine the maximum percent of an award that may be granted advanced

standing in accordance with good practices.

5. Developmental Education Courses

For students with academic skill deficiencies, developmental education courses should be made available, as appropriate, to be taken prior to or in conjunction with curriculum requirements in workforce education programs. These courses may be used as described in the ACGM, or they may be adapted for specific needs of workforce education (e.g., Technical Math for Electronics Technicians). If the content of a technical course is developmental (below college level), it must receive a developmental approval number and must not be counted toward credit for an award. Developmental approval numbers are available in study skills, English for speakers of other languages, writing, reading, and mathematics. (Note: Developmental courses for public college students will only be funded by the state for a total of 27 semester credit hours within a college or district. This restriction includes course work taken during and since June 1996.)

6. Establishment of Program Linkages

Programs should demonstrate flexibility and opportunity for students. They should be designed to permit maximum access for students by establishing linkages with other programs in public secondary schools and/or other institutions of higher education.

Linkages may be demonstrated by various articulation agreements that provide for student transfer, inverted degree plans, advanced standing opportunities, 1+1 programs, and Tech Prep programs.

7. Verification of Workplace Competencies

To verify entry-level workplace competencies, the college must provide *at least one* of the following for each approved award: a) capstone experience, b) eligibility for a credentialing exam, and/or c) an external learning experience.

a. Capstone Experience

The capstone is a learning experience resulting in a consolidation of a student's educational experience and certifies mastery of entry level workplace competencies. The capstone experience must occur during the last semester of the student's educational program. Methods of providing a capstone experience include:

- (1) a final external learning experience that allows a student to apply broad knowledge of the discipline;
- (2) a comprehensive, discipline specific examination prepared by the faculty of the workforce education program and administered at the conclusion of the program;
- (3) a course involving simulation of the workplace, case studies, portfolios, and employment scenarios; and
- (4) a discipline specific special project involving the integration of various teams of students performing activities to simulate the situations which may occur in the workplace.

b. Credentialing Exams

Credentialing exams are licensure, certification, or registration exams provided by state or national agencies or by professional organizations.

c. External Learning Experiences

An external learning experience is a competency based learning experience, paid or unpaid, that enhances lecture and laboratory instruction and is provided at work sites appropriate to the discipline. The inclusion of an external learning experience in both certificate and applied associate degree plans is strongly recommended. The external learning experience allows the student to have practical, hands-on training and to apply learned concepts and theories in a workplace setting. There are five types of external learning experiences which include clinical experiences, internships, practica, cooperative education, and apprenticeships.

Clinical and internship experiences provide workplace settings in which students learn and apply program theory and management of the work flow. Clinical experiences must take place in a health care setting and students must not be paid for the learning experiences. Internship experiences take place in any setting outside of health care and students may or may not be paid for the learning experiences. (Please refer to Table 3-4, Clinical Experience and Internship Courses, in this chapter.)

Practica and cooperative education provide workplace settings in which students gain practical experience in a discipline, enhance skills, and integrate knowledge. (Please refer to Table 3-5, Practicum and Cooperative Education Courses, to determine which type of external learning experience is most appropriate.)

To determine which external learning experience is appropriate, colleges should review the criteria in Tables 3-4 and 3-5. Clinical experiences and internships are defined as closely supervised experiences with instruction in theory provided concurrently. Practica and cooperative education courses are less closely supervised, apply previously learned theory, and are suitable for the student who can work more independently and is either working in the discipline (cooperative education) or is almost ready for career entry (practicum).

Apprenticeships provide workplace settings that are registered with the Bureau of Apprenticeship and Training (BAT) of the U.S. Department of Labor. The on-the-job training (OJT) component of apprenticeship programs provides instruction in entry-level competencies. A maximum of 1008 contact hours of apprenticeship on-the-job training may be granted SCH or CEU as cooperative education experience.

(1) External learning experiences must ultimately be under the control of the educational institution, although individuals in the sponsoring workplace may be responsible for the daily supervision of the student or for the lecture component of cooperative education.

- (2) External learning experiences must be governed by a written, signed agreement between the higher education institution and the organization providing the experience. The higher education institution must maintain copies of such agreements and have them available for review by the Coordinating Board staff. (A sample affiliation agreement is available upon request.)

The affiliation agreement should indicate what services each institution would be responsible for and the timeline for expiration or renewal. The renewal process for sites outside the institution's service area should be timed to coincide with the Higher Education Regional Council's approval process.

- (3) Each institution must assure that the external learning experience is consistent with industry standards, supports specific written objectives outlined by the educational institution, and emphasizes current practices in the field of specialization.
- (4) Prior to the beginning of the external experience, the institution must provide both the student and the external site with written documentation of the objectives, instructional strategies, and evaluation mechanisms of the external learning course.
- (5) The institution must approve and evaluate all training locations and must evaluate all faculty members who supervise students. The on-site supervisor of each external experience should have appropriate qualifications in the applicable discipline. Written evaluation records must be maintained by the educational institution.
- (6) A written External Learning Experience Evaluation Form, based on the student's learning plan and describing student learning outcomes, must be developed by the instructor in conjunction with the external learning supervisor and provided to the supervisor at the external site. This form will allow the supervisor and the instructor to monitor student progress and learning activities accurately. The profile may be in the form of a matrix or checklist (see sample at the end of the chapter) and maintained at the educational institution.
- (7) Prior to the external experience, each student must receive a statement of the expectations of the external site.
- (8) To prepare a student for external learning experiences, a student must be taking a coherent sequence of courses in an AAS, a certificate, an institutional award or apprenticeship certification in the same technical education content area as a prerequisite or co-requisite to the external learning courses. The external learning courses may be for SCH or for CEU. Each student must be in contact with a designated instructor (college faculty or designated employee at the external site) while at the work site.

- (9) External learning experiences may be paid or unpaid and full or part-time depending upon the type of experience and credentialing requirements. Employment obtained for the purpose of wage earning only must not be considered as an external learning experience in the program.
- (10) Institutions are encouraged to provide access to liability insurance for their students who are enrolled in the external learning experiences.
- (11) For income tax purposes, to differentiate stipends from wages, colleges, businesses, and industries participating in external learning experiences are encouraged to refer to appropriate labor laws for clarification of employment versus non-employment relationships. The following six criteria should be met to indicate a non-employment relationship:
- (a) the training, even though it includes actual operation of the facilities of the employer, must be similar to that which would be given in a workforce education program;
 - (b) the training must be for the benefit of the trainees or students;
 - (c) the trainees must not displace regular employees but rather work under their close supervision;
 - (d) the employer that provides the training must derive no immediate advantage from the activities of the trainees, and on occasion the employer's operations may actually be impeded;
 - (e) the trainees or students should understand that they are not necessarily entitled to a job at the conclusion of the training period; and
 - (f) the employer and the trainees understand that the trainees or students are not entitled to wages for the time spent in training.
- (12) The maximum number of external contact hours in an AAS program must not exceed 1008 hours unless the program is specifically exempt. Exemption may be granted to health professions programs based on the standard of practice for the specific discipline. To apply for an exemption, a professional organization must submit to the Coordinating Board a request and a rationale for such exemption. If a waiver is granted, it will apply to all programs in that discipline.

After reviewing state and national standards of practice for the following disciplines, external contact hour caps have been established:

<u>Discipline Name</u>	<u>CIP Code</u>	<u>External Contact Hour Cap</u>
Diagnostic Medical Sonography	51.0910	2000
Echocardiography	51.0910	1500
Electroneurodiagnostics and Polysomnography Technology	51.0903	2000
Invasive Cardiology	51.0901	1500
Nuclear Medical Technology	51.0905	2000
Radiation Therapy	51.0907	1500
Radiologic Technology	51.0911	2000
Respiratory Care Therapy	51.0908	2000
All other CIP codes		1008

- (13) External learning experiences must be properly sequenced with other courses in the program. To ensure that the student has developed a minimum level of technical competency prior to entering the work site, external courses must have a lecture and/or laboratory prerequisite or co-requisite.
- (14) In clinical, internship, and practicum experiences, formally scheduled discussion of the external experience with students is considered part of the external experience, not a lecture, for credit hour assignment.
- (15) Continuing education workforce awards, including institutional awards, may require external learning experience courses. External learning experiences in continuing education must be approved in advance and are available only on a limited basis. The external learning experience course can be awarded one CEU for every 10 contact hours. External learning experiences may be approved for continuing education as follows:
- (a) up to 10 contact hours in a topic may be part of a lecture/laboratory course;
 - (b) more than 10 contact hours in a topic must be contained in a free-standing course separate from any lecture or laboratory course. (Refer to the WECM inventory for currently approved courses. Any external learning courses not already listed in the WECM must be submitted as Local Need courses and must be approved in advance of instruction to receive funding.)
- (16) The following definitions are used in Tables 3-4 and 3-5:
- (a) Clinical preceptor: a work-site supervisor who oversees the daily, hands-on experiences of a health professions student in the workplace;
 - (b) Close supervision: to remain within a short distance in time or space; very attentive; constant oversight, guidance, and review of the hands-on experiences of a health professions student; daily organization of the student's activities;
 - (c) Direct supervision: daily oversight, guidance, and review of the hands-on experiences of a workforce education students; daily organization of the student's activities; and
 - (d) Indirect supervision: general oversight and guidance of the hands-on experiences of a workforce education students; periodic review of the student's progress; overall organization of the student's activities.

Table 3-4. Clinical Experience and Internship Courses

CRITERIA	CLINICAL EXPERIENCE	INTERNSHIP
A. Instruction		
1. Level of instruction	basic, intermediate, or advanced	basic, intermediate, or advanced
2. Type of learning	required or elective	required or elective
3. Student outcomes	synthesize new knowledge; and/or apply previous knowledge; and/or learn to manage the work flow	synthesize new knowledge; and/or apply previous knowledge; and/or learn to manage the work flow
4. Method of instruction	practical experience related to theory simultaneously	practical experience related to theory simultaneously
5. Type of supervision	direct and/or close by faculty or clinical preceptor	direct by external site supervisor
6. Lecture component	prerequisite or co-requisite course	prerequisite or co-requisite course
B. Compensation for		
1. Student	no	yes or no
2. Faculty/supervisor/clinical preceptor	college pays its faculty; external site pays clinical preceptor or supervisor	college pays its faculty; external site pays supervisor
C. Role of college faculty	primary instructor or periodic visits	primary instructor or periodic visits
D. Credit hour: contact hour ratio	1:3, 4, 5, or 6	1:3, 4, 5, or 6
E. Site of instruction	health care setting only	any setting <i>except</i> health care

Table 3-5. Practicum and Cooperative Education Courses

CRITERIA	PRACTICUM	COOPERATIVE EDUCATION
A. Instruction		
1. Level of instruction	Basic, Intermediate, or Advanced	Basic, Intermediate, or Advanced
2. Type of learning	required for health programs; required or elective for non-health programs	required or elective
3. Student outcomes	gain practical experience in a discipline; enhance skills, and integrate knowledge	gain practical experience in a discipline; enhance skills, and integrate knowledge
4. Method of instruction	supervised practice	lecture with supervised practice
5. Type of supervision	direct by faculty or a clinical preceptor for health programs or indirect by external site supervisor for non-health programs	indirect by external site supervisor
6. Lecture component	prerequisite or co-requisite course	1 hour/week required
B. Compensation for		
1. Student	yes or no	yes or no
2. Faculty /supervisor/ clinical preceptor	college pays its faculty; external site pays supervisor or clinical preceptor	college pays its faculty; external site pays supervisor
C. Role of college faculty	periodic visits	lecture and/or periodic visits to external site
D. SCH:contact hour ratio	1:7, 8, 9, or 10	1:7, 8, 9, or 10

In general, the total contact hours for external learning experience courses per program must not exceed 1008. However, an institution may request a waiver for a program that exceeds 1008 external contact hours if the institution can demonstrate that additional hours are required to meet the standard practice for that discipline.

Refer to the list of programs above that are already approved for a greater number of external contact hours and for a description of the waiver process.

An external learning experience creates a physical presence of the educational institution in the community in which the external learning experience is provided. For this reason, it is very important for institutions offering external learning experiences outside their own service areas to follow the procedures found in Board Rules, Chapter 4, subchapter E and the *Notification and Approval Procedures for Distance Education, Off-Campus, and On-Campus Extension Programs and Courses*. (Refer to Chapter 2 of these *Guidelines*.) A Texas institution wishing to send

students to another state for external learning experiences should obtain permission from that state's higher education authority to have a physical presence in that state. Likewise, an out-of-state institution wishing to use Texas facilities for external learning experiences must have approval from the Coordinating Board. (See Board Rules, Chapter 7.)

When there is competition for external learning sites, institutions should strive for cooperation and collaboration in scheduling common sites. Regional consortia involving all stakeholders including lower division and upper division institutions are encouraged.

8. Student Success Guidelines and Standards

Each program should identify factors that will facilitate student progress e.g., assessment, remediation, counseling, orientation, child care, financial aid, transportation, and specific steps to help the student achieve success in the program. Maintenance of Student Success Plans for each program is optional but strongly encouraged. However, TSI guidelines must be followed.

a. Texas Success Initiative (TSI)

All students enrolled in associate degree programs or Level Two certificates must meet requirements of the Texas Success Initiative (TSI), including assessment prior to enrollment in any college-level course work and any indicated developmental education or other strategy for achieving college readiness. (For more information about TSI requirements, please refer to CB Rules, Chapter 4, Subchapter C.) Although TSI requirements are waived for students enrolled in Level One certificates, colleges should also provide some form of assessment and developmental education for entering students in TSI-waived certificates.

Institutions are strongly encouraged to use one of the Coordinating Board's approved assessments or one of the nationally normed tests specifically created for workforce education students (e.g., Work Keys to assess entering students in TSI-waived certificates). Further, workforce education faculty are strongly encouraged to collaborate with academic and developmental education faculty to:

- (1) determine local, appropriate cut scores on the assessment instrument to measure the entry and exit levels of basic skills competencies; and
- (2) create sections of course-based or non-course based developmental reading, writing, or math as appropriate to help students learn basic skills in work-based applications and contexts.

b. Program Quality Standards

Graduates of programs approved by the Coordinating Board must be reported on the CBM-009 each fall semester following the close of the fiscal year. All chief instructional officers and workforce education administrators should consult with their reporting officials prior to submission of this report to ensure the accuracy of reported information.

c. Graduate Guarantee for AAS Graduates

The Graduate Guarantee shall be used for accountability purposes. The guarantee shall ensure the graduate's employer that the graduate has met program competencies and shall offer up to nine tuition free hours of education for a program graduate judged by the employer to be unable to perform on the job the competencies as specified in the college program.

9. Reporting and Record Keeping

Submission of the CBM009 and the CB116 are required of all programs. In addition, continuing education programs must submit the following:

- a. In all cases, no more than the approved number of contact hours or no more than the actual number of contact hours taught per course (whichever is less) may be reported and claimed for state funding; and
- b. If a workforce course is offered cooperatively by two or more institutions, only the institution of record, based on student registration, may claim state funding.

Transcripting of Courses: An institution must maintain and issue upon request a record of each individual's participation in workforce activities for which SCH or CEU are awarded. Only those who successfully meet the established requirements for an activity are awarded SCH or CEU. A cumulative record or transcript represents an official verification of a learner's participation. The institution should maintain records of participation for a period of at least seven years from the date of award. Policies regarding the retention and release of such records are established by the institution in keeping with the institution's policies for other types of student educational records. Policies must also adhere to the following requirements:

- a. Guidelines published in the following documents:
 - (1) *Principles of Accreditation: Foundations for Quality Enhancement* (2010 or subsequent edition) of the Commission on Colleges, Southern Association of Colleges and Schools; and
 - (2) *The Continuing Education Unit*, by the International Association for Continuing Education and Training (IACET).
- b. The following specified items of information shall be included on all records and transcripts:
 - (1) name and address of the institution;
 - (2) name and social security number (or other college approved unique identification number) of the individual participant;
 - (3) title of the course, program, or activity;
 - (4) completion date;
 - (5) number of SCH or CEU awarded;
 - (6) report of assessment results or other requirements for satisfactory completion; and
 - (7) the institution is free to transcript the local title of Continuing Education

courses, but must use the WECM title of credit courses; the WECM Rubric and Course Number will be utilized on all official institutional transcripts and reports.

10. Additional Guidelines for Continuing Education (CEU) Courses

a. State Regulations for Funding of Workforce Continuing Education Courses

Information regarding approval and funding of workforce continuing education courses taught by Texas public colleges can be found in the following: Section 54.051 of the Texas Education Code; Coordinating Board Rules, Chapter 9, Subchapters A, E, F and G; and guidelines found elsewhere in this document.

- (1) To be approved for state funding, workforce continuing education courses must be consistent with the roles and missions of the college and must be designed to respond effectively to identified workforce needs by providing:
 - (a) preparatory education in occupations addressed in credit workforce education programs;
 - (b) preparatory education in other occupations requiring other than a baccalaureate or advanced degree for which there is a documented need within the Texas economy; or
 - (c) education to enhance or extend the skills of employees already working in a particular field.
- (2) Workforce continuing education courses with basic skills content must be designed for specific occupations and specific occupational target populations and must include appropriate occupational objectives. Courses that are primarily intended to develop basic skills, such as Adult Basic Education, GED preparation, and TSI preparation, are not eligible for state funding under this category.
- (3) Workforce continuing education courses submitted for Local Need approval should not duplicate existing WECM courses or other approved workforce continuing education courses within the institution.
- (4) A coherent sequence of continuing education courses which total 360 or more contact hours must be approved as a postsecondary workforce education program. No single workforce continuing education lecture or laboratory course may require more than 176 contact hours.
- (5) Tuition and fees for workforce continuing education courses offered for continuing education units (CEU) must be established by the institution's governing board and be uniformly and consistently assessed. The institution's board may delegate interim authority for establishment of tuition and fees. However, the institution's board must at least annually ratify or approve any changes in tuition and fees.
 - (a) Based on the \$25 per semester minimum tuition stated in Section 54.051 of the Texas Education Code (<http://www.statutes.legis.state.tx.us>), it

recommended that minimum tuition be \$0.50 per contact hour for students in workforce continuing education courses.

- (b) Institutions providing (contract) courses to organizations for which credits or CEUs are earned and for which tuition is charged must charge out-of-state tuition to non-resident students who are brought from out of state for such contract classes (see Coordinating Board Rules, Chapter 9, Subchapter G). Based on the \$200 per semester minimum tuition for nonresident students stated in Section 54.051 of the Texas Education Code, it is recommended that minimum tuition be \$4.00 per contact hour for non-resident students who are brought from outside the state for contract classes. For this purpose, a "non-resident student" is one who lives and works outside the state.
- (c) In general, colleges must charge for courses that award CEU in order to generate state formula funding. However, governing boards may choose to charge zero tuition in one of two special circumstances as follows:
 - (1) If all or a significant portion of the institution's costs for facilities, instructor salaries, equipment, and/or other expenses are covered by business, industry, or other local public or private clients, individual students may be exempt from tuition. These in-kind contributions must satisfy a definition of sufficiency as determined by the local governing board; or
 - (2) If the workforce continuing education course is taught in federal prisons and facilities, equipment, supplies, and/or other expenses are borne by the federal government.
- (6) An approved workforce continuing education course may be delivered through contract instruction consistent with Coordinating Board Rules and Regulations, Chapter 9, Subchapter G.
- (7) An approved workforce continuing education course may be offered out-of-district/service area, subject to approval by the appropriate Higher Education Regional Council(s) as specified in Chapter 4, Subchapter P and Subchapter Q of the Coordinating Board Rules and Regulations.

b. General Guidelines for Workforce Continuing Education Courses

- (1) Purposes for award of Continuing Education Units (CEU)
 - (a) The CEU serves as a unit of measure to recognize an individual's participation in non-credit activities that meet appropriate criteria;
 - (b) The CEU may serve as the accounting unit of an institution's total non-credit courses, programs, and activities; and
 - (c) The CEU criteria provide a systematic planning model for program development and delivery which helps to ensure quality workforce continuing education programming.
- (2) CEU Administrative Criteria
 - (a) Organization. The institution has an identifiable office or division with

designated professional staff to plan and administer workforce continuing education programs. Through this office, the institution ensures that both administrative and program criteria are followed for learning experiences offering CEU;

- (b) Learning Environment and Support. The institution provides a supportive and positive learning experience through appropriate educational facilities, learning materials, equipment, and support services consistent with the goals and planned learning outcomes of each learning experience; and
- (c) Record Keeping. Refer to the section on Reporting and Record Keeping earlier in this chapter.

(3) CEU Program Criteria

- (a) Needs Identification. The program or activity is planned in response to the educational needs that have been identified for a target audience;
- (b) Learning Outcomes. Each program or activity has clear and consistent written statements of intended learning outcomes (e.g., behavioral or performance objectives). These outcomes represent what learners are expected to accomplish as a result of the learning activity. They represent the knowledge, skills, or attitudes required to move a target audience to another level of competencies. Program content, instructional methods and types of learner assessment are dictated by the learning outcomes;
- (c) Instruction. Qualified instructional personnel are directly involved in planning and conducting each learning experience. These personnel have competence in the subject matter, a clear understanding of intended learning outcomes, knowledge and skill in selection and use of appropriate instructional strategies, and ability to effectively communicate educational content to the target audience;
- (d) Content and Methodology. The selection and use of content and instructional methodologies is consistent with the learning outcomes. Methods are selected which appeal to the diverse learning styles of each audience. Learners are actively involved, have an opportunity to process in some way what they have learned, and receive feedback;
- (e) Assessment of Learning Outcomes. Program planning includes ways in which participants will demonstrate the achievement of the learning outcomes. Demonstrations may be done in different ways -- questions and answers, discussions, simulations, written or oral exercises, reports, projects, or plans. Demonstrations are observable and measurable. They create active learning, help to promote and reinforce learning, and are used throughout the program; and
- (f) Program Evaluation. Each program is evaluated for its quality and effectiveness. Program evaluations are the institution's main source of feedback. Evaluation may measure reactions of participants, the amount of learning, changes in behavior, or provide information about the planning, development, administration, instruction, and support services for a program.

c. Summary

The CEU should be awarded to individuals only for participation in those non-credit activities. These activities should be measured against guidelines that are well organized planned instruction, demonstrate related learning outcomes and measurability and meet specific criteria as outlined in section 3 of this chapter.

11. Other Requirements

Although this chapter outlines the basic requirements for a workforce education program, other requirements may also apply. These requirements are as follows;

- (1) For requirements specific to the WECM and related course information, see Chapter Four;
- (2) For new program application requirements, see Chapter Five;
- (3) For program revision requirements, see Chapter Six; and
- (4) For approval of distance education courses and awards, colleges should refer to CB Rules and Regulations, Chapter 4, Subchapter P and other related documents available at: <http://www.theccb.state.tx.us/Rules/TAC.cfm>.

These rules and guidelines are designed to ensure the quality of courses and programs as well as the adequacy of the technical and managerial infrastructures to support those courses and programs.

C. Examples of Forms

1. Advisory Committee Meeting Minutes

CHAIRPERSON:		
MEETING DATE:	MEETING TIME:	MEETING PLACE:
RECORDER:		PREVIOUS MEETING:

MEMBERS PRESENT:

OTHERS PRESENT:

Name and Title		Name and Title		Name and Title	

Agenda Item	Action Discussion Information	Responsibility
Old Business:		
Continuing Business:		
New Business:		
Curriculum Decisions:		
Other:		

MINUTES

Key Discussion Points	Discussion
Old Business:	
Continuing Business:	
New Business:	
Curriculum Decisions:	
Other:	

CHAIRPERSON SIGNATURE:	DATE:	NEXT MEETING:
------------------------	-------	---------------

2. Chart of SCANS Skills

SCANS Skills are grouped in two areas: (1) foundation skills and (2) workplace competencies.

1. Foundation Skills are defined in three areas: (a) basic skills, (b) thinking skills, and (c) personal qualities.
 - (a) Basic Skills: A worker must read, write, perform arithmetic and mathematical operations, listen, and speak effectively. These skills include:
 - (1) Reading: locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules;
 - (2) Writing: communicate thoughts, ideas, information, and messages in writing; and create documents such as letters, directions, manuals, reports, graphs, and flow charts;
 - (3) Arithmetic and Mathematical Operations: perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques;
 - (4) Listening: receive, attend to, interpret, and respond to verbal messages and other cues; and
 - (5) Speaking: organize ideas and communicate orally.
 - (b) Thinking Skills: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively. These skills include:
 - (1) Creative Thinking: generate new ideas;
 - (2) Decision Making: specify goals and constraints and generate alternatives, consider risks, and evaluate and choose the best alternative;
 - (3) Problem Solving: recognize problems and devise and implement plan of action;
 - (4) Visualize ("Seeing Things in the Mind's Eye"): organize and process symbols, pictures, graphs, objects, and other information;
 - (5) Knowing How to Learn: use efficient learning techniques to acquire and apply new knowledge and skills; and
 - (6) Reasoning: discover a rule or principle underlying the relationship between two or more objects and apply it when solving a problem.
 - (c) Personal Qualities: A worker must display responsibility, self esteem, sociability, self management, integrity, and honesty. These qualities include:
 - (1) Responsibility: exert a high level of effort and persevere toward goal attainment;
 - (2) Self Esteem: believe in one's own self worth and maintain a positive view of oneself;
 - (3) Sociability: demonstrate understanding, friendliness, adaptability, empathy, and politeness in group settings;
 - (4) Self Management: assess oneself accurately, set personal goals, monitor progress, and exhibit self control; and
 - (5) Integrity and Honesty: choose ethical courses of action.

2. Workplace Competencies are defined in five areas: (a) resources, (b) interpersonal skills, (c) information, (d) systems, and (e) technology.

(a) Resources: A worker must identify, organize, plan, and allocate resources effectively.

- (1) Time: select goal-relevant activities, rank them, allocate time, and prepare and follow schedules.
- (2) Money: Use or prepare budgets, make forecasts, keep records, and make adjustments to meet objectives.
- (3) Material and Facilities: Acquire, store, allocate, and use materials or space efficiently.
- (4) Human Resources: Assess skills and distribute work accordingly, evaluate performance and provide feedback.

Examples: use computer software to plan a project; prepare a budget; conduct a cost/benefits analysis; design an RFP process; write a job description; develop a staffing plan.

(b) Interpersonal Skills: A worker must work with others effectively.

- (1) Participate as Member of a Team: contribute to group effort.
- (2) Teach Others New Skills.
- (3) Serve Clients/Customers: work to satisfy customers' expectations.
- (4) Exercise Leadership: communicate ideas to justify position, persuade and convince others, responsibly challenge existing procedures and policies.
- (5) Negotiate: work toward agreements involving exchange of resources, resolve divergent interests.
- (6) Work with Diversity: work well with men and women from diverse backgrounds.

Examples: collaborate with a group member to solve a problem, work through a group conflict situation, train a colleague, deal with a dissatisfied customer in person, select and use appropriate leadership styles, use effective delegation techniques, conduct an individual or team negotiation, demonstrate an understanding of how people from different cultural backgrounds might behave in various situations.

(c) Information: A worker must be able to acquire and use information.

- (1) Acquire and Evaluate Information.
- (2) Organize and Maintain Information.
- (3) Interpret and Communicate Information.
- (4) Use Computers to Process Information.

Examples: research and collect data from various sources, develop a form to collect data, develop an inventory record-keeping system, produce a report using graphics, make an oral presentation using various media, use on-line computer databases to research a report, use a computer spreadsheet to develop a budget.

(d) Systems: A worker must understand complex interrelationships.

- (1) Understand Systems: know how social, organizational, and technological systems work and operate effectively with them.

- (2) Monitor and Correct Performance: distinguish trends, predict impacts on system operations, diagnose deviations in systems' performance and correct malfunctions.
- (3) Improve or Design Systems: suggest modifications to existing systems and develop new or alternative systems to improve performance.

Examples: draw and interpret an organizational chart; develop a monitoring process; choose a situation needing improvement, break it down, examine it, propose an improvement, and implement it.

- (e) Technology: A worker must be able to work with a variety of technologies.
- (1) Select Technology: choose procedures, tools or equipment including computers and related technologies.
 - (2) Apply Technologies to Task: understand overall intent and proper procedures for setup and operation of equipment.
 - (3) Maintain and Troubleshoot Equipment: Prevent, identify, or solve problems with equipment, including computers and other technologies.

Examples: read equipment descriptions and technical specifications to select equipment to meet needs, set up and assemble appropriate equipment from instructions, read and follow directions for troubleshooting and repairing equipment.

3. SCANS Occupational Assessment

The know-how identified by SCANS is made up of five competencies and a three-part foundation of skills and personal qualities needed for solid job performance. The rating level ranges from 1 (low) to 5 (high). Please circle your response.

COMPETENCY	RATING
Resources: Identifies, organizes, plans, and allocates resources.	
C1 Time: Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules.	1 2 3 4 5
C2 Money: Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.	1 2 3 4 5
C3 Materials and Facilities: Acquires, stores, allocates, and uses materials or space efficiently.	1 2 3 4 5
C4 Human Resources: Assesses skills and distributes work accordingly, evaluates performance, and provides feedback.	1 2 3 4 5
Information: Acquires and uses information.	
C5 Acquires and evaluates information.	1 2 3 4 5
C6 Organizes and maintains information.	1 2 3 4 5
C7 Interprets and communicates information.	1 2 3 4 5
C8 Uses computers to process information.	1 2 3 4 5
Interpersonal: Works with others.	
C9 Participates as a member of a team: Contributes to group effort.	1 2 3 4 5
C10 Teaches others new skills.	1 2 3 4 5
C11 Serves Clients/Customers: Works to satisfy customers' expectations.	1 2 3 4 5
C12 Exercises Leadership: Communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.	1 2 3 4 5
C13 Negotiates: Works toward agreements involving exchange of resources; resolves divergent interests.	1 2 3 4 5
C14 Works With Diversity: Works well with men and women from diverse backgrounds.	1 2 3 4 5
Systems: Understands complex interrelationships.	
C15 Understands Systems: Knows how social, organizational, and technological systems work and operates effectively with them.	1 2 3 4 5
C16 Monitors and Corrects Performance: Distinguishes trends, predicts impacts on system operations, diagnoses system's performance, and corrects malfunctions.	1 2 3 4 5
C17 Improves or Designs Systems: Suggests modifications to existing systems and develops new or alternative systems to improve performance.	1 2 3 4 5
Technology: Works with a variety of technologies.	
C18 Selects Technology: Chooses procedures, tools, or equipment, including computers and related technologies.	1 2 3 4 5
C19 Applies Technology to Task: Understands overall intent and proper procedures for setup and operation of equipment.	1 2 3 4 5
C20 Maintains and Troubleshoots Equipment: Prevents, identifies, or solves problems with equipment, including computers and other technologies.	1 2 3 4 5

FOUNDATION		RATING				
Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens, and speaks.						
F1	Reading: Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.	1	2	3	4	5
F2	Writing: Communicates thoughts, ideas, information, and messages in writing; creates documents such as letters, directions, manuals, reports, graphs, and flow charts.	1	2	3	4	5
F3	Arithmetic: Performs basic computations; uses basic numerical concepts such as whole numbers, etc.	1	2	3	4	5
F4	Mathematics: Approaches practical problems by choosing appropriately from a variety of mathematical techniques.	1	2	3	4	5
F5	Listening: Receives, attends to, interprets, and responds to verbal messages and other cues.	1	2	3	4	5
F6	Speaking: Organizes ideas and communicates orally.	1	2	3	4	5
Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons.						
F7	Creative Thinking: Generates new ideas.	1	2	3	4	5
F8	Decision Making: Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.	1	2	3	4	5
F9	Problem Solving: Recognizes problems and devises and implements plan of action.	1	2	3	4	5
F10	Seeing Things in the Mind's Eye: Organizes and processes symbols, pictures, graphs, objects, and other information.	1	2	3	4	5
F11	Knowing How to Learn: Uses efficient learning techniques to acquire and apply new knowledge and skills.	1	2	3	4	5
F12	Reasoning: Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.	1	2	3	4	5
Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, integrity, and honesty.						
F13	Responsibility: Exerts a high level of effort and perseveres towards goal attainment.	1	2	3	4	5
F14	Self-Esteem: Believes in own self-worth and maintains a positive view of self.	1	2	3	4	5
F15	Sociability: Demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings.	1	2	3	4	5
F16	Self-Management: Assesses self accurately, sets personal goals, monitors progress, and exhibits self-control.	1	2	3	4	5
F17	Integrity/Honesty: Chooses ethical courses of action.	1	2	3	4	5

4. Program Competency Profile

	Business																	
Skill / Competency:	<i>COM Course Title:</i>	<i>Introduction to Business 131</i>	<i>Business Math 131</i>	<i>Computer Science 130</i>	<i>Marketing 131</i>	<i>Career Planning 115</i>	<i>Business Communications 231</i>	<i>Management 231</i>	<i>Business Law 231</i>	<i>Physical Education 111</i>	<i>Accounting 231</i>	<i>Marketing 231</i>	<i>Management 232</i>	<i>Cooperative Education 241</i>	<i>Finance 231</i>	<i>Management 235</i>	<i>Marketing 233</i>	<i>Cooperative Education 242</i>
Evaluate Market	✓			✓								✓			✓	✓	✓	
Put Together a "Game Plan"				✓			✓					✓				✓	✓	
Prepare Budget to Meet Business Objectives	✓			✓						✓	✓				✓	✓	✓	
Set Short-Term Goals	✓			✓			✓					✓		✓	✓	✓	✓	✓
Set Long-Term Goals	✓			✓			✓						✓	✓	✓	✓	✓	✓
Evaluate Previous Year's Activities				✓								✓			✓	✓	✓	
Visit Work Station	✓						✓						✓		✓	✓	✓	✓
Maintain Open Door Policy							✓								✓	✓	✓	
Listen to Employees and Customers	✓			✓		✓	✓					✓	✓		✓	✓	✓	✓
Read Written Correspondence From Employees and Customers						✓	✓					✓	✓		✓	✓	✓	✓
Keep Confidentiality, if Asked	✓						✓					✓	✓		✓	✓	✓	✓
Respond to Input Appropriately							✓					✓			✓	✓	✓	
Share Business Objectives and Results with Employees	✓						✓					✓			✓	✓	✓	
Determine Employees' Needs							✓					✓			✓	✓	✓	
Locate Qualified Applicants					✓		✓					✓			✓	✓	✓	
Determine Job Requirements	✓	✓	✓	✓	✓	✓	✓					✓			✓	✓	✓	
Develop and Maintain Adequate Application Form				✓	✓	✓	✓					✓			✓	✓	✓	
Review and Evaluate Completed Application				✓	✓	✓	✓					✓			✓	✓	✓	
Interview Qualified Applicants				✓	✓	✓	✓					✓			✓	✓	✓	
Perform Background Checks												✓			✓	✓	✓	
Screen Applicants for Job, as Needed				✓	✓	✓	✓					✓			✓	✓	✓	
Select Employee												✓			✓	✓	✓	
Maintain Paper Trail								✓				✓			✓	✓	✓	
Reject Unselected Applicants												✓			✓	✓	✓	
Determine Reason for Discharge							✓					✓			✓	✓	✓	
Investigate Reason for Discharge							✓					✓			✓	✓	✓	
Document Reason for Discharge							✓					✓			✓	✓	✓	
Evaluate for Consistency of Discipline												✓			✓	✓	✓	
Inform Employee of Action												✓			✓	✓	✓	
Collect Company Property												✓			✓	✓	✓	
Process Final Paperwork												✓			✓	✓	✓	
Read Business-Related Materials	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Review Statistical /Financial Report and Analyze Data	✓	✓								✓					✓	✓	✓	

4. Program Competency Profile

Skill / Competency:	Business																	
	<i>COM Course Title:</i>	<i>Introduction to Business 131</i>	<i>Business Math 131</i>	<i>Computer Science 130</i>	<i>Marketing 131</i>	<i>Career Planning 115</i>	<i>Business Communications 231</i>	<i>Management 231</i>	<i>Business Law 231</i>	<i>Physical Education 111</i>	<i>Accounting 231</i>	<i>Marketing 231</i>	<i>Management 232</i>	<i>Cooperative Education 241</i>	<i>Finance 231</i>	<i>Management 235</i>	<i>Marketing 233</i>	<i>Cooperative Education 242</i>
Compare and Interpret Data	✓	✓								✓				✓	✓			
Share/Report Relevant Data			✓			✓				✓				✓	✓			
Take Required Action										✓								
Follow Up, as Necessary							✓			✓						✓		
Communicate Company Image, Policies, and Safety Procedures	✓						✓						✓		✓	✓		✓
Outline Job Duties					✓		✓					✓	✓		✓	✓		✓
Identify Specific Procedures per Task			✓				✓					✓	✓				✓	✓
Teach Specific Procedures per Task			✓				✓					✓	✓		✓		✓	✓
Observe and Verify Comprehension of Job Duties							✓					✓	✓				✓	✓
Evaluate and Correct Employee Performance					✓		✓					✓			✓		✓	✓
Retrain as Needed							✓					✓						✓
Assess Strengths and Weaknesses	✓						✓					✓			✓			
Identify Employees' Objectives	✓						✓					✓						
Outline Plan to Strengthen Weaknesses							✓					✓	✓		✓		✓	✓
Reinforce Strengths	✓											✓						
Provide Experience in Various Job Strengths							✓					✓	✓					✓
Determine Mutual Objectives Within Organization					✓		✓					✓	✓		✓			✓
Provide Continuous Guidance					✓							✓						
Recognize /Reward Job Performance	✓		✓	✓			✓					✓						
Determine Basic Staff Requirements							✓					✓			✓			
Anticipate Changes in Staffing Needs	✓						✓					✓			✓			
Review Budget							✓			✓				✓	✓			
Adjust Staff Accordingly							✓											
Identify Customer	✓			✓									✓		✓			✓
Determine Customer Needs	✓		✓	✓							✓		✓		✓	✓	✓	✓
Provide Goods and Services to Meet Needs	✓		✓	✓							✓		✓			✓	✓	✓
Promote Goods and Services	✓			✓							✓		✓			✓	✓	✓
Provide Customer Incentives	✓			✓							✓		✓			✓	✓	✓
Use Follow-up Procedures	✓			✓			✓				✓					✓		
Prioritize Activities	✓						✓						✓					✓
Delegate Responsibilities	✓						✓								✓			
Direct and Follow Up on Activities	✓						✓						✓					✓
Identify Problems	✓	✓					✓						✓		✓			✓

4. Program Competency Profile

	Business																	
Skill / Competency:	<i>COM Course Title:</i>	<i>Introduction to Business 131</i>	<i>Business Math 131</i>	<i>Computer Science 130</i>	<i>Marketing 131</i>	<i>Career Planning 115</i>	<i>Business Communications 231</i>	<i>Management 231</i>	<i>Business Law 231</i>	<i>Physical Education 111</i>	<i>Accounting 231</i>	<i>Marketing 231</i>	<i>Management 232</i>	<i>Cooperative Education 241</i>	<i>Finance 231</i>	<i>Management 235</i>	<i>Marketing 233</i>	<i>Cooperative Education 242</i>
Solve Problems (People, Equipment, Business, etc.)	✓						✓						✓	✓	✓	✓		✓
Determine Specific Quality and Needs							✓						✓			✓		✓
Evaluate Costs	✓	✓							✓					✓	✓			
Justify Expenditure	✓								✓					✓	✓			
Complete Transaction	✓													✓				✓
Verify Receipt of Goods	✓													✓				✓

Source: Dorothy McNutt. Used by Permission.

5. SCANS Matrix Model

Program: Precision Metal Working Award: Machine Tool Technology/Machinist CIP: 48.0501									Credential: Certificate	
LIST OF ALL COURSES REQUIRED AND IDENTIFIED COMPETENCIES										
Competencies								Course Number	Course Title	
1	2	3	4	5	6	7	8			
x	x	x	x	x	x	x	x	ORIE 0102	Introduction to College	
x	x	x	x	x	x	x	x	MCHN 1438	Basic Machine Shop I	
x	x	x	x	x	x	x	x	MCHN 1343	Machine Shop Mathematics	
x	x	x	x	x	x	x	x	MCHN 1317	Machine Shop Blueprint Reading	
x	x	x	x	x	x	x	x	TECH 1341	Occupational Mathematics	
x	x	x	x	x	x	x	x	MCHN 1341	Basic Machine Shop II	
x	x		x		x		x	ENGL 1301	Oral and Written Communications	
x	x	x	x	x	x	x	x	WLDG 1421	Introduction to Welding Fundamentals	
x	x		x	x	x			PSYC 1301	Human Relations	
x	x	x	x	x	x	x	x	MCHN 1352	Intermediate Machining I	
x	x	x	x	x	x	x	x	MCHN 1330	Statistical Process Control for Machinist	
x	x	x	x	x	x	x	x	MCHN 2344	Computerized Numerical Control Programming	
x	x	x	x	x	x	x		MCHN 1354	Intermediate Machining II	
x	x	x	x	x	x	x		MCHN 2335	Advanced CNC Machining	
									COMPETENCY REFERENCES	
									8. BASIC USE OF COMPUTERS	
									7. WORKPLACE COMPETENCIES	
									6. PERSONAL QUALITIES	
									5. THINKING SKILLS	
									4. SPEAKING AND LISTENING	
									3. ARITHMETIC OR MATHEMATICS	
									2. WRITING	
									1. READING	

6. External Learning Experience Student Evaluation Form

Student Name _____

Affiliating Institution _____

Dates of External Learning Experience From: _____ To: _____

Dates Absent: _____

Number of Days Late: _____

Please circle the most representative response for each behavior demonstrated by the student.

- Key:**
- 5 Always**
 - 4 Most Always**
 - 3 Usually**
 - 2 Sometimes or Occasionally**
 - 1 Never**
 - N/A Not Applicable or Not Observed**

Affective Traits:

- | | | | | | | |
|---|-----|---|---|---|---|---|
| 1. Starts activities immediately | N/A | 1 | 2 | 3 | 4 | 5 |
| 2. Respects the meaning of privileged information | N/A | 1 | 2 | 3 | 4 | 5 |
| 3. Maintains personal appearance and hygiene as appropriate for the workplace | N/A | 1 | 2 | 3 | 4 | 5 |
| 4. Is skillful in adapting to and working with others | N/A | 1 | 2 | 3 | 4 | 5 |
| 5. Approaches assignments with confidence | N/A | 1 | 2 | 3 | 4 | 5 |
| 6. Maintains an orderly work area | N/A | 1 | 2 | 3 | 4 | 5 |
| 7. Replenishes supplies when needed | N/A | 1 | 2 | 3 | 4 | 5 |
| 8. Willingly stays to complete or correct work | N/A | 1 | 2 | 3 | 4 | 5 |
| 9. Searches for answers to questions in available time | N/A | 1 | 2 | 3 | 4 | 5 |
| 10. Maintains/prepares satisfactory records | N/A | 1 | 2 | 3 | 4 | 5 |
| 11. Follows established company procedures | N/A | 1 | 2 | 3 | 4 | 5 |
| 12. Organizes workload | N/A | 1 | 2 | 3 | 4 | 5 |
| 13. OTHER SKILLS UNIQUE TO THE OCCUPATION:
_____ | N/A | 1 | 2 | 3 | 4 | 5 |

Psychomotor Skills:

- | | | | | | | |
|--|-----|---|---|---|---|---|
| 1. Routine tasks are completed within acceptable limitations | N/A | 1 | 2 | 3 | 4 | 5 |
| 2. Routine tasks are completed within acceptable time | N/A | 1 | 2 | 3 | 4 | 5 |
| 3. Sophisticated tasks are completed within acceptable limitations | N/A | 1 | 2 | 3 | 4 | 5 |
| 4. Sophisticated tasks are complete within acceptable time | N/A | 1 | 2 | 3 | 4 | 5 |
| 5. OTHER SKILLS UNIQUE TO THE OCCUPATION:
_____ | N/A | 1 | 2 | 3 | 4 | 5 |

Cognitive Skills:

- | | | | | | | |
|---|-----|---|---|---|---|---|
| 1. Transfers knowledge of principles and procedures to new techniques | N/A | 1 | 2 | 3 | 4 | 5 |
| 2. Recognizes tasks that are beyond student capacity | N/A | 1 | 2 | 3 | 4 | 5 |
| 3. Applies classroom learning to workplace setting | N/A | 1 | 2 | 3 | 4 | 5 |
| 4. Interprets charts, graphs, and data correctly | N/A | 1 | 2 | 3 | 4 | 5 |
| 5. Troubleshoots equipment | N/A | 1 | 2 | 3 | 4 | 5 |
| 6. Identifies and attempts to solve discrepancies in systems, results, or information | N/A | 1 | 2 | 3 | 4 | 5 |
| 7. OTHER SKILLS UNIQUE TO THE OCCUPATION:
_____ | N/A | 1 | 2 | 3 | 4 | 5 |

This student has Entry-Level Skills:

- Now
- After additional external learning experiences
- After additional course work
- After additional course work and additional external learning experiences

Please provide additional information regarding your evaluation of the student's performance in this external learning experience.

Comments:

I have seen this evaluation and discussed it with my workplace supervisor.

Student Signature _____ Date _____

Supervisor Signature _____ Date _____

Reviewed by College Instructor _____ Date _____

7. Transcript Form

Name of College Address		Name: Address: City & State:	SS Number: ZIP:	
Course Number	Course Title and Description	Date Completed	CEU Awarded	Assessment Results
One workforce continuing education unit is defined as 10 contact hours of participation in an organized workforce continuing education experience under responsible sponsorship, capable direction, and qualified instruction.				
			Date	
			Director of Continuing Education	

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Chapter Four

The Workforce Education Course Manual (WECM)

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A. Background and Purposes of the WECM

The *Workforce Education Course Manual* (WECM) is a web-based inventory of current workforce education courses available for use by Texas public two-year colleges. Courses are grouped by subject area according to the Classification of Instructional Programs (CIP) codes published by the National Center for Education Statistics (NCES). Since 1998, WECM related projects have ensured currency of WECM courses and guidelines. Funded through the Carl D. Perkins Act, these projects have also provided development opportunities and have been supported by college faculty administrators, instructional specialists, and business and industry representatives.

The purposes of the WECM are to:

1. contribute to the currency and consistency of workforce courses;
2. provide Texas colleges increased assistance and flexibility in responding to employer needs;
3. enhance the portability of credits and credentials for students;
4. provide increased access for students to workforce education degrees and career advancement for students;
5. facilitate articulation with other providers of education at both the secondary and post-secondary levels; and
6. incorporate industry-established skill standards into WECM courses.

The WECM policies and guidelines are updated annually through the WECM Leadership Advisory Committee. The Committee is comprised of experienced workforce education leaders from small and large institutions in different regions of the state. These leaders have worked with a full range of semester credit hour (SCH) and continuing education unit (CEU) workforce education programs and courses and have participated in the implementation and maintenance of WECM.

B. Development and Organization of WECM Courses

The WECM is organized by six-digit CIP codes that represent instructional program codes, titles, and descriptions for academic and occupational programs offered at postsecondary levels. The THECB assigns CIP codes and rubrics to courses for the purpose of classifying, recording, and reporting statistics for workforce education courses. The CIP codes or rubrics are not intended to drive the selection of SCH or CEU course offerings; rather, to serve as a guide once a college has identified the outcomes for a course and/or program.

The WECM courses are created and maintained by teams of instructional specialists with expertise in the subject areas. The specialists are selected from colleges around the state. The allotted ranges of contact hours and/or credit hours represent the instructional specialist teams' professional judgment about the appropriate amount of time needed to cover the minimum course outcomes.

An approved program may include courses with different CIP codes. The decision to use a WECM course should be based primarily on the intended end-of-course outcomes of the course rather than the CIP code or rubric.

When a WECM course is already available to cover specific material, the institution must use the range of credit and contact hours as well as the minimum outcomes specified in the WECM course listing. The parameters in Tables 4-1 or 4-2 should only be used when creating a completely new course at a WECM workshop or when designing a Special Topics (Table 4-1) or Local Need (Table 4-2) course.

C. Explanation of Course Entries

All WECM SCH and CEU courses are designed with an array of course options and are governed by uniform protocol. Courses allow flexibility for colleges in awarding certificate and degrees and in responding to the immediate needs of students, business, and industry. SCH and CEU courses provide an opportunity for students to obtain skills, knowledge, and behaviors needed for career exploration, entry into the job market, and specific job upgrades. An explanation of SCH and CEU course options and protocol include the following:

End-of-Course Outcomes: End-of-Course outcomes are the distinguishing feature of each WECM course. Minimum outcomes are intended for student achievement of specific competencies and are meant to be taught and measured for the award of either SCH or CEU. Colleges must not eliminate but are encouraged to enhance or add outcomes. Enhancements or additions must not be so extensive that they result in a markedly different course. Local need or business/industry standards, state/national credentialing requirements, employer-defined skill requirements, national industry-defined skill requirements or standards, and/or Texas Skill Standards Board (TSSB) recognized skill standards may serve as resources for enhancement or addition of course outcomes.

Course Description: Course descriptions provide an overview of course content or subject matter. Colleges must use the complete WECM course descriptions for all SCH courses and CEU "mirror" courses, but they may enhance or add to the course descriptions as long as the enhancements are consistent with WECM approved end-of-course outcomes. The enhancements must not be so extensive that they result in a fundamentally different course. Colleges may amend the description of a course offered only for CEU provided that the integrity and intent of the course remains intact and the description is consistent with WECM approved end-of-course outcomes.

Contact Hour Range: Each SCH course in the WECM has a suitable range of contact hours necessary to master minimum course outcomes and to afford each college a choice of instructional strategies via lecture/lab components. The SCH courses are assigned contact hour ranges based on the ratios outlined in Table 4-2 of this Chapter. Colleges must follow the established ratios for credit and contact hour assignments.

A CEU course with fewer than seven contact hours of instruction will not generate state funding. An exception may be permitted when the specific type and length of instruction is required by a local, state, or national licensing, certifying, regulatory, or accrediting agency. The requirements for adding a course with fewer than seven contact hours are discussed later in this chapter. No lecture/lab CEU course can have more than 176 contact hours. CEU external learning courses must follow the same contact hour limits as the SCH external

learning courses.

Suggested Prerequisite: If instructional specialists at a WECM Course Review Workshop recommend a course prerequisite, a specific list of suggested prerequisite course(s), skill(s), or knowledge is included in the description.

Course Level: The course level indicates whether the course is introductory, intermediate, or advanced as recommended by instructional specialists. The first digit in the course number specifies the course level as described below in the section titled "Course Rubric and Number."

Course Title: The published WECM title for SCH courses must appear in college publications and on transcripts. For CEU courses, workforce marketing titles may be used to better describe the nature of the courses being offered and may be listed in transcripts. However, all CEU mirror courses must use the published WECM title for the course.

Course Rubric and Number: Rubrics (prefixes) provide a common set of unique course designations for each occupational discipline. Each four-letter rubric (e.g., DFTG) identifies a cluster of skills and knowledge to be used in determining both course equivalency and degree applicability for transfer on a statewide basis. Using a common rubric enables students to link their portfolios of skill attainment to the occupational needs of business and industry. Courses should be chosen based on course descriptions and end-of-course outcomes, not on rubrics. Any program may involve courses with several different rubrics as long as the course content is appropriate.

The four-digit number after the rubric indicates the course level, the SCH and/or CEU value, the course type, and the suggested sequence. The following descriptions explain:

1. The first digit identifies course level. For SCH and CEU courses, an introductory course is denoted by a "1," and an advanced course is denoted by a "2." An intermediate course may be denoted with either a "1" or a "2."
2. The second digit defines the SCH or CEU value. For example, a "3" indicates a three SCH course and a "0" denotes a CEU course. Courses must follow the established ratios discussed in Chapter Three. Approved contact hour and credit hour combinations can be found in Table 4-2 of this chapter. The number of Continuing Education Units (CEU) awarded is calculated by setting 10 instructional contact hours equal to one CEU.
3. The third and fourth digits establish the type of course and course sequence.

00-59	Lecture-Lab
60-63	Clinical
64-69	Practicum
70-79	Local Need
80-85	Cooperative Education
86-89	Internship
90-99	Special Topics

For both SCH and CEU courses, the published WECM rubric and number must be used in official college publications.

D. Using the WECM

1. Guidelines for All Course Types

a. Definition of Types of Instruction

Lecture: Time used to present new material with additional cognitive and/or affective learning outcomes is classified as *lecture*.

Laboratory: Time used by college personnel providing direct supervision of skill development, application and practice of knowledge is classified as laboratory. Also activities conducted in simulation facilities to develop or practice skills are classified as laboratory activities.

Credit lecture/lab courses may include a maximum of 47 contact hours of clinical experience designated as laboratory experience. Continuing education courses may include a maximum of nine (9) contact hours of clinical experience. Longer clinical experiences must be taught as separate clinical courses.

External learning experience: Time used to present or apply knowledge in a workplace setting is classified as external learning experience. The integration of knowledge gained through the external experience with previously learned concepts or practices, regardless of setting, time, or evaluation, is included in the instructional design of the external learning experience and would be classified as external hours. Advanced practice in a lab setting prior to performing an advanced or high-risk procedure and discussion of cases may also be included in this category. (When such advanced or high risk practice is 32 contact hours or greater in a credit course or 10 contact hours or greater in a continuing education course, the advanced practice hours must be taught in a separate laboratory or lecture/lab course.)

For definitions of specific types of external learning experiences, see the section on "External Learning Experiences" in Chapter Three.

b. Assignment of Semester Credit Hours and Continuing Education Units

For SCH and CEU program formats, the educational institution must assign consistent and appropriate ratios of contact hours to SCH or CEU for each course in the program according to the ratios and parameters established by Coordinating Board guidelines. For suggested combinations of lecture and laboratory experiences, see Table 4.2, "Credit and Contact Hour Combinations for Existing WECM and Local Need Courses."

(1) For lecture/classroom instruction per 16-week semester, a ratio of one SCH to one contact hour (1:1) must be used. If the instruction is compressed into less than a 16-week semester, the course must still require the same number of contact hours as it would in a long semester.

Example of an eight-week summer course

8 lecture hours per week = 64 total contact hours

64 total contact hours/16 weeks is equivalent to 4 hours/week

Therefore, the course is assigned 4 SCH.

- (2) For on-campus laboratory instruction per 16-week semester, a ratio of one SCH to two to four laboratory contact hours (1:2, 3, or 4) must be used. Therefore, one SCH can be earned for two, three, or four contact hours per week of laboratory instruction.

Example of a four SCH course with lecture and laboratory:

3 lecture contact hours/week = 3 SCH

3 laboratory contact hours/week = 1 SCH

Total for the course = 4 SCH

- (3) For external learning experience ratios, see Tables 3-4 and 3-5 in Chapter Three.

- (4) For continuing education units, institutions must use a ratio of 1 CEU to 10 contact hours. Calculation of CEU: When calculating the number of CEU for a course, the number of contact minutes should be totaled and divided by 60 to arrive at the number of contact hours. Non-instructional time such as breaks is not included. Total contact hours are then divided by 10 to determine the number of CEU. CEU can be expressed in tenths (e.g., 17 contact hours equate to 1.7 CEU). When the fractional part of a contact hour is at least 50 minutes, the fractional portion may be counted as a whole hour. Calculations of contact hours involved in a workforce continuing education experience may include the following elements:

- (a) In-class time with direct participation between the learner and instructor;
- (b) Field activities, lab assignments, and projects with an instructor present;
- (c) Activities in which there is no instructor present such as supervised independent study, computer-assisted instruction, external learning experiences or project-based assignments (after field-testing has shown the average amount of time required to complete the activity).

Examples of activities that are not included when calculating contact hours include time for study, assigned reading, meeting time devoted to business or organizational activities, and time allocated to breaks or refreshments (unless a presentation is made during refreshments).

2. Special Topics Courses

A Special Topics course is provided for temporary use or transitional content and should be used only when course content does not exist in a current WECM course. The college specifies discipline-specific outcomes for the Special Topics course. Topics may address recently identified current events, skills, and knowledge pertinent to the technical area and relevant to the occupational development of the student. Special Topics courses are available for certain rubrics within each six-digit CIP code and are identified by a "9" in

the third digit of the course number.

Although THECB approval is currently not required for the content of a Special Topics course, *audit penalties may apply if colleges are not very careful to include only legitimate workforce education content and avoid non-fundable community education courses*. Colleges must submit a Special Topics form through the electronic submission process prior to the end of the semester in which the course is offered.

The process for development and submission of the Special Topics SCH and CEU courses is as follows:

- a. Determine if there is a suitable WECM course available;
- b. If not, submit a Special Topics Course Form for each Special Topics course taught to the THECB. The Special Topics Course Form is located at the WECM website cited in this chapter; and
- c. The form must clearly document the CIP code, rubric, number, subtitle, effective date, actual number of contact hours taught, type of course (SCH or CEU), level, course description, and minimum outcomes. The rubric must be selected from the list of available rubrics on the course application. The subtitle identifies the specific course content; for example, WLDG 1391 "Alloys and Processes," or WLDG 1091 "Farm and Ranch Welding."

A SCH Special Topics Course cannot have fewer than 16 or more than 112 contact hours. The course must follow the established ratios for contact hour and credit hour assignments as discussed above. Allowable combinations have been outlined in Table 4-1 of this Chapter. A range of contact hours and lecture/lab components is specified for each SCH value.

If a new or revised program includes a Special Topics course, either as a required course or as an elective, a Special Topics course form must be submitted electronically to the THECB. Colleges are limited to a total of three Special Topics and/or Local Need courses per AAS degree or advanced technical certificate. Additionally, colleges are limited to two Special Topics and/or Local Need courses per Level 2 certificate and to one Special Topics or Local Need course per Level 1 certificate. Exceptions to this limitation will be made only if the requesting college is able to provide a compelling justification for such a request.

A CEU Special Topics Course cannot have fewer than seven or more than 112 contact hours. There is no limitation on the number of CEU Special Topics courses that can be taught per semester or quarter.

Table 4-1. Credit/Contact Hour Combinations
for SCH Special Topics Courses

COURSE RUBRIC	SCH	CONTACT HOUR RANGE PER SEMESTER	ALLOWABLE COMBINATIONS		
			Lecture /wk	Lab /wk	Contact /sem
XXXX 119X	1	16-64	0	2	32
			0	3	48
			0	4	64
			1	0	16
XXXX 129X	2	32-96	0	4	64
			0	6	96
			1	2	48
			1	3	64
			1	4	80
			2	0	32
			2	1	48
XXXX 139X	3	48-96	1	4	80
			2	2	64
			2	3	80
			2	4	96
			3	0	48
			3	1	64
XXXX 149X	4	64-112	2	4	96
			3	2	80
			3	3	96
			3	4	112
			4	0	64
			4	1	80

During WECM course review workshops, instructional specialists evaluate Special Topics courses for possible inclusion in the WECM. If a course is approved as an addition to the WECM, the instructional specialists working in conjunction with the instructional leadership and the Maintenance Project will assign the final WECM title, rubric, number, suitable range of contact hours, number of SCH and/or CEU, course description, and minimum course outcomes. If a Special Topics course is added to the WECM, it will be noted on the WECM website under "Workshop Results."

If the course is not adopted as a regular WECM course, the college may continue to teach the content for up to 24 months. After 24 months, a new Special Topics Form must be submitted to the THECB.

3. Local Need Courses

A Local Need course may be used to respond to unique local or regional conditions or to regulatory changes, to expand an existing discipline to include a new specialty, or to create courses in new disciplines. (New disciplines are those with no course rubrics in the WECM inventory of courses.) Programs not addressing a new discipline or a new specialty within a discipline are limited to the following;

- a. three Special Topics and/or Local Need courses per AAS degree or Advanced Technical Certificate;
- b. two Special Topics and/or Local Need courses per Level 2 certificate; and
- c. one Special Topics or Local Need course per Level 1 certificate.

Content that is not contained in the WECM and that will be offered repeatedly over several years is most appropriate for Local Need status. Evidence of need for this course must be substantiated by support from business and industry in a specified geographical area. A Local Need course must be submitted to the THECB and approved at least 30 days prior to instruction to qualify for state funding. Local Need courses are identified by a "7" in the third digit of the course number. The Coordinating Board course report edit will verify whether colleges have submitted all Local Need course forms.

The process for development and submission of a SCH or CEU Local Need course is as follows:

- a. Determine if there is a suitable WECM course available or whether the course might be accommodated in a Special Topics format;
- b. If not, submit a Local Need Course Application. Clearly document the CIP code; rubric; number; title; justification for need of the course; type of instruction; implementation date; actual contact hours; course type (SCH or CEU); licensing, certifying, or accrediting body (if applicable); level of instruction; course description; and minimum course outcomes. The Local Need Course Form is located at the WECM website cited in this chapter; and
- c. If approved by the THECB, the course will be added to the college's Local Need Course Inventory and subsequently reviewed during the WECM course review process. Local Need courses will remain on the college's local course inventory for 24 months. After 24 months, the college will be provided the opportunity to renew the course in order to continue teaching the course if the course has not been added to the WECM course inventory. Instructional specialists will determine if Local Need courses should become permanent additions to the WECM. If a Local Need course is added to the WECM, it will be noted on the WECM website under "Workshop Results." At the end of 24 months, courses that have been added to the WECM course inventory must replace the Local Need courses in the program.

A SCH Local Need lecture-lab course cannot have fewer than 16 or more than 176 contact hours. The courses must follow the established ratios for contact hour and credit hour assignments as discussed in Chapter Three. Preferred and allowable combinations have been outlined in Table 4-2 of this chapter. A range of contact hours with lecture-lab components is specified for each number of SCH. Local Need external learning

courses must follow the established ratios for the appropriate type of external learning course as outlined in Tables 4-3, 4-4, 4-5, and 4-6.

A CEU Local Need course cannot have fewer than 7 contact hours unless it specifically addresses local, state, or national licensure, certification, regulatory, or accreditation requirements. To create a course with fewer than 7 contact hours, a college must submit a Local Need application with justification that includes the description and length required of the specific course. The course must be required by a local, state, or national licensing, certifying, regulatory, or accrediting agency. Upon verification of the external requirement, the Coordinating Board staff will approve the course and forward the course application to the director of the WECM Project. The director will verify that the course meets all WECM course protocol requirements and enter the course into the WECM inventory.

A CEU Local Need lecture-lab course cannot have more than 176 contact hours. CEU external learning courses must follow the same contact hour limits as the SCH external learning courses. A CEU Local Need course may have a contact hour range differential of up to 24 hours. For example, if a course is to be offered for 24, 36, and 48 hours, the approved range of contact hours will be 24 to 48 hours.

Table 4-2. Lecture – Lab Credit/Contact Hour Combinations for SCH and Local Need Courses

SEMESTER CREDIT HOURS (SCH)	PREFERRED Contact Hour Range per Semester	PREFERRED COMBINATIONS*			OTHER ALLOWABLE Contact Hour Range per Semester	OTHER ALLOWABLE COMBINATIONS**		
		Lecture /wk	Lab /wk	Contact /sem		Lecture /wk	Lab /wk	Contact /sem
1	16-48	1	0	16	16-64	1	1	32
		0	2	32		0	4	64
		0	3	48				
2	32-80	2	0	32	32-128	2	1	48
		1	2	48		0	5	80
		0	4	64		0	6	96
		1	3	64		0	7	112
		1	4	80		0	8	128
3	48-96	3	0	48	48-144	3	1	64
		2	2	64		1	4	80
		2	3	80		1	5	96
		2	4	96		1	6	112
						1	7	128
				1	8	144		
4	64-128	4	0	64	64-160	4	1	80
		3	2	80		2	5	112
		3	3	96		2	7	144
		2	4	96		2	8	160
		2	6	128		1	9	160
		3	4	112				
5	80-144	5	0	80	80-176	5	1	96
		4	2	96		3	4	112
		4	3	112		3	5	128
		4	4	128		3	7	160
		3	6	144		3	8	176
				2	9	176		

Notes: 1) *Preferred contact hours and combinations are those that typically represent best practices or the most common course patterns and 2) **Other allowable combinations are available for specific circumstances.

4. External Learning Experience Courses

External learning experience courses, e.g., cooperative education, practicum (or field experience), internship, and clinical experience, are included in each six-digit CIP code area as appropriate. External learning experience courses are generically described in the WECM and guidelines for use of these courses are presented in Chapter Three.

The parameters for development of SCH clinical experiences, internships, practica, and cooperative education courses are summarized in Tables 4-3, 4-4, 4-5, and 4-6. Cooperative education, which requires a one-hour lecture component, is summarized in Table 4-6. Tables 4-3, 4-4, and 4-5 for clinical experience, internship, and practicum courses reflect contact hours for the external learning component only. Colleges may include formally scheduled conferences between instructors and students in internship, practicum and clinical courses. In such cases, the conference should be counted as part of the external hours, not as a lecture component.

Internship and clinical courses have a ratio of credit hours to external experience contact hours of 1:3, 1:4, 1:5, or 1:6 and may range from a total of 1 to 6 SCH. Practicum courses have a ratio of credit hours to external experience contact hours of 1:7, 1:8, 1:9, or 1:10 and may range from a total of 1 to 5 SCH. Cooperative education courses have a ratio of credit hours to external experience contact hours of 1:7, 1:8, 1:9, or 1:10 and may range from a total of 2 to 6 SCH. For each number of SCH in these tables, a range of allowable contact hours is specified.

Table 4-3. Clinical Experience SCH Course Ranges

Course Rubric and Number	SCH	Contact Hour Range per Semester
XXXX1160,1161,1162, or 1163 XXXX 2160,2161,2162, or 2163	1	48-96
XXXX1260,1261,1262, or 1263 XXXX 2260,2261,2262, or 2263	2	96-192
XXXX1360,1361,1362, or 1363 XXXX 2360,2361,2362, or 2363	3	144-288
XXXX1460,1461,1462, or 1463 XXXX 2460,2461,2462, or 2463	4	192-384
XXXX1560,1561,1562, or 1563 XXXX 2560,2561,2562, or 2563	5	240-480
XXXX1660,1661,1662, or 1663 XXXX 2660,2661,2662, or 2663	6	288-576

Table 4-4. Internship SCH Course Ranges

Course Rubric and Number	SCH	Contact Hour Range per Semester
XXXX 2186, 2187, 2188 or 2189	1	48-96
XXXX 2286, 2287, 2288 or 2289	2	96-192
XXXX 2386, 2387, 2388 or 2389	3	144-288
XXXX 2486, 2487, 2488 or 2489	4	192-384
XXXX 2586, 2587, 2588 or 2589	5	240-480
XXXX 2686, 2687, 2688 or 2689	6	288-576

Table 4-5. Practicum SCH Course Ranges

Course Rubric and Number	SCH	Contact Hour Range per Semester
XXXX 1164, 1165, 1166, 1167, 1168, or 1169 XXXX 2164, 2165, 2166, 2167, 2168, or 2169	1	112-160
XXXX 1264, 1265, 1266, 1267, 1268, or 1269 XXXX 2264, 2265, 2266, 2267, 2268, or 2269	2	224-320
XXXX 1364, 1365, 1366, 1367, 1368, or 1369 XXXX 2364, 2365, 2366, 2367, 2368, or 2369	3	336-480
XXXX 1464, 1465, 1466, 1467, 1468, or 1469 XXXX 2464, 2465, 2466, 2467, 2468, or 2469	4	448-640
XXXX 1564, 1565, 1566, 1567, 1568, or 1569 XXXX 2564, 2565, 2566, 2567, 2568, or 2569	5	560-640

Table 4-6. Cooperative Education SCH Course Ranges
(includes one lecture hour per week)

Course Rubric and Number	SCH	Contact Hour Range per Semester
XXXX 1280, 1281, 1282, 1283, 1284, or 1285 XXXX 2280, 2281, 2282, 2283, 2284, or 2285	2	128-176
XXXX 1380, 1381, 1382, 1383, 1384, or 1385 XXXX 2380, 2381, 2382, 2383, 2384, or 2385	3	240-336
XXXX 1480, 1481, 1482, 1483, 1484, or 1485 XXXX 2480, 2481, 2482, 2483, 2484, or 2485	4	352-496
XXXX 1580, 1581, 1582, 1583, 1584, or 1585 XXXX 2580, 2581, 2582, 2583, 2584, or 2585	5	464-656
XXXX 1680, 1681, 1682, 1683, 1684, or 1685 XXXX 2680, 2681, 2682, 2683, 2684, or 2685	6	576- 656

5. Mirror Courses

When a course may be delivered in either a SCH or a CEU format, the course is defined as a “mirror” course and must be offered as published in the WECM. As with other WECM courses, instructional delivery methods are determined by the college. The college may choose to include additional outcomes to provide students an opportunity to master competencies that are above the minimum. However, added outcomes must not substantially change the intent of the course. Institutions seeking to award credit for “mirror” courses taught in CEU format are responsible for meeting the requirements of the Commission on Colleges of the Southern Association of Colleges and Schools, including requirements for faculty qualifications. (Refer to Chapter 3, Section A-2(d) (p.16) and Section B-4(d) (pp. 24-25) of these *Guidelines* for further explanation.)

6. Lower-Division Academic Course Guide Manual (ACGM) Parallel Courses

The *Lower-Division Academic Course Guide Manual (ACGM)* is the official list of courses approved for general academic transfer that may be offered by public community and technical colleges in Texas for state funding.

If a WECM course is parallel in content to an ACGM course, the ACGM course is referenced in the WECM. The ACGM courses are given Texas Common Course Numbering System rubrics and numbers and are intended for transfer toward completion of a baccalaureate program. Although some universities accept the WECM version of a parallel course in transfer, others do not. Colleges are strongly encouraged to use the ACGM version of the parallel course if the faculty member has appropriate credentials to teach a transfer course.

Field of Study Curriculum (FOSC) courses are intended for transfer of lower division course credit to baccalaureate programs at senior institutions of higher education. These courses represent the lower division major requirements for a bachelor's degree in a specific discipline and are always listed in the ACGM. If a WECM SCH course is parallel to an ACGM course designated as part of a FOSC, the WECM course description will be annotated with this information. A WECM course is not technically part of a FOSC, but some universities may accept the course by local agreement.

7. Developmental Education Courses

Developmental education courses include compensatory material that is below college level. They cover topics such as reading, writing, mathematics, study skills, and English as a Second Language. Developmental education courses are available only in the *Lower-Division Academic Course Guide Manual*. The WECM courses are not intended to provide developmental instruction.

8. Vendor-Authorized and Generic Non-Vendor Courses

The WECM contains vendor-authorized courses written specifically to accommodate instructional requirements of commercial vendors. These courses were developed for use only by colleges that are authorized by a vendor to offer the vendor's curriculum. In most cases, vendor-authorized courses have generic non-vendor course alternatives. These non-vendor course alternatives contain similar outcomes as those in vendor-authorized courses. However, they are designed for colleges that are not vendor-authorized. Both vendor-authorized courses and the non-vendor course alternatives are flagged in the WECM.

9. Courses Required by Licensure, Certification, or Accreditation Agencies

When applicable, the name of a Texas licensing or certifying agency, board, or association is included beneath the SCH and CEU end-of-course outcomes for each applicable course. State agency references are published in the Directory of Licensed Occupations and Apprenticeship Program Contacts in Texas published by Career Development Resources (CDR). National certification and accreditation bodies are identified by instructional specialists for the WECM Maintenance Project but are generally not listed with the course information on the inventory. When notified by the Coordinating Board of changes to licensure, certification, or accreditation requirements that affect WECM courses, the Maintenance Project works with qualified instructional specialists to revise the courses in question.

10. CEU Professional Development Certification Courses

A CEU professional development update course with a range of 7-24 contact hours is available in appropriate CIP codes and rubrics to assist colleges in meeting mandatory licensure and certification continuing education requirements. For a complete list of approved professional development courses, enter "professional development" under "course title" on the WECM search page.

11. WECM Short-Hour Continuing Education Unit (CEU) Courses

Courses that have a designated range of 7-40 contact hours are available in the WECM and may be used to provide workforce skills or to enhance existing skills. These courses are intended to be offered for continuing education units (CEU) only and they do not have SCH mirror courses.

12. SCH Single-Course Delivery

In response to local need, colleges may offer a select number of individual SCH courses that are available in the WECM even if the college does not have an approved program in the same CIP code. However, the linking of WECM courses to develop a program without obtaining THECB program approval is not permitted. For each academic year and within any program CIP Code, a college may offer a maximum of 14 SCH of courses in an area where no approved program exists provided the following requirements are met:

- a. No more than two courses or eight SCH (whichever is greater) are offered in any one semester, and no more than 14 SCH are offered in any one year;
- b. Courses may be WECM courses, including SCH Special Topics and/or Local Need courses, but must not be external learning courses; and
- c. Faculty teaching the courses must meet all SACS requirements.

E. Maintenance Process for WECM Courses

All WECM courses are reviewed at least once every three years under the guidance of the WECM Project. Prior to selecting the subject areas to be reviewed, the WECM Project Director and the WECM Leadership Committee consider new and emerging occupations, changing technologies, and field comments. Led by workforce education administrators, instructional specialists may create, revise, and/or archive courses based on important factors such as technological advances; course utilization; Local Need course requests; trends in Special Topics courses; and requirements of licensing, certifying, or accrediting bodies. The review of WECM courses involves instructional specialists and other content experts from around the state.

The WECM website enables colleges to search for courses by CIP code, rubric, number, title, description, end-of-course outcomes, SCH and/or CEU options. Results of recent WECM course reviews and a schedule of future WECM Course Review Workshops are posted on this website. The website also provides links to other pertinent information related to workforce education. The URL for the WECM website is:

<http://www.thecb.state.tx.us/AAR/UndergraduateEd/WorkforceEd/wecm2000/index.htm>.

Readers are invited and encouraged to submit comments concerning WECM courses and processes through the WECM website. To submit a comment, click on the "WECM Comments" link.

1. New Courses

New SCH and CEU courses may be added to the WECM upon the recommendation of instructional specialists reaching consensus during a course review. Justifications for a new course include new technology, new licensure, certification, or accreditation requirements; and/or a large number of similar Local Need and Special Topics courses submitted. A newly written course must not replicate an existing WECM course. A new course may be used as soon as it is officially posted on the WECM website.

2. Revised Courses

Instructional specialists review each SCH and CEU course at least once every three years for currency, frequency of utilization, and needed modifications. Such elements as end-of-course outcomes, course descriptions, title, contact hour range, SCH and CEU options, CIP code, and rubric are reviewed. After the instructional specialists reach consensus, the revised course is recommended for inclusion in the WECM. Once the course is posted by the Coordinating Board on the WECM website it is available for immediate use. The existing course may be used until August 31 of the next fiscal year. After this date, the revised course must be used to avoid funding problems.

3. Corrected Courses

Administrative corrections are made to WECM courses by the WECM Maintenance Project upon approval by the WECM Leadership Committee. These corrections are generally minor such as grammatical or spelling changes. In rare instances, Coordinating Board staff remove a course for administrative reasons. For example, some developmental education courses were inadvertently placed in the WECM and were later removed (see entry on "Developmental Education Courses" in Section D7, above).

4. Archived Courses

Archiving is the process of removing unused, invalid, or duplicated courses from the WECM. A course may be archived in one of two ways: 1) from a recommendation made by instructional specialists or 2) due to lack of use during the most recent five year period. An archived course is no longer available for use and is no longer eligible for state reimbursement. Archived courses will not be reinstated in the WECM. However, for future reference, an archived course database will be maintained by the Coordinating Board.

5. Archive-Pending Courses

A list of courses that will be archived at the end of the next cycle will be posted on the WECM website before the courses are removed from the WECM course inventory. These are "archive-pending" courses. Generally, an archive-pending course will remain active for a minimum of one annual cycle beginning September 1 and ending August 31. In some instances, a different schedule will apply and the expiration date for the course will be provided on the WECM inventory. Generally, if an archive-pending course is offered by a college and reported to the Coordinating Board prior to the official date of archive, the course will not be archived but will remain in the WECM.

Chapter Five New Program Approval Process

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A. Overview of the New Program Certification Process

At its October 29, 2009 meeting, the Coordinating Board adopted rules that significantly streamline the process of approval for new associate of applied science degree and certificate programs (Chapter 9, Subchapter E, Section 9.93). In summary, the adopted rules allow automatic approval of a new associate of applied science degree or certificate program if an institution and governing board certify that the criteria are met and that current documentation is available to support the criteria. Specifically, the criteria include the following:

1. The program has institutional and governing board approval;
2. The institution has researched and documented current job market need for the program and/or that the program would lead to opportunities for further education;
3. There is recent evidence of both short-term and long-term student demand for the program;
4. Enrollment projections reflect student demand estimates to ensure the financial self-sufficiency of the program;
5. Basic and career technical/workforce skills have been integrated into the curriculum;
6. The institution has an enrollment management plan for the program;
7. The institution has or will initiate a process to establish articulation agreements for the program with secondary and/or senior level institutions;
8. The program is designed to be consistent with the standards of the Southern Association of Colleges and Schools Commission on Colleges of the Southern Association of Colleges and Schools, and with the standards of other applicable accrediting agencies, and is in compliance with appropriate licensing authority requirements;
9. The program would not unnecessarily duplicate existing programs at other institutions;
10. Representatives from private sector business and industry have been involved in the creation of the program through participation in an advisory committee;
11. Adequate funding is available to cover all new costs to the institution over the first five years after the implementation of the program;
12. New costs during the first five years of the program would not exceed \$2 million
13. The institution has an improvement plan in place for all career technical/workforce programs that do not currently meet Board standards for both graduation and placement;
14. The appropriate Higher Education Regional Council has been notified in writing of the proposal for a new program; and
15. Skill standards recognized by the Texas Skill Standards Board, if they exist for the discipline, have been reviewed and considered for inclusion in the curriculum for the program.

The criteria listed above must meet the most current requirements listed in Chapter Three of these Guidelines. The institution must maintain documentation supporting these criteria on file and available upon request by Coordinating Board staff.

A new applied associate degree or certificate program that meets these criteria may be requested using the Certification Form for New Associate of Applied Science and Certificate Programs and is automatically approved if no objections are received during the 30-day public comment period. The institution's program inventory will be updated accordingly and

a letter of approval will be sent to the institution.

a. New Program Approval Required

Colleges must submit a New Program Certification Form under the following circumstances:

- (1) To create a certificate, including an advanced technical certificate or a Field of Study Completion certificate, or an associate degree (AAS, AAA, AS, AA, or AAT) in a program for which the college has no current offerings on its inventory, or in a program which has been deactivated for over three years;
- (2) To create an associate degree in a program in which the college has only certificate offerings on its inventory; or
- (3) To offer a sequence of workforce continuing education courses for which the total number of contact hours for the sequence is 360 or more (see Chapter Three).

A New Program Certification Form is not required to add certificates to an existing program. For this purpose, an application for program revision may be used (see Chapter Six).

If a licensing agency requires confirmation that a program is approved by the Coordinating Board, the institution may request that a letter be sent to the appropriate agency affirming Coordinating Board approval.

b. Distance Education Programs

To offer distance education or off-campus courses or programs for funding, a college must have an approved "Institutional Plan for Distance Education and Off-Campus Instruction." Please refer to Chapter Two of these Guidelines and the *THECB Rules and Regulations*, Chapter Four, Subchapter P, Approval of Distance Education Courses and Programs for Public Institutions at: <http://www.thecb.state.tx.us/apps/Laws/default.cfm>.

c. Application Deadlines

Program certification forms must be received at least 30 days prior to the start date of the program in order to allow an adequate amount of time for public comment.

d. Texas Skill Standards Board Recognition

Institutions seeking approval for new workforce education programs are eligible to apply for program recognition from the Texas Skill Standards Board (TSSB). This process is optional and applies only to disciplines for which skill standards have been developed. To apply for TSSB program recognition, the institution must document that Texas skill standards, where recognized or conditionally recognized by the TSSB, have been fully incorporated into the curriculum. (To see the list of TSSB recognized and conditionally recognized skill standards, visit the Texas Skill Standards Repository website at: www.tssb.org.)

B. Application Procedures and Requirements

1. Letter of Intent to Apply for New Workforce Education Program

A letter of intent shall be sent to the chair(s) of the appropriate Higher Education Regional Council(s) and to the appropriate local workforce development board(s). For a listing of local workforce development boards, please go to www.texasworkforce.org/dirs/wdbs/wdbmap.html. (See sample Letter of Intent at the end of this chapter.) The institution is no longer required to send a copy of this letter to the Coordinating Board.

2. Electronic New Program Application Forms

Public colleges must submit new program applications electronically if they include any Local Need courses that are not currently on the college's approved Local Need course inventory. The inventory of currently approved Local Need courses can be found at: www.txhighereddata.org/Interactive/CourseInventory.cfm under "WECM (Technical) Courses."

3. Supporting Documentation for New Program Development

This section outlines the supporting documentation that institutions should maintain to demonstrate proper new program design and implementation. Additional documentation may be requested during the new program approval process. Please submit this additional information only when specifically requested by Coordinating Board staff.

a. Documentation of Workforce Demand for the Program

The proposed program must be justified in terms of labor market information documenting pertinent local, regional, and/or statewide workforce demand for the program. Links to data sources and tools from the Texas Workforce Commission have been consolidated on the web at:

<http://socrates.cdr.state.tx.us/iSocrates/Files/GIPWE.asp>. To satisfy this requirement, institutions must document at least *two* of the following:

- (1) The program would prepare students for an occupation that has been documented as needed from a strategic planning website such as CCBenefits Inc. (now part of Economic Modeling Specialists Inc.);
- (2) The program would prepare students for an occupation that is targeted by the local workforce development board in the institution's service area or local workforce development area;
- (3) The program would prepare students for an occupation that is on the list of priority occupations for the region or the state as identified by the Texas Workforce Commission. Visit the TWC website at: <http://www.twc.state.tx.us/twc.html>;
- (4) The program would prepare students for an occupation that has been identified as an emerging and evolving occupation for the region or state by Career Development Resources (CDR). See CDR website at: <http://www.cdr.state.tx.us/>;

- (5) Publications of the Bureau of Labor Statistics (BLS) of the U.S. Department of Labor indicate high demand for the occupation for the next five to 10 years. Visit the BLS website at: <http://stats.bls.gov/bls/home.html>;
- (6) A survey of local or regional employers documents sufficient employment opportunities for the projected enrollment in the program. If a survey is used, documentation should include the type of survey (phone, mail, etc.); description and size of the population; description of sampling techniques; number and location (in district, service area, and/or statewide) of employers surveyed, including the total number of surveys sent and the number returned; number of usable responses; salary ranges and employment opportunities by job title; and demonstration that the program education or training results in added value or an entry level wage higher than minimum wage and/or a standard of living above poverty;
- (7) Advisory Committee Recommendations;
- (8) Occupational Information Network (O*NET); or
- (9) New regulatory/accrediting requirements.

b. Assurance of Basic and Workforce Skills

It is not necessary to submit this information, but the college must document that the appropriate level of academic and workplace skills would be achieved upon completion of the described curriculum. (See examples of SCANS Matrix Model and Program Competency Profile at the end of Chapter Three.)

To document students' attainment of basic academic skills, the institution must either designate the program as TSI-eligible or follow the guidelines for assessment and remediation of students as outlined in Chapter Three of these *Guidelines* and in Coordinating Board rules, Chapter 4, Subchapter C.

c. Enrollment Management Plan

The institution should design a program-specific enrollment management plan. The plan should provide evidence that the proposed new program would have sufficient enrollment to support the program, including a(n):

- (1) identification of articulated feeder institutions and programs (e.g., high schools participating in 2+2 and/or Tech Prep programs);
- (2) strategy for enrollment projection and management that includes student recruitment and program marketing;
- (3) plan that specifies activities for access, recruitment, retention, and placement of students from special populations;
- (4) history of enrollment in related continuing education/workforce education courses (if applicable); and
- (5) projected enrollment, including the anticipated number of program majors for the first year of program operation, the anticipated average annual enrollment thereafter, and the anticipated annual number of graduates once the program is fully implemented.

NOTE: To ensure the viability of a program, a minimum enrollment of 20 students per year is recommended for most programs.

d. Program Linkages and Demonstration of Non-Duplication

Each program (or group of similar programs) should have documented linkage(s) with public secondary schools and/or other institutions of higher education and non-duplication with similar programs within the higher education region and/or service area. Documentation should include (as applicable):

- (1) identification of similar workforce education programs and related training programs in the region/service area (information available on the Coordinating Board website at: <http://www.thecb.state.tx.us>);
- (2) documentation that contact has been made with appropriate institutional administrators to initiate program specific articulation;
- (3) a timeline for the formal initiation of these linkages;
- (4) a statement specifying the form(s) of program linkage(s) that will be initiated [e.g., inverted degree plans, advanced placement, 1+1 programs, 2+2(+2), and/or Tech Prep programs]; and/or
- (5) documentation that clearly justifies the need for any proposed program that duplicates an existing program in the region or service area. Colleges wishing to enter contractual agreements with non-regionally accredited organizations should consult the Coordinating Board's Rules, Chapter Nine, subchapter G. Independent school districts, colleges, degree granting career schools and colleges, and/or apprenticeship sponsors must obtain approval from the Texas Education Agency and the Coordinating Board to utilize the Tech Prep Program designation for new or revised programs.

e. External Agency Approval, Certification, and Accreditation

The institution shall document the process and time line for any required or voluntary external agency approval or accreditation required to ensure the eligibility of graduates to take the examinations required for certification, licensure, or registration. Letters demonstrating communication with the appropriate approval agency and documentation of the required process shall be available.

f. Resources Required for Program Operation

The institution should detail the initial resources needed for the program, including existing and additional faculty, facilities, equipment, and an estimate of annual operating costs. Specific areas to address include:

- (1) Faculty: For applied associate degree programs, at least one full-time faculty member with appropriate credentials must have his or her primary teaching assignment in the major, curriculum area, or concentration. All certificate programs must have at least an assigned program coordinator who is a full-time employee of the college and faculty with appropriate credentials (see Chapter Two);
- (2) Facilities: These must be adequate for the delivery of the program. All out-of-district or off-campus resources must be adequate to support a program of quality equal to that of the main campus;

- (3) Equipment: A general list of major required equipment, estimated costs, and potential donations must be provided. Any equipment or supplies that would be donated must be noted in this section; and
- (4) Five-year Costs and Revenue: Details of how the institution will meet projected new program costs for the first five years, including personnel, operating expenses, and capital outlay must be provided.

g. Advisory Committee Minutes

The institution must keep on file minutes of all advisory committee meetings conducted for the planning of the program, as well as a list of all advisory committee members, including their names, titles, and employers. The minutes from at least two formal advisory committee meetings held prior to submitting the new program application should clearly document industry support.

C. New Program Review Process

When developing a new program, institutions are encouraged to consult with Coordinating Board staff as well as members of other appropriate state agencies and the appropriate local workforce development board(s).

1. Staff Review of the Application

Colleges should receive notification of approval 30-45 days after the program's posting on the Coordinating Board's website. For Program Certification Forms that are incomplete or require substantial changes, 60 days will be allotted from the time the application is received to resolve all problems.

An institution may request staff assistance in developing a new program. This is especially important when the program would be the first of its kind in the state and/or no WECM courses are available for the program area.

2. Objections to Proposed New Programs and Resolution of Disputes

Objections raised by an institution to another institution's proposed new career technical/workforce education program must be submitted in writing to the Assistant Commissioner for Academic Affairs and Research within 30 days from the date the letter of intent is sent to the Higher Education Regional Council. The Assistant Commissioner may delay formal review of the new program until objections are removed.

In the event of a dispute between or among institutions that cannot be resolved by the institutions, the Commissioner may appoint a three member representative panel to be chosen from among the voting members of other Higher Education Regional Councils. The panel will conduct a hearing and subsequently recommend to the Commissioner a resolution to the conflict. This procedure may be implemented at the request of any institution involved in the dispute.

3. Coordinating Board Approval

Associate degree and certificate programs must be referred to the Coordinating Board if they are the subject of an unresolved grievance or dispute. Other programs may be referred to the Coordinating Board at the Assistant Commissioner's discretion.

4. Implementation Deadline

Programs must be implemented within 18 months of the approved implementation date as stated by the Assistant Commissioner in the approval letter. To pursue new program implementation after that time, the college must submit a new Program Certification Form.

5. Appeals Procedure

All appeals of Coordinating Board decisions regarding new program approval should begin by contacting an appropriate member of the Career Technical Programs staff. If the institution and the Coordinating Board staff are unable to resolve the matter, the institution may submit a written request for a ruling from the Assistant Commissioner for Academic Affairs and Research. The institution shall be notified in writing of the Assistant Commissioner's decision within 30 working days. An institution may appeal the Assistant Commissioner's decision directly to the Commissioner and ultimately to the Coordinating Board under the provisions of Coordinating Board Rules Chapter One, Section 1.25.

D. Examples and Forms

Example Letter of Intent

[*date*]

Chair, Higher Education Regional Council
Chair, Local Workforce Development Board

Dear _____:

Please be advised that _____ [*college*] intends to apply for a new workforce education program leading to a [*certificate/associate of applied science or associate of applied arts degree/ advanced technical certificate*] in [*name of major*].

It is our intent to submit an application for program approval to the Coordinating Board staff by [*applicable due date; see approval process deadlines*], and, if the program is approved, for [*semester/year*] implementation.

If members of the Higher Education Regional Council or the Local Workforce Development Board have questions about our intent to offer this program, please inform me as soon as possible.

Sincerely,

[*name of president*]
[*name of college*]

**Certification Form for New Associate of Applied Science Degree
and Certificate Programs
Texas Higher Education Coordinating Board**

Directions: An institution shall use this form to request a new associate of applied science degree or certificate program that meets all criteria for automatic approval in Coordinating Board Rules, Chapter 9, Subchapter E, Section 9.93.

Information: Contact the Division of Academic Affairs and Research at 512/427-6200 for more information.

Program Information

1. Institution:
2. Program Name:
3. Proposed CIP Code:
4. Number of Required Semester Credit Hours (SCH):
5. Implementation Date: Report the first semester and year that students would enter the program.
6. Contact Person: Provide contact information for the person who can answer specific questions about the program.

Name:
Title:
E-mail:
Phone:

Signature Page

I hereby certify that all of the following criteria have been met in accordance with the procedures outlined in Coordinating Board Rules, Chapter 9, Subchapter E, Section 9.93, and that recent documentation is available to support these criteria:

- (A) The program has institutional and governing board approval;
- (B) The institution has researched and documented current job market need for the program and/or that the program would lead to opportunities for further education;
- (C) There is recent evidence of both short-term and long-term student demand for the program;
- (D) Enrollment projections reflect student demand estimates to ensure the financial self-sufficiency of the program;

(E) Basic and career technical/workforce skills have been integrated into the curriculum;

(F) The institution has an enrollment management plan for the program;

(G) The institution has or will initiate a process to establish articulation agreements for the program with secondary and/or senior level institutions;

(H) The program is designed to be consistent with the standards of the Southern Association of Colleges and Schools Commission on Colleges of the Southern Association of Colleges and Schools, and with the standards of other applicable accrediting agencies, and is in compliance with appropriate licensing authority requirements;

(I) The program would not unnecessarily duplicate existing programs at other institutions;

(J) Representatives from private sector business and industry have been involved in the creation of the program through participation in an advisory committee;

(K) Adequate funding is available to cover all new costs to the institution over the first five years after the implementation of the program;

(L) New costs during the first five years of the program would not exceed \$2 million;

(M) The institution has an improvement plan in place for all career technical/workforce programs that do not currently meet Board standards for both graduation and placement;

(N) The appropriate Higher Education Regional Council has been notified in writing of the proposal for a new program;

(O) Skill standards recognized by the Texas Skill Standards Board, if they exist for the discipline, have been reviewed and considered for inclusion in the curriculum for the program.

I understand that the Coordinating Board will update the program inventory for the institution if no objections to the proposed program are received during the 30-day public comment period.

Chief Executive Officer Date

I hereby certify that the Governing Board has approved this program.

Date of Governing Board approval: _____

Governing Board (or Designee) Date

These forms may be uploaded electronically to the Coordinating Board by accessing the Degree Program and Administrative Change Request System website at: <https://www1.thecb.state.tx.us/apps/proposals/>. Instructions for using this site are included on the website.

Chapter Six Program Revisions

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A. Need for Program Revisions

Once an AAS or an AAA degree or certificate is approved and has been placed on the college's career technical/workforce education program inventory, changing it may require a formal program revision. Applications for revision of certificate and degree programs must be submitted electronically through the WECM website at:

<http://www.thecb.state.tx.us/AAR/UndergraduateEd/WorkforceEd/inventory/>. If the change would significantly alter the program outcomes, the institution must submit an Application for a New Program (see Chapter Five).

NOTE: A revision will not be approved if it causes an associate degree to exceed 72 SCH or causes any of the requested awards to exceed the maximum lengths described in Chapter Three.

1. Changes That Require a Program Revision

A program revision is required for the following changes in a program (as defined in Chapter 3):

- a. To change the name of an AAS/AAA degree or certificate.
- b. To request a change in the CIP code of a degree or certificate to a different CIP code in the same program.
- c. To add a new Semester Credit Hour (SCH) or Continuing Education (CE) certificate to an existing degree or certificate program.
- d. To add an Advanced Technical Certificate to an existing program (see Chapter Three for details).
- e. To revise the curriculum of an award in any of the following ways:
 - (1) Any new Special Topics or Local Need courses are added to the curriculum (refer to Chapter Four for guidelines on using Local Need and Special Topics courses);
 - (2) The total number of credit hours in the award is increased or decreased by more than six SCH from the number of SCH on the college's approved program inventory or by 100 contact hours in CE;
 - (3) The length of the award is increased or decreased by one semester or more;
 - (4) The certificate status changes from Level 1 (TSI-waived) to Level 2 (TSI-liable) or from Level 2 to Level 1; or
 - (5) Any academic courses are replaced by WECM courses or any WECM courses are replaced by academic courses.
- f. To deactivate an award.
- g. To reactivate an award (within three years of deactivation).
- h. To close an award.

2. Changes That Do Not Require a Program Revision

Provided that none of the above changes are requested, a program revision is NOT required:

- a. To increase or decrease the number of credit hours in a Semester Credit Hour (SCH) award by six SCH or fewer, provided that the total number of SCH still falls within the allowable range for that type of award OR to increase or decrease the number of Continuing Education Units (CEU) in a Continuing Education award by 100 contact hours or fewer, provided that the total number of contact hours still falls within the allowable range for a CE award (360-780). NOTE: If the change would be more than six SCH from the number currently on the program inventory (or 100 contact hours for continuing education), a revision is required.
- b. To substitute WECM courses for other WECM courses (except if Local Need or Special Topics courses are being added or removed).
- c. To substitute ACGM courses for other ACGM courses (provided SACS general education requirements are still met).
- d. To convert to a Tech Prep program (providing no other changes which would require a program revision are made to the post-secondary curriculum).

It should be noted that even in cases when a program revision is not required, colleges are encouraged to electronically submit program updates at any time prior to the requested implementation date in order to keep their online curriculum outlines current.

3. Changes That Require a New Program Application

A New Program Application is required under the following circumstances:

- a. To add a new AAS or AAA degree.
- b. To add a new degree or certificate (credit or continuing education) in a program area that is not currently on the college's inventory.
- c. To reactivate an award three years or more after it has been deactivated.
- d. To make any changes that significantly alter the program outcomes.

4. Application Deadlines

Applications for program revisions must be submitted to the Coordinating Board staff at least 45 days prior to the requested implementation date of the changes. Applications received less than 45 days before the implementation date will be handled as time allows. Institutions should be aware that the staff may not be able to review late applications in time for the requested implementation date.

B. Electronic Submission of Program Revisions

In the interest of efficiency, revision applications must be submitted electronically. Information about this process is available on the CB website at: www.thecb.state.tx.us/AAR/UndergraduateEd/WorkforceEd/inventory/ or through the WECM website under "Electronic Submissions" at: www.thecb.state.tx.us/AAR/UndergraduateEd/WorkforceEd/wecm2000/index.htm.

C. Components of Program Revision Applications

The following information will be required to complete and submit the application.

1. The Institution's six-digit FICE code and authorized password: A valid password is required to gain access to the electronic submission system. The password is assigned to the college's technical dean or vice president of instruction and may be requested by contacting Duane.Hiller@thecb.state.tx.us.
2. Action to be taken: Select the appropriate action (see Section D of this chapter for further explanation). Options include:
 - a. Add an award to an existing program;
 - b. Revise an award;
 - c. Convert an award to Tech Prep;
 - d. Reactivate an award;
 - e. Deactivate an award;
 - f. Close an award; and
 - g. View and/or edit a revision currently saved "In Progress."
3. Program CIP Code and Award CIP Code: Please refer to the Degree Program (Clearinghouse) Awards inventory via the Inventory Browse Portal (www.txhighereddata.org/Interactive/CourseInventory.cfm/) for accurate CIP code assignments.
4. Correctional Facility: Revisions to awards offered both at the main campus and at a correctional facility must be submitted as separate awards. (Awards offered at correctional facilities cannot be Tech Prep.)
5. Effective Date: Select the effective date for the revision from the list of choices offered.
6. Award Sequence: Provide the award sequence as it appears on current THECB program inventory. This information is available using the Inventory Browse Portal.
7. Award type: Provide award code for each award.
 - a. AAS Associate of Applied Science Degree (60 - 72 SCH)
 - b. C1 Certificate level one (15-42 SCH)
 - c. C2 Certificate level two (43-59 SCH)
 - d. ESC Enhanced skills certificate (6-15 SCH)

- e. ATC Advanced technical certificate (16-50 SCH; see Chapter Three)
- f. CE Workforce continuing education program (0 SCH; 360-779 contact hours)

8. Award title: Provide the award title as it should appear on the institution's inventory.

9. Contact information: Provide contact information for the authorized institutional official and the contact person for the program.

10. WECM Special Topics Course Submission. (See Chapter Four)

11. WECM Local Need Course Submission. (See Chapter Four)

12. Proposed Curriculum Outline.

D. Program Revision Procedures

1. Conversion/Revision to a Tech Prep Award

Converting a program or award to Tech Prep does not require a program revision. Refer to Chapter Seven for additional information.

2. Program Deactivation

a. Notice of Program Deactivation: An institution may deactivate a program by suspending new student enrollment and submitting an electronic Application for Program Deactivation to the Coordinating Board. Institutions should have on file and available for Coordinating Board staff review provisions for teaching out currently enrolled students.

b. Deactivation Time Limit: A program may remain deactivated no longer than three academic years. A program that is not reactivated by the institution within three years will be closed by the Coordinating Board.

3. Program Reactivation

To reactivate a deactivated program, the institution must submit an electronic Application for Program Reactivation that includes the proposed curriculum outline. The institution must have on file and available for Coordinating Board staff review a description of how it has corrected or will correct the reason(s) for which the program was deactivated.

NOTE: A program can only be reactivated within three years of being deactivated. If more than three years have lapsed, a new program application is required.

4. Institution Initiated Closure

A program or award may be closed voluntarily by an institution. If students are currently enrolled in a program that the college wishes to close, the program should be

deactivated before being formally closed.

An institution must submit an electronic Application for Program Closure to notify the Coordinating Board staff of its intent to close a program. Institutions should have on file and available for Coordinating Board staff review the reason(s) for closure and provisions for teaching-out currently enrolled students.

Closed programs may only be reopened if they are resubmitted as new programs.

E. Staff Review of Revision Application

Program revisions will be reviewed by the Coordinating Board. Revised awards must meet the same general guidelines set for workforce education programs in Chapter Three as well as the standards for New Programs in Chapter Five.

Program revisions must receive Coordinating Board approval prior to implementation by the institution. Failure to submit a properly completed application or failure to provide additional information as requested by staff in a timely manner may delay the approval process. Notice of receipt and/or approval will be posted electronically on the THECB Community and Technical Colleges Electronic Program Status Notification Page at:
<http://www.thecb.state.tx.us/AAR/UndergraduateEd/WorkforceEd/electronic/index.cfm>.

A program is considered approved only when an "A" is listed in the "Act" column and the date of approval is shown in the "Notif. Date" column. If any changes were requested by the college or made by CB staff, the changes will be described in the "Notes/Comments" column. Instructions for use are provided on the website.

F. Appeals Procedure

All appeals of Coordinating Board decisions regarding program approval, revision, evaluation, deactivation, and closure should begin by contacting an appropriate member of the Career Technical Programs Department staff. If an institution and Coordinating Board staff members are unable to resolve the matter, the institution may request a ruling from the Assistant Commissioner for Academic Affairs and Research. In such cases the institution shall be notified of the Assistant Commissioner's decision within 30 working days of receiving the request. An institution may appeal the Assistant Commissioner's decision to the Commissioner of Higher Education and ultimately to the Coordinating Board under the provisions of Coordinating Board Rules Chapter 1, Section 1.55.

Chapter Seven
GLOSSARY

1+1 program. An articulated, competency-based workforce education program offered by community and technical colleges where the first year of academic and technical study is offered by one institution and the second year is offered by a second participating institution that offers the applied associate degree.

2+2 program. An articulated, competency-based workforce education program that links the last two years of secondary education with the first two years of higher education to create a four-year academic and technical curriculum. These 2+2 programs do not necessarily meet all the requirements of a Tech Prep program.

2+2+2 program. An articulated, competency-based workforce education program that links a 2+2 program to the last two years of higher education and that results in a baccalaureate degree. These 2+2+2 programs do not necessarily meet all the requirements of a Tech Prep program.

AAA. See *Associate of Applied Arts degree program*.

AAS. See *Associate of Applied Science degree program*.

ACGM. See *Lower Division Academic Course Guide Manual*.

AOS. See *Associate of Occupational Studies degree program*.

Academic. A term referring to courses and programs designed for transfer.

Academic Associate Degree. A type of degree program leading to the Associate of Arts (AA) or Associate of Science (AS) degree and intended to transfer to a four-year college or university.

Academic year. A 12-month period, which may vary from institution to institution, but generally begins on September 1 and ends on August 31 for state reporting purposes.

Accreditation. A process signifying that an institution has a purpose appropriate to higher education, and resources, programs, and services sufficient to accomplish its purpose on a continuing basis. Colleges in Texas should refer to the *Principles of Accreditation* (replaces the *Criteria for Accreditation*) by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS).

Advanced technical certificate. A certificate that has a specific associate or baccalaureate degree (or, in some circumstances, junior-level standing in a baccalaureate degree program) as prerequisite for admission. It must consist of at least 16 and no more than 50 SCH. It must be focused, clearly related to the prerequisite degree, and justifiable to meet industry or external agency requirements.

Advisory committee. A group of business or industry representatives whose purpose is to advise the college on the needs for a particular program. The committee advises on matters of curriculum, instructor qualifications, and equipment and facility requirements needed to assure

that graduates will have appropriate skills for employment in the business or industry upon graduation.

Affiliation agreement. Documentation between a college and business/industry affiliate defining an educational partnership, and specifying conditions, roles, and time lines.

Annual Data Profile (ADP). A report (data profile) prepared by the Coordinating Board staff from college-generated data and program information to be used by the colleges to conduct institutional effectiveness self-assessments and institutional plans for new program review and program revisions. The ADP summarizes annual progress by each college toward meeting state-level goals.

Applied associate degree. A type of degree program designed to lead the individual directly to employment in a specific career. Refers to the associate of applied arts and the associate of applied science degrees. The term “applied” in an associate degree name is the distinguishing characteristic of the technical nature of the college work. See *Associate of Applied Arts* and *Associate of Applied Science*.

Apprenticeship training program. A program, registered with the U.S. Department of Labor or the state apprenticeship agency in accordance with the National Apprenticeship Act (29 U.S.C. 50), that is conducted or sponsored by an employer, a group of employers, or a joint apprenticeship committee representing both employers and a union, and that contains all terms and conditions for the qualification, recruitment, selection, employment, and training of apprentices. These programs must be certified by the Bureau of Apprenticeship and Training (BAT) of the U. S. Department of Labor.

Articulation. A planned process linking educational institutions and experiences to assist students in making a smooth transition from one level of education to another without experiencing delays or duplication in learning. Examples of articulation include advanced placement, 2+2 programs, 2+2+2 programs, and Tech Prep Associate of Applied Science degree programs.

Articulation agreement. A commitment to a program designed to provide students with a non-duplicative sequence of progressive achievement. Such an agreement might be signed between two institutions, such as high schools and colleges or between two-year and four-year institutions to promote the transfer and success of students.

Assessment (of students). All colleges must have policies and procedures for the proper assessment of students in basic skills of reading, writing, and math to ensure proper advising and course placement. A college may either use one of the designated tests for the Texas Success Initiative program or an assessment instrument of its choice and determine its own cut scores for purposes of course placement. National studies have shown that proper assessment and course placement help promote student success, satisfaction, and retention.

Associate of Applied Arts (AAA) degree program. A program of study designed for immediate employment and/or career advancement that emphasizes the application of artistic principles and the humanities through an orderly, identifiable sequence of courses. The degree program is composed of technical courses, general education courses, related instruction

courses, and, as appropriate, elective courses to prepare students for employment in the performing arts.

Associate of Applied Science (AAS) degree program. A program of study designed for immediate employment and/or career advancement that is composed of an orderly, identifiable sequence of courses designed to meet specific occupational competencies and outcomes. The degree program is composed of technical courses, general education courses, related instruction, and, as appropriate, elective courses to prepare students for employment as technicians or professionals.

Automated Student and Adult Learner Follow-Up System (ASALFS). An automated process that uses employment and education databases to track program completers, verifying their status in terms of employment or further education. The follow-up system is conducted by Career Development Resources (CDR).

Award. The credential granted a student for successful completion of a set curriculum such as a degree or certificate.

BAT. An acronym for the Bureau of Apprenticeship Training of the U.S. Department of Labor.

Capstone experience. A learning experience that results in consolidation and synthesis of program competencies.

Career cluster. A group of related awards or exit options (degrees or certificates) identified by a four- or six-digit CIP code.

Career development personnel. Professional staff members who are employed in the delivery of career development services, which include information and planning, placement, counseling, and guidance as well as testing and assessment.

Career Development Resources (CDR). A unit of the Texas Workforce Commission within the Workforce Information Analysis and Reporting Division. CDR provides career and occupational information software, hardcopy monographs and job hunting guides, labor market and continuing education outcomes data, in-service training, tabloids and other materials to assist students and jobseekers in developing plans for their education and career choices.

Career guidance and counseling. Student services which allow students to evaluate and adjust career plans based upon information on employers, occupations, wages, job openings, skill qualifications, and education and training options.

Career lattices. Programs in different six-digit CIP codes that can be combined into industry-defined career pathways.

Career School or College. A nonpublic, postsecondary educational institution offering applied associate degree programs. Previously known as a proprietary institution. Refer to *THECB Rules and Regulations*, Chapter Seven.

CBM reports. Coordinating Board Management reports required from higher education institutions as condition of eligibility to receive appropriations made by the Texas Legislature. Examples include CBM001 (Student Report), CBM002 (Success Initiative Report), CBM004 (Class Report), CBM00C (Continuing Education Report).

Census date. The official date by which public community and technical colleges must report enrollment data to the Coordinating Board for state reimbursement, e.g., the twelfth class day in a long semester.

CERT1. See *Level One Certificate*.

CERT2. See *Level Two Certificate*.

CERT3. See *Enhanced Skills Certificate*.

Certificate program. A technical program designed for entry-level employment or for upgrading skills and knowledge within an occupation. Certificate programs serve as building blocks and exit points within AAS degree programs. Post AAS certificates are also available.

Certification/licensure/registration. A process sponsored by an agency or association, designed by educators in cooperation with business, industry, and/or labor, that validates and/or certifies the skills and learning experiences of a candidate and enters the name of the successful candidate on a registry.

CIP code. The Classification of Instructional Programs (CIP) is a federal taxonomy developed by the National Center for Education Statistics of the U.S. Department of Education and used throughout the nation by government agencies and professional associations to establish standard terminology and record-keeping for higher education programs.

Clinical education. A type of external learning experience whereby the student receives instruction at a sponsoring health professions setting. Clinical practice is supervised by qualified faculty members employed by the educational institution sponsoring the program or by preceptors employed by the clinical site.

Commission on Colleges. The Commission on Colleges of the Southern Association of Colleges and Schools (SACS) is the recognized regional accrediting body in the 11 U.S. southern states, including Texas.

Competency profile. A list of skills and abilities defined and validated by business/industry as necessary to perform tasks related to a particular occupation or cluster of occupations.

Completer. A student who completes a Coordinating Board-approved associate degree, certificate, core curriculum or field of study curriculum.

Concurrent course credit. See *dual credit*.

Concurrent enrollment (dual enrollment). Enrollment by a student in two different institutions simultaneously.

Contact hour. The basic instructional unit for funding purposes. A time unit of instruction consisting of 60 minutes, of which 50 minutes must be direct instruction.

Continuing education certificate. A Coordinating Board approved workforce education certificate containing a coherent sequence of continuing education courses totaling 360 or more contact hours and listed on the college's approved inventory of programs.

Continuing education course. A Coordinating Board-approved higher education technical course offered for continuing education units and conducted in a competency-based format. Such a course provides a quick and flexible response to business, industry, and student needs for intensive preparatory, supplemental, or upgrade training and education and has specific occupational and/or apprenticeship training objectives.

Continuing Education Unit (CEU). Basic unit for continuing education courses. One continuing education unit (CEU) is 10 contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction.

Contract instruction. The delivery of a course or courses to meet the needs of a contracting entity, which may be a business, industry, or external agency. Refer to Chapter Nine of *THECB Rules and Regulations*.

Cooperative education. A type of external learning experience where students receive both lecture instruction and practical experience at a worksite.

Coordinating Board. A reference to the Texas Higher Education Coordinating Board (THECB). The Coordinating Board was created by the Texas Legislature in 1965 and is governed by members appointed from across the state by the Governor for six-year terms.

Coordinating Board staff. Professionals employed by the Texas Higher Education Coordinating Board to implement its policies.

Correctional institution. Any prison, jail, reformatory, work farm, detention center, halfway house, community-based rehabilitation center, or any other similar institution designed for the confinement or rehabilitation of criminal offenders.

Course inventory. A list of courses approved by the Coordinating Board for use by a specific college.

Credential. A license, certificate, registration, or other formal recognition that is legally required in order for a person to practice a specific occupation.

Credentialing authority. A government agency that is authorized to grant credentials, or a private organization that is generally recognized and accepted as the grantor of credentials.

Developmental courses. Courses designated as remedial or compensatory to help students develop basic skills. Developmental courses approved for state funding are listed in the *Lower Division Academic Course Guide Manual (ACGM)*.

Dual credit. A process by which a high school student enrolls in a college course and receives simultaneous academic credit for the course from both the college and the high school.

Dual enrollment. See *Concurrent enrollment*.

Eligible Program. For Institutional Effectiveness purposes, a program that has been approved for at least three years, is not taught in a correctional facility, and has not been closed or deactivated.

Enhanced skills certificate. A certificate consisting of at least six and no more than 15 semester credit hours and attached to an applied associate degree that provides the student with enhanced skills.

Exit points. Specified points in the sequence of courses in a program at which a student may exit the program, receive a certificate or degree, and possess the competencies required for employment in an identified occupation.

External learning experiences. Competency-based learning experiences, paid or unpaid, that supplement lectures and laboratory instruction and that are offered in business and industry (examples: cooperative education, clinical experience, practicum, internship or apprenticeship).

Field-of-Study Curriculum (FOSC). A set of academic courses that will satisfy the lower-division requirements for a baccalaureate degree in a specific academic area at a general academic teaching institution. A field-of-study curriculum affects academic degree programs at public colleges or universities as designated within the particular field-of-study curriculum.

General education. Academic course work designed to give students a broad general background in selected disciplines.

Graduate. A student who completes a Coordinating Board-approved associate degree or certificate program.

Graduate guarantee. College certification of student competencies as defined by the Program Competency Profile. A college Graduate Guarantee policy allows graduates who are judged by an employer to be lacking in technical job skills identified as exit competencies for their specific degree or certificate program to return to the college for up to nine tuition-free hours of education.

Higher Education Regional Council (HERC). A group composed of representatives from all public higher educational institutions that exist within regional areas of the state. Its purpose is to coordinate planning among institutions by reviewing and recommending to the Coordinating Board institutional plans for out-of-district or distance education offerings.

Institutional award. A course or series of courses with fewer than 15 SCH or 360 CE contact hours that is not part of the Coordinating Board maintained Program Inventory, representing achievement of an identifiable skill proficiency or meeting a student's self-defined educational objective.

Institutional effectiveness. A comprehensive statewide evaluation process that takes into account the resources, processes, and results of an educational institution and its programs and services.

Internship. A supervised, external learning experience for students in non-health professions programs. Students may be paid or unpaid.

Labor market information. Documentation pertinent to local, regional, state, and/or national workforce demand for the program, i.e., targeted occupations identified by an appropriate state or federal agency or committee.

Letter of intent. A written declaration of intent to offer a new program submitted to the Coordinating Board and the Higher Education Regional Council at least 30 days but not more than 180 days prior to submitting a formal application for program approval that indicates the program under development and the expected date of formal submission.

Level One Certificate. A program of study of no more than one year that consists of at least 15 and no more than 42 semester credit hours. Level I certificate programs are exempt from the requirements of the Texas Success Initiative, although all certificate programs must provide for local assessment and remediation of students.

Level Two Certificate. A program of study that consists of at least 43 and no more than 59 semester credit hours. Level 2 Certificates are subject to the requirements of the Texas Success Initiative.

Level Three Certificate. See *Enhanced Skills Certificate*.

Licensing. Legal authorization to practice in an occupational field, granted by a state agency after passage of a formal examination.

Local Need Course. A workforce education course approved for a specific college.

Local Workforce Development Board. Mechanism authorized by the Texas Legislature and used by a local governmental or economic development body to determine the workforce development needs of the area. Refer to the website at: www.twc.state.tx.us/dirs/wdbs/wdbmap.html for a listing of local boards.

Lower Division Academic Course Guide Manual (ACGM). The Coordinating Board's official statewide inventory of lower division academic courses that may be offered for state funding by any community college.

Marketable Skills Achievement Award. A credit program of 9 to 14 SCH or a workforce continuing education program of 144 to 359 contact hours that meet the minimum standard for

program length specified in the federal Workforce Investment Act (WIA) but are too short to qualify as certificate programs on the Coordinating Board program inventory.

Mirror-image course. A *Workforce Education Course Manual (WECM)* course that may be offered in both a SCH and a CEU format.

Non-credit courses. Courses that result in the award of continuing education units (CEU) as specified by SACS criteria. Only courses that result in the award of CEU may be submitted for state funding.

Occupational Employment Statistics (OES) codes. Five-digit identifiers for occupational clusters that comprise a coding system designed by the U.S. Bureau of Labor Statistics. These codes are used by the Texas Workforce Commission to generate occupational projections and expected industry staffing patterns for Texas.

Options. Different associate degrees in the same CIP code.

Portfolio. A collection or verification of student work, e.g., papers, videos, and assessments, demonstrating student competencies or skills.

Practicum. A type of external learning experience whereby students receive practical experiences in the workplace.

Prerequisite. A course or competency required prior to entering a program or a course.

Principles of Accreditation: Foundations for Quality Enhancement. A document published by the Commission on Colleges for the Southern Association of Colleges and Schools containing statements of performance requirements and advisory suggestions. (Replaces the *Criteria for Accreditation.*)

Program. An organized curriculum directly related to the acquisition and/or upgrading of technical skills which may include several awards. Programs are defined by a CIP code.

Program closure. The process whereby a program is officially discontinued and removed from the program inventory either voluntarily by the institution or by the Coordinating Board through the deactivation process.

Program competencies profile. A matrix or checklist of competencies matched against learning modules or courses in which the competencies will be developed.

Program deactivation. The process whereby an institution suspends all new student enrollments for a maximum of three years to assess program vitality and make revisions without loss of eligibility for state funding or dropping the program and its courses from the program/course inventory.

Program linkage. Agreements between community and/or technical college programs and other educational institutions to facilitate transfer of courses or course credits and promote a seamless educational pathway.

Program reactivation. A formal process to reinstate a program that has been deactivated within the previous three years.

Program revision. The process whereby an institution requests a change to an existing approved program.

Program summary. A short description of a new program written by the college and included in the new program application. It includes the program description, program need and potential, and program resources.

Remediation. An activity designed to teach basic competencies in such areas as reading, writing, oral communication, and mathematics. See *developmental courses*.

SCANS skills. Skills identified by the Secretary's Commission on Achieving Necessary Skills as needed by American workers entry-level employment.

Skill standard. A standard that specifies the level of knowledge and competence required to successfully perform work-related functions within an occupational cluster.

Shortened semester. A semester that is compressed into fewer than 16 weeks.

Southern Association of Colleges and Schools (SACS). A regional agency that sets standards for colleges and schools desiring accreditation. See *Commission on Colleges*.

Special Topics course. A WECM course that should be used only when course content does not exist in any other WECM course. The Special Topics course is intended for temporary use or transitional content.

Specializations. Concentrations within certificate or applied associate degree programs that reflect the training required for specific occupations within a broad career field and result in the same award. Specializations must share a common core of courses.

Start-up costs. An estimate of the initial five years of resources needed by an educational institution to begin a new program, including personnel, facilities, equipment, and operating expenses.

Student follow-up. See *Automated Student and Adult Learner Follow-up System*.

Sunset review. A formal evaluation process through which programs are reviewed for up to three years by the Coordinating Board for possible closure. Sunset review differs from program deactivation in that the college may continue to enroll new students in the program. (*This classification has been deleted and is no longer in use.*)

Targeted occupations. Occupations for which a workforce demand exists as identified by regional labor market information or local workforce development boards.

TASP. See *Texas Academic Skills Program*.

Tech Prep. A program of study that begins in a secondary school and continues in a community or technical college, resulting in a certificate or associate degree in a career field.

Technical. A term referring to workforce education courses and programs.

Texas Academic Skills Program (TASP). A program that included an examination to assess each student's reading, writing and mathematical skills to determine whether the student is prepared to successfully complete college-level course work. The program also required all institutions to provide developmental courses to prepare students to complete such course work. The TASP was repealed by the Texas Legislature, effective August 31, 2003, and was replaced by the Texas Success Initiative.

Texas Education Code (TEC). Statutes of the State of Texas dealing with education. In general, the statutes dealing with higher education are within Title III of the code.

Texas Higher Education Coordinating Board *Rules and Regulations*. The policies and procedures which regulate the operation of public higher education institutions within the state of Texas. These rules and regulations may be accessed electronically via the Coordinating Board's website at: www.thecb.state.tx.us.

Texas Higher Education Coordinating Board (THECB). See *Coordinating Board*.

Texas Success Initiative (TSI). A comprehensive program of assessment, advising, developmental education, and other strategies to ensure college readiness. Replaces the Texas Academic Skills Program (TASP) on September 1, 2003.

Texas Workforce Commission. The agency established by the Texas Legislature to address welfare reform and workforce development program consolidation.

TSI. See Texas Success Initiative.

TSI-waived. Refers to certificate programs that are not subject to state mandated assessment and remediation requirements.

Unique Need Course. An academic course approved for a specific college or university.

Workforce continuing education course. See *continuing education course*.

Workforce Education Course Manual (WECM). The Coordinating Board's official statewide inventory of workforce education courses.

Workforce demand. The documented need for a program to provide education and training for specific businesses and industries.

Workforce basic skills. See *SCANS skills*.

URL Web Site Addresses

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The following list has been compiled by Career Technical Programs Department staff for the convenience of the readers of the *Guidelines for Instructional Programs in Workforce Education (GIPWE)*. All URL addresses were correct at the time of publication. Except for the Career Technical Programs information on the Coordinating Board's website, the Career Technical Programs department staff takes no responsibility for changes made by the owners of these websites. Any oversights or inaccuracies are unintentional.

A. Coordinating Board Information

Texas Higher Education Coordinating Board Main Website
<http://www.thecb.state.tx.us/>

Texas Higher Education Coordinating Board Rules and Regulations
<http://www.thecb.state.tx.us/Rules/>

Texas Career Technical/Workforce Education Website
<http://www.thecb.state.tx.us/AAR/UndergraduateEd/WorkforceEd/>

Perkins Data Resources
<http://www.thecb.state.tx.us/OS/Grants/Perkins/perkdata/>

B. Federal Government Agencies (General Information)

Centers for Disease Control and Prevention (CDC)
<http://www.cdc.gov/nchs/default.htm>

Integrated Postsecondary Education Data System (IPEDS)
<http://nces.ed.gov/ipeds/>

National Archives and Records Administration (Federal Register)
<http://www.archives.gov/federal-register/index.html>

National Center for Education Statistics (NCES)
<http://www.nces.ed.gov/>

NCES Fast Facts
<http://nces.ed.gov/fastfacts/index.asp>

Occupational Information Network (O-NET)
<http://www.doleta.gov/programs/onet>

Secretary's Commission on Achieving Necessary Skills (SCANS)
U.S. Department of Labor – Employment and Training Administration
<http://wdr.doleta.gov/SCANS/> (*note: case sensitive*)

U.S. Bureau of Labor Statistics Home Page (BLS)
<http://www.bls.gov/>

Occupational Outlook Handbook (online searchable edition)
<http://www.bls.gov/oco/home.htm>

U.S. Department of Education/ Office of Vocational and Adult Education
<http://www.ed.gov/about/offices/list/ovae/index.html?src=mr>

C. State Government Agencies (General Information)

Career Development Resources (CDR) formerly SOICC
<http://www.cdr.state.tx.us/>

Legislative Budget Board (LBB)
<http://www.lbb.state.tx.us/>

State of Texas Official Web Site
<http://www.state.tx.us/>

Texas Commission on Alcohol and Drug Abuse (TCADA)
<http://www.tcada.state.tx.us/>

Texas Commission on Fire Protection (TCFP)
<http://www.tcfp.state.tx.us/>

Texas Department of Criminal Justice (TDCJ)
<http://www.tdcj.state.tx.us/>

Texas Department of Health (TDH) – now part of
Texas Department of State Health Services (DSHS)
<http://www.dshs.state.tx.us/>

Texas Department of Human Services (TDHHS) – now under
Texas Health and Human Services
<http://www.hhs.state.tx.us/>

Texas Education Agency (TEA)
<http://www.tea.state.tx.us/>

Texas Education-Related sites (Links)
<http://www.state.tx.us/>

Texas Electronic Library
<http://link.tsl.state.tx.us/>

Texas Labor Market Information
<http://www.tracer2.com/>

Texas State Occupational Information Coordinating Committee (SOICC)
http://www.borderecoweb.sdsu.edu/bew/drct_pgs/s/soicc.html

Texas Office of the Secretary of State (Texas Register)
<http://www.sos.state.tx.us/texreg/index.shtml>

Texas Workforce Commission/ Apprenticeships
<http://www.twc.state.tx.us/svcs/apprentice.html>

Texas Workforce Commission/ Local Workforce Development Boards
<http://www.twc.state.tx.us/dirs/wdbs/wdbmap.html>

Texas Workforce Commission/ Proprietary Institutions
<http://www.twc.state.tx.us/svcs/propschools/prophp.html>

Texas Workforce Commission/ Workforce Investment Act (WIA) of 1998
<http://www.twc.state.tx.us/boards/wia/txwia.html#wia1998>

D. Higher Education Associations and Information Resources

American Association of Collegiate Registrars and Admissions Officers (AACRAO)
<http://www.aacrao.org/>

American Association of Community Colleges (AACC)
<http://www.aacc.nche.edu/>

American College Personnel Association (ACPA)
<http://www.acpa.nche.edu/>

Association for Career and Technical Education (ACTE)
<http://www.acteonline.org/>

Association for Institutional Research (AIR)
<http://www.airweb.org/>

Association of College & Research Libraries Standards (American Library Association)
<http://www.ala.org/acrl/guides/>

Association on Higher Education and Disabilities (AHEAD)
<http://www.ahead.org/>

Association of Schools of Allied Health Professions (ASAHP)
<http://www.asahp.org/>

Boards of Higher Education in the U.S.
<http://www.regents.state.la.us/board/boardsus.htm>

Career Colleges and Schools of Texas (CCST)
<http://www.colleges-schools.org/>

Center for the Health Professions – PEW Health Professions Commission
<http://futurehealth.ucsf.edu/compubs.html>

Classification of Instructional Programs, 2010 Edition: <http://nces.ed.gov/ipeds/cipcode/>
(2000 Edition: <http://nces.ed.gov/pubs2002/cip2000/>)

ERIC Database (online search function)
<http://www.eric.ed.gov/>

Healthcare Career Resource Center
<http://library.thinkquest.org/15569/>

International Technology Education Association (ITEA)
<http://www.iteaconnect.org/index.html>

NAFSA: Association of International Educators
<http://www.nafsa.org/>

National Association of College and University Business Officers (NACUBO)
<http://www.nacubo.org/>

National Association of Student Personnel Administrators (NASPA)
<http://www.naspa.org/>

National Library of Medicine (NLM)
<http://www.nlm.nih.gov/>

Society for College and University Planning (SCUP)
<http://www.scup.org/>

Southern Regional Education Board (SREB)
<http://www.sreb.org/>

State Higher Education Executive Officers (SHEEO)
<http://www.sheeo.org/>

Texas Association of Institutional Researchers (TAIR)
<http://www.texas-air.org/>

Texas Association of College Registrars and Admissions Officers (TACRAO)
<http://www.tacrao.org/>

Tech Prep Texas Statewide Articulation and Evaluation
<http://www.techpreptexas.org/aboutus.html>

Texas Administrators of Continuing Education (TACE)
<http://www.taceonline.org/>

Texas Association for Developmental Education (TADE)
<http://www.tade.org/>

Texas Association of College Technical Educators (TACTE)
<http://www.tacte.org/>

Texas Common Course Numbering System
<http://www.tccns.org/>

Texas Community College Teachers Association (TCCTA)
<http://www.tccta.org/>

Texas Skill Standards Board
<http://www.tssb.org/>

Texas Society of Allied Health Professions (TSAHP)
<http://tsahp.org/Home/index.htm>

Virtual College of Texas
<http://www.vct.org/>

Western Interstate Commission for Higher Education (WICHE)
<http://www.wiche.edu/>

E. Program or Occupation-Specific Accrediting, Certifying, or Licensing Bodies and Professional Associations (Including Vendor-Based Certifications for Information Technology)

Accrediting Board for Engineering and Technology (ABET)
TAC Technology Accreditation Commission
<http://www.abet.org/>

Accrediting Bureau of Health Education Schools (ABHES)
<http://www.abhes.org/>

American Association of Colleges for Teacher Education (AACTE)
<http://www.aacte.org/>

American Association of Medical Assistants (AAMA)
<http://www.aama-ntl.org/>

American Association for Respiratory Care (AARC)
<http://www.aarc.org/>

American Bar Association (ABA) Standing Committee on Paralegals
<http://www.abanet.org/legalservices/paralegals/>

American Board of Funeral Service Education (ABFSE)

<http://www.abfse.org/>

American Culinary Federation, Inc. (ACF)

<http://www.acfchefs.org/>

American Health Information Management Association (AHIMA)

<http://www.ahima.org/>

American Occupational Therapy Association, Inc. (AOTA)

<http://www.aota.org/>

American Physical Therapy Association (APTA)

<http://www.apta.org//AM/Template.cfm?Section=Home>

American Registry of Diagnostic Medical Sonographers (ARDMS)

<http://www.ardms.org/>

American Society of Clinical Pathologists (ASCP)

<http://www.ascp.org/>

American Society of Clinical Pathologists Board of Registry

<http://www.ascp.org/Certification/default.aspx>

American Society of Health-System Pharmacists (ASHP)

<http://www.ashp.org/>

Association of Collegiate Business Schools and Programs (ACBSP)

<http://www.acbsp.org/>

Association of Surgical Technologists (AST)

<http://www.ast.org/>

Cisco Training and Certifications

<http://www.cisco.com/web/learning/index.html>

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

<http://www.caahep.org/>

Emergency Medical Services Educators' Association of Texas (EMSEAT)

<http://www.emseat.com/>

Emergency Medical Services Association of Texas (EMSAT)

<http://www.texasemsat.org/default.htm>

Federal Aviation Administration (FAA)

Certification Information for Aviation Maintenance Technician Schools

<http://www.faa.gov/>

International Association for Administrative Professionals (IAAP)
<http://www.iaap-hq.org>

Joint Review Committee in Radiologic Technology (JRCERT)
<http://www.jrcert.org>

Microsoft Certified Systems Engineer (MCSE) Information
<http://www.microsoft.com/traincert/mcp/mcse/default.asp>

Microsoft Office Specialist (MOS) Information
<http://www.microsoft.com/learning/mcp/officespecialist/>

National Accreditation Commission of Cosmetology Arts and Sciences (NACCAS)
<http://naccas.org>

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
<http://www.naacls.org>

National Association of Schools of Art and Design (NASAD)
<http://nasad.arts-accredit.org/>

National Council for Accreditation of Teacher Education (NCATE)
<http://www.ncate.org>

National Court Reporters Association (NCRA) Verbatim Reporters Center
<http://www.ncraonline.org>

National Society for Histotechnology (NSH)
<http://www.nsh.org>

National Association of Veterinary Technicians in America (NAVTA)
<http://www.navta.net>

Novell Professional Certifications
<http://www.novell.com/training/index.html>

Texas Board of Nurse Examiners (BNE)
<http://www.bvne.state.tx.us>

Texas Commission on Law Enforcement Officer Standards and Education (TCLEOSE)
<http://www.tcleose.state.tx.us>

Texas State Board of Dental Examiners
<http://www.tsbde.state.tx.us>

Texas State Board of Pharmacy
<http://www.tsbp.state.tx.us>

F. Regional Accrediting Bodies

Middle States Commission on Higher Education (MSCHE)

<http://www.msche.org/>

New England Association of Schools and Colleges (NEASC)

<http://www.neasc.org/cihe/cihe.htm>

North Central Association of Colleges and Schools (NCA)

<http://www.ncacihe.org>

Northwest Association of Colleges and Universities (NWCCU)

<http://www.nwccu.org>

Southern Association of Colleges and Schools (SACS)

<http://www.sacs.org>

Western Association of Schools and Colleges (WASC)

<http://www.wascweb.org>