Agriculture, Food and Natural Resources Effective School Year 2014-2015		
To indicate statewide articulated courses on a student's AAR, use special course explanation code "A". Courses in an articulated coherent sequence may be taken at any grade level (9-12) as long as the <u>final</u> course in the articulated coherent sequence is taken in grade 11 or 12.		
<ul> <li>All high school courses <b>must</b> include e school credit unless otherwise noted.</li> <li>Teachers approved for ATC courses m</li> </ul>	will not be eligible for Advanced Technical Credit. nhanced content equivalent to the college courses indicated, and are a minimum of one (1) high ust hold a baccalaureate degree in the teaching discipline, or a minimum of an associate degree <u>and</u>	
demonstrated competencies directly re High School Course	ated to the subject area to fulfill SACS requirements. College WECM Equivalent	
Equine Science (1 credit) (EQUINSCI) 13000500	Equine Science I AGEQ 1311 or AGEQ 1411 (AGEQ 1011 CEU)	
	<b>Course Outcomes:</b> Explain the historical significance of the horse to society; identify horse breeds; identify basic anatomy and physiological functions; and outline managerial practices relevant to the horse industry.	
Horticulture Science (1 credit) (HORTISCI) 13002000	Principles of Horticulture HALT 1301 or HALT 1401 (HALT 1001 CEU)	
<b>Enhancement:</b> Explain the effect of environmental factors on plant growth.	<b>Course Outcomes:</b> Utilize scientific nomenclature used in horticulture; explain the effect of environmental factors on plant growth; and identify the various facets of the horticulture industry and career opportunities.	
Landscape Design and Turf Grass Management (1 credit) (LNDTGMGT) 13001900	Landscape Design HALT 1322 OR HALT 1422 (HALT 1022 CEU)	
	<b>Course Outcomes:</b> Demonstrate the appropriate procedures utilized in the development of a landscape plan; create an acceptable landscape design; and perform a site analysis and successfully incorporate the information into the final design.	
Range Ecology Management (1 credit) (RECOMGT) 13001600Enhancements: Devise range reseeding and water development.Design rotational grazing systems.	Range Management AGCR 1307 or AGCR 1407 (AGCR 1007 CEU) Course Outcomes: Identify range problems including toxic plants, overgrazing, and water distribution; evaluate brush control methods including biological, mechanical, chemical, and range burning; devise range reseeding and water development plans; design rotational grazing systems; and compute stocking rates.	

Agricultural Mechanics and Metal Technology (1 credit) (AGMECHMT) 13002200	Shop Safety and Procedures DEMR 1301 or 1401 (DEMR 1001 CEU) Course Outcomes: Identify and use basic hand tools; use human protection equipment; and correctly use and dispose of hazardous materials. OR
	Farm and Ranch Shop Skills I AGME 1315 or 1415 (AGME 1015 CEU)
	<b>Course Outcomes:</b> Demonstrate oxyacetylene cutting procedures; demonstrate arc welding; identify shop tools; utilize shop plans; and describe construction processes.
Agricultural Power Systems (1 credit) (AGPOWSYS) 13002400	Preventive Maintenance DEMR 1229 or 1329 (DEMR 1029 CEU)
	<b>Course Outcomes:</b> Apply preventative maintenance practices; perform preventative maintenance on systems; and practice appropriate record keeping.
	OR
	Small Gasoline Engine SMER 1324 OR 1424 (SMER 1024 CEU)
	<b>Course Outcomes:</b> Describe ignition systems theory testing and diagnosis; disassemble, repair, inspect, and service engines; demonstrate the use and care of tools and materials; and demonstrate safe operations.

### **Architecture and Construction**

Effective School Year 2014 - 2015

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- Courses taken in the eighth grade (8<sup>th</sup>) will not be eligible for Advanced Technical Credit
- All high school courses **must** include enhanced content equivalent to the college courses indicated, and are a minimum of one (1) high school credit unless otherwise noted.
- Teachers approved for ATC courses must hold a baccalaureate degree in the teaching discipline, or a minimum of an associate degree and demonstrated competencies directly related to the subject area to fulfill SACS requirements.

High School Course	College WECM Equivalent
Interior Design (1 credit) (INTERDSN) 13004300	Fundamentals of Interior Design INDS 1311 or INDS 1411 (INDS 1011 CEU)
<b>Enhancement</b> : Discuss the scope of interior design profession.	<b>Course Outcomes:</b> Describe and apply elements and principles of design; discuss the scope of the interior design profession; describe the interior design problem-solving process; and identify design quality.
Construction Technology (1 credit) (CONSTECH) 13005100	Architectural Blueprint Reading DFTG 1215 or 1315, (DFTG 1015 CEU)
<b>Enhancements:</b> Scale prints with architectural and engineering scales.	<b>Course Outcomes:</b> Identify the importance and use of construction prints; identify the symbols, terminology, and standard abbreviations; explain the sequence of drawing organization; make the calculations and measurements relative to construction; and interpret construction
Interpret a set of construction contract documents.	drawings and scales. OR
	Residential and Light Commercial Blueprint Reading
	CNBT 1300, (CBNT 1000 CEU)
	<b>Course Outcomes:</b> Scale prints with architectural and engineering scales; identify construction blueprint symbols and abbreviations; interpret a set of construction contract documents; and correlate elevations, sections, details, plan views, schedules, and general notes.
Advanced Construction	Construction Technology I
Technology (1 credit) (ADVCONST) 13005200	
	CNBT 1316, or (CNBT 1016 CEU)
Required Prerequisite: Construction Technology	<b>Course Outcomes:</b> Explain safety practices and procedures; demonstrate use of tools and equipment; estimate material
(1 credit) (CONSTECH) 13005100	requirements from blueprints; and demonstrate proper methods and techniques used in various types of site preparation and foundations.
Enhancements: Demonstrate safety practices and procedures.	
Demonstrate methods and techniques used in various types of site preparation and foundations.	

Principles of Architecture and Construction (1 credit) (PRINARCH) 13004200 Enhancement: Describe green and sustainable building practices and standards.	Introduction to the Construction Industry CNBT 1301, (CNBT 1001) Course Outcomes: Identify types of construction and organizational structures; explain purposes for various construction documents; describe the responsibilities of the construction office and field operations; identify environmental health and safety agency requirements; identify the various construction crafts and trades; and describe green and sustainable building practices and standards.
Architectural Design (1 credit) (ARCHDSN) 13004600	Architectural Drafting – Residential DFTG 1317 or 1417, (DFTG 1017 CEU)
	<b>Course Outcomes:</b> Utilize architectural terms, symbols, residential construction materials, and processes to produce a set of residential construction drawings including site plan, floor plan, elevations, wall sections, schedules, details, and foundation plan using reference materials.
Advanced Architectural Design (1 credit) (ADVARCH) 13004700	Architectural Drafting – Commercial
	DFTG 2328 or 2428 or (DFTG 2028 CEU)
	<b>Course Outcomes:</b> Apply commercial construction materials and processes; produce a set of commercial construction drawings including a site plan, floor plans, reflected ceiling plan, sections, elevations, schedules, and details.
Construction Management (1credit) (CONSTMGT) 13004900	Construction Management I
Enhancements:	CNBT 2342 or CNBT 2042/2442
Apply green and sustainable	Course Outcomes: Define terms associated with construction
building codes and standards. Demonstrate techniques for successful contractor interaction including professional protocol and communication.	supervision, leadership, motivation, problem solving, and decision making. Demonstrate problem solving and decision making skills in construction problems. Apply green and sustainable building codes and standards. Employ techniques for successful contractor interaction including professional protocol and communication.

#### Arts, Audiovisual Technology and Communications Effective School Year 2014 - 2015

To indicate statewide articulated courses on a student's AAR, use special course explanation code "A". Courses in an articulated coherent sequence may be taken at any grade level (9-12) as long as the <u>final</u> course in the articulated coherent sequence is taken in grade 11 or 12.

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- All high school courses must include enhanced content equivalent to the college courses indicated, and are a minimum of one (1) high school credit unless otherwise noted.
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High School Course	College WECM Equivalent
Advanced Audio/Video Production (2 credits)	Digital Video ARTV 1351 or ARTV 1451 (ARTV 1051 CEU)
(ADVAVPRO) 13008600 Enhancement: Synchronize sound files with visuals and animation.	<b>Course Outcomes:</b> Use digital video capture and output methods; apply appropriate compression schemes for various output; integrate still graphics and animation into a production; apply principles of video production; and identify the components of a digital video system. <b>OR</b>
	Digital Sound ARTV 1343 or ARTV 1443 (ARTV 1043 CEU)
	<b>Course Outcomes:</b> Generate sound files from various sources; select sounds that are appropriate for a project's content; use sound editing software to manipulate and improve sound files; incorporate sound files into a project; and synchronize sound files with visuals and animation.
Animation (1 credit)	Interactive Digital Media I IMED 1345 or IMED 1445 (IMED 1045 CEU)
(ANIMAT) 13008300	<b>Course Outcomes:</b> Develop an interactive digital media presentation integrating different types of media; design a navigation scheme; and demonstrate animation techniques.
Advanced Animation (2 credits)	Basic Animation ARTV 1303 or ARTV 1403 (ARTV 1003 CEU)
(ADVANIM) 13008400	<b>Course Outcomes:</b> Demonstrate animation principles; communicate conceptual ideas through storyboards; execute animation sequences; and develop artwork using traditional or digital tools.

# Business Management and Administration Effective School Year 2014-2015

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- Teachers approved for ATC courses must hold a baccalaureate degree in the teaching discipline, or a minimum of an associate degree and demonstrated competencies directly related to the subject area to fulfill SACS requirements.

High School Course	College WECM Equivalent
Principles of Business, Marketing, and Finance (1 credit) (PRINBMF) 13011200	Introduction to Business BUSG 1301 (BUSG 1001 CEU) Course Outcomes: Identify business functions of accounting, management, marketing, and economics; and describe the relationships of social responsibility, ethics, and law; and describe the scope of global business enterprise.
Touch System Data Entry (1 credit) (TSDATAE) 13011300	Beginning Keyboarding         POFT 1329, or 1429 (POFT 1029 CEU)         Course Outcomes:       Demonstrate basic keyboarding techniques; apply proofreading and editing skills; and create basic business documents.
Business English (1 credit) (BUSENGL) 13011600 Enhancement: Utilize terminology applicable to technical and business writing.	Business English POFT 1301 (POFT 1001 CEU) Course Outcomes: Apply the basic rules of grammar, spelling, capitalization, number usage, and punctuation; utilize terminology applicable to technical and business writing; develop proofreading and editing skills; and write effective sentences and paragraphs for business applications.

Human Resource Management (1 Credit) (HRMGT) 13011900	Human Resources Management HRP0 2301 or (HRPO 2001 CEU) Course Outcomes: Describe and explain the development of human resources management; evaluate current methods of job analysis, recruitment, selection, training/development, performance management, promotion, and separation; discuss management's ethical, social, and legal responsibilities; assess methods of compensation and benefits planning; and analyze the role of strategic human resource planning in support of organizational mission and objectives.
Business Management (1 credit) (BUSMGT) 13012100	Principles of Management BMGT 1327, (BMGT 1027 CEU) Course Outcomes: Explain various theories, processes, and functions of management; apply theories to a business environment; identify leadership roles in organizations; and describe elements of the communication process.
Business Information Management I (1 credit) (BUSIM1) 13011400	Computer Applications I POFI 1301 or POFI 1401 (POFI 1001 CEU) Course Outcomes: Identify the components of a computer system; and perform common tasks used in applications. OR Introduction to Computers ITSC 1301 or ITSC 1401 (ITSC 1001 CEU)
Enhancement: Identify fundamental programming structures.	<b>Course Outcomes:</b> Identify the components of a computer system; use common applications; explain the impact of computers on society; identify computer careers; identify fundamental programming structures; identify ethical use of computers; and use basic operating system functions.

Business Information Management II (1 credit) (BUSIM2) 13011500	Computer Applications II POFI 1341 or POFI 1441 (POFI 1041 CEU) Course Outcomes: Apply advanced skills to produce documents using current software applications. OR Integrated Software Applications I ITSC 1309 or ITSC 1409 (ITSC 1009 CEU) Course Outcomes: Use word processing, spreadsheet, database, and/or presentation software; and integrate applications to produce documents.
Business Law (1 credit) (BUSLAW) 13011700 Enhancement: Differentiate between business ethics and legal issues.	Business Law/Contracts BUSG 2305 (BUSG 2005 CEU) Course Outcomes: Define fundamental legal terminology regarding contracts, torts, property, and wills; differentiate between business ethics and legal issues; and identify and explain required elements of torts, requirements of contracts, and various consumer laws as applied to business and individuals.
Global Business (1 credit) (GLOBBUS) 13011800	Introduction to International Business and Trade IBUS 1305 or IBUS 1405 (IBUS 1005 CEU) Course Outcomes: Explain terms used in the international business environment; and discuss internal and external factors influencing the conduct of international business.

	Finance Effective School Year 2014-2015
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	explanation code "A".
	oherent sequence may be taken at any grade level (9-12) as long ne articulated coherent sequence is taken in grade 11 or 12.
	8 <sup>th</sup> ) will not be eligible for Advanced Technical Credit. le enhanced content equivalent to the college courses indicated, and are a minimum of one (1) high d.
	s must hold a baccalaureate degree in the teaching discipline, or a minimum of an associate degree <u>and</u> y related to the subject area to fulfill SACS requirements.
High School Course	College WECM Equivalent
Accounting I (1 credit)	Introduction to Accounting I ACNT 1303 or ACNT 1403 (ACNT 1003 CEU)
(ACCOUNT1) 13016600 Enhancement: Define accounting terminology.	<b>Course Outcomes:</b> Define accounting terminology; analyze and record business transactions in a manual and computerized environment; complete the accounting cycle; prepare financial statements; and apply accounting concepts related to cash and payroll.
	Principles of Accounting ACNT 1325 or ACNT 1425 (ACNT 1025 CEU)
	<b>Course Outcomes:</b> Apply generally accepted accounting principles, concepts, and procedures; and complete the accounting cycle for service and merchandising enterprises.
Money Matters (1 credit)	Money and Financial Markets BNKG 1340 (BNKG 1040 CEU)
(MONEYM) 13016200 Teacher must have 36 months of banking work experience	<b>Course Outcomes:</b> Identify the role of the Federal Reserve and other central banks influencing the money supply; describe principles of monetary and fiscal policy as they relate to the banking industry; describe the characteristics of financial intermediaries, related markets, investments, and funds management.
Banking and Financial Services (1 credit)	Principles of Bank Operation BNKG 1303 (BNKG 1001 CEU)
(BANKFIN) 13016300 Teacher must have 36 months of	<b>Course Outcomes:</b> Describe the fundamental banking terminology and functions of credit, deposit, and payment; identify the characteristics of banking products, services, and markets; describe the role of regulatory
banking work experience	agencies and bank operations; and describe the role of technology as related to banking operations.

### Health Science

Effective School Year 2014-2015

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HIGH SCHOOL COURSE	COLLEGE WECM EQUIVALENT
Principles of Health Science (1 credit) (PRINHLSC) 13020200 OR Health Science (1 credit) (HLTHSCI) 13020400	Introduction to Health Professions HPRS 1101 or 1201 (HPRS 1001 CEU) Course Outcomes: Identify the roles of various health care professionals; outline state and national credentialing and licensing requirements; describe legal and ethical issues affecting the practice of health care professionals; and give examples of professionalism and the rights and responsibilities of health care professionals.
Medical Terminology (1/2 credit) (MEDTERM) 13020300 AND Principles of Health Science (1 credit) (PRINHLSC) 13020200 OR Health Science (1 credit) (HLTHSCI) 13020400 Special Note: • Separate training must be obtained for each course	Essentials of Medical Terminology HPRS 1106 or HPRS 1206 (HPRS 1006 CEU) Course Outcomes: Define, pronounce, and spell medical terms with the use of medical references as resource tools; use terms in context; build and analyze medical terms; examine word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols. OR Medical Terminology MDCA 1213 or 1313 (MDCA 1013 CEU) Course Outcomes: Define terms and abbreviations which apply to the structural organization of the body; analyze and identify terms and their components from a list, including prefixes, suffixes, roots, and combining forms; identify correct pronunciation, spelling, and definition of medical terms; and correctly interpret the contents of a written patient medical scenario. OR Medical Terminology I HITT 1205 or 1305 (HITT 1005 CEU) Course Outcomes: Identify, pronounce, and spell medical terms; use terms in context; utilize prefixes, suffixes, root words, and plurals to construct medical terms; analyze medical terms; translate abbreviations; and interpret symbols.

Anatomy and Physiology (1 credit) (ANATPHYS) 13020600	Anatomy and Physiology for Allied Health VNSG 1320 or VNSG 1420 (VNSG 1020 CEU)
Enhancements: Include elements of	<b>Course Outcomes:</b> Identify the structure of each of the major body systems; describe the functions of each of the major body systems; and discuss the interrelationship of systems in maintaining homeostasis.
Pathophysiology. Include all developmental stages of the human body.	OR Anatomy and Physiology for Medical Assistants MDCA 1309 or MDCA 1409 (MDCA 1009 CEU)
<b>Please note:</b> Medical background required for ATC teacher approval.	<b>Course Outcomes:</b> Identify and correlate cells, tissues, organs, and systems of the human body; differentiate normal from abnormal structure and function; and identify all body systems, their organs, and relevant pathophysiology.

#### **Hospitality and Tourism** Effective School Year 2014-2015 To indicate statewide articulated courses on a student's AAR, use special course explanation code "A". Courses in an articulated coherent sequence may be taken at any grade level (9-12) as long as the final course in the articulated coherent sequence is taken in grade 11 or 12. Courses taken in the eighth grade (8<sup>th</sup>) will not be eligible for Advanced Technical Credit. All high school courses must include enhanced content equivalent to the college courses indicated, and are a minimum of one (1) high school credit unless otherwise noted. Teachers approved for ATC courses must hold a baccalaureate degree in the teaching discipline, or a minimum of an associate degree and demonstrated competencies directly related to the subject area to fulfill SACS requirements. **College WECM Equivalent** High School Course **Travel and Tourism** Introduction to Travel and Tourism Management TRVM 1300 (TRVM 1000 CEU) (1 credit) (TRTORMGT) 13022500 **Course Outcomes:** Identify the qualifications needed for the many careers in the travel and tourism industry; discuss the history and growth of travel and tourism and how they relate to the marketplace; Enhancements: define the role of governments in the travel industry and identify how Discuss the history and growth of tourism is an important source of revenue for a destination: describe travel and tourism and how they types of geography as it relates to travelers, and identify types of travel relate to the marketplace. and travelers; identify the components of the travel and tourism Define the role of governments in industry, define the channels of distribution, and discuss how the travel the travel industry. product is promoted and marketed. Identify how tourism is an important source of revenue for a destination. Identify types of travelers. **Hospitality Services** Introduction to Hospitality Industry HAMG 1221 or HAMG 1321 (HAMG 1021 CEU) (1 credit) (HOSPSRVS) 13022800 **Course Outcomes:** Identify the segments and career opportunities in the hospitality industry; discuss current issues facing the hospitality industry; and discuss the impact of customer service.

Hotel Management (1 credit) (HOTELMGT) 13022300	Front Office Procedures HAMG 1313 (HAMG 1013)
	Course Outcomes: Discuss the various service levels and market segments in the lodging industry as they pertain to the front office area of the hotel; and identify front office responsibilities, accounting procedures, revenue management, checkout and settlement procedures, and night audit functions and verification. OR Guest Room Management HAMG 1342 or 1242 (1042 CEU)
	<b>Course Outcomes:</b> Identify the steps for planning, organizing, and staffing as they relate to guest room operations; explain how housekeeping operations are directed and controlled; explain the budgeting function; and identify cleaning duties, cleaning supplies, and laundry needs of guest room services.
Culinary Arts	Sanitation and Safety
(1 credit)	CHEF 1205 or CHEF 1305 (CHEF 1005 CEU)
(CULARTS) 13022600	
Enhancements: Discuss Occupational Safety and Health Administration (OSHA) requirements and effective workplace safety programs.	<b>Course Outcomes:</b> Identify causes of and prevention procedures for food-borne illness, intoxication, and infection; demonstrate good personal hygiene and safe food handling procedures; describe food storage and refrigeration techniques; explain sanitation of dishes, equipment, and kitchens including cleaning material, garbage, and refuse disposal; and discuss Occupational Safety and Health Administration (OSHA) requirements and effective workplace safety programs.
Serv-Safe certification MUST be obtained during this course for credit to be granted at the college level.	

Human Services	
Effective School Year 2014-2015	
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<ul><li>school credit unless otherwise noted.</li><li>Teachers approved for ATC courses must ho</li></ul>	ed content equivalent to the college courses indicated, and are a minimum of one (1) high and a baccalaureate degree in the teaching discipline, or a minimum of an associate degree and
High School Course	to the subject area to fulfill SACS requirements. College WECM Equivalent
Lifetime Nutrition and Wellness	Nutrition for the Food Service Professional
	IFWA 1218 or IFWA 1318 (IFWA 1018 CEU)
(1 credit) (LNURTWEL) 13024500	<b>Course Outcomes:</b> Identify nutrients and their sources, functions, digestion, and metabolism; explain healthy cooking techniques; analyze and modify recipes for healthier food production; and evaluate and prepare diets and menus in accordance with dietary guidelines and restrictions.
Child Guidance	Child Guidance
(2 credits)	CDEC 1319 or CDEC 1419 (CDEC 1019 CEU)
(CHILDGUI) 13024800 Enhancements:	<b>Course Outcomes:</b> Summarize theories related to child guidance; explain how appropriate guidance promotes autonomy, self-discipline, and life-long social skills in children; recognize the impact and influence of families and culture in guiding children; and promote development of positive self-concept and prosocial
Application of guidance intervention with a child.	behaviors in children. Apply appropriate guidance techniques to specific situations relating to children's behaviors and demonstrate skills in helping children resolve conflicts.
Prepare DAP schedule, routines, transitions.	OR
	Child Development Associate Training II
Thirty hours (30 hrs.) observation at a child care facility.	CDEC 2322 (CDEC 2022 CEU) Course Outcomes: Explain methods to establish and maintain a safe, healthy learning environment, describe ways to support social and emotional development and describe techniques used to provide positive guidance. Utilize skills in writing, speaking, problem-solving, time management, and record keeping.
Child Development	Child Growth and Development
(1 credit) (CHILDDEV) 13024700	CDEC 1354 or CDEC 1454 (CDEC 1054 CEU)
<b>Enhancement:</b> Discuss types and techniques of observation.	<b>Course Outcomes:</b> Summarize principles of growth and development in the physical, cognitive, emotional, and social domains; compare and contrast theories of development; discuss the impact of developmental processes on early childhood practices; discuss types and techniques of observation; and explain the importance of play. Demonstrate skills in application of developmental principles and theories, observation techniques and recognition of growth and developmental patterns.

### Information Technology

Effective School Year 2014 - 2015

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High School Course	College WECM Equivalent
Principles of Information Technology (1 credit)	Introduction to Computers ITSC 1301 or ITSC 1401 (ITSC 1001 CEU)
(PRINIT) 13027200 Enhancement: Explain the impact of computers on	<b>Course Outcomes:</b> Identify the components of a computer system; use common applications; explain the impact of computers on society; identify computer careers; identify fundamental programming structures; identify ethical use of computers; and use basic operating system functions.
Society. Computer Maintenance (1 credit)	Introduction to Computer Maintenance CPMT 1311 or CPMT 1411 (CPMT 1011 CEU)
(COMPMTN) 13027300	<b>Course Outcomes:</b> Identify modules that make up a computer system and its operation; identify each type of computer bus structure; assemble/setup microcomputer systems and adapter/interface boards; and install/connect associated peripherals. <b>OR</b>
	Personal Computer Hardware ITSC 1325 or ITSC 1425 (ITSC 1025 CEU)
	<b>Course Outcomes:</b> Assemble/setup and upgrade personal computer systems; diagnose and isolate faulty components; optimize system performance; and install/connect peripherals.
Telecommunications and Networking (1 credit)	Fundamentals of Networking Technologies ITNW 1325 or ITNW 1425 (ITNW 1025 CEU)
(TELECOMN) 13027400	<b>Course Outcomes:</b> Identify and use network transmission media; explain the OSI model; Identify the characteristics of network topologies and protocols; identify the functions of a network operating system and distinguish between centralized, client/server, and peer-to- peer systems; and distinguish between Local Area Networks (LANs) and Wide Area Networks (WANs) and identify the components used to expand a LAN into a WAN.

Computer Technician (2 credits) (COMPTECH) 13027500 Enhancement: Use computer related test equipment.	Computer Systems Maintenance CPMT 1345 or CPMT 1445 (CPMT 1045 CEU) Course Outcomes: Describe the functions of components in a computer system; use computer related test equipment; and demonstrate the effective use of maintenance tools.
Computer Programming (1 credit) (COMPPROG) 13027600	Computer Programming ITSE 1302 (ITSC 1002 CEU) Course Outcomes: Design, write, test, and document computer programs.
Advanced Computer Programing (1 credit) (ADVCOMPP) 13027700	Advanced Computer Programming ITSE 2359 or ITSE 2459 (ITSE 2059) Course Outcomes: Develop well-documented programs containing data structures; and incorporate input/output file handling technique.
Digital and Interactive Media (1 credit) (DIMEDIA) 13027800	Introduction to Digital Media IMED 1301 or IMED 1401 (IMED 1001 CEU) Course Outcome: Utilize the elements and hardware/software components of digital media; produce a digital media presentation; select optimal digital media strategies for various delivery systems; and examine digital media industry career opportunities. Or Digital Imaging I ARTC 1302 or ARTC 1402 (ARTC 1002 CEU) Course Outcomes: Identify terminology, advantages and limitations of image editing software; distinguish bit-mapped resolutions for image acquisitions and output devices; use digital editing and painting tools; use basic half-tone theory in production of images, manipulate, create, and edit digital images for print and for web; specify appropriate file formats.

Web Technologies (1 credit) (WEBTECH) 13027900	Web Design I IMED 1316 or IMED 1416 (IMED 1016 CEU)
	<b>Course Outcomes:</b> Identify how the Internet functions with specific attention to the World Wide Web and file transfer; apply design techniques in the creation and optimization of graphics and other embedded elements; demonstrate the use of World Wide Web Consortium (W3C) formatting and layout standards; and design, create, test, and maintain a web site.
	Internet/Web Page Development ITSC 1319 or ITSC 1419 (ITSC 1019 CEU)
	<b>Course Outcomes:</b> Identify basic Internet concepts and terminology; use electronic communication methods; and develop web pages.

# Law, Public Safety, Corrections and Security Effective School Year 2014-2015

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Courses taken in the eighth grade (8<sup>th</sup>) will not be eligible for Advanced Technical Credit.

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High School Course	College WECM Equivalent
Law Enforcement I (1 credit) (LAWENF1) 13029300	Criminalistics I CJSA 1308 Course Outcomes: Describe the care required in identifying, collecting, and preserving evidence for scientific examination and explain the significance of field and laboratory findings.
Court Systems and Practices (1 credit) (COURTSP) 13029600	Fundamentals of Criminal Law CJSA 1327
Enhancement:	<b>Course Outcomes:</b> Explain the historical and philosophical development of the nature of criminal law; describe definitions
List the elements of crimes using the Texas statutes as an illustration.	and concepts of criminal law and the classifications of crimes an penalties using Texas statutes as illustrations; list the elements of crimes using the Texas statutes as an illustration; and discuss criminal responsibilities as they apply to the criminal statutes. (This course is parallel to the Academic Course Guide Manual (ACGM) course, CRIJ 1310.)
	OR
	Court Systems and Practices (Formerly Courts and Criminal Procedures) CJSA 1313
	<b>Course Outcomes:</b> Describe the American judiciary system and its structure; identify the roles of judicial officers; identify the trial processes from pretrial to sentencing; and interpret the role of evidence. (This course is parallel to the Academic Course Guide Manual (ACGM) course, CRIJ 1306)

Principles of Law, Public Safety, Corrections and Security (1 credit)	Introduction to Criminal Justice CJSA 1322 (CJSA 1022)
(PRINLPCS) 13029200	Course Outcomes: Describe and explain the history,
<b>Enhancement:</b> Explain the significance of field and laboratory findings.	philosophy and ethical considerations of criminal justice; define the nature and impact of crime on society and how it is integrated in to the criminal justice system; distinguish between the civil and criminal court systems; and interpret the relationship between the components of the criminal justice system.

#### Manufacturing Effective School Year 2014-2015 To indicate statewide articulated courses on a student's AAR, use special course explanation code "A". Courses in an articulated coherent sequence may be taken at any grade level (9-12) as long as the final course in the articulated coherent sequence is taken in grade 11 or 12. Courses taken in the eighth grade (8<sup>th</sup>) will not be eligible for Advanced Technical Credit. All high school courses must include enhanced content equivalent to the college courses indicated, and are a minimum of one (1) high school credit unless otherwise noted. Teachers approved for ATC courses must hold a baccalaureate degree in the teaching discipline, or a minimum of an associate degree and demonstrated competencies directly related to the subject area to fulfill SACS requirements. High School Course College WECM Equivalent **Precision Metal Manufacturing Basic Machine Shop I** MCHN 1338 or MCHN 1438 (MCHN 1038 CEU) (1 credit) **Course Outcomes:** Demonstrate set-up and use of the lathe. (PRECMMAN) 13032500 milling machine, drill press, power saw, and bench grinder applying good housekeeping, proper safety, and preventative maintenance. Use precision instruments to perform bench work including part layout, drilling, reaming, taping, press fitting, location of hole centers and surfaces; set up power saws for cutoff operation; demonstrate tooling maintenance, and hazardous material handling. Perform preventative maintenance. Interpret blueprints **Advanced Precision Metal Manufacturing Basic Machine Shop II** MCHN 1341 or MCHN 1441 (MCHN 1041 CEU) (2 credits) **Course Outcomes:** Identify machine parts and their (ADVPMM) 13032600 functions; select layout tools and techniques; define machine shop terminology; perform basic machine setups; Prerequisite: calculate common shop formulas; perform semi-precision Precision Metal Manufacturing lavout: execute grinding techniques: demonstrate basic machine operations; and apply proper measuring tools. **Advanced Welding** Introduction to Welding Fundamentals WLDG 1421 or WLDG 1521(WLDG 1021 CEU) (2 credits) **Course Outcomes:** Demonstrate safety procedures (ADVWELD) 13032400 associated with oxy-fuel and arc process; perform basic welds using oxy-fuel and arc welding equipment; and identify ferrous and nonferrous metals. OR Introduction to Shielded Metal Arc Welding (SMAW) WLDG 1428 or WLDG 1528 (WLDG 1028 CEU) **Course Outcomes**: Select electrodes and amperage settings for various thicknesses of materials and welding positions; define principles of arc welding; and explain electrode classifications. Perform SMAW operations in various positions using selected electrodes and different joint designs.

Marketing Effective School Year 2014-2015			
To indicate statewide articulated cou	To indicate statewide articulated courses on a student's AAR, use special course explanation code "A".		
Courses in an articulated coherent sequence may be taken at any grade level (9-12) as long as the <u>final</u> course in the articulated coherent sequence is taken in grade 11 or 12.			
<ul> <li>Courses taken in the eighth grade (8<sup>th</sup>) will not be eligible for Advanced Technical Credit.</li> <li>All high school courses <b>must</b> include enhanced content equivalent to the college courses indicated, and are a minimum of one (1) high school credit unless otherwise noted.</li> <li>Teachers approved for ATC courses must hold a baccalaureate degree in the teaching discipline, or a minimum of an associate degree <u>and</u> demonstrated competencies directly related to the subject area to fulfill SACS requirements.</li> </ul>			
High School Course	College WECM Equivalent		
Marketing Dynamics (2 credits) (MKTGDYN) 13034700	Principles of Marketing MRKG 1311 (MRKG 1011 CEU) Course Outcomes: Identify the marketing mix components; explain the environmental factors which influence consumer and organizational decision-making processes; and outline a marketing plan.		
Entrepreneurship (1 credit) (ENTREP) 13034400	Small Business Management/Entrepreneurship BUSG 2309 (BUSG 2009 CEU)Course Outcomes:Identify management skills for a small business; outline issues related to choosing a business, obtaining a return on investment; and create a business plan.		

Science, Technology, Engineering and Mathematics Effective School Year 2014-2015	
To indicate statewide articulated courses	on a student's AAR, use special course explanation code "A".
Courses in an articulated coherent sequence may be taken at any grade level (9-12) as long as the final course in the articulated coherent sequence is taken in grade 11 or 12.	
school credit unless otherwise noted.	ontent equivalent to the college courses indicated, and are a minimum of one (1) high baccalaureate degree in the teaching discipline, or a minimum of an associate degree and
High School Course	College WECM Equivalent
Electronics (1credit) 13036800 (ELECTRO)	Electricity Principles CETT 1302/1402 (CETT 1002 CEU) Course Outcomes: Identify basic principles of electricity (A/C and D/C), voltage, current, and circuitry; apply Ohm's law to electrical calculations; use test equipment to measure continuity voltage, and current values; and use electrical safety practices.
Advanced Electronics (2 credits) 13036900-(ADVELECT)	Fundamentals of Electronics CETT 1307/1407(CETT 1007) Course Outcome: Build and test circuits using analog and digital components; visually identify components and component values; build and test series and parallel resistive circuits; check resistors, diodes, and transistors using a multimeter.

Engineering Design and Presentation (1 credit) 13036500 (ENGDSPR)	Technical Drafting DFTG 1305 or DFTG 1405 (DFTG 1005 CEU)
Enhancement: Apply lettering techniques.	Course Outcomes: Create technical sketches, geometric constructions, orthographic projections, pictorial/sectional views, dimension drawings, and apply lettering techniques. OR
	Basic Computer-Aided Drafting DFTG 1309 or DFTG 1409 (DFTG 1009 CEU)
	<b>Course Outcomes:</b> Identify terminology and basic functions used with CAD software; use CAD hardware and software to create, organize, display, and plot/print working drawings; and use file management techniques.

## Transportation, Distribution and Logistics

Effective School Year 2014-2015

To indicate statewide articulated courses on a student's AAR, use special course explanation code "A". Courses in an articulated coherent sequence may be taken at any grade level (9-12) as long as the final course in the articulated coherent sequence is taken in grade 11 or 12. Courses taken in the eighth grade (8<sup>th</sup>) will not be eligible for Advanced Technical Credit. All high school courses must include enhanced content equivalent to the college courses indicated, and are a minimum of one (1) high school credit unless otherwise noted. Teachers approved for ATC courses must hold a baccalaureate degree in the teaching discipline, or a minimum of an associate degree and demonstrated competencies directly related to the subject area to fulfill SACS requirements. **HIGH SCHOOL COURSE COLLEGE WECM EQUIVALENT** Advanced Automotive Technology Introduction and Theory of Automotive Technology AUMT 1201 or 1301 (AUMT 1001 CEU) (2 credits) (ADVAUTOT) 13039700 **Course Outcomes:** Explain the history of the **Special Note:** automobile and career possibilities of the automobile Teacher must be ASE Certified in: industry; describe safe, professional and responsible work practices; describe proper use of shop tools and Electrical equipment: list the eight Automotive Service Excellence Brakes (ASE) vehicle subsystems; explain the use of service Engine Performance publications; and identify automotive maintenance. • Steering and Suspension AND Student must pass the National Automotive Automotive Suspension and Steering Systems Student Skills Standards Assessment (NA3SA). AUMT 1316 or 1416 (AUMT 1016 CEU) **Course Outcomes:** Utilize appropriate safety Enhancement: procedures; explain operations of suspension and Describe historical development of the steering systems; diagnose and repair system automotive industry. components, including electronically controlled systems; perform wheel alignment procedures; and perform tire service and repair. AND Automotive Brake Systems AUMT 1310 or 1410 (AUMT 1010 CEU) **Course Outcomes:** Utilize appropriate safety procedures; and diagnose and repair hydraulic systems, drum/disc brake systems, and anti-lock brake systems. OR Introduction to Automotive Technology AUMT 1305 or 1405 (AUMT 1005 CEU) **Course Outcomes:** Utilize appropriate safety procedures; describe historical development and career information of the automotive industry; demonstrate safe, professional, and responsible work practices;

demonstrate the proper use of shop equipment and tools; describe the eight Automotive Service Excellence (ASE)
vehicle subsystems; use service information; and perform basic automotive maintenance.
AND Automotive Suspension and Steering Systems AUMT 1316 or 1416 (AUMT 1016 CEU)
<b>Course Outcomes:</b> Utilize appropriate safety procedures; explain operations of suspension and steering systems; diagnose and repair system components, including electronically controlled systems; perform wheel alignment procedures; and perform tire service and repair.
AND Automotive Brake Systems AUMT 1310 or 1410 (AUMT 1010 CEU)
<b>Course Outcomes:</b> Utilize appropriate safety procedures; and diagnose and repair hydraulic systems, drum/disc brake systems, and anti-lock brake systems.