WATC

Catalog
2008–2009

WATC

**Catalog
2008–2009**

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Information Directory

Directory

General Information   316.677.9400
E-Mail ....info@WATC.edu
Fax 677.9555
Web Site ....www.watc.edu
Emergency Closing Hotline (also visit www.watc.edu) 677.9596

Airport Center
2021 S. Eisenhower, Wichita, KS 67209-2848
Aviation 677.1550

Aviation Tech Center
7603 E. Pawnee, Wichita, KS 67207-3025
Aviation 652.2800

Comotara Center
3639 N. Comotara, Wichita, KS 67226-1304
General Information 677.1400
Business and Technology 677.9400
General Education 677.9400
Health Sciences 677.9400
Skilled Trades 677.9400

Main Campus
301 S. Grove, Wichita, KS 67211-2099
General Information 677.9400
Academic Affairs 677.9560
Academic Success 677.9520
ADA Compliance Officer 677.9400
Administrative Offices 677.9400
Admissions 677.9400
Apprenticeships 677.9460
Aviation 677.9557
Bookstore 677.9459
Disability Services/Accommodation Requests 677.9520
Educational Research and Development 677.9538
Financial Aid 677.9520
Financial Services 677.9400
Human Resources 677.9471

Schweiter Center

1400 S. George Washington Drive, Wichita, KS 67211-3992

Seneca Center

4141 N. Seneca, Wichita, KS 67204-3103

Southside Education Center

4501 E. 47th Street S., Wichita, KS 67210

WATC Locations and Directions

N

www.watc.edu

S

Douglas

Hydraulic

I-135

Grove

Hillside

Kellogg

Lincoln

MAIN CAMPUS
301 S. Grove
Wichita, KS 67211-2099
316.677.9400
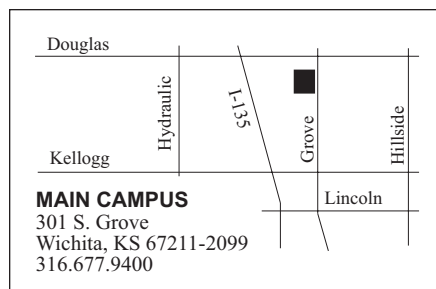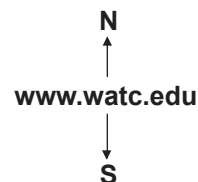
Main Campus Directions
- **Go to Building A for information.**

From the east:
- **Go west on Kellogg (US Hwy 54) to Grove exit.**
- **Go north on Grove approximately one block (west side of street).**

From the west:
- **Go east on Kellogg to Washington exit.**
- **Go north on Washington to Douglas.**
- **Go east on Douglas to Grove.**
- **Go south on Grove approximately two blocks (west side of street).**

Kellogg (US 54)

Ridge

Dugan

Pueblo

Harry

I-235

Eisenhower

Hoover

K-42

AIRPORT CAMPUS
2021 S. Eisenhower
Wichita, KS 67209-2848
316.677.1550
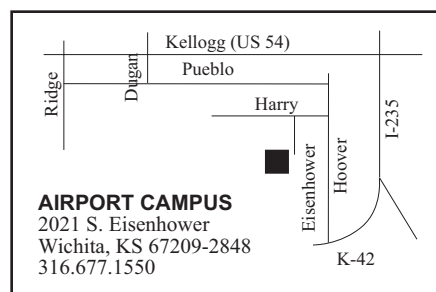
Airport Center Directions
- **Exit West Kellogg at Dugan.**
- **Go south on Dugan to Pueblo.**
- **Go east and follow Pueblo as it turns into Hoover Road.**
- **Go south on Hoover Road to Harry Street.**
- **Go west on Harry Street to Eisenhower.**
- **Go south on Eisenhower.**

S. Oliver

Kansas Turnpike

E. Pawnee

E. Pawnee

Cessna Aircraft
Pawnee Facility

Aviation Tech Center

S. Rock

AVIATION TECH CENTER
7603 E. Pawnee
Wichita, KS 67207-3025
316.652.2800
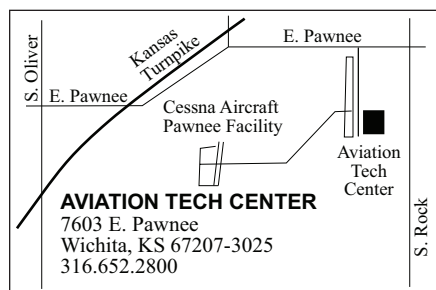
Aviation Tech Center Directions
- **Go east on Kellogg (US Hwy 54) to Rock.**
- **Go south on Rock to Pawnee.**
- **Go west on Pawnee (south side of street).**

37th St. E.

Comotara Center

Colonel James Jabara Airport

N. Rock

K-96

K-96

N. Webb

E. 29th St. N.

COMOTARA CENTER
3639 N. Comotara
Wichita, KS 67226-1304
316.677.1400
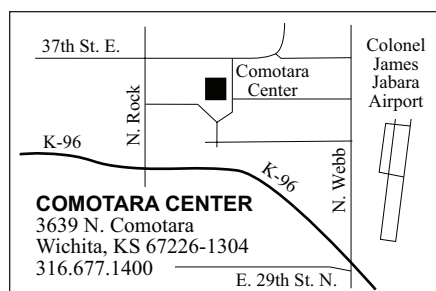
Comotara Center Directions
- **Go north on I-135-N to 96-E.**
- **Go east on 96-E and exit on Rock Road.**
- **Go north on Rock Road.**
- **Go east on 37th St. North.**
- **Go south on Comotara.**

SCHWEITER CENTER
1400 S. George Washington Drive
Wichita, KS 67211-3992
316.677.1950
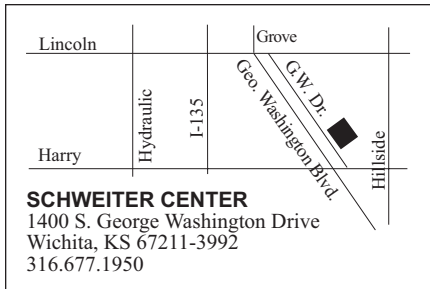
Schweiter Center Directions
- **Exit I-135 at Lincoln Street.**
- **Go east on Lincoln to George Washington Boulevard.**
- **Go south six blocks to Schweiter Center (east side of street).**

SENECA CENTER
4141 N. Seneca
Wichita, KS 67204-3103
316.677.1200
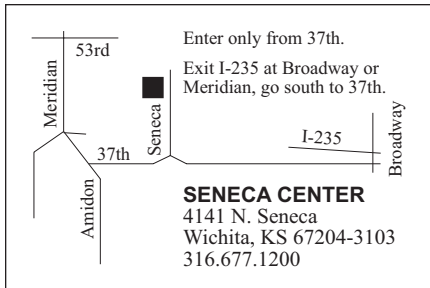
Seneca Center Directions
From the west:
- **Exit I-235 at Exit 13/Meridian, stay right.**
- **Go east on 37th Street to Seneca.**
- **Go north on Seneca about 1/4 mile (west side of street).**
From the east – trucks cannot enter from this direction:
- **Exit I-235 at Broadway.**
- **Go south on Broadway to 37th Street.**
- **Go west on 37th Street to Seneca.**
- **Go north on Seneca about 1/4 mile (west side of street).**

SOUTHSIDE EDUCATION CENTER
4501 E. 47th St. South
Wichita, KS 67210-1651
316.554.2600
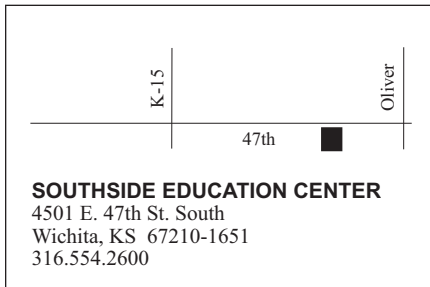
Southside Education Center Directions
- **Go south on I-135 / K-15.**
- **Take Exit 3A and merge onto K-15 S / Southeast Boulevard.**
- **Go southeast on K-15 / Southeast Boulevard to 47th St.**
- **Go east on 47th Street South (south side of street).**

President's Welcome

Set a new course for success at Wichita Area Technical College!

What are your goals?

Would you like to get general education credits and move on to a four-year college or university? You can do this at Wichita Area Technical College (WATC). We're accredited with the Higher Learning Commission of the North Central Association (HLC-NCA), the same organization that accredits major colleges and universities all over the country.

Do you want to enroll in a short-term program and attain a technical certificate or certificate of completion? The programs we offer can prepare you for a career in your chosen field.

Do you want to get a job and continue learning while earning a living? Once you've graduated with an associate of applied science degree, technical certificate or certificate of completion, many employers will pay for more education.

We know that you're here because you have goals, and our job is to help you reach those goals. What we offer as a college is unique — a mix of technical programs, general education and online courses, all provided in a flexible schedule and at an affordable cost.

We're here to provide you with high quality, relevant education — education that helps you move forward in your life of learning.

Wishing you much success,

Pete Gustaf, President

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The College

Wichita Area Technical College

Wichita Area Technical College (WATC) has been delivering excellence in education since 1965. WATC continues to build on this tradition with quality instructors, talented students and state-of-the-art technical equipment. Together, these elements help create a hands-on learning environment that promotes participation and prepares students for career experiences.

Mission, Vision and Values

Mission

The mission of Wichita Area Technical College is to provide relevant, technical education and training that meets the needs of learners, the community and industry while instilling a positive work ethic and desire for lifelong learning.

Vision

Wichita Area Technical College will be recognized as the premier technical college in the Midwest with highly qualified faculty, state-of-the-art facilities, programs and technologically advanced resources.

Values

To achieve our vision and fulfill our mission, Wichita Area Technical College has embraced the following values:

- Accountability: WATC values the resources entrusted to us and will use them responsibly to support the mission of the college.
- Quality: WATC values the desire of students, faculty and staff to learn and work in an environment that encourages professionalism from each individual.
- Education for Employment: WATC values the importance of technical as well as general education in preparing students for high-skill/high-demand/high-wage jobs to meet the demands of workforce and economic development.
- Innovation: WATC values a state-of-the-art learning environment (including alternative delivery methods and flexible scheduling) that encourages all members of our community to participate fully in lifelong learning within a rapidly changing society.
- Customer Service: WATC values the diverse needs of its customers and seeks to exceed their expectations.
- Collaboration: WATC values its responsiveness to meet the needs and specific requirements of its partnerships with community, business, educational systems and governmental agencies.
- Equity/Diversity: WATC values the diverse nature of its students, faculty and staff seeking to treat each person with utmost respect.
- Work Ethics: WATC values behaviors that promote responsible students, employees and citizens.

Governance and Structure

Kansas Board of Regents

The Kansas Board of Regents (KBOR) is comprised of nine members who are appointed by the governor of Kansas. They are then confirmed by the Kansas Senate. KBOR governs six state universities and supervises and coordinates 19 community colleges, six technical colleges and a municipal university. KBOR primarily deals with educational policies, programs, services, providers and other systems in an effort to improve and maintain the high quality of education in Kansas. KBOR also coordinates vital programs, such as adult literacy, qualified admissions, concurrent enrollment for high school students, financial assistance for education and many others. KBOR, in conjunction with the Kansas Postsecondary Technical Education Authority, approves technical programs offered by WATC.

Sedgwick County Technical Education and Training Authority

Sedgwick County Technical Education and Training Authority (SCTETA) is the governing board for WATC. The board consists of 11 appointed, voting members who establish and publish policies, regulations and procedures pertaining to WATC.

Program Advisory Committees

Program advisory committees, representatives from business and industry, provide a very important link between WATC and the community. These committees validate learning outcomes deemed essential by business and industry for successful entry or advancement in specific occupations. These committees also monitor the curriculum, recommend instructional equipment and help keep the programs current with emerging technologies.

Accreditations/Affiliations

Higher Learning Commission-North Central Association

The Higher Learning Commission (HLC) is part of the North Central Association (NCA) of Colleges and Schools. NCA is one of six regional institutional accreditors in the United States. Through its Commissions, it accredits, and thereby grants membership to educational institutions in the North Central region.

Wichita Area Technical College is fully accredited by The Higher Learning Commission as of October 2008.

The Higher Learning Commission
30 North LaSalle Street, Suite 2400
Chicago, Illinois 60602-2504
Phone: 800.621.7440 / 312.263.0456
Fax: 312.263.7462
www.ncahlc.org

Program Accreditations

Automotive Collision Repair

- National Automotive Technician Education Foundation
  13505 Dulles Technology Drive, Suite 2
  Herndon, VA 20171-3421
  703.713.0100

Automotive Technology

- National Automotive Technician Education Foundation
  13505 Dulles Technology Drive, Suite 2
  Herndon, VA 20171-3421
  703.713.0100

Aviation Maintenance Technology

- Federal Aviation Administration
  Flight Standards District Office
  1801 Airport Road, FAA Building
  Wichita, KS 67209
  316.941.1200

Dental Assistant

- Commission on Dental Accreditation of the American Dental Association
  211 E. Chicago Avenue
  Chicago, IL 60611-2678
  312.440.4653

Dietary Manager

- Dietary Manager Association
  406 Surrey Woods Drive
  St. Charles, IL 60174
  630.587.6336

Medical Assistant

- Commission on Accreditation of Allied Health Education Programs on recommendation of:
  Curriculum Review Board of the American Association of Medical Assistants Endowment
  35 E. Wacker Drive, Suite 1970
  Chicago, IL 60601-2208
  312.553.9355

Practical Nurse

- National League for Nursing Accrediting Commission
  61 Broadway, 33rd Floor
  New York, NY 10006
  212.363.5555

Surgical Technology

- Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the Accreditation Review Committee on Education in Surgical Technology:
  National Board of Surgical Technology
  and Surgical Assisting
  6 W. Dry Creek Circle, Suite 100
  Littleton, CO 80120
  303.694.9262

Program Affiliations

Air Conditioning Technology

- Air Conditioning Contractors of America
  2800 Shirlington Road, Suite 300
  Arlington, VA 22206
  703.575.4477
- RSES Headquarters
  1666 Rand Road
  Des Plaines, IL 60016-3552
  1.800.295.5660 or 847.297.6464

Automotive Collision Repair

- Inter-Industry Conference on Auto Collision Repair
  1342 Colonial Boulevard, Suite K-230
  Ft. Myers, FL 33907
  239.939.9667
  877.ICAR.MIG

Automotive Technology

- Automotive Service Association Educational Member
  7510 N. Palmer Avenue
  Kansas City, MO 64158
  816.781.5801

Certified Nurse Aide

The program is approved by:
- Kansas Department of Health and Environment
  (approval is required to offer program)
  1000 S.W. Jackson, Suite 200
  Topeka, KS 66212-1365
  785.296.0056

Commercial Truck Driving

- American Red Cross
  707 N. Main
  Wichita, KS 67203
  316.265.6601
- Kansas Department of Motor Vehicles
  Commercial Drivers License Division
  1821 W. 21st St. N.
  Wichita, KS 67204
  316.821.9920
- Kansas Motor Carriers Association
  P.O. Box 1673
  Topeka, KS 66601
  785.267.1641
- National Association of Publicly Funded
  Truck Driving Schools
  John Wood Community College
  1301 S. 48th St.
  Quincy, IL 62305-8736
  217.224.5362
- National Safety Council
  Kansas-Missouri Division
  5829 Troost Avenue
  Kansas City, MO 64110
  816.842.5223
- Technology Maintenance Council
  A Division of American Truckers Association
  2200 Mill Road
  Alexandria, VA 22314-4677
  703.838.1763

Certified by:

CDL 101 Commercial Driver Education is certified by:

- Professional Truck Drivers Institute
  555 E. Braddock Road
  Alexandria, VA 22314
  703.647.7015

Machining Technology

- Society of Manufacturing Engineers
  One SME Drive
  Dearborn, MI 48121
  313.271.1500

Mechanical Engineering Technology

- American Society for Engineering Education
  1818 N. Street N.W., Suite 600
  Washington, DC 20036-2479
  202.331.3500
- Society of Manufacturing Engineers (SME)
  One SME Drive
  Dearborn, MI 48121
  313.271.1500

Practical Nurse

The program is approved by:

- Kansas State Board of Nursing
  (approval is required to offer program)
  900 S.W. Jackson, Suite 1051
  Topeka, KS 66612-1230
  785.296.3782

Welding

- American Welding Society
  550 N.W. LeJune Road
  Miami, FL 33126
  800.443.9353

Other

- Aviation Technician Education Council
  2090 Wexford Court
  Harrisburg, PA 17112
  717.540.7121
- Experimental Aircraft Association
  P.O. Box 3086
  Oshkosh, WI 54903-3086
  800.322.2412
- Professional Aviation Maintenance Association
  Ronald Reagan Washington National Airport
  Washington, D.C. 20001
  703.417.8800

Educational Programs

Students have many educational opportunities at WATC and are encouraged to select the program that best meets their career preparation needs. These education opportunities include general education courses and associate of applied science (AAS) degree, technical certificate, certificate of completion and apprenticeship programs. Students may also opt to select courses that focus on particular technical skills instead of registering in a complete program.

Associate of Applied Science Degrees

AAS degree programs are designed to provide students with the knowledge and skills needed to enter the workforce, advance within their chosen careers or further their education. To be awarded the AAS degree, students must successfully complete a minimum of 60 credit hours — a combination of technical and general education hours. Although AAS degrees are designed to prepare students for employment, technical credits may transfer to other colleges or universities.

General education credits must include coursework completed in the areas listed below. The chief academic officer may approve alternative general education courses and acceptance of transfer credits or work experience.

WATC offers the following AAS programs that require general education courses:
- Administrative Office Technology
- Automotive Service Technology
- Aviation Maintenance Technology
- Avionics Technology
- Computer-Aided Drafting
- Health Care
- Interior Design
- Medical Laboratory Technician
- Mechanical Engineering Technology
- Surgical First Assistant

General Education

Associate of Applied Science Degrees

WATC's philosophy and approach to general education promotes the appreciation for lifelong learning necessary to support the professional academic and personal success of students. Every degree program incorporates a common set of general education courses designed to prepare students with a foundation in communication, mathematics and social sciences. These themes are also integrated and applied through the core curriculum in WATC's technical certificate programs.

WATC provides general education courses required for its degree programs. These courses are taught with curricula that meet or exceed state core curriculum standards approved by KBOR and are taught by instructors with the appropriate credentials. WATC's general education courses that lead to the AAS degree are interspersed throughout the program and allow ample flexibility for student schedules.

WATC's technical coursework provides a knowledge base in the application of physical sciences and fosters a tendency to think using an analytical and problem-solution approach; however, what students learn in technical courses is not the only knowledge they need nor is it the only way of thinking. Students will encounter people in their professional and personal lives that will challenge them in other ways — politically, aesthetically, emotionally and morally. General education courses are designed to support and further students' comfort levels in dealing with differing opinions and appreciating other ways of thinking.

Mission and Vision

WATC is committed to providing a general education core program that supports its technical educational programs and offers learners a cost-efficient way to earn general education requirements that are transferable to other educational institutions. Thus, in keeping with KBOR's goal for seamless and efficient transfer, this core curriculum is based on a project initiated in 1999. KBOR's Kansas Core Outcomes Project was an initiative where two- and four-year institutions collaborated to identify the core components and competencies of general education courses. The Kansas Core Outcomes Project meets annually, and these outcomes and competencies are reflected in WATC's general education core program to ensure that the general education courses articulate with other institutions of higher learning.

Mission

The mission of WATC's general education courses is to provide a framework of higher education that enables students to develop knowledge through learning and provides a foundation for success in the global economy.

To reinforce the general education content areas of Communication/Humanities, Mathematics/Natural Sciences and Social Sciences for WATC's AAS degrees, WATC believes that:

- Learners are at the center of curriculum strategies that incorporate clear goals and definable skills.
- The humanities content of the general education core is to provide opportunities for learners to critically explore broad areas of common knowledge, intellectual concepts and attitudes.
- The communications content of the general education core is to provide the skills needed to communicate clearly and effectively in personal and professional settings.
- The problem-solving content for the general education core is to provide a systematic approach to decision-making based on facts and data.
- The ethical content of the general education core is to provide a foundation for responsible roles in business and society.

Productive citizens need to communicate effectively, apply basic mathematical strategies, critically and creatively solve problems, interact in social settings and effectively utilize technology. Wichita Area Technical College (WATC) has established a set of general education learning outcomes to include these areas.

Upon graduating from WATC, students will be able to demonstrate these learning outcomes. These outcomes are integrated into the curricula of all programs and are reinforced in a variety of courses throughout the college.

Students will be able to demonstrate the ability to …

1. Communicate effectively by writing clearly, concisely and accurately in a variety of contexts and formats.
2. Communicate effectively by speaking clearly, concisely and accurately in a variety of contexts and formats.
3. Demonstrate mathematical skills utilizing quantitative problems and drawing conclusions within various contexts.
4. Identify, define and systematically analyze a problem from a global perspective.
5. Identify and express awareness, sensitivity and respect for self and the diverse needs of others within the community.

6. Demonstrate computer literacy by applying current technology within coursework and career fields.

Vision

WATC's general education core courses support the learning outcomes of its technical and AAS degree programs and will be transferable to other institutions of higher learning. WATC will also continue to work with other institutions of higher learning to construct articulation agreements to allow WATC students the ability to matriculate to four-year institutions.

Technical Certificates

Technical certificate programs provide the knowledge and skills needed to enter the workforce. Students who wish to pursue an AAS degree may transfer most of these courses and credits to an AAS degree program at WATC.

Certificates of Completion

Certificate of completion programs provide the knowledge and skills required in today's competitive and changing workforce. Programs vary in length from a few days to several months.

Academic Success

The Academic Success program assists students in mastering the necessary skills to progress with their college education. The instructional program includes test preparation courses for COMPASS™, WorkKeys®, and TEAS® assessments. Materials and tutorial assistance are available in the laboratory to help students improve their skills and ready themselves for entry into college-level coursework.

To fulfill WATC's mission to provide relevant, technical education for employment and lifelong learning, Academic Success courses provide an academic safety net for the needs of two student groups:

- Those who require or desire work in pre-technical college-level competencies, such as reading, writing and math.
- Those who require or desire to improve their college experience through learning enhancement activities, such as reading comprehension, study skills and personal career development.

Academic Success staff members are committed to helping students succeed in technical programs and college-level courses and to helping them prepare for lifelong success.

Self-paced courses may be taken to prepare for placement exams, to refresh skills prior to taking

college-level courses or they may be taken along with other college courses as reinforcement.

Academic Success Goals

Academic Success' primary goal is to ensure that students who enter WATC have opportunities to protect and increase their personal dignity by gaining:

- Proficiency in academic skills.
- Competencies for academic success.
- Confidence to pursue personal goals.
- Problem-solving skills associated with learning and personal development.

Adult Literacy

Adult Literacy includes the Adult Basic Education (ABE), General Educational Development (GED) Preparation and English Speakers of Other Languages (ESOL) programs.

Adult Basic Education

ABE classes build skills that can lead to a high school diploma by passing the GED exams. These improved skills can also lead to better employment and United States citizenship.

ABE Eligibility

Individuals 16 years of age or older and who are not registered in high school may register in ABE classes. This includes both high school and non-high school graduates.

ABE Registration

All applicants must take a Comprehensive Adult Student Assessment System (CASAS) assessment, which is a tool that is used to help the Adult Literacy staff select a program of study that is best for each student.

English for Speakers of Other Languages

ESOL classes help speakers of other languages increase their listening, speaking, reading and writing skills. These classes also help to improve skills needed for United States citizenship.

General Educational Development Test Preparation

There are five GED tests:
- Language Arts, Writing
- Language Arts, Reading
- Mathematics
- Science
- Social Studies

Students are required to pass Official GED Practice Tests administered through a state-approved adult literacy program or GED Testing Center to assure GED test readiness. Persons may not retest unless they have successfully completed a course of study to improve their scores and taken the Official GED Practice Tests again.

For students who need to improve skills prior to taking the Official GED Practice Tests, Adult Literacy offers classes, based on individuals' skill levels, that help them attain the skills needed to achieve their goals. Students study under the supervision and assistance of an instructor. Individual and group activities enhance the learning. Assessments of progress are made until students are ready for referral for GED testing.

GED Eligibility

ABE students are eligible to begin study and practice for the GED exams upon attaining a specified score on the CASAS assessment.

Business Partnerships

Since 1965, WATC has established a working relationship with more than 375 local and area business partners. WATC has trained over 200,000 students to enter the job market, but gaining the skills and knowledge necessary to enter today's workforce is only the beginning. To meet the ever-changing and growing needs of business and industry, employees must continue their pursuit of the skills and knowledge needed to compete, become more productive, transfer knowledge and enjoy life. WATC strives to meet these needs through business partnerships, customized training, professional continuing education and personal enrichment courses.

Mission

The mission of Business Partnerships is to ensure the resources of the college are available to and utilized by all sectors in south-central Kansas to meet the needs of industry, business and private citizens for technical skills, mandated continuing education and to develop lifelong learning habits.

Customized Training

Business Partnerships encompasses all programs that are peripheral to ongoing, campus-based programs. WATC's customized training programs and courses are developed at the request of business, industry and private citizens and are designed specifically to meet their ever-changing and growing needs for technical

skills and profession-mandated continuing education. Due to their unique nature, these programs and courses do not appear in the catalog.

Business Partnerships provides:
- Customized training, technical assistance and other educational opportunities utilizing up-to-date services and equipment — all customized to meet companies' needs and at times that fit their schedules.
- Courses that satisfy industry-specific, professional continuing education requirements.
- Personal enrichment courses that afford individuals opportunities to expand their lifelong learning.
- Training delivered through traditional classroom settings at one of WATC's locations, hybrid, online or at the company's place of business.

To request information about customized training or technical assistance, call 316.677.9400.

Apprenticeship Programs

Apprenticeships are training systems that produce highly skilled workers who meet the demands of employers competing in a global economy. Apprenticeships, partnerships between employers and employees, ensure a quality education by combining on-the-job training with related theoretical and practical classroom instruction. Apprenticeships usually last about four years, but range from one to six years. Up to 48 hours of college credit is awarded upon successful completion of one of the WATC partner apprenticeship programs. With additional general education, students can receive an AAS degree.

Apprenticeship Partners

WATC currently offers credit to participants in the following apprenticeship programs:
- Independent Electrical Contractors
- Iron Workers Local 606
- Kansas Plumbing, Heating, Cooling Contractors Association
- Plumbers and Pipefitters Apprenticeship Training of Kansas
- Sheet Metal Workers Local 29
- Wichita Electrical Joint Apprenticeship and Training Committee

Competency-Based Education

All WATC courses and programs are competency-based education (CBE). Program advisory committees, made up of representatives from business and industry,

identified and validated the knowledge and skills needed by workers in different technical occupations. These knowledge and skill competencies then became the foundation for curriculum and are used to evaluate the progress of students.

Students may review these competencies before registration by asking an advisor or program director for a list. Instructors share the competencies with students on course syllabi during the first class session. At the end of each registration period, instructors rate student competency levels.

Advanced Standing

Because CBE allows for rating skills and competencies, students have the opportunity to receive credit for previous education and/or work experience. Advanced standing is possible providing students are able to pass required written, oral and/or performance tests that indicate competency in particular units of instruction. Passing competency tests advances students to the next unit of instruction in the curriculum. Test-out is not always an option in some laboratory courses.

Satisfaction Guarantee

WATC guarantees that graduates are occupationally competent in the skill areas identified as essential by business and industry. Should an employer identify specific skill deficiencies for which training was provided, or if a graduate cannot find employment due to specific skill deficiencies for which training was provided, WATC agrees to provide retraining of the skills deemed deficient. This guarantee, which waives tuition charges, is good for up to six credit hours and extends one year from the date of graduation.

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Learner
Services

Learner Services

Admissions

Admissions Policy

Wichita Area Technical College (WATC) encourages all individuals who are interested in, and are capable of, extending their education beyond high school to apply. Admission to the college is open to the following individuals.

New Students

- High school graduates
- Persons holding a General Educational Development (GED) diploma

Prospective students need to complete the WATC Application for New Student Admission. An official high school or GED transcript must be mailed directly to the registrar. Applicants who have completed a home-school curriculum must apply under ability to benefit. Transcripts from a foreign country must be translated into English by an accredited institution or approved translating agency and then approved through the registrar.

Acceptance to the college does not guarantee acceptance into a specific program. Most programs have specific program entrance requirements. Contact Admissions for program requirements.

Transfer Students

Prospective students need to complete the WATC Application for New Student Admission. Transfer students seeking admission who have not graduated from high school or have not obtained a GED need to submit an official copy of their transcripts from other colleges attended. Transfer students must have successfully completed 15 hours of credit from an accredited institution and have a grade point average (GPA) of 2.0 or higher to be accepted as a transfer student at WATC. Applicants who do not have 15 hours of college credit must meet the admission requirements for new students.

Practical Nurse applicants, whether a new or transfer student, must provide a high school or GED transcript.

High School Students

High school students may register for courses with the written approval of their parent/guardian and their high school counselor and must submit an official high school transcript. High school students must provide a payment agreement from their high school as WATC is unable to assess tuition to high school students (Kansas Statutes Annotated 72-4417). Students must document evidence of potential success at the college level. Contact Admissions, 316.677.9400, for more information about attending WATC while in high school.

Ability-to-Benefit Students

Students beyond compulsory school attendance age who have not earned a high school diploma or equivalent, are not committed to earning a high school diploma or equivalent, and have the ability to benefit from the occupational education offered by the institution can apply for admission to WATC under ability to benefit. Students who attended a home school or an international high school and have not successfully completed 15 or more hours of credit from an accredited institution with a 2.0 grade point average (GPA) or higher are required to apply for admission under ability to benefit.

All ability-to-benefit students applying as technical certificate or degree-seeking students must demonstrate the ability to academically benefit from college courses. Ability-to-benefit students must take and pass the approved tests listed below with the minimum score indicated. Specific programs may have additional testing requirements. Students who do not meet this minimum standard are referred to WATC's Adult Literacy and/or Academic Success courses for academic remediation. Students must demonstrate their improved abilities and resubmit for admission to WATC.

Approved COMPASS™ Tests and Scores
- Reading   62
- Mathematics   25
- Writing   32

Returning Students

Students who have a break in registration for more than four semesters must reactivate their file by completing an admissions update form. Students may be required to meet any new admission requirements for the college or program before readmission is granted.

International Student Status

Student VISA of M-1 or F-1. Applicants must provide this valid document along with a letter from their sponsoring institution verifying the applicant's current

status. M-1 or F-1 applicants are not eligible for federal financial aid and are assessed the nonresident tuition rate.

WATC has applied to be approved by the USCIS (in the Department of Homeland Security) to accept applicants who are seeking admission through a foreign student visa. Until the application is approved, WATC is unable to issue I-20s.

Undocumented, Non-U.S. Citizens

Undocumented, non-U.S. citizens are eligible to apply for admission if they meet the following Kansas Board of Regents (KBOR) requirements:

• Provide documentation that they attended an accredited Kansas high school for three or more years and graduated from an accredited Kansas high school or obtained a GED diploma in Kansas.

• File an affidavit with WATC stating that they have filed an application to legalize their immigration status or filed for U.S. citizenship or that their parents have filed such an application.

Affidavits are available on WATC's Web site at www.watc.edu/learnerservices.

In addition to the above criteria, all international and non-U.S. citizens must fulfill all college and program requirements before admission is granted. Undocumented, non-U.S. citizens are not eligible for federal financial aid.

Document Requirement

Falsified or forged documents result in an applicant being permanently barred from admission or registration at WATC.

Transcript Requirement

Official transcripts must be mailed directly from the issuing institution and received by the registrar prior to registering. Transcripts must be in a sealed envelope upon receipt and may not be hand-carried or stamped "student copy." Transcripts must be mailed directly to:

Wichita Area Technical College
Registrar
301 S. Grove
Wichita, KS 67211-2099

Admission Assessments

Most programs have admission requirements, including specific assessments on which applicants must meet minimum scores. A student identification number is required to take assessments. Students may take most assessments at the Main Campus, Southside Education Center or Comotara Center. Contact

Admissions, 316.677.9520, Main Campus, to start the process.

General Education Admission Assessments

The ACT® COMPASS/ESL™ is required for placement in general education courses. Contact Admissions, 316.677.9400, Main Campus, for additional information.

Advisement

WATC offers assistance in career planning, selecting courses and dealing with personal or academic problems. Advisement usually precedes registration for WATC programs. Career planners serve as academic/program advisors to assist students with course selection, scheduling and meeting program requirements.

Career planners are available to assist with:
• Course and program information.
• Student orientation.
• General financial aid information.
• Career and job counseling.
• Personal counseling referral.
• Agency referrals.

Financial Aid

Purpose of Financial Aid

The financial aid program assists students who want to attend WATC but who would find it difficult to do so without assistance. WATC's financial aid program combines grants, loans and scholarships for students who meet certain eligibility requirements. To receive federal financial aid, students must be registered, or accepted for registration, as a regular student in an eligible program and must meet all admission criteria.

Eligibility Requirements

Before federal financial aid can be awarded, students must:
1. Be admitted as a regular student at WATC.
2. Be a U.S. citizen or eligible noncitizen.
3. Be registered as a regular student in an eligible program.
4. Have a high school or GED diploma.
5. Have resolved any drug conviction issues.
6. Make satisfactory academic progress.

Financial Aid Regulations

The following regulations govern the awarding and disbursing of all financial aid:

1. Students must complete the Free Application for Federal Student Aid (FAFSA) for the Federal Pell Grant and loans.
2. Students must provide signed copies of their income tax returns and W-2 forms when requested.
3. The Financial Aid office must adjust the Federal Pell Grant and loans for students who withdraw or drop to less than full-time status during a registration period. Awards are adjusted according to the college's cancellation and refund policies.
4. Students who receive financial aid must maintain satisfactory academic progress (see Satisfactory Academic Progress). Satisfactory academic progress is checked at the end of each semester, including the summer session.

Applying for Federal Financial Aid

Students must apply each academic year for federal funds. The FAFSA is the application for the Federal Pell Grant, all student loans and certain other programs. The information provided is processed through the formula adopted by Congress to determine financial need. The formula takes into consideration the number and age of family members in the household, the number of college students, income and assets reported on the application. FAFSA results are communicated as estimated family contribution (EFC). This number determines eligibility for the Federal Pell Grant and subsidized loans.

A certain number of applications are selected by the processing center for verification each year. If selected for verification, students are required to bring completed and signed copies of their income tax returns, W-2 forms, verification worksheets and any other forms requested to the Financial Aid office — parents' forms may also be required. All documents must be brought together — incomplete files are not accepted. Income information is verified, and the results are resubmitted to the processing center. Students are expected to respond in a timely manner to requests for additional documents. Failure to respond to requests results in a significant delay in the award process.

Course Load

The number of credit hours that students are registered in each semester (fall, spring and summer) impacts financial aid eligibility.

Credit Hours and Student Status

Per Semester	Student Status
12 or more credit hours	Full-time
9 to 11.9 credit hours	Three-quarter-time
6 to 8.9 credit hours	Half-time
5.9 or fewer credit hours	Less than half-time

Cumulative Credit and Student Status

Less than 30 credits	First year/freshman
30 to 60 credits	Second year/sophomore

Federal Pell Grant

The Federal Pell Grant is a federally funded program that provides financial assistance to students who demonstrate financial need. The grant does not have to be repaid unless students fail to complete the courses for which aid was received.

Federal Academic Competitiveness Grant

The Academic Competitiveness Grant (ACG) is a federally funded program reserved for first- or second-year students who are registered in two-year associate degree programs. To receive this grant, students must have passed a rigorous course of study during high school as defined by the federal government. To receive ACG funds, students must also be receiving a Pell grant and be registered full-time in at least 12 credit hours. This grant does not have to be repaid unless students fail to complete the courses for which aid was received. The Financial Aid office determines whether or not students meet eligibility requirements.

Loans

A loan is borrowed money that must be repaid with interest.

Federal Stafford Student Loans

Recipients of federal student loans are under full obligation to repay loans. Requirements for loans include completing the FAFSA and registering in at least six hours (half-time) per semester.

Before Accepting a Loan

WATC requires all students borrowing for the first time at WATC to complete an entrance counseling session. This session provides information that students need to know before accepting loans. It includes students' rights and responsibilities as borrowers of federal funds and an overview of repayment information.

Loan Disbursement

All loans must be disbursed in at least two equal payments, usually once each semester. In the case of a single-semester loan, half of the loan amount is disbursed at the beginning of the semester; the second disbursement is disbursed after the midpoint of the semester. There are no exceptions to this rule.

Before Leaving School

All student loan borrowers are required to complete an exit counseling session before graduation or at the time of withdrawal. The session provides information about the rights and responsibilities of the borrower, the anticipated date that repayment will begin, to whom and where to make payments and an estimated payment amount. Students who plan to leave WATC should contact Financial Aid, 316.677.9400, for specific information.

Federal Subsidized Stafford Loans

Subsidized loans are for students who demonstrate financial need. The federal government pays the interest for students while they are registered at least half-time and during the six-month grace period after graduation. Repayment begins six months from graduation or the last date of attendance.

Federal Unsubsidized Stafford Loans

Unsubsidized loans are available to students who do not demonstrate financial need. Students may pay interest either quarterly during the period of registration or at the time of repayment. Additional unsubsidized loans are also available to independent students (determined by federal guidelines on the FAFSA) or to students whose parents have been denied a Federal Parent Loans for Undergraduate Students (PLUS) loan. Repayment begins six months after graduation or the last date of attendance.

Federal Parent Loans for Undergraduate Students

Federal Parent Loans for Undergraduate Students (PLUS) loans are available to parents of dependent students who are registered at least half-time and need additional resources. Only parents (as defined on the FAFSA) are eligible to apply for this loan.

Repaying the Loans

After students graduate, leave school or drop below half-time status, there is a six-month grace period before loans are due for repayment. The amount of the loan payment depends on the size of the debt and the time it takes to repay the loan.

Scholarships

Scholarships are available that are not based solely on financial need. These scholarships are usually made possible by private donations to the college and are awarded to students in recognition of academic achievements or work experience. Several scholarships are available to students at WATC. A complete list of available scholarships and eligibility requirements is available through the Financial Aid office.

Other Resources for Financial Aid

The following resources may have funds available for qualified students. Eligibility is determined by the organization. Contact the organization for eligibility requirements:

- Bureau of Indian Affairs (BIA)
- Department of Veterans Affairs
- Kansas Department of Human Resources
- SER Corporation
- Social and Rehabilitation Services
- Vocational and Rehabilitation Services
- Workforce Development Office
- Workforce Investment Act (WIA)
- Employer-sponsored programs
- Private and institutional scholarships

Transferring to Another College

Students who plan to transfer to another college or to WATC during the year must add the new college's code to the Student Aid Report (SAR). Students should contact either college's financial aid office for information on how to do this. WATC's code for the FAFSA is 005498.

Satisfactory Academic Progress

Students must meet the following requirements to maintain eligibility for federal student aid:

1. Maintain a 2.0 GPA. The overall GPA is cumulative and includes all periods of registration.
2. Successfully complete at least 67 percent of the credit hours in which they registered for the semester.
3. Complete program within 150 percent of the published length of the program measured in credit hours attempted, which includes, if applicable, transfer credits that apply toward the student's program of study and all other credits taken at WATC.

Grades of A, B, C, D and F are counted in determining the cumulative GPA. Grades of I, U, S and W are not counted in determining the overall GPA. However, these grades and hours count in determining the percentage of successfully completed hours. Satisfactory progress is checked at the end of each semester, including the summer session.

Students who fall below a 2.0 GPA on accumulated coursework are referred for advisement. Students are notified of this status by mail. Students may not be recommended for readmission if justification for continued registration is not shown.

Students are encouraged to visit regularly with their advisors and instructors regarding grades and academic standing.

Financial Aid Probation

Students who are receiving federal and state financial aid and do not meet the satisfactory academic progress requirements are placed on financial aid probation for the following academic semester. Students have the following semester, or next registration period they attend, to meet the satisfactory progress requirements. Students who are on financial aid probation due to incomplete grades are removed from probation when all other requirements are met, the course is completed and grades are turned in to the registrar. Students are notified in writing of their financial aid status at their recorded address.

If satisfactory academic progress is not regained within the next term of registration, students are placed on financial aid suspension.

Financial Aid Suspension

Students who are on financial aid probation and do not make satisfactory academic progress, and students exceeding the maximum amount of time allowed to complete a program, are placed on financial aid suspension. Students who are on financial aid suspension are not eligible to receive financial aid until satisfactory progress is demonstrated. Students are notified in writing of their financial aid status at their most recent address.

Financial Aid Suspension

Appeals Process

Students who are placed on financial aid suspension and feel they have exceptional circumstances may appeal in writing to the Financial Aid office with the appropriate documentation. Appeals must be received within 30 days of the date the notification of suspension was issued. Hearings are then scheduled with the Financial Aid Review Committee. The committee reviews appeal requests and makes decisions based on the documentation and circumstances surrounding requests. Students are notified in writing of decisions. The review committee's decisions are final.

Regaining Financial Aid Eligibility

Students who lose federal financial aid eligibility for not making satisfactory progress regain eligibility when the registrar determines that satisfactory progress requirements have once again been met.

Once students demonstrate satisfactory academic progress, they are reinstated as eligible recipients and placed on financial aid probation for subsequent terms.

Students may be paid for a registration period in which satisfactory progress is regained, but cannot be paid for any payment period in which the requirements were not met.

Return of Title IV Funds Policy

Students who have received any financial aid and are considering withdrawing from courses at WATC should contact the Financial Aid office, 316.677.9400, to complete the required paperwork.

If tuition and other costs were paid with financial aid dollars (federal grants and/or loans), then all or a portion of the student's refund must be returned to the student aid program(s) from which the money was awarded. Students who received cash disbursements to assist with living expenses and then withdraw, drop out or are expelled may be required to repay some or all of the money.

Students who withdraw from all courses before 60 percent of the semester or registration period has passed must repay all or a portion of the federal financial assistance received. This means that students are not entitled to 100 percent of their federal grants and/or loans until 60 percent (about 11 weeks of an 18 week semester) of the registration period has been completed. This policy applies only if students completely terminate registration from every course, cancel registration, withdraw or are dismissed.

Students are required to return the difference between the amount of unearned aid and the amount returned by the college. Students are responsible for any amount due the college that results from the return of Title IV funds that were used to cover college charges, such as tuition, tools, books, uniforms or materials.

Any federal grant money that students have to repay is considered a federal overpayment. Students must either repay that amount in full or make satisfactory arrangements with the U.S. Department of Education to repay the amount. Students must repay, or make repayment arrangements, within 45 days of the date they are notified of the overpayment or they lose further eligibility for all federal aid for attendance at any college until the debt has been paid in full. To make repayment arrangements, contact the U.S. Department of Education, Debt Collection Services, 1.800.621.3115.

Financial Obligation

Failure to meet financial obligations of any kind to WATC could subject a student's account to suspension of future services; referral of delinquent accounts to a collection agency; and the assessment of additional late payment charges, transcript holds, attorney's fees and other costs and charges necessary for the collection of any amount not paid when due.

Registrar

Privacy Policy

WATC complies with the Family Educational Rights and Privacy Act of 1974 (FERPA) and affords students certain rights with respect to their educational records. This act was designed to protect the privacy of educational records, to establish a student's right to inspect and review their educational records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. See board policies LS 4.0 Construction and Maintenance of Educational Student Records and LS 5.0 Privacy of Student Records.

Student Rights

In accordance with FERPA, WATC requires that students who want WATC to release copies of grades, transcripts or any other information relative to academic performance to parents, guardians, bill-payers, prospective employers or governmental agencies must give WATC permission to do so. All requests to secure or release these types of information must be accompanied by a written authorization signed by the student. Without such authorization, WATC does not release this information. This policy extends and applies to parents who request access to and disclosure of their student's educational records. Student records are never released without written consent except to WATC faculty and staff who demonstrate a clear need to know. Other exceptions to this policy include compliance with a judicial order or an emergency involving the health or safety of students or other persons.

Directory Information

Unless specifically requested by the student within ten days of the beginning of each semester to not disclose the information listed below, WATC may disclose such information at its discretion for any purpose. WATC designates the following student information as public or directory information:

• Name
• Dates of attendance
• Classification
• Major/degree program of study
• Awards
• Honors
• Degrees conferred, including dates
• Past and present participation in officially recognized activities

Currently registered students, or any who have previously attended WATC, may inspect their academic records by submitting an official written request to the registrar. Students must schedule an appointment with the registrar to inspect their records.

Students may challenge possible inaccuracies or misleading items in their records during the course of such an inspection — the fairness of a grade may not be challenged under this provision. Students also have the right to file a complaint with the U.S. Department of Education over alleged failures by WATC to comply with FERPA requirements.

Students are notified each year of their rights under FERPA through the catalog and student handbook. Additional information regarding student records and FERPA may be obtained from the registrar.

Student Records

Confidential student records are not released to prospective employers, colleges or other third parties, including parents, without the student's written permission and signature. This policy is in accordance with FERPA. Upon request, students may inspect and review their educational records. Students also have the right to request a hearing with vice president, Academic Affairs and Learner Services, to challenge the accuracy of their records. See Privacy Policy for additional information. Consent to Release Nondirectory Information forms may be obtained from the registrar or online at www.watc.edu/students-registrar_office.php.

Student Rights Regarding Personal Information

Students who are asked to supply private or confidential information are to be informed of the following according to the Federal Protection of Pupil Rights Amendment (PPRA), as amended:

"Student social security numbers are personal information. Section 7 of the FERPA of 1974, Pub L. No. 93-579, provides that it shall be unlawful for any federal, state or local government agency to deny any individual any right, benefit or privilege provided by law because of such individual's refusal to disclose his social security account number. Any federal, state or local government agency that requests an individual to disclose his social security account number shall inform that individual whether that disclosure is mandatory or voluntary, by what statutory or other authority such number is solicited and what uses will be made of it."

• The purpose and intended use of the information.
• Whether they may refuse, or are legally required, to supply the requested information.
• Any known consequences arising from supplying, or refusing to supply, private or confidential information.

- The identity of other persons or entities authorized by state or federal law to receive the information.
- Upon request, students must be told whether WATC maintains information on them and the classification of that information — this includes confidential information.
- Students have the right to review all private or public information on them without charge.
- Students have the right to receive copies of private or public information about them. WATC may charge a fee to cover actual costs for providing the copies.
- Students may contest the accuracy or completeness of public or private information by submitting a written complaint. WATC has 30 days to either correct the information found to be in error or to notify the student that it believes the information is correct. If the information is found to be incorrect, WATC will attempt to notify past recipients of the information. Students may appeal WATC's adverse determination. Refer to the college's policies and procedures manual.
- The permission or consent required of parents and the rights accorded to parents by statute or law are required for and accorded to students.

Course Load

Credit Hours and Student Status

Per Semester	*Student Status*
12 or more credit hours	Full-time
9 to 11.9 credit hours	Three-quarter-time
6 to 8.9 credit hours	Half-time
5.9 or fewer credit hours	Less than half-time

Cumulative Credit and Student Status

Less than 30 credits	First year/freshman
30 to 60 credits	Second year/sophomore

Registration Information

Change of Major

Students who wish to change their major or program of study or update other information should complete the proper form and submit it to the registrar within the first two weeks of the semester.

Information Update

To update other student information, such as a name or address change, students should complete a Student Record Change form and submit it to the registrar. In order to process a name change, documentation such as a marriage license or driver's license is required. The information update form is available in administrative offices at all locations or online at www.watc.edu/students-registrar_office.php.

Tuition and Fees

Kansas resident tuition for most technical programs and courses starting between July 1, 2008, and June 30, 2009, is $68 per credit hour. Tuition for a few selected programs varies from $48 to $346 per credit hour. Kansas nonresident or out-of-state student tuition is the same as the Kansas resident tuition. Fees are $23 per credit hour. Material costs are additional and vary according to the program. Rates are subject to change without advance notice. Tuition and fees are also available online at www.watc.edu/learnerservices.

Returned Check Fee

Nonrefundable for insufficient check.........................$30

Transcript Fee

Per transcript requested $8

Textbooks, Materials, Tools and Supplies

Students are responsible for purchasing textbooks, materials, tools, uniforms and other costs that are charged separately. Costs differ from course to course. Textbook information is provided at orientation.

Preregistration

Students are encouraged to preregister for courses. Once the WATC Application for New Student Admission, official transcripts and ACT™ WorkKeys® or other entrance test scores have been received, students may preregister in courses or register with payment. Some programs may have additional requirements that must be met before students can preregister. Appointments are not required. Advisors are available to answer questions and assist with the preregistration process.

Late Registration

See Add, Drop and Withdrawal Process.

Payment

The preregistration period ending date for each semester is published in the class schedule. Registration continues until the first day of the course or until courses are full.

- Statements are issued to students who have preregistered. Payments are due each semester by the published deadline dates. Students may obtain class schedules and make payments at the Main Campus and Southside Education Center.
- To mail payments, students should send check or money order with full name and program name to:

Wichita Area Technical College
Finance and Operations
301 S. Grove, Wichita, KS 67211-2099

- Payments must be made by the published deadline dates for each semester or the student's registration may be cancelled. Students may register again for open courses, but cash, check, third-party authorization or federal financial aid must be available as payment.

Financial Obligation

Failure to meet financial obligations of any kind to WATC could subject a student's account to suspension of future services; referral of the delinquent account to a collection agency; and the assessment of additional late payment charges, transcript holds, attorney's fees and other cost and charges necessary for the collection of any amount not paid when due.

Transfer of Credits to WATC

Coursework from an accredited institution and/or documented work experience or business, industry or military training that fulfills course requirements for an AAS degree or technical certificate program within the last five years may be considered for transfer credit. Credits earned prior to this time are evaluated on a course-by-course basis. Approved transfer credits are not included in the student's WATC career GPA, but the credit hours are applied to the program award requirements. Some WATC programs have transferable credit to other programs. Credit hours earned at WATC and transferred from one program to another are evaluated following the same guidelines and review process, and the credit is included in students' GPA.

WATC requires official transcripts, employment information and military records from each institution from which a student wants to transfer credit. Students are responsible for ensuring that transcripts or documents have been sent and are on file with the registrar. Without sufficient documentation, it may be necessary for students to verify technical knowledge and skills through written and/or performance examinations. The registrar and/or appropriate senior learning officer review and evaluate transfer of credit requests and inform students in writing as to the acceptability of the coursework or experience toward an AAS degree or technical certificate. Transfer credits must have been earned at an accredited institution. Equivalent coursework for which students have earned a letter grade of C or better is considered for transfer.

Credit by Examination

Students may demonstrate, on an internal WATC examination, the knowledge and proficiency necessary to receive credit for certain courses.

Purpose

The purpose of awarding credit by examination is to give students the opportunity to earn credits based on previous knowledge, thereby avoiding unnecessary repetition of content, which allows them to move more quickly toward graduation.

Procedure

Students who are seeking AAS degrees or technical certificates may request credit by examination for certain courses in the current catalog for which achievement of the course goals can be demonstrated by examination. Students are advised to complete credit by examination testing prior to the first day of classes. For students who are currently attending classes and would like to take a credit by examination, testing must be completed prior to the end of the first week of classes.

The individual course for which credit is to be given and the test itself must be approved by the senior learning officer.

1. Students must have completed all college admissions requirements and provided the registrar with all previous college transcripts.
2. Students must be registered to be eligible for credit by examination.
3. Students must have met any prerequisites prior to taking an exam for credit.
4. Students may take an exam for credit only once for each course.
5. Students may not take an exam for credit if transfer credit has already been granted for the course or if the student has already taken the course at this or another institution.

Process

1. Students complete the Credit by Examination form and submit it to the registrar or designee for approval. The registrar submits the request to the appropriate senior learning officer for approval for courses not already designated eligible for credit by examination.
2. Students take the signed form to their student representative and pay $75 per test for the exam. The fee must be paid prior to taking the credit by examination and is not refunded if students do not pass the exam. There is no financial aid available to pay for credit by examination, and the hours earned through credit by examination do not count

as registered hours. Students who fail the exam may pay the tuition and take the course.

3. Students take receipt to Testing Services for administration of credit by examination.

4. Testing results are sent to the registrar, and students are notified by mail of exam results.

5. If a student does not pass the exam, a notation is made on the Credit by Examination form, and the form is filed in the student's permanent file. No indication of the exam is made on the student's transcript.

6. If a student passes the exam, a notation is made on the Credit by Examination form, and the form is filed in the student's file. The credit is placed on the student's transcript with a grade of S. Results of special examinations do not affect student's cumulative GPA.

Auditing Courses

Students who audit courses attend regularly but are not required to take exams or complete assignments. No credit is awarded for audited courses.

- All course prerequisites must be met or students must obtain instructor approval.
- Each division determines which courses are suitable for the audit option.
- A grade of X is recorded on students' transcripts. Under no circumstances may an audited course be changed to a course taken for credit, and courses registered in for credit cannot be changed to a course for audit. Students may register to audit courses if space is available. Registration dates for auditing courses follow the published add period for the semester.
- The registration form for audited courses must be signed by the appropriate senior learning officer. The completed and signed form should be returned to the registrar.
- Tuition and fees for audited courses are the same as those charged for credit courses. Tuition and fees are due at registration and may not be charged to students' accounts.
- Financial aid and scholarship monies may not be used to pay for audited courses.

Work Experience/Training

Work experience or business, industry or military training considered for transfer must satisfy program course requirements. If accepted for transfer, the experience is converted to a justifiable number of credit hours and documented on the student's transcript. Letter grades are not assigned. A maximum of six credit hours is accepted by WATC for this purpose. Any exceptions will be reviewed on an individual basis.

Transfer of Credits From WATC

It is possible to transfer WATC credits to other colleges and universities. To be assured of credit transferability, it is essential that students talk to an admissions officer at the college to which they are transferring. WATC does not copy, forward or release another institution's records.

Add, Drop and Withdrawal Process

Once students have completed registration, the only way they can modify their schedule is by following the Add, Drop and Withdrawal Process. Students who are improperly registered should immediately go to the registrar's office for instructions on how to proceed. Students may drop courses or withdraw from the college by completing a Course Schedule Change form, obtaining the appropriate approval signatures and submitting the completed form to the registrar. The effective date is the date that the completed Course Schedule Change form is received in the registrar's office. Courses dropped prior to the published 20th day of classes for a given term (or 25 percent of class meetings for nonstandard terms) are not recorded on the student's transcript. For financial aid purposes, the withdrawal date is always the last date of attendance as determined by the institution from its attendance records. Students who do not officially drop/withdraw from a course receive an F for that course. The Course Schedule Change form is available at all administrative offices.

Adding/Dropping Concurrently

Students who concurrently drop and add the same number of credit hours in a simultaneous transaction may incur additional charges or receive refunds. See the Institutional Refund Policy.

Adding Courses

Students may add a course or courses according to the following schedule:

- Short-term courses/programs: No adds after class begins.
- Eight to 16-week technical courses: May add through the second day of class with instructor approval.
- Eight-week general education/transfer courses: May add up to three business days after start of class.
- 16-week general education/transfer courses: May add up to five business days after start of class.

Administrative Withdrawal

WATC may elect to initiate an administrative withdrawal to withdraw students from all courses for any of the following reasons:

1. Student fails to provide documentation required by WATC for full admission status.
2. Student fails to meet WATC's basic standards for academic performance and/or progress.
3. Student violates attendance expectations.
4. Student fails to provide documentation requested by WATC to complete student's financial aid file in a timely manner.
5. Student fails to make payment of tuition and/or fees in the manner, amount and at the time agreed on between student and WATC's Finance and Operations office.

Should WATC elect to initiate an administrative withdrawal, written notification is sent to students. Students have five business days to appeal an administrative withdrawal. The completion of an administrative withdrawal does not relieve students of their financial obligations to WATC. All charges that are unpaid by students at the time of an administrative withdrawal become immediately due and payable. Refunds are issued and credits are applied in accordance with WATC's published refund policy.

Course Cancellation

Insufficient Registration/Class Size Limitations

Courses have specific minimum or maximum registration numbers. If it becomes necessary to cancel courses due to insufficient registration, all tuition and course fees are refundable for courses that are cancelled if a replacement course is not provided. WATC reserves the right to cancel or postpone courses regardless of the advertised starting date. Registration for most programs is on a first-come, first-served basis.

Attendance

Class attendance is a reliable predictor of future performance as an employee, and WATC is dedicated to providing employability and technical skills. Punctual attendance at all scheduled classes is regarded as integral to all courses and is expected of all students. Students are also expected to maintain satisfactory progress in all courses in which they are registered. Because all coursework builds upon material sequentially presented in classes, WATC faculty members include attendance expectations in their course syllabi. Students are responsible for knowing and adhering to these expectations. Penalties for excessive absences may include reduction of grades and/or withdrawal from courses. Students are responsible for obtaining information presented during absences. WATC encourages all students to check with their instructors if they have any questions regarding program attendance expectations.

Grading System

Letter Grades

WATC issues letter grades to communicate students' level of achievement or competency. It is important to note the quality points and the meaning of each letter grade.

Letter Grade	Quality Points Per Credit Hour	Grade Description
A	4	Superior achievement (credit awarded)
B	3	Above average achievement (credit awarded)
C	2	Average achievement (credit awarded
D	1	Below average achievement (credit awarded but does not satisfy graduation requirements in occupational specific/core courses)
F	0	Failing work (no credit awarded)
S	Not calculated	Satisfactory achievement
U	Not calculated	Unsatisfactory achievement (no credit awarded)
W	Not calculated	Withdrawn
I	Not calculated	Incomplete
N	Not calculated	Grade not submitted
X	Not calculated	Audit (no credit awarded)

Work Ethics

WATC acknowledges the importance of good work ethics. The college awards a numerical grade for work ethics in technical programs. The grade is determined by evaluating ten work ethic traits including attendance, character, teamwork, appearance, attitude, productivity, organizational skills, communication, cooperation and respect:

3   Exceeds Expectations
2   Acceptable
1   Needs Improvement
0   Unacceptable

Grade Point Average

Semester and cumulative grade point averages (GPAs) are calculated and recorded on students' permanent transcripts at the end of each grading period. Semester GPAs are calculated by adding the quality points earned, which is the number of credits taken multiplied by the points awarded for each letter grade (A=4, B=3, C=2, D=1, F=0). This number is then divided by the credit hours attempted that semester. Cumulative GPAs are calculated the same way, but are a composite of all quality points earned and credit hours attempted at WATC. While transferred credits are added to transcripts, the grades for these hours are not included in calculating the WATC GPA.

Repeat courses are noted on grade reports and transcripts with an R after the letter grade. The new grade replaces the original grade in the calculation of student's cumulative GPA. Questions about grades or GPAs should be directed to the registrar or senior learning officer.

Incomplete Courses

Students who are unable to complete courses should contact their instructor regarding incomplete grades. At the instructor's discretion, students may be granted an extension of time to complete assigned work if they are in good standing (have been making a passing grade) and they enter into a contract with the instructor indicating what work must be completed and the time frame for completion. If granted, students receive an incomplete letter grade for the course, which is recorded as an I on the grade report and transcript.

All work for incomplete courses must be satisfactorily completed within four calendar weeks. The instructor then completes the appropriate documentation and submits it to the senior learning officer for validation. The senior learning officer then submits the validated documentation to the registrar. The I automatically becomes an F or U at the end of the four-week period if a change is not requested.

Repeating Courses

Students are allowed to repeat failed or dropped courses. All course-related charges must be paid for repeated courses. Repeat courses are noted on grade reports and transcripts with an R after the letter grade. Only the latest grade earned, higher or lower, is used to calculate the GPA.

Occupational Profiles

Occupational profiles are more explicit than letter grades and provide prospective employers detailed information about students' technical knowledge and skills. This gives graduates an advantage when seeking employment.

Occupational profiles are based on a numerical rating system that assesses students' occupational competencies as follows:

4 Skilled — performs task independently
3 Moderately skilled — performs task with limited supervision
2 Limited skilled — performs task with close supervision
1 Exposure — received instruction, but has not developed skill
N No instruction on task

Occupational profiles are available for most current programs. There is a processing charge for occupational profiles. Students may obtain copies of their occupational profile through the registrar by submitting a completed Transcript Request form along with payment for the processing charge. Upon written request from the student, WATC mails profiles to prospective employers and others. The Consent to Release Nondirectory Information and Transcript Request forms are available from the registrar or online at www.watc.edu/students-registrar_office.php.

Grade Reports

Grade reports are issued by mail at the end of each semester for courses that receive letter grades. The report reflects semester and cumulative GPAs. Official grade reports are mailed to students' last address of record. Students are responsible for keeping address information current.

Courses for which instructors have not submitted grades are reported as Grades Not Submitted with a letter grade of N on grade reports and transcripts. Questions about grades should be directed to the registrar, an instructor or senior learning officer.

Transcripts

Transcripts, official records for individual students, list the subjects studied, credits earned and grades received. A transcript fee must be paid before transcripts are provided to students or other institutions. Contact the registrar for additional information.

Financial Obligation

Failure to meet financial obligations of any kind to WATC could subject a student's account to suspension of future services; referral of the delinquent account to a collection agency; and the assessment of additional late payment charges, transcript holds, attorney's fees and other cost and charges necessary for the collection of any amount not paid when due.

Academic Probation

To graduate, students must maintain a minimum cumulative GPA of 2.0 on a 4.0 grading scale. Students who are registered in six or more credit hours and do not maintain a 2.0 cumulative GPA are placed on academic probation the following semester of registration. Students who receive financial aid must meet additional criteria to meet satisfactory academic progress. Contact Financial Aid, 316.677.9400, for additional information.

At the close of each semester, the registrar and the administrator, Learner Success, review students' academic records and notify students in writing of their probationary status.

To register while on academic probation, students are required to:
• Meet with a career planner to understand the terms of academic probation and academic suspension.
• Complete a written action plan with a career planner. The action plan must have the approval of

the appropriate senior learning officer and include specific academic goals that facilitate achieving the required GPA, which may include meeting with the senior learning officer or instructor to determine progress, as well as any additional actions or interventions deemed necessary.

If students' semester and cumulative GPA meet the requirements for satisfactory academic progress at the conclusion of the probationary semester, students are no longer considered to be on academic probation. Students who do not meet satisfactory academic progress requirements are placed on academic suspension.

Students who are placed on academic suspension at WATC may appeal to the vice president, Academic and Learner Services. For details on this process, refer to Grievance Procedure, which can be found in the catalog and student handbook. Students who are placed on academic suspension are not eligible to register for the next regular semester. After one semester of academic suspension, students may register under continued academic probation status until their GPA reaches 2.0.

Graduation Requirements

To be awarded an AAS degree, technical certificate or certificate of completion, students must pass all required coursework, submit required transcripts for transfer credit and meet all academic, financial or other obligations required for their program of study. To be eligible for graduation, students must have an overall GPA of at least 2.0. WATC urges students to continuously monitor their educational progress. Prior to the final semester or registration period, students must meet with a career planner to ensure that all requirements will be finished prior to the anticipated graduation date.

Associate of Applied Science Degree Graduation Requirements

- A minimum of 60 semester credits with an overall GPA of 2.0 or higher. *
- A passing grade in all courses within the student's declared program of study. *
- At least 25 percent of credits must be earned at WATC.
- Recommendation for graduation by the registrar.

* Individual program requirements may vary.

Technical Certificate Graduation Requirements

- A minimum overall GPA of 2.0. *
- A passing grade in all courses within the student's declared program of study. *

- At least 25 percent of credits must be earned at WATC.
- Recommendation for graduation by the registrar.

* Individual program requirements may vary.

Certificate of Completion Requirements

- A passing grade in all courses within the student's declared program of study. *
- Recommendation for issuance of the certificate by the registrar.

* Individual program requirements may vary.

Intent to Graduate

All students in AAS degree or technical certificate programs of study must formally notify the registrar of their intent to graduate by completing a Graduation Intent Card — even if they do not choose to participate in the commencement ceremony. This card needs to be completed at the beginning of the student's final semester. The registrar completes degree checks after Graduation Intent Cards are returned.

Commencement Ceremonies

At the conclusion of the spring semester, all students completing AAS degree or technical certificate programs are honored at a commencement ceremony.

Individual locations may also hold ceremonies throughout the year to recognize students who complete AAS degree, technical certificate or certificate of completion programs.

Career Services

Career Services offers several services to all WATC students and alumni to assist them in securing relevant employment after graduation.

College Central Network, Inc.

WATC partners with College Central Network, Inc. (CCN), an online job and résumé board. This service is available to current students, alumni and employers. Career planners provide training sessions for current students. To use the system, students, alumni and employers must register online at www.collegecentral.com/watc. Weekly e-mails are sent to all students and faculty updating them with new job opportunities on College Central Network.

Job Boards

All WATC's locations have job boards where available employment opportunities are posted. The job boards are updated and new jobs are posted weekly. Jobs that are specific to a program are also sent to instructors

for announcement in classrooms. Senior learning officers and faculty are also notified of job openings that pertain to their divisions.

Career Placement Study

WATC conducts a career placement follow-up study each year to determine the employment status of WATC graduates. Follow-up results are published in the Career Placement Report, which is available from Career Services, administrative offices at all locations or online at www.watc.edu. WATC provides career placement assistance to all WATC graduates, however, career or job placement cannot be guaranteed.

References and Letters of Recommendation

To request a letter of recommendation or reference from a WATC faculty member, students must complete, sign and date a Student Reference Request form. Students are responsible for submitting the original completed form to the registrar and a copy of the form to the faculty member before a recommendation is given.

Finance and Operations

Institutional Refund Policy

Schedule Changes

Students who are considering withdrawing completely from a program must contact the registrar, their advisor or senior learning officer and instructors. Schedule changes can affect a student's financial aid eligibility and status.

General Refund Guidelines

Drops and/or Withdrawals Before First Day of Courses

Refunds for drops or complete withdrawals on or before the first day of classes are given for tuition, fees, undistributed materials, undistributed uniforms and program dues. No other charges are refundable. See Tuition Refund Schedule.

Drops and/or Withdrawals After Courses Begin

Refunds for drops or complete withdrawals after classes begin are given for tuition and fees only. No other charges are refundable including, but not limited to, uniforms, tools, materials, insurance, program testing/exam fees, dues and other student fees. See Tuition Refund Schedule.

Refunds

Refunds, when due, are made within 30 days from the date the registrar receives the completed Course Schedule Change form from the student. If refunds are a result of the receipt of Title IV funds, any credit balance is to be refunded to the student, or parent if from a PLUS loan, within 14 days from the date that the credit balance is generated. Refund checks are mailed directly from Finance and Operations to student's recorded address. Students may not pick up refund checks. In the event that a manual check is approved and issued from the student's account, a processing fee of $25 will be charged.

Students who paid with credit cards are notified by mail when refund calculations are complete. Students must then return to the Main Campus or Southside Education Center with the charged credit card for refunds to be processed.

Cancelled Courses

All tuition and course fees are refundable for courses that are cancelled. Refunds, when due, are made within 30 days from the date the course is cancelled.

Administrative Dismissal From College

See Tuition Refund Schedule.

Student Drop or Withdrawal Process

See Add, Drop and Withdrawal Process.

Tuition Refund Schedule

Refunds for students who drop or withdraw after tuition has been paid are calculated based on the following schedule:

For 8- to 16-Week Credit Courses	Refund Amount
Prior to and including the 1st day of class	100% refund
Up to seven calendar days after 1st day of class	100% tuition*/fees
Eight or more calendar days after 1st day of class	No refund

For 2- to 8-Week Credit Courses	Refund Amount
Prior to and including the 1st day of class	100% refund
Up to five calendar days after 1st day of class	100% tuition*/fees
Six or more calendar days after 1st day of class	No refund

For Non-Credit/Less Than 2-Week Courses	Refund Amount
Prior to 1st day of class	100% refund
After course begins	No refund

Financial Obligation

Failure to meet financial obligations of any kind to WATC could subject a student's account to suspension of future services; referral of the delinquent account to a collection agency; and the assessment of additional late payment charges, transcript holds, attorney's fees and other cost and charges necessary for the collection of any amount not paid when due.

WATC

www.watc.edu

**Catalog
2008–2009**

**Additional
Services and
Resources**

Additional Services and Resources

Building Accessibility / Accommodations

WATC does not discriminate with regard to disability in employment, education, admissions or activities. The layout at all locations makes it possible for physically disabled individuals to access most programs of study offered. Special-need services are provided to improve access to education opportunities and to provide reasonable accommodations for individuals with learning disabilities that limit life functioning. Reasonable accommodations are provided to individuals with documented disabilities. It is the responsibility of individuals with disabilities to make their needs known to the senior learning officer responsible for their location. Forms are available through Learner Success or online at www.watc.edu/prospective-ada.php.

Reasonable Accommodations for Individuals With Disabilities

WATC recognizes that traditional methods, programs and services are not always appropriate or sufficient to accommodate limitations experienced by some qualified persons with disabilities. When a disability prevents a student from fulfilling a course requirement through conventional procedures, consideration is given to alternatives while also realizing that academic standards must be maintained.

As deemed appropriate in individual situations, reasonable accommodations may be made for qualified students with disabilities. Support services and auxiliary aids are examples of reasonable accommodations that may be made available under specific circumstances.

Students eligible for accommodations and/or services, under Section 504 of the Rehabilitation Act of 1973 and the Americans With Disabilities Act (ADA) of 1990, have certain responsibilities. Students must provide WATC with medical or other diagnostic documentation confirming their disability and limitations. They may also be required to provide additional documentation of limitation evaluations, such as a recent report — prepared by a qualified physician, psychologist or professional — that evaluates their ability to perform adult-level college work and states the parameters of the disability.

Students are responsible for requesting accommodations or auxiliary aids and are expected to cooperate in obtaining and arranging for accommodations or auxiliary aids. Requests should be made at least six weeks before courses, programs or activities begin. Students should contact the administrator, Learner Success each semester after registration with a list of courses they have registered in and instructors' names. Forms are available from Learner Success or online at www.watc.edu/prospective-ada.php.

Students are responsible for making a written request for assistance to obtain specialized support services from other resources, such as State Vocational Rehabilitation, Recordings for the Blind, State Services for the Blind, etc. Example: The Division of Vocational Rehabilitation may fund items, such as transportation to the institution, tuition, text books, hearing aids and other individually prescribed devices.

The administrator, Learner Success, Main Campus, serves as the coordinator of accommodations for students with disabilities, acts as the resource person to faculty and staff members and is the liaison to outside agencies.

WATC encourages students with disabilities to practice self-advocacy. Anything that faculty and staff members can do to aid this process enhances mutual understanding and communication.

Food Services

All WATC locations have lounge areas with vending machines where food and beverage items are available for purchase.

Housing

WATC is an urban college and does not own, operate or enter into formal agreements for student housing. Contact a career planner for local information, 316.677.9400.

Inclement Weather

If classes are cancelled due to inclement weather, notification of cancellation is sent to local radio and television stations. If a student is unsure about a particular location, information is available through the administrative office, by calling the college's Emergency Closing Hotline, 316.677.9596, and online at www.watc.edu.

Student Identification

The ability to easily identify current WATC students is an important component of WATC's campus safety and security efforts. Students must have a valid WATC photo student identification (ID) card for the current semester. Students are required to wear their IDs in a manner that keeps them readily visible while on any WATC property. IDs may also be required to access resources in the Library and Learning Resources Center. Student IDs are prepared as a part of student orientation or can be obtained through the Learner Services office at the Main Campus or Southside Education Center.

Library Learning Resources

WATC's Library and Learning Resources Center is located at the Southside Education Center. Collections include books, current and archived periodicals, audio-visual materials, software programs, an online catalog and online databases that are general and program-specific. These allow students to do subject searches for journal articles or e-books. Off-campus, students can access the library through WATC's Web page at www.watc.edu.

The library offers Information and Library Literacy training to the student population. This training provides students with the abilities to access and analyze information in a digital world, which increases their life skills and provides a competitive edge in the job market. An online tutorial of library procedures and searching techniques is also available on the Web page to assist students.

The library provides individual reference and research support to everyone, including prospective students and community members. The level of personal assistance is a positive aspect of the library.

Interlibrary Loan is a system to order books and journal articles from other libraries to obtain materials for faculty, staff and students. The library can order items directly from libraries throughout the state. With the support of the South Central Kansas Library System, materials can be ordered from throughout the world.

To help students relax, a comfortable seating area is provided. Board games, such as chess and checkers, are available as well as jigsaw puzzles for those who want to test their mental abilities. Coffee is provided to promote a more comfortable atmosphere. All of these amenities help students feel a sense of ownership in the library. Current hours and other information can be found at www.watc.edu.

Southside Education Center LLRC

4501 E. 47th St. South
Wichita, KS 67210-1651
316.554.2794

Internet Usage

Board policy, LS 6.0 Acceptable Use of Computers, Networks, Internet, Electronic Mail and Other Online Services—Students, describes procedures that must be accepted and followed. All individuals utilizing these resources are required to complete and sign an Internet Access Contract.

Student Organizations

The local chapter of SkillsUSA, a club for vocational industrial students, offers students a wide variety of leadership skill training and professional development opportunities. Students also have opportunities to participate in local, state and national leadership and skill conferences. These activities present students with excellent opportunities to build self-confidence, meet new people, participate in competitive events and visit with local, state and national employers.

Parking Regulations

On-campus parking is available at all WATC locations. All motor vehicles, motorcycles, mopeds and bicycles must be registered with WATC and must display a current parking decal. Parking decals are available through Learner Services. Decals are not transferable between vehicles.

Where and How to Park

WATC assumes no responsibility for the care or protection of any vehicle or its contents during time parked or operated on the grounds of any WATC property. Vehicle registrants are held responsible for the safe operation and parking of their vehicle regardless of who may be operating the vehicle.

Registration of a vehicle does not guarantee a parking space on WATC property. Lack of space is not considered a valid reason for violating parking regulations. Vehicles parked outside the parking space boundaries, regardless of the reason, will be ticketed. Backing into parking spaces is prohibited.

Temporary Parking Permits

Temporary parking permits may be acquired from the main office at each WATC location. A temporary parking permit may be used up to five times per semester, whether the vehicle is rented, borrowed, family-owned or for short-term classes meeting five or fewer times.

Handicapped Parking

Vehicles parked in a WATC designated handicapped parking area must display a current handicapped parking permit and a WATC parking decal.

Parking Fines and Removal

WATC reserves the right to remove, or have removed, any vehicle that is parked in such a way as to constitute a hazard; impedes vehicular or pedestrian movement; blocks the operation of emergency equipment; or hinders making essential repairs. Vehicles deemed abandoned may also be removed from WATC property. Owners of such vehicles are responsible for paying all costs involved in the removing, impounding and storage of such vehicles.

Fines may be assessed for improper parking, parking in restricted or no-parking areas; speeding or reckless driving; failure to register vehicle with WATC; failure to display parking decal; and failure to follow directions of school authorities in matters related to vehicular traffic and parking.

Students are required to obtain and display a valid parking permit. City of Wichita parking tickets are issued for parking violations and must be paid to the City of Wichita according to its process. Parking privileges may be revoked due to excessive violations.

WATC

**Catalog
2008–2009**

Policies and Procedures

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Policies and Procedures

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Student Bill of Rights

LS 13.0 Policy Statement

The Wichita Area Technical College (WATC) community expects all members to discipline themselves, individually and collectively, and it requires adherence to the regulation of conduct appropriate for an academic community. Members of the college community are obligated to assume individual responsibility for their personal freedoms and obligations. WATC must and will take appropriate action when a member's conduct places the best interests of the community at jeopardy.

Students are both citizens and members of the academic community. As citizens, they enjoy the same freedoms of speech, peaceful assembly and right of petition that other citizens enjoy. As members of the academic community, they assume the obligations inherent in that membership, and as representatives of the college. Students, as members of this community, are responsible for being familiar with the policies of WATC.

1. Freedom of Association: Students are free to organize and to participate in voluntary associations of their own choosing, subject only to reasonable college regulations ensuring that such associations are neither discriminatory in their treatment of other members of the college, nor operated in a manner that substantially interferes with the rights of others. Freedom of association may not be forbidden because of the general political or philosophical objectives of any particular group. However, college groups or organizations are under a strong obligation to avoid representing their actions or views as those of the college.

2. Recognized Campus Organizations: A recognized organization is a group of WATC students organized for a stated purpose that has official recognition from the college. Affiliation with extramural organizations shall not of itself disqualify student organizations, neither from institutional recognition nor from the use of college facilities, although reasonable provisions may be made to safeguard the autonomy of college organizations from domination by outside groups.

3. Freedom of Speech and Assembly: No regulation shall restrict student expression solely on the basis of disapproval or fear of their ideas or motives. Students and student organizations shall be free to examine and discuss all questions of interest to them, and to express opinions publicly and privately. Modes of expression or assembly that are manifestly unreasonable in terms of time, place, or manner may be forbidden. This does not, however, abrogate students' accountability as citizens to the laws of the larger society.

   Students and student organizations shall always be free to support causes by orderly and peaceful assembly that does not infringe upon the rights of others. It shall be made clear that such expressions represent views of the students or student organizations and not the college.

   Student groups are allowed to invite and to hear any persons of their own choosing. Routine procedures required by the college before guest speakers are invited to appear at college locations shall be designed to ensure that there is orderly scheduling of facilities and adequate preparation for the event. College control of college facilities shall not be used as a device of censorship. It shall be made clear to the academic and larger community that sponsorship of guest speakers does not necessarily imply approval or endorsement of the views expressed, either by the sponsoring group or the college.

4. Freedom of the Press: There shall be no ideological censorship in the determination of printed matter available at the college; access to publications is not to be denied because of disapproval of their content. Any student publications supported by compulsory student fees or by substantial college subsidy shall, however, be subject to the rules and regulations of the Kansas State Board of Education acting as trustees of the college or their designees.

5. Freedom in the Classroom: Classrooms are not unstructured political forums; they are the center for study and understanding of described subject matter for which faculty members have professional responsibility and institutional accountability. Faculty members should respect the confidential nature of the relationship between faculty and students. Faculty members should avoid exploitation of students for private advantage and should acknowledge significant assistance from them. Faculty members should protect students' rights as defined herein. Control of the order and direction of class, as well as control of the scope and treatment of the subject matter, must therefore, immediately rest with faculty members, free from disruption by students or others who may be in disagreement with the manner in which they discharge their responsibilities.

Students have the right to be informed in reasonable detail at the beginning of each term of the nature of the course, course expectations, the evaluative standards and the grading system that is being used.

Students have the right to take reasonable exception to the data or views offered in classrooms and to reserve judgment about matter of opinion, without fear of penalty.

Students have the right of protection against improper disclosure of information concerning their grades, views, beliefs, political associations or character that faculty members acquires in the course of their professional relationship with students.

Students shall have protection through orderly procedures against prejudiced or capricious academic evaluation. At the same time, they are responsible for maintaining standards of academic performance established for each course in which they are enrolled.

6. Nondiscrimination: It is the policy of WATC not to discriminate against any individual in matters of admission, employment, housing, services or in the educational programs or other activities based on non-meritorious factors including, but not limited to, age, race, sex, color, religion, gender, national origin, ancestry, disability, veteran status or political affiliation.

7. Student Records: WATC complies with the Family Educational Rights and Privacy Act (FERPA) of 1974 and affords students certain rights with respect to their educational records. This act was designed to protect the privacy of educational records, to establish students' right to inspect and review their educational records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. See board polices LS 4.0 Construction and Maintenance of Educational Student Records and LS 5.0 Privacy of Student Records.

   In accordance with FERPA, WATC requires that students who want WATC to release copies of grade transcripts or any other information relative to academic performance must give WATC permission to do so.

8. Equal Protection: The college has an obligation to apply its regulations equally to all students who are similarly situated. This does not mean, however, that the college is required to refrain from taking action against some offenders because there are others who cannot be identified, or who are not similarly charged.

Student Code of Conduct
LS 14.0 Policy Statement

The college community expects all students to live by the following regulations that are designed for its general well being. Any violations of these board policies may result in disciplinary actions, such as probation, suspension, expulsion and/or legal actions. Visitors to the college shall observe these regulations while on college property. Noncompliance by their visitors may subject students to sanctions imposed by the college as well as to the provisions of local and state law.

College students enjoy all the rights and privileges of citizenship. Students are subject, however, to the special obligations that accrue to them as members of the academic community. Institutional efforts should be exerted to develop, not inhibit, intellectual and personal development of students by the exercise of the rights of citizenship both on and off college locations.

The enforcement of the obligations of students to the larger society is the responsibility of the legal and judicial authorities duly established for that purpose. When the interests of the college community are clearly involved, however, the authority of the college may be asserted. The fact that a violation occurs off college locations does not preclude the interest and involvement of the college.

The Student Code of Conduct exists to encourage the best possible learning and living environment for all students. It is the obligation of students to treat all other members of the academic community with dignity and respect — including other students, faculty members, employees, visitors and neighbors of WATC. The enforcement of college regulations is critical to the existence of such an environment for all members of the academic community.

The Student Code of Conduct is not a criminal law code, and criminal law concepts do not apply to it.

The following are not permitted:

1. Academic Dishonesty: Cheating or plagiarism in any form is unacceptable. The college functions to promote the cognitive and psychosocial development of all students. Therefore, all work submitted by students must represent their own ideas, concepts and current understanding. Academic dishonesty also includes submitting substantial portions of the same academic coursework to more than one course for credit without prior permission of the faculty members.

2. Falsification of College Records: Willful falsification of official records or documents or omission with the intent to deceive is prohibited. Included in

this regulation, but not limited to the following examples, is the forging, alteration or misuse of college documents, records, academic record change forms, fee receipts, identification cards, parking permits, financial aid forms, telephone billing cards, WATC forms or documents and computer tampering.

3. Use of Alcoholic Beverages on College Property: Possession, consumption or sale of alcoholic beverages is prohibited in college-owned, leased or operated facilities and on campus grounds unless otherwise specifically authorized by college administration for an event.

4. Illegal Drug Activity: Possession, manufacture, distribution, use or sale of drugs or drug paraphernalia and narcotics classified as illegal, except those taken under a doctor's prescription, are prohibited on college-owned or controlled property, in college-related housing or at any college-sponsored or supervised function.

5. Hazing: Hazing is defined as an activity that endangers the physical safety of a person; produces mental or physical discomfort; causes embarrassment, fright, humiliation or ridicule; or degrades the individual — whether it is intentional or unintentional. The college does not tolerate students being subjected to any treatment that debases individuals' status or robs them of dignity.

6. Harassment: Conduct toward another person or identifiable group of persons including, but not limited to, unwelcome comments or other conduct that unreasonably interferes with an individual's work or academic performance or creates an intimidating, hostile or offensive environment for that individual's work, education or participation in a college activity; retaliation against any person filing a conduct complaint or against any person cooperating as a witness. Harassment based on race, age, sex, color, religion, gender, national origin, ancestry, disability or veteran status is not tolerated.

7. Physical Assault: Conduct including, but not limited to, unwanted touching, threats of violence, use of violence and/or fighting.

8. Sexual Harassment and/or Sexual Assault: Any actions or statements of a sexual nature that are abusive, intimidating, harassing or embarrassing, along with implied or stated threats are prohibited. This policy includes, but is not limited to, unwanted touching or comments, retaliation, threats of violence, use of violence and sexual assault.

9. Lewd or Indecent Conduct: Conduct including, but not limited to, actions that are indecent, vulgar, obscene, profane or offensive is prohibited.

10. Destruction/Damage/Misuse of Property: Malicious destruction, damage or misuse of college or private property.

11. Disorderly Conduct: Detaining or threatening another person, obstructive or riotous acts and/or verbal/physical abuse of any member of the WATC community on- or off-college locations.

12. Unauthorized Entry: Any unauthorized or forceful entry, whether actual or attempted, into any college facility or building.

13. Failure to Obey Official Orders: Failure to disperse or to leave; disrupting or obstructing a college building or facility, room or other premise; failure to identify oneself with an identification card; or to cease the use of loudspeakers, amplifiers or other forms of noise after being given notice or an official order to do so by a duly authorized agent or administrative officer of the college.

14. Theft: Theft or the conversion of another's property — personal, public or college.

15. Possession or Use of Firearms/Weapons: The possession, wearing, carrying, transporting or use of a firearm or other dangerous weapon, incendiary device or explosive is strictly forbidden on college-owned or controlled premises or vehicles.

16. Gambling: Any illegal game or contest played for money or for any form of property or item of value. Gambling includes, but is not limited to, games played with cards, dice or other gambling devices that involve betting and/or wagering.

17. Fiscal Misconduct: Fiscal misconduct includes, but is not limited to falsification of college or student organization financial records, any purchase made without organization membership approval, including, but not limited to, long-distance calls, copier use, signature of contracts, travel expenses, etc.; failure to relinquish student organization financial records to officers/advisors and/or WATC officials; failure to provide an end-of-fiscal-year financial disclosure statement to the organization's membership when requested to do so; writing non-sufficient funds checks to the college; forgery; and/or embezzlement.

18. Failure to Comply With Official Notification: Failure to comply with any official notification, written or verbal, of a duly authorized administrative, faculty or conduct authority of the college.

19. Conduct System Process Misconduct: Falsifying, distorting or misrepresenting information before a conduct authority and/or knowingly instituting a conduct proceeding without cause.

20. Other Acts of Misconduct: Violation of any city or state laws and/or board policies or the policies of WATC instructional centers and satellites, including internship and clinical sites.

21. Irresponsibility: Living organizations, societies, clubs and similarly organized groups are responsible for compliance with college regulations. Upon satisfactory proof that a group encouraged or did not take satisfactory steps to prevent violations of college regulations, that group may be subject to permanent or temporary suspension, loss of recognition or charter, social probation or other action.

Academic Probation

To graduate, students must maintain a minimum cumulative GPA of 2.0 on a 4.0 grading scale. Students who are registered in six or more credit hours and do not maintain a 2.0 cumulative GPA are placed on academic probation the following semester of registration. Students who receive financial aid must meet additional criteria to meet satisfactory academic progress. Contact Financial Aid, 316.677.9400, for additional information.

At the close of each semester, the registrar and the administrator, Learner Success review students' academic records and notify students in writing of their probationary status.

To register while on academic probation, students are required to:

- Meet with a career planner to understand the terms of academic probation and academic suspension.
- Complete a written action plan with a career planner. The action plan must have the approval of the appropriate senior learning officer and include specific academic goals that facilitate achieving the required GPA, which may include meeting with the senior learning officer or instructor to determine progress, as well as any additional actions or interventions deemed necessary.

If students' semester and cumulative GPAs meet the requirements for satisfactory academic progress at the conclusion of the probationary semester, students are no longer considered to be on academic probation. Students who do not meet satisfactory academic progress requirements are placed on academic suspension.

Students who are placed on academic suspension at WATC may appeal to the vice president, Academic Affairs and Learner Services. For details on this process, refer to Grievance Procedure, which can be found in the catalog and student handbook. Students who are placed on academic suspension are not eligible to register for the next regular semester. After one semester of academic suspension, students may register under continued academic probation status until their GPA reaches 2.0.

Student Grievance Policy

LS 15.0 Policy Statement

Wichita Area Technical College encourages all students to pursue academic goals and other college-sponsored activities that promote intellectual growth and personal development. In pursuit of these goals, students should be free of unfair or improper action from any member of the academic community. Students, however, must also be aware that they are responsible for complying with all board policies and for maintaining the appropriate requirements as established by the faculty for each course in which they are enrolled. The following grievance procedures have been developed to provide students with a prompt and equitable means of seeking an appropriate remedy for any alleged violation of their rights.

General Provisions

Under this section, a grievance may be initiated by a student alleging violation of board policies and procedures. The grievance may be against another student, an instructor, an administrator or a member of the staff.

Processing the Grievance

Students who believe they have been subjected to an unjust action or denied rights by a member of the academic community may seek to rectify the situation according to the following procedures. The following actions are grounds for a student grievance:

1. Prejudiced or capricious decision in the academic evaluation of a student's performance.
2. Prejudiced or capricious decision in orientation, counseling, assessment or any other matriculation procedure.
3. Act or threat of intimidation or harassment.
4. Act or threat of physical aggression.
5. Arbitrary action or imposition of sanctions without proper regard to due process as specified in college procedures.
6. Violation of student rights which are described in the college regulations.

Step I: Informal Procedure

Before filing a formal, written grievance, students should first attempt to resolve the issue in the following manner. An informal conference should be conducted with:

1. The person against whom the grievance is directed, if the student is comfortable with such a meeting. (Optional: Sexual harassment/sexual assault claims should follow the formal procedure.)

2. The appropriate senior learning officer.
3. The vice president, Academic Affairs and Learner Services, for academic evaluation of student's performance (#1 under Processing the Grievance).
4. The vice president, Academic Affairs and Learner Services, for all other student grievances (#2–6 under Processing the Grievance).

   Students who feel that a grievance has not been resolved by any of the above conferences within five business days, may submit a formal grievance to the appropriate vice president.

Step II: Formal Procedure

Formal grievances shall be filed within 30 days of the action being grieved. Grievances should be submitted to the vice president, Academic Affairs and Learner Services. Grievances will be referred to the Student Grievance Committee; this committee is a standing committee with one-year appointments.

The process for submitting a formal grievance to the vice president is as follows:

1. The student shall complete and submit within five working days, after the Informal Process, a grievance form provided by the vice president.
2. Upon receipt of the completed grievance form, the vice president shall within five working days:
   a. Request a response from the person against whom the charges are made. That person should submit a response within ten business days. Failure to respond within the defined timelines will not delay the processing of the grievance.
   b. Refer the grievance materials from both parties to the chair of the Student Grievance Committee. The committee chair will convene the committee to investigate hearings, establish findings of facts and recommend action for resolution.
   c. The vice president shall also advise the student of the investigation that will ensue.

The Student Grievance Committee shall conduct its proceedings as follows:

1. A record of all information in the possession of the vice president shall be given to the committee chair. The committee shall make every reasonable effort to conduct its hearing and present its findings and recommendations within 15 business days of receiving the grievance.
2. The committee shall discuss issues, hear testimony, interview witnesses and consider all available evidence pertaining to the charge.
3. Both parties shall have the right to present written or oral statements, testimony, evidence and witnesses. Each party has the right to be present at the hearing.

4. The committee shall judge the relevancy and weight of testimony and evidence and make its findings of facts, limiting its investigation to the formal charge. The committee shall also make recommendations for the disposition of the charge.
5. The hearing shall be closed to the public.
6. The committee shall submit its findings of facts and recommend action within ten business days after the hearing to the vice president, with a copy to each party and the college president.
7. A summary record of the proceedings is the responsibility of the committee chair. These proceedings should be kept in a file by the appropriate vice president for two years and shall be available to both parties.
   a. Final action for all grievances: The vice president, upon receiving the findings of facts and recommendations of the committee, will review the proceedings of the committee, conduct such investigations as are appropriate and take one of the following actions:
      i. Concur with the committee's recommendations.
      ii. Reduce the recommended sanctions.
      iii. Dismiss the charge.

      If ii or iii should occur, the vice president shall convene the committee for further discussion and consultation.

      The decision by the vice president shall be rendered within five business days, in writing, to: the accused person, the appropriate committee, college president and student filing the grievance.
   b. The accused or the aggrieved person may write an appeal of the decision made by the vice president to the college president within five (5) business days. Upon receipt of the appeal, the college president will review the proceedings of the committee, conduct such investigations as are appropriate and take one of the following actions:
      i. Concur with the committee's recommendations.
      ii. Reduce the recommended sanctions.
      iii. Dismiss the charge.

      If ii or iii should occur, the president shall convene the vice president and committee for further discussion and consultation.

      The decision by the president shall be rendered within five business days, in writing, to the accused person, the appropriate committee, vice president and student filing the grievance. The president's decision is final, unless, the grievance is specifically against the president.

c. In the event a grievance is against the president, a written appeal may be filed with the board within ten business days. Upon receipt of the appeal, the board will review the proceedings of the committee, conduct such investigations as are appropriate and take one of the following steps:

  i. Concur with the committee's recommendations.

  ii. Reduce the recommended sanctions.

  iii. Dismiss the charge.

  The decision of the board shall be made within ten business days and transmitted, in writing, to the accused person, the committee, the president, the vice president and the student filing the grievance. The decision of the board is final.

d. Retaliation: Any retaliatory action of any kind by an employee or student of the college against any student as a result of filing a grievance under these procedures, cooperating in an investigation or other participation in these procedures is prohibited and will be regarded as basis for disciplinary action.

Students who feel their concerns have not been satisfied at the local level are free to write to WATC's accrediting institution:

The Higher Learning Commission
30 North LaSalle Street, Suite 2400
Chicago, Illinois 60602-2504
Phone: 800.621.7440 / 312.263.0456
Fax: 312.263.7462
www.ncahlc.org

Student Discipline

Procedure for Probation, Suspension and Expulsion

WATC provides every student the opportunity to learn. Taking advantage of this opportunity is the student's responsibility. Students are expected to acquaint themselves with the Student Bill of Rights, the Student Code of Conduct and all published policies and procedures and are held responsible for compliance with these policies and procedures.

The board may place on probation, suspend or expel, or by regulation, may authorize the president or vice president, Academic Affairs and Learner Services, or their designees, to place on probation, suspend or expel any student who violates the Student Bill of Rights, the Student Code of Conduct or other published policies.

Appeals Process

Probation, Suspension and Expulsion

1. Appeal to the Student Review and Appeals Committee: No extended-term suspension and no expulsion shall be imposed upon a student without notification of their right to an appeal to the Student Review and Appeals Committee. In all cases wherein a student might be suspended for an extended term or might be expelled, they shall first be suspended for a short term. A written notice of any decision to suspend for an extended term or to expel and the charges upon which the same is based shall be given to students to be suspended or expelled and to their parents or guardians (if student is dependent and under 18 years of age). Such notice shall be accompanied by a copy of this procedural regulation of the board. If students wish to appeal the decision to suspend or expel, they must do so in writing to the vice president, Academic Affairs and Learner Services, within two days of receiving the initial decision. Upon receipt of the letter requesting the appeal, the vice president, Academic Affairs and Learner Services, must notify the student in writing of the time, date and place that the student will be afforded an opportunity for a formal hearing, and such date shall not be later than seventy-two (72) hours after the vice president has received the student's appeal. For the purposes of time notification, weekends and school holidays are excluded.

2. Reports of Hearing: Upon the conclusion of any formal hearing, the Student Review and Appeals Committee shall make a written recommendation to the president of the college. Such recommendation shall be copied to the board and shall be open to the inspection of students who are suspended or expelled and, if the student has not attained eighteen (18) years of age, to their parents or guardians and counsel or other advisor. If students have attained eighteen (18) years of age, such report shall be open to the inspection of their parents or guardians and counsel or other advisor only upon written consent of the student.

  Whenever any such formal hearing results in suspension for an extended term or expulsion, the Student Review and Appeals Committee conducting such hearing may make a recommendation to the college president that returns the student to classes, pending any appeal or during the period allowed for notice of appeal, if such student is not reasonably anticipated to cause continued repeated material disorder, disruption or interference with the operation of the college or substantial and material impingement upon or invasion of the rights of others. Whenever the committee fails to

make a recommendation, the suspension shall continue until an appeal is determined or until the period of suspension or expulsion has expired, whichever is the sooner.

Under this regulation, whenever any written notice is required to be given to parents or guardians of any student, it shall be sufficient if the same is mailed to the residence of such parents or guardians at the address on file in the college records of such student. In lieu of mailing such written notice, the same may be personally delivered.

3. Procedural Due Process: The student and the college administrator involved in this hearing may choose to be present during the entire presentation of evidence. The formal hearing required under Paragraph 1 hereof shall afford procedural due process including, but not limited to, the following:

   a. The right of the student and the college to have counsel of his/her own choice present and to receive the advice of such counsel or other person whom he/she may select.

   b. The right of the student and his/her counsel or advisor and the college to hear or read a full report of testimony.

   c. The right of the student and his/her counsel and the college to confront and cross-examine witnesses who appear in person at the hearing, either voluntarily or as a result of the issuance of a subpoena.

   d. The right of the student and college to present their own witnesses in person or their testimony by affidavit.

   e. The right of the student and the college to testify in their behalf and give reasons for his/her conduct.

   f. The right of the student and the college to have an orderly hearing.

   g. The right of the student and the college to a fair and impartial decision based on substantial evidence.

   For the purposes of this regulation, "counsel" means any person a student or the college selects to represent and advise them at all proceedings conducted pursuant to the provisions of these regulations governing suspension and expulsion of students.

4. Appeal to Board: Written notice of any hearing resulting in an extended-term suspension or expulsion shall be given to students suspended or expelled and to their parents or guardian (if student is dependent upon parents for support and is under eighteen (18) years of age) by certified letter, mailed within twenty-four (24) hours after determination. Any student who has been suspended for an extended term or expelled or one of his parents or guardians (if student is dependent upon parents for support and is under eighteen (18) years of age) may appeal such suspension or expulsion to the board by filing a written notice specified in this section. Any such appeal shall be heard by the board or by a hearing officer appointed by such board not later than twenty (20) calendar days after such notice of appeal is filed. The student and his parents or guardians (if required) shall be notified in writing of the time and place of the appeal hearing at least five (5) days prior thereto. Such appeal shall be conducted under rules that are consistent with Paragraph 3. In all expulsion or extended-term suspension cases, a record of the appeal hearing shall be made by mechanical or electronic recording or by an official court reporter, and the costs shall be paid by the college. The board shall render its decision on any such appeal at the next regularly scheduled meeting of the board. Again, for the purposes of time notification, weekends and school holidays are excluded.

   For the purpose of hearing any appeal under this section, the board may appoint one or more hearing officers. Any such hearing officer shall be a member of the board, a faculty member or an administrator of the college. Any such appointment shall apply to a particular hearing or to a set or class of hearings as specified by the board in making such appointment. Whenever a hearing officer appointed under authority of this section hears any appeal, he/she shall, after hearing the same, prepare a written report to the board. After receiving the report, the board shall determine the appeal with or without additional hearing. Any appeal determined by the board in accordance with this paragraph shall be valid to the same extent as if the matter were fully heard by the board without a hearing officer.

5. Powers and Duties of Persons Conducting Hearings: Any person, hearing officer or any member of a committee or the board while conducting a hearing may:

   a. Administer oaths for the purpose of taking testimony therein.

   b. Call and examine witnesses and receive documentary and other evidence.

   c. Take any other action necessary to make the hearing in accord with procedural due process.

   The chairperson of the Student Review and Appeals Committee or a member of the board in holding an appeal hearing under Paragraphs 1 or 4 may, and upon the request of any student for whom such hearing is held or his or her parent or counsel, petition that

the administrative judge of the judicial district court be authorized to issue subpoenas for the attendance and testimony of the principal witness or witnesses and production of books, records, reports, papers and documents relating to the proposed suspension or expulsion in the same manner as the issuance of subpoenas in civil actions pursuant to KSA 60-245. For the purpose of this paragraph, "principal witness" means any witness whose testimony is of major importance in support of the charges upon which the proposed suspension or expulsion is based or in determination of material questions of fact.

Internet Usage

Board policy LS 6.0 Acceptable Use of Computers, Networks, Internet, Electronic Mail and Other Online Services—Students describes procedures that must be accepted and followed. All individuals utilizing these resources are required to complete and sign an Internet Access Contract. Examples of violations can be found in board policy AF 10.0 Academic Probation, Suspension and Expulsion.

Acceptable Use of Computers, Networks, Internet, Electronic Mail and Other Online Services– Students

LS 6.0 Policy Statement

Wichita Area Technical College is committed to making advanced technology and increased access to learning opportunities available to all students. The goal of the college in providing access to students is to promote educational excellence by facilitating resource sharing, innovations and communications. The use of computers, networks, the Internet or other online services shall be in support of education and research consistent with the college's educational objectives.

Implemental Procedures

1. Student Responsibilities: Regardless of any "technology protection measure" implemented by the college as may be required by the Children's Internet Protection Act, students are responsible for good behavior on computers, networks, the Internet or other online services just as they are in a classroom or a hallway. General college rules for behavior and communications apply. Network storage areas will be treated like college lockers. Network administrators, instructors and other appropriate college staff may review student files and student communications from time to time to prevent misuse and to ensure students are using the system responsibly and in compliance with laws and college policies. Communications on the network are often public in nature; students should not expect that files stored on college servers will be private.

2. Permission: Students must have permission from, and be under the supervision of, college professional staff before utilizing college-provided computers, networks, the Internet or other online services. Permission is not transferable from one student to another and may not be shared. Students shall not be allowed to utilize electronic communications unless a signed Student Access Contract is on file. To remain eligible as users, students' use must be consistent with the educational objectives of the college. Access is a privilege, not a right, and inappropriate use will result in, among other disciplinary measures, the cancellation of those privileges. Students will display college-appropriate conduct when using the computer equipment or network and shall maintain an environment conducive to learning.

3. Violations: Administrators, instructors and other appropriate college employees decide what inappropriate use is. Violating this policy may result in:

   a. Restriction or loss of network access; and/or

   b. Disciplinary or legal action including, but not limited to, suspension or expulsion from college and/or criminal prosecution under appropriate local, state and federal laws; and

   c. Assessment of the cost of damages to hardware/software.

4. Inappropriate Use: The following uses of college-provided computers, networks, the Internet or other online services are not permitted on the part of WATC students:

   a. Accessing, uploading, downloading or distributing pornographic, obscene or sexually explicit material.

   b. Transmitting obscene, abusive, sexually explicit or threatening language.

   c. Violating any local, state or federal statute.

   d. Accessing another individual's materials, information or files without permission.

   e. Violating copyright or otherwise using the intellectual property of another individual or organization without permission.

   f. Using others' passwords.

   g. Vandalizing, defined as any unauthorized access and/or malicious attempt to damage computer hardware/software or networks or destroying the data of another user, including creating, uploading or intentionally introducing viruses.

h. Intentionally wasting limited resources.

i. Using the network for commercial purposes.

j. Harassing, insulting or attacking others.

k. Using, disclosing or disseminating personal information online such as full name, home address, phone number, etc., except with approval by certified or administrative college staff.

l. Using e-mail lists from the college's Internet site, network or servers to create mailing lists for non-college purposes.

m. Gaining unauthorized access to resources or entities.

n. Invading the privacy of individuals.

o. Improperly altering the setup of computers (e.g., desktops, icons, wallpapers, screen savers, installed software) as determined by the network administrator.

p. Using software that has not been assigned or approved by staff.

q. Failing to follow a college policy while using computers or failing to follow any other policies or guidelines established by college administration, instructors or other appropriate college staff.

r. Seeking to gain or gaining unauthorized access to information resources or other computing devices.

5. Security Risk: Any student identified as a security risk or having a history of problems with other computer systems may be denied access.

6. Disclaimer: The college makes no warranties of any kind, whether express or implied, for the access it is providing. The college will not be responsible for any damages suffered. This includes loss of data resulting from delays, nondeliveries, misdeliveries or service interruptions caused by its own negligence or user errors or omissions. Use of any information obtained via the Internet is at the user's risk. The college denies any responsibility for the accuracy or quality of information or for any commercial transactions conducted through its system.

7. Statements of Personal Belief: Any statement of personal belief found on computers, networks, the Internet, other online services or other telecommunication system is implicitly understood to be representative of the author's individual point of view, and not that of WATC, its employees or the participating school. No representations to the contrary shall be published without written approval from the college. Program or college administrators may review all content in any Internet or online accounts paid for, in whole or in part, by the college without notice of any kind.

8. Student Access Contract: Prior to use of college computers or networks (e.g. the Internet or other online services), each student shall submit a signed Student Access Contract for filing in the registrar's office. Prior to use of computers at any other college facility, each student shall also submit a signed Student Access Contract for filing with the registrar's office of the facility at which these computers are located. If a student is under the age of 18, a parent/guardian shall also sign the contract(s). New Student Access Contracts must be signed and submitted each school year. This policy applies to all students regardless of whether they have submitted a signed Student Access Contract. If a student does not have a current Student Access Contract on file as required above, access to computer services and accounts is prohibited.

9. College Technology Plan: The Administrative Implemental Procedures contained in this policy shall be consistent with the college technology plan adopted by the Board of Trustees.

Parking Regulations

On-campus parking is available at all WATC locations. All motor vehicles, motorcycles, mopeds and bicycles must be registered with WATC and must display a current parking decal. Decals are not transferable between vehicles.

Where and How to Park

WATC assumes no responsibility for the care or protection of any vehicle or its contents during time parked or operated on the grounds of any WATC property. Vehicle registrants are held responsible for the safe operation and parking of their vehicle regardless of who may be operating the vehicle.

Registration of a vehicle does not guarantee a parking space on WATC property. Lack of space is not considered a valid reason for violating parking regulations. Vehicles parked outside the parking space boundaries, regardless of the reason, will be ticketed. Backing into parking spaces is prohibited.

Temporary Parking Permits

Temporary parking permits may be acquired from the main office at each WATC location. A temporary parking permit may be used up to five times per semester, whether the vehicle is rented, borrowed, family-owned or for short-term classes meeting five or fewer times.

Handicapped Parking

Vehicles parked in a WATC designated handicapped parking area must display a current handicapped parking permit and a WATC parking decal.

Parking Fines and Removal

WATC reserves the right to remove, or have removed, any vehicle that is parked in such a way as to constitute a hazard; impedes vehicular or pedestrian movement; blocks the operation of emergency equipment; or hinders making essential repairs. Vehicles deemed abandoned may also be removed from WATC property. Owners of such vehicles are responsible for paying all costs involved in the removing, impounding and storage of such vehicles.

Fines may be assessed for improper parking, parking in restricted or no-parking areas; speeding or reckless driving; failure to register vehicle with WATC; failure to display parking decal; and failure to follow directions of school authorities in matters related to vehicular traffic and parking.

Students are required to obtain and display a valid parking permit. City of Wichita parking tickets are issued for parking violations and must be paid to the City of Wichita according to its process. Parking privileges may be revoked due to excessive violations.

Institutional Refund Policy

Schedule Changes

Students who are considering withdrawing completely from a program must contact the registrar or their career planner and instructors. Schedule changes can affect a student's financial aid eligibility and status.

General Refund Guidelines

Drops and/or Withdrawals

Refunds for drops or complete withdrawals are calculated according to the Tuition Refund Schedule.

Refunds

Refunds, when due, are made within 30 days from the date the registrar receives the completed Course Schedule Change form from the student. If refunds are a result of the receipt of Title IV funds, any credit balance is to be refunded to the student, or parent if from a PLUS loan, within 14 days from the date that the credit balance is generated. Refund checks are mailed directly from Finance and Operations to student's recorded address. Students may not pick up refund checks. In the event that a manual check is approved and issued from the student's account, a processing fee of $25 will be charged.

Students who paid with credit cards are notified by mail when refund calculations are complete. Students must then return to the Main Campus or Southside Education Center with the charged credit card for refunds to be processed.

Cancelled Courses

All tuition and course fees are refundable for courses that are cancelled. Refunds, when due, are made within 30 days from the date the course is cancelled.

Administrative Dismissal From College

See Tuition Refund Schedule.

Student Drop or Withdrawal Process

See Add, Drop and Withdrawal Process.

Tuition Refund Schedule

Refunds for students who drop or withdraw after tuition has been paid are calculated based on the following schedule:

For 8- to 16-Week Credit Courses	Refund Amount
Prior to and including the 1st day of class	100% refund
Up to seven calendar days after 1st day of class	100% tuition*/fees
Eight or more calendar days after 1st day of class	No refund

For 2- to 8-Week Credit Courses	Refund Amount
Prior to and including the 1st day of class	100% refund
Up to five calendar days after 1st day of class	100% tuition*/fees
Six or more calendar days after 1st day of class	No refund

For Non-Credit/Less Than 2-Week Courses	Refund Amount
Prior to 1st day of class	100% refund
After course begins	No refund

Financial Obligation

Failure to meet financial obligations of any kind to WATC could subject a student's account to suspension of future services; referral of the delinquent account to a collection agency; and the assessment of additional late payment charges, transcript holds, attorney's fees and other cost and charges necessary for the collection of any amount not paid when due.

Safety and Security

The safety and security of all individuals while on WATC property and in classrooms and laboratories is of utmost consideration to WATC. This is the reason for the following WATC administrative procedures and policies.

Safety and security are everyone's responsibility. Students and employees should familiarize themselves with recommended security and prevention methods. All individuals are reminded to always be conscious of their surroundings and immediately report all suspicious activities. Security procedures are discussed during orientation and counseling sessions. Security information is available from administration at each location.

For more information about safety policies, as well as personal safety suggestions, pick up WATC's Safety Report brochure, which is available from the Admissions office, administrative offices at all locations and online at www.watc.edu.

Board Policies Regarding Safety

WATC's board policy LS 14.0 Student Code of Conduct is designed to ensure the fundamental right to safety. These policies protect college property, students, instructors and other employees and their possessions on or about any college property while attending or while located at the site of any college-sponsored function.

Operations personnel serve as the liaison between WATC and the Wichita Police Department or the Sedgwick County Sheriff's office. If a criminal action or other emergency is reported, college personnel respond quickly to protect individuals from bodily harm or to prevent destruction of property. In some cases, college personnel may involve the Wichita Police Department or the Sedgwick County Sheriff's office.

Manuals outlining procedures to ensure the safety and security of all individuals and deter criminal activity have been developed for each location and are reviewed annually. Administration identifies specific strategies to implement policies and to explain expectations and incident reporting procedures to students and employees.

Access to WATC Facilities

WATC facilities are restricted to those who have a legitimate purpose for being on the premises. Others will be asked to leave. Facilities are secured and locked when classes are not in session. After-hours building access is limited. Locks and other equipment necessary to provide security to buildings, contents and occupants are checked regularly.

Reporting Criminal Activities

The Crime Awareness and Campus Security Act of 1990, regulation 34 CFR 668.46(c)(1), states that an institution must report statistics for the three most recent calendar years regarding the occurrence of criminal offenses and arrests that have been reported to local police agencies or to a security authority (including campus, buildings or property and public property). See WATC's Safety Report, which is available from the Admissions office, administrative offices at all locations and online at www.watc.edu.

Prevention Measures

The prevention of crime is everyone's responsibility. Everyone should plan ahead and not place themselves or their possessions in danger.
- Mark all tools and equipment with an engraver.
- Make sure vehicle is always locked.
- Don't carry large sums of money.

Extra care should be taken at night. Some proven tips to minimize danger are:
- Park in an open, well-lit, visible spot.
- Travel to and from college in pairs whenever possible.
- Leave the building with a group of people.
- Before opening the door to get in the vehicle, look under and inside the vehicle.
- Be aware of everything and everyone around.

Suspicious acts, vandalism or emergencies should be reported immediately to security, building administrator or an instructor. Let them investigate. Don't assume that they already have the information — they need and appreciate assistance in preventing crimes.

Equipment and Machinery

Due to the nature of the equipment used for instructional purposes, it is imperative that all individuals adhere to safe practices at all times. In addition to the safety instructions and precautions that instructors provide, students must refrain from utilizing any power equipment in laboratory areas when instructors are not present. Students must have authorization and proper instruction where necessary to use equipment in classrooms and related laboratories. Damage to machines or related tooling caused by student misuse or unauthorized use places students at financial risk for cost of repairs. No obligation is inferred for students who have received proper authorization and instruction. Students should talk with instructors before attempting to use equipment. Failure to comply with safety precautions leads to disciplinary action. See board policy OP 76 Safety, Technology Education and WATC Laboratories.

Bloodborne Pathogens

Due to the threat of exposure to bloodborne pathogens, individuals should avoid contact with another person's blood or body fluids. All laboratories are equipped with emergency kits. Appropriately trained personnel should perform clean-up procedures involving blood and other potentially infectious materials. See board policy HR 19.0 Handling Blood and Body Fluids.

Hazardous Materials

WATC is responsible for providing a safe learning environment even when hazardous materials are used in the instructional process. To assure everyone's safety, it is critical that employees and students learn to identify and assume responsibility for the proper usage and storage of hazardous materials. A portion of course orientations and regular instruction is devoted to informing students about hazards present in classrooms and laboratories; personal safety; protection from hazards; and the location of and procedures for handling waste containers and hazardous materials. Instructors oversee the proper usage and storage of hazardous materials used in their technical areas. See board policy OP 28.0 Handling of Hazardous Chemicals.

The Kansas Department of Health, Occupational Safety and Health Administration (OSHA), requires that placards and Material Safety Data Sheets (MSDS) be posted in buildings and each laboratory informing employees and students about physical and health hazards associated with products used in the workplace and during instruction. Emergency personnel also use these sheets to facilitate treatment in case of accidents and to clean up related spills or releases. MSDSs are available upon request. See board policies OP 28.0 Handling of Hazardous Chemicals and OP 58.0 Safety, Hazardous Wastes.

Possession and/or Use of Weapons

Board policy LS 14.0 Student Code of Conduct strictly prohibits the possession and/or use of weapons. Violations of this policy will result in suspension or expulsion from WATC.

Individuals found to have brought, handled, transmitted or to have been in possession of a weapon, including any firearm or replica firearm, at WATC, on WATC property or at a WATC-supervised activity will receive a mandatory expulsion from WATC.

Individuals found to have brought or to have been in possession of any article designed to inflict bodily harm, at WATC, on WATC property or at a WATC-supervised activity will be subject to disciplinary action up to and including expulsion from WATC.

Individuals who use any article to inflict bodily harm or to place a person(s) in fear of bodily harm at WATC, on WATC property or at a WATC-supervised activity shall be subject to disciplinary action up to and including expulsion from WATC.

Safety Drills

Instructors give safety instructions the first week of classes. In the case of a weather emergency, instructors take students to designated areas of safety. Maps showing these designated areas are posted in each classroom and laboratory. In case of a fire alarm, students should follow their instructor who will lead them away from the building. Students who are in lounge or other unsupervised areas at the time of an alarm should follow the general flow of traffic to a safety area. See board policies OP 8.0 Weather Warnings, OP 11.0 Tornado Drills and OP 12.0 Safety, Fire Safety.

Sexual Harassment

WATC does not tolerate sexual harassment of students or employees by students, non-students, employees or non-employees (as outlined in board policies HR 1.0 Sexual Harassment of Employees and LS 1.0 Sexual Harassment of Students). Violations of these policies will result in disciplinary actions being taken against all individuals involved, including possible expulsion of students and termination of employees. Non-students or non-employees who violate these policies are reported to local law enforcement authorities for the appropriate action. Administrators who fail to follow the policies or fail to investigate complaints will also be disciplined.

Sexual Harassment of Students

Board policy LS 1.0 Sexual Harassment of Students adopts the following definition of sexual harassment regarding students:

Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature constitute sexual harassment when (1) submission to such conduct is made either explicitly or implicitly a term of the student's academic opportunities; (2) submission to or rejection of such conduct by a student is used as a basis for academic decisions affecting such students; or (3) such conduct has the purpose or effect of unreasonably interfering with the student's educational performance or it creates an intimidating, hostile or offensive educational environment.

Note: Conduct that has the effect of unreasonably interfering with a student's educational performance or creates an intimidating, hostile or offensive educational environment may be "sexual harassment" whether or not the person engaging in the conduct intends to create that effect."

Students who believe they have been subjected to sexual harassment should report the problem to an instructor or senior learning officer.

Smoking/Tobacco

Board policy OP 2.0 Smoking in College-Owned Buildings strictly prohibits the use of tobacco products in any building owned or operated by WATC. Adult students and employees may smoke only in the outside designated-smoking areas at each location. High school students are not permitted to use tobacco on college property.

Photo and Video Statement

Marketing and Community Relations, or a professional hired by the department, often takes photographs and videos that include students in classrooms, laboratories, study areas and at events. WATC has exclusive rights to all content, and participants will not be compensated in any manner for the time or use of their name, picture or likeness. Individuals who attend WATC do so with the understanding that these photographs and videos may include them and may be used in college publications and advertisements, both printed and electronic, for publicity and advertising purposes.

Visitors

WATC encourages the public to visit its campuses. However, for the security and safety of everyone, individuals wishing to visit are asked to check in with the administrative office at each location prior to entering classrooms or laboratories. Students wishing to host visitors must confer with their instructors prior to the visitation. Students are not permitted to bring children to class or to leave them unattended in any area at WATC locations — this includes student lounges, library/resource center, restrooms and parking lots. See board policy OP 23.0 Visitors.

Board Policies

To read WATC board policies, contact any WATC administrative office, or online, go to www.watc.edu/policies.php.

WATC

**Catalog
2008–2009**

Programs
of Study

Program Locations and Descriptions

Academic Success

ACADEMIC SUCCESS

Academic Success Courses

Academic Success

Academic Success program assists students in mastering the necessary skills to progress with their college education. The instructional program includes test preparation courses for COMPASS®, WorkKeys® and TEAS® assessments. These courses are supported by individualized, self-paced laboratory practice. Materials and tutorial assistance are available in the laboratory to help students improve their skills and ready themselves for entry into college-level coursework.

To fulfill WATC's mission to provide relevant, technical education for employment and lifelong learning, Academic Success provides an academic safety net for the needs of two student groups:

- Those who require or desire work in pre-technical college-level competencies, such as reading, writing and math.
- Those who require or desire to improve their college experience through learning enhancement activities, such as reading comprehension, study skills and personal career development.

Academic Success staff members are committed to helping students succeed in technical programs and college-level courses and to helping them prepare for lifelong success.

Courses may be taken to prepare for placement exams, to refresh skills prior to taking college-level courses, or they may be taken along with other college courses as reinforcement.

Academic Success Goals

Academic Success' primary goal is to ensure that students who enter WATC have opportunities to protect and increase their personal dignity by gaining:

- Proficiency in academic skills.
- Competencies for academic success.
- Confidence to pursue personal goals.
- Problem-solving skills associated with learning and personal development.

Self-Paced Courses

Self-paced courses are designed for students who can work independently, without the necessity of regularly scheduled lectures. In self-paced courses, there are no lectures. Instructors assign readings, computerized instruction and any videos/tapes that may be required. Instructors are also available to answer questions. Students learn the required material at their own pace. Self-paced courses are not easier than instructor-led courses.

Who should take self-paced courses?

Self-paced course are for anyone who would like to brush up on math or writing skills prior to entering formal college coursework.

Interested in what WATC's Academic Success program has to offer?

Visit WATC's Web site at www.watc.edu.

Academic Success Courses		Credits
ASC 006	Self-Paced WorkKeys Test Prep	0.0
ASC 007	Self-Paced COMPASS Test Prep	0.0
ASC 008	Self-Paced TEAS Test Prep	0.0

Registration

Registration for courses is at Main Campus, Southside Education Center and Comotara Center. Call Admissions, 316.677.9520, for additional information.

Aviation

AVIATION

Advanced Aerostructures Technician

Program Description

The Advanced Aerostructures Technician program provides students with the skills and knowledge to succeed in the aircraft manufacturing and service industry. Students receive classroom instruction and shop demonstration. Instruction includes the fundamentals of blueprint reading, precision measurement, communication skills, math skills, business operations and environmental health and safety. Additional instruction includes the fundamentals of assembly, meeting manufacturing standards, use of common aircraft sheetmetal tools and sealant application. Students learn how to identify fasteners, install and remove fasteners, assemble sheetmetal components, identify and maintain proper "skin" quality and curved surface techniques.

Admission Requirements

- Submit an application for admission.
- Be 18 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Accreditations and Affiliations

The Advanced Aerostructures Technician program is approved by the Kansas Board of Regents.

Certificate of Completion		15.0 Credits
AER 130	Aircraft Blueprint Reading	2.0
AER 131	Precision Instrument	1.0
AER 132	Aerostructures Assembly	4.0
AER 133	Advanced Aerostructures	2.0
CED 106	Computer Introduction	1.0
EMP 100	Employability Skills	2.0
MSC 101	Occupational Safety	1.0
MSC 102	Applied Shop Math	2.0
	Certificate of Completion Total	**15.0**

Aviation

Aviation Cabinetmaker / Aviation Cabinetmaker Assistant

Career Description

The aviation cabinetmaker constructs cabinets for aircraft. The craftsmanship is taken to a higher level to achieve a precision product manufactured with lightweight composite materials. These cabinets are usually covered with a variety of veneer, laminates and exotic woods. Skilled aviation cabinetmakers may be employed by a variety of large and small aircraft companies. Working in smaller companies often involves custom cabinetmaking, which is both rewarding and challenging.

Career Titles

- Aviation cabinetmaker
- Wood technician cabinetmaker

Program Description

This program provides students with the skills and knowledge necessary to work in the production of aviation cabinetry. This certificate program teaches students to fabricate products utilizing wood and composite materials with a high degree of accuracy and precision. Students become familiar with aviation blueprints and utilize various types of materials including honeycomb board, aluminum, Kevlar, epoxies, various types of adhesives and plastic and wood veneers.

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Program Outcomes

Upon successful program completion, students are able to:
1. Fabricate projects to print specifications.
2. Demonstrate wood shop safety.
3. Demonstrate the ability to assemble aviation cabinets.
4. Demonstrate the ability to utilize industry-specific tools and machinery.
5. Demonstrate the ability to effectively utilize industry-specific materials.

Accreditations and Affiliations

The Aviation Cabinetmaker program is approved by the Kansas Board of Regents.

Certificate of Completion		15.0 Credits
CON 168	Occupational Safety	1.0
CON 170	Aircraft Blueprint Reading	2.0
CON 171	Hand and Power Tools	1.0
CON 173	Beginning Cabinetmaking and Joinery	6.0
CON 176	Overlay and Laminate	1.0
EMP 100	Employability Skills	2.0
MSC 102	Applied Shop Math	2.0
	Certificate of Completion Total	**15.0**

Technical Certificate		32.0 Credits
Session One		
CON 168	Occupational Safety	1.0
CON 170	Aircraft Blueprint Reading	2.0
CON 171	Hand and Power Tools	1.0
CON 176	Overlay and Laminate	1.0
EMP 100	Employability Skills	2.0
MSC 102	Applied Shop Math	2.0
	Session One Total	**9.0**
Session Two		
CON 173	Beginning Cabinetmaking and Joinery	6.0
CON 175	Inspection and Quality	2.0
CON 188	Cabinet Finish Processes	4.0
CED 101	Computer Essentials	2.0
ENG 101	English Composition I	3.0
	Session Two Total	**17.0**
Session Three		
CON 172	Materials and Processes	6.0
	or	
CON 190	Internship	6.0
	Session Three Total	**6.0**
	Technical Certificate Total	**32.0**

AVIATION

Aviation Maintenance Technology

Program Description

This program meets the requirements for students to take the exam for the airframe and powerplant mechanic certificate. The certificate authorizes the holder to approve aircraft that has undergone inspection or maintenance "for return to service". This curriculum is approved by the Federal Aviation Administration.

Graduates from this program are in demand not only in the field of aviation but in other fields that require a high degree of mechanical knowledge.

Admissions Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Accreditations/Affiliations

The Aviation Maintenance Technology program is approved by the Kansas Board of Regents and the Federal Aviation Administration.

Technical Certificate — Airframe	**71.0 Credits**
Technical Certificate — Powerplant	**73.0 Credits**
Associate of Applied Science Degree	**139 .0 Credits**

Technical Certificate — Airframe

Semester One — General Curriculum

AMT 105	Technical Mathematics	2.0
AMT 107	Aircraft Drawings	1.0
AMT 109	Physics	2.0
AMT 111	Materials and Processes	4.0
AMT 113	Basic Electricity	4.0
AMT 115	Weight and Balance	2.0
AMT 117	Mechanic Privileges and Limitations	1.0
AMT 119	Maintenance Publications, Forms and Records	2.0
AMT 123	Cleaning and Corrosion Control	1.0
AMT 125	Fluid Lines and Fittings	1.0
AMT 127	Ground Operations and Service	2.0
AMT 131	General Review and Test	1.0
	Semester One Total	**23.0**

Semester Two — Airframe I

AMT 108	Aircraft Coverings	2.0
AMT 112	Assembly and Rigging	4.0
AMT 153	Hydraulic and Pneumatic Power Systems	2.0
AMT 159	Aircraft Fuel Systems	2.0
AMT 167	Aircraft Welding	2.0
AMT 177	Wood Structures	1.0
AMT 179	Aircraft Sheetmetal and Non-Metallic Structures	8.0
AMT 183	Aircraft Finishes	2.0
	Semester Two Total	**23.0**

Semester Three — Airframe II

AMT 116	Aircraft Instrument Systems	1.0
AMT 120	Airframe Inspection	3.0
AMT 151	Aircraft Electrical Systems	6.0
AMT 155	Aircraft Landing Gear Systems	4.0
AMT 161	Fire Protection Systems	1.0
AMT 163	Ice and Rain Control Systems	1.0
AMT 165	Cabin Atmosphere Control Systems	2.0
AMT 169	Communication and Navigation Systems	2.0
AMT 173	Position and Warning Systems	1.0
AMT 186	Airframe Review and Test	4.0
	Semester Three Total	**25.0**
	Technical Certificate — Airframe Total	**71.0**

Technical Certificate — Powerplant

Semester One — General Curriculum

AMT 105	Technical Mathematics	2.0
AMT 107	Aircraft Drawings	1.0
AMT 109	Physics	2.0
AMT 111	Materials and Processes	4.0
AMT 113	Basic Electricity	4.0
AMT 115	Weight and Balance	2.0
AMT 117	Mechanic Privileges and Limitations	1.0
AMT 119	Maintenance Publications, Forms and Records	2.0
AMT 123	Cleaning and Corrosion Control	1.0
AMT 125	Fluid Lines and Fittings	1.0
AMT 127	Ground Operations and Service	2.0
AMT 131	General Review and Test	1.0
	Semester One Total	**23.0**

Semester Four — Powerplant I

AMT 136	Propellers	4.0
AMT 200	Reciprocating Engines	11.0
AMT 204	Engine Fuel Systems	1.0
AMT 206	Auxiliary Power Units	1.0
AMT 227	Turbine Engines	9.0
	Semester Four Total	**26.0**

Semester Five — Powerplant II

AMT 202	Engine Inspection	2.0
AMT 203	Ignition and Starting Systems	3.0
AMT 207	Fuel Metering Systems	4.0
AMT 208	Engine Electrical Systems	2.0
AMT 211	Engine Cooling Systems	1.0
AMT 213	Engine Lubrication Systems	3.0
AMT 217	Induction and Airflow Systems	1.0
AMT 219	Engine Exhaust and Reverser Systems	2.0
AMT 223	Engine Fire Protection Systems	1 .0
AMT 225	Engine Instrument Systems	1.0
AMT 231	Powerplant Review and Test	4.0
	Semester Five Total	**24.0**
	Technical Certificate — Powerplant Total	**73.0**

Associate of Applied Science Degree

Semester One — General Curriculum

AMT 105	Technical Mathematics	2.0
AMT 107	Aircraft Drawings	1.0
AMT 109	Physics	2.0
AMT 111	Materials and Processes	4.0
AMT 113	Basic Electricity	4.0
AMT 115	Weight and Balance	2.0
AMT 117	Mechanic Privileges and Limitations	1.0
AMT 119	Maintenance Publications, Forms and Records	2.0
AMT 123	Cleaning and Corrosion Control	1.0
AMT 125	Fluid Lines and Fittings	1.0
AMT 127	Ground Operations and Service	2.0
AMT 131	General Review and Test	1.0
	Semester One Total	**23.0**

Semester Two — Airframe I

AMT 108	Aircraft Coverings	2.0
AMT 112	Assembly and Rigging	4.0
AMT 153	Hydraulic and Pneumatic Power Systems	2.0
AMT 159	Aircraft Fuel Systems	2.0
AMT 167	Aircraft Welding	2.0
AMT 177	Wood Structures	1.0
AMT 179	Aircraft Sheetmetal and Non-Metallic Structures	8.0
AMT 183	Aircraft Finishes	2.0
	Semester Two Total	**23.0**

Semester Three — Airframe II

AMT 116	Aircraft Instrument Systems	1.0
AMT 120	Airframe Inspection	3.0
AMT 151	Aircraft Electrical Systems	6.0
AMT 155	Aircraft Landing Gear Systems	4.0
AMT 161	Fire Protection Systems	1.0
AMT 163	Ice and Rain Control Systems	1.0
AMT 165	Cabin Atmosphere Control Systems	2.0
AMT 169	Communication and Navigation Systems	2.0
AMT 173	Position and Warning Systems	1.0
AMT 186	Airframe Review and Test	4.0
	Semester Three Total	**25.0**

Semester Four — Powerplant I

AMT 136	Propellers	4.0
AMT 200	Reciprocating Engines	11.0
AMT 204	Engine Fuel Systems	1.0
AMT 206	Auxiliary Power Units	1.0
AMT 227	Turbine Engines	9.0
	Semester Four Total	**26.0**

Semester Five — Powerplant II

AMT 202	Engine Inspection	2.0
AMT 203	Ignition and Starting Systems	3.0
AMT 207	Fuel Metering Systems	4.0
AMT 208	Engine Electrical Systems	2.0
AMT 211	Engine Cooling Systems	1.0
AMT 213	Engine Lubrication Systems	3.0
AMT 217	Induction and Airflow Systems	1.0
AMT 219	Engine Exhaust and Reverser Systems	2.0
AMT 223	Engine Fire Protection Systems	1 .0
AMT 225	Engine Instrument Systems	1.0
AMT 231	Powerplant Review and Test	4.0
	Semester Five Total	**24.0**

Semester Six — General Education

	Communications Elective	3.0
	Humanities Elective	3.0
	Social Science Elective	3.0
	General Education Electives	6.0
	Computer Applications	3.0
	Semester Six Total — General Education	**18.0**
	AAS Degree Total	**139.0**

AVIATION

Avionics Technology

Program Description

The Avionics Technology technical certificate program prepares students to work in the field of avionics technology. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition. The program emphasizes a combination of aircraft and avionics theory and practical application necessary for successful employment. Program graduates receive an Avionics Technology technical certificate that qualifies them as avionics technicians. The technical certificate program leads to the associate of applied science (AAS) degree program.

Admissions Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Accreditations/Affiliations

The Avionics Technology program is approved by the Kansas Board of Regents.

Technical Certificate		40.0 Credits
Associate of Applied Science Degree		**68.0 Credits**
Session One		
AVT 100	Technical Mathematics	3.0
AVT 103	Introduction to Avionics	3.0
EMP 100	Employability Skills	2.0
	Session One Total	**8.0**
Session Two		
AVT 101	Basic Electricity and Electronics	3.0
AVT 102	Basic Electricity and Electronics Lab	4.0
	Session Two Total	**7.0**
Session Three		
AVT 107	Basic Communication Electronics	3.0
AVT 115	Basic Communications Lab	4.0
	Session Three Total	**7.0**
Sessions Four and Five		
AVT 110	Aircraft Electrical, Communications and Navigation Systems with Lab	12.0
	Sessions Four and Five Total	**12.0**
Session Six		
AVT 105	Avionics Systems and Troubleshooting	2.0
AVT 106	Avionics Systems and Troubleshooting Lab	2.0
AVT 108	Wiring and Cannon Plug Lab	2.0
	Session Six Total	**6.0**
	Technical Certificate Total	**40.0**
Session Seven — AAS Degree		
AVT 120	Principles of Avionics	4.0
AVT 121	Test Bench Lab	3.0
AVT 122	Practical Electronics Technology	3.0
AVT 123	Test Equipment Lab	3.0
	Session Seven — AAS Degree Total	**13.0**
Session Eight — AAS Degree — General Education		
ENG 101	English Composition I	3.0
MTH 101	Intermediate Algebra or higher	3.0
SPH 101	Introduction to Public Speaking	3.0
	or	
SPH 111	Interpersonal Communication	3.0
	and	
A minimum of one course from each of the following areas:		
	Natural Sciences	
	Social Sciences	
	Session Eight — AAS Degree Total	**15.0**
	AAS Degree Total	**68.0**

Aviation

Composites Fabrication Technician

Career Description

The composites fabrication technician works in the design and production of composite processes and products for many varied industries including, but not limited to, aerospace, marine, automobiles, trucks, recreational vehicles, energy products, household and sporting goods and industrial machines.

Career Titles

- Composites fabrication technician
- Composites technician
- Lay-up/bonding technician
- Composites quality control inspector
- Composites repair technician

Program Description

This certificate of completion provides students with the skills and knowledge necessary to work in various phases of the composites industry. Students receive hands-on working knowledge of the manufacturing methods and techniques used in today's composite industries. Completers are able to manufacture, trim and finish composite components using manual lay-up methods. Students also become familiar with the materials used to create the ever-increasing number of composite components and structures.

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Meet entrance exam requirements.

Program Outcomes

Upon successful completion, students are able to:
1. Demonstrate safe handling of composite materials.
2. Construct articles from composite materials.
3. Demonstrate fundamental knowledge of resins and reinforcement materials.
4. Demonstrate vacuum bagging techniques.
5. Safely mix and apply polymer resins.
6. Demonstrate fundamental molding techniques.
7. Cut and trim composite materials.
8. Read and correctly interpret blueprints for composite components and assemblies.
9. Identify the various illustration methods.
10. Visualize a three-dimensional item from a two-dimensional drawing.
11. Interpret the formation given on a production drawing including dimensions and tolerances and lay-up and ply orientation.
12. Perform the fundamental operations required in a composites production facility.
13. Calculate ratios and percentages and apply them to resin mixtures.
14. Use precision measuring instruments.
15. Safely and correctly use common hand tools.
16. Produce holes and install fasteners in articles constructed from composite materials.
17. Hand lay-up a composite laminate.

Certificate of Completion		15.0 Credits
CED 106	Computer Introduction	1.0
CFT 100	Occupational Safety and Precision Measurement	1.0
CFT 101	Introduction to Composites	2.0
CFT 105	Blueprint Reading for Composites	1.0
CFT 106	Composites Finish Trim	2.0
CFT 107	Composites Assembly	2.0
CFT 130	Composites Fabrication Methods/Applications	2.0
EMP 100	Employability Skills	2.0
MSC 102	Applied Shop Math	2.0
	Certificate of Completion Total	**15.0**

18. Demonstrate knowledge of the resin transfer/infusion methods of molding composites.
19. Demonstrate good bonding techniques.

Accreditations/Affiliations

The Composites Fabrication Technician program is approved by the Kansas Board of Regents.

Business and Technology

BUSINESS AND TECHNOLOGY

Accounting

Program Description

The Accounting program is designed to prepare students for employment in a variety of positions in today's automated offices. The program provides learning opportunities that introduce, develop and reinforce academic and occupational knowledge, skills and attitudes required for job acquisition, retention and advancement. The program provides opportunities to upgrade present knowledge and skills or to retrain in the area of accounting. Graduates of the program receive a technical certificate.

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Accreditations and Affiliations

The Accounting program is approved by the Kansas Board of Regents.

Technical Certificate		48.0 Credits
Session One		
ACC 101	Principles of Accounting I +	4.0
BUS 101	Beginning Document Processing	4.0
BUS 120	Business English +	3.0
CED 101	Computer Essentials	2.0
	Session One Total	**14.0**
Session Two		
ACC 102	Principles of Accounting II +	4.0
ACC 152	Payroll Accounting +	2.0
BUS 108	Word Processing +	3.0
BUS 121	Business Communications +	3.0
BUS 122	Business Math +	3.0
	Session Two Total	**15.0**
Session Three		
ACC 103	Principles of Accounting III +	4.0
ACC 104	Computerized Accounting +	3.0
ACC 106	Accounting Spreadsheet Fundamentals +	3.0
EMP 100	Employability Skills	2.0
	Session Three Total	**12.0**
Session Four		
ACC 107	Full-Time Accounting Internship +	8.0
	or	
ACC 108	Half-Time Accounting Internship +	4.0
ACC 156	Business Tax Accounting +	2.0
ACC 159	Accounting Simulation +	2.0
	Session Four Total	**8.0**
	Technical Certificate Total	**48.0**

+ *Course has prerequisites. See Course Descriptions.*

Business and Technology

Administrative Office Technology (online)

Program Description

The Administrative Office Technology associate of applied science (AAS) degree program prepares students for a variety of positions in current business, administrative and professional fields. Degree holders prove competence in all aspects of a modern office environment as well as critical-thinking skills necessary to prove agility in today's fast-paced business world. Students complete all required general education courses making them candidates for the AAS degree. Because students are following a similar course path as all business technical certificate programs, graduates can expect to receive the Microsoft Office Specialist Certification as they progress through the program. Graduates receive an Administrative Office Technology AAS degree.

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Accreditations and Affiliations

The Administrative Office Technology program is approved by the Kansas Board of Regents and is accredited by the Higher Learning Commission of the North Central Association.

Associate of Applied Science Degree	66.0 Credits
Session One	
BUS 101 Beginning Document Processing	4.0
BUS 106 Office Procedures +	2.0
CED 101 Computer Essentials	2.0
ENG 101 English Composition I +	3.0
SPH 101 Introduction to Public Speaking	3.0
Session One Total	**14.0**
Session Two	
BUS 102 Intermediate Document Processing +	4.0
BUS 108 Word Processing +	3.0
BUS 121 Business Communications +	3.0
MTH 101 Intermediate Algebra +	3.0
PSY 101 General Psychology	3.0
Session Two Total	**16.0**
Session Three	
BUS 103 Advanced Document Processing +	4.0
BUS 205 Advanced Word Processing +	3.0
BUS 206 Spreadsheet Management +	3.0
SOC 101 Introduction to Sociology	3.0
Session Three Total	**13.0**
Session Four	
BUS 105 Database Management +	2.0
BUS 107 Machine Transcription +	2.0
BUS 207 Business Accounting +	5.0
Elective *	3.0
Session Four Total	**12.0**
Session Five	
EMP 100 Employability Skills +	2.0
MTH 112 College Algebra +	3.0
Electives *	6.0
Session Five Total	**11.0**
AAS Degree Total	**66.0**
* Electives	
Students must complete a minimum of nine credit hours from the following occupational courses:	
BUS 150 Office Simulations +	3.0
BUS 151 Telephone Training	3.0
BUS 152 Desktop Publishing +	3.0
BUS 208 Medical Terminology +	3.0
DIS 150 Directed Individual Study	1–12.0

+ *Course has prerequisites. See Course Descriptions.*
* *Students may choose electives from any Business and Technology programs.*

General Education

GENERAL EDUCATION

General Education Courses

Program Description

General Education courses are available for students who would like to begin their college education with a more personal and affordable option to private schools and state universities. Students can complete lower-level courses at WATC before transferring on to a four-year college or university. General education courses are also included in all WATC associate degree programs to provide students a well-rounded curriculum while preparing for a technical career.

Admission Requirements

- Submit an application for admission
- Show documentation of high school graduation or satisfaction of high school equivalency
- Meet individual course requirements. Some courses require an assessment score or prerequisite courses.

Accreditations and Affiliations

WATC is fully accredited by the Higher Learning Commission of the North Central Association. Accordingly, general education courses are fully eligible for transfer to other institutions.

General Education Courses		Credits
ACC 105	Fundamentals of Accounting	3.0
ACC 120	Accounting with Computers	3.0
ACC 160	Principles of Accounting I	3.0
ACC 165	Payroll Accounting	2.0
ACC 170	Principles of Accounting II	3.0
ALH 101	Medical Terminology	3.0
ALH 105	First Aid and CPR	3.0
ALH 110	Principles of Nutrition	3.0
ALH 125	Personal Health/Community Hygiene	3.0
ART 100	Art Appreciation	3.0
BIO 100	Biology Review	1.0
BIO 110	Principles of Biology	5.0
BIO 150	Human Anatomy and Physiology	5.0
BIO 160	Microbiology	5.0
BUS 104	Introduction to Business	3.0
BUS 130	Personal Finance	3.0
BUS 140	Principles of Marketing	3.0
BUS 160	Human Relation – People at Work	3.0
BUS 200	Principles of Management	3.0
CED 115	Computer Applications	3.0
CED 120	Advanced Computer Applications	3.0
CHM 100	Chemistry Review	1.0
CHM 110	General Chemistry	5.0
CHM 125	Chemistry I	5.0
CRJ 101	Introduction to Criminal Justice	3.0
EBS 101	College Reading Skills	3.0
EBS 105	Becoming a Master Student	3.0
EBS 110	English	3.0
EBS 115	Pre-Algebra	3.0
EBS 120	Elementary Algebra	3.0
ECO 105	Principles of Macroeconomics	3.0
ECO 110	Principles of Microeconomics	3.0
EMP 100	Employability Skills	2.0
ENG 101	English Composition I	3.0
ENG 120	English Composition II	3.0
MTH 101	Intermediate Algebra	3.0
MTH 102	Intermediate Algebra with Review	5.0
MTH 111	College Algebra with Review	5.0
MTH 112	College Algebra	3.0
MTH 113	Trigonometry	3.0
MTH 115	Pre-Calculus	5.0
MTH 125	Calculus I	5.0
MTH 150	Calculus II	5.0
PED 110	Lifetime Fitness	1.0
PHL 110	Ethics	3.0
PHS 110	Physical Science	5.0
PSY 101	General Psychology	3.0
PSY 120	Developmental Psychology	3.0
PSY 130	Human Growth and Development	3.0
PTR 100	Introduction to Personal Training	3.0
PTR 101	Principles of Strength and Conditioning	1.0
SOC 101	Principles of Sociology	3.0
SPH 101	Public Speaking	3.0
SPH 111	Interpersonal Communication	3.0

Health Sciences

Health Sciences

Certified Nurse Aide

Career Description

Certified nurse aides (CNA), often the principal caregivers in nursing homes, work under the supervision of registered and licensed practical nurses. They take and record temperature, pulse, respiration and blood pressure; help residents in and out of bed; and assist with bathing, dressing, feeding and toileting of residents. CNAs work primarily in nursing homes, but may also work in hospitals or for temporary nursing service agencies.

Career Titles

- Certified nurse aide (CNA)
- Certified nurse assistant
- Geriatric aide

Program Description

The CNA program prepares students to be caregivers in nursing homes while working under the supervision of licensed nurses. The instruction includes classroom, laboratory and clinical experiences. Students must successfully complete a competency skills checklist, maintain attendance as defined in the course syllabus and achieve satisfactory grades. Daytime classes meet daily for approximately five weeks, and evening classes meet two to three times a week for approximately three months.

The program meets the guidelines of the Kansas Department of Health and Environment, and graduates may take the state examination to become CNAs after successful completion of the course.

Admissions Requirements

In addition to the college's admissions policy, students must:
- Be 16 years of age or older.
- Successfully complete preadmission testing.
- Provide documentation of a negative PPD TB skin test within the last six months or negative chest X-ray within the last three years.
- CNAs and medication aides must pay for and pass a criminal background check – must be completed prior to first day of classes.

Note: Beginning July 1, 1998, persons who have been found guilty of a felony related to crimes against a person may be denied employment in adult care homes and home health agencies (KSA 39-970 and KSA 65-5117). Visit www.kdhe.state.ks.us/hoc for a list of prohibited offenses, or call Melinda Reynard-Lindsay, 785.296.8628.

Physical and Environmental Requirements

The following sensory and physical activities are essential functions of this position and are performed in excess of levels required for ordinary movement:
- Awkward position
- Balancing
- Color vision
- Crouching
- Depth perception
- Fingering (manipulative finger movements)

Certificate of Completion		5.0 Credits
GRA 101	Certified Nurse Aide	5.0
	Certificate of Completion Total	5.0
Related Courses		
ALH 002	Certified Nurse Aide Update +	0.0
ALH 150	Assisted Living Operator Training	2.0
GRA 019	Medication Aide Update +	0.0
GRA 108	Rehabilitation Aide +	2.0
GRA 110	Social Services Designee +	2.0
GRA 113	Activity Director +	2.0
GRA 116	Activity Director/Social Services Designee +	3.0
GRA 119	Medication Aide +	5.0
HHA 100	Home Health Aide +	2.0

+ *Course has prerequisites. See Course Descriptions.*

- Grasping
- Handling
- Hearing
- Lifting
- Near visual acuity
- Reaching
- Smelling
- Speaking
- Standing/moving about
- Stooping
- Twisting

The following mental and communicative activities are essential to the performance of this position:
- Ability to handle stress and emotions
- Ability to handle conflict
- Ability to organize materials
- Careful attention to detail
- Concentrating on task
- Dealing with diverse populations
- Fast reaction time
- Handling multiple priorities
- Making decisions with limited information
- Making non-routine judgments
- Performing tasks during limited time frame
- Positive attitude toward ill, handicapped and elderly
- Reasoning — applying procedures
- Reporting to multiple supervisors
- Using diplomacy and tact

Individuals in this position are required to carry or lift weights in this range:
- 25–50 pounds

Individuals in this position are exposed to the following:
- Bloodborne pathogens
- Use of electrical equipment
- Use of sharp utensils
- Wet work — hands

Program Outcomes

Upon successful program completion, students are able to:

1. Identify the individual's basic human needs —physical, psychological, social, spiritual and environmental.
2. Demonstrate meeting each individual's basic human needs —physical, psychological, social, spiritual and environmental.
3. Demonstrate employability skills.
4. Recognize the members of the health-care team and the importance of communication between the certified nurse aide and other team members.
5. Identify the effect of aging on each person's basic needs to help them reach their highest quality of life.
6. Identify emergency safety methods and protocols for certified nurse aides to prevent accidents and incidents.

Accreditations/Affiliations

The Certified Nurse Aide program is approved by the Kansas Board of Regents.

The program is also approved by:

- Kansas Department of Health and Environment
1000 SW Jackson, Suite 200
Topeka, KS 66212-1365
785.296.0056

HEALTH SCIENCES

Dental Assistant

Career Description

Dental assistants work at chairside as dentists examine and treat patients. They prepare patients for treatment, obtain dental records and provide instruments and materials needed during treatment procedures. Dental assistants also provide post-treatment instruction, instruct patients in oral health care, take impressions for study casts, expose radiographs and processes dental X-ray film as directed by the dentist. In some dental offices, dental assistants perform business office and laboratory duties as well. The wide range of tasks that dental assistants may perform requires both technical and interpersonal skills. Dental assistants may be employed in general dentistry or in any dental specialty area. Employment opportunities include solo or group dental practices, government clinics, hospitals or teaching institutions.

Program Description

This program provides the educational environment and experiences to prepare for employment as a dental assistant. The program graduate has the knowledge and skills necessary to assist during the delivery of dental care, perform supportive treatment procedures and basic business office tasks. Graduates may take the Dental Assisting National Board examination to become a Certified Dental Assistant (CDA).

Students may request consideration for advanced placement by submitting an official transcript of coursework. This program does not offer credit for experiential learning.

Admission Requirements

In addition to the college's admissions policy, students registering in this health program must:
- Complete a college-level Introduction to MS Office course. Credit may be transferred by official transcript from any accredited institution. See Transfer of Credit section in catalog.
- Be 17 years of age or older.
- Attend an information session prior to registration.
- Successfully complete preadmission testing.
- Upon acceptance, complete necessary health examinations, immunizations and pass a drug screen test at their own expense prior to the first day of courses.
- Possess current American Heart Association CPR for Healthcare Providers certification prior to start of second-semester courses.

Physical and Environmental Requirements

The following sensory and physical activities are essential functions of this position and are performed in excess of levels required for ordinary movement.
- Accommodation
- Awkward position
- Color vision
- Depth perception
- Feeling
- Fingering (manipulative finger movements)
- Flexing or rotating wrists
- Grasping
- Handling
- Hearing
- Lifting
- Near visual acuity
- Reaching
- Repetitive movement
- Sitting
- Speaking
- Standing
- Stooping
- Twisting

Technical Certificate		42.0 Credits
Semester One (16 weeks)		
Session One		
DAS 118	Dental Radiology I +	2.0
DAS 119	Dental Anatomy	2.0
	Session One Total	**4.0**
Session One-A (8 weeks)		
DAS 102	Fundamentals in Dental Assisting +	3.0
DAS 107	Anatomy for Dental Assistants +	1.0
DAS 112	Dental Materials I +	3.0
DAS 115	Chairside Assisting I +	4.0
	Session One-A Total	**11.0**
Session One-B (8 weeks)		
DAS 108	Dental Health Education +	2.0
DAS 111	Fundamentals in Dental Assisting II +	2.0
DAS 132	Dental Materials II +	2.0
DAS 135	Chairside Assisting II +	3.0
	Session One-B Total	**9.0**
	Semester One Total	**24.0**
Semester Two (16 weeks)		
Session Two		
DAS 138	Dental Radiology II +	2.0
DAS 143	Dental Materials III +	1.0
Session Two-A (8 weeks)		
DAS 125	Dental Science I	2.0
DAS 144	Clinical Externship I +	4.0
DAS 145	Chairside Assisting III	1.0
	Session Two-A Total	**7.0**
Session Two-B (8 weeks)		
DAS 129	Dental Science II +	1.0
DAS 142	Dental Office Procedures +	2.0
DAS 155	Chairside Assisting IV +	1.0
DAS 156	Clinical Externship II +	4.0
	Session Two-B Total	**8.0**
	Semester Two Total	**18.0**
	Technical Certificate Total	**42.0**
Optional Continuing Education Courses		
DAS 020	Theoretical Application of Nitrous Oxide (6 clock hours) +	0.0
DAS 210	Expanded Fundamentals in Dental Assisting +	4.0
DAS 214	Supragingival Scaling for the Dental Assistant +	4.0
+ Course has prerequisites. See Course Descriptions.		

The following mental and communicative activities are essential to the performance of this position:
- Ability to handle stress and emotions
- Ability to organize materials
- Ability to remember procedures and instructions
- Careful attention to detail
- Concentrating on task
- Dealing with angry people
- Dealing with diverse populations
- Fast reaction time
- Handling conflict
- Handling multiple priorities
- Performing task during limited time frame
- Positive attitude toward ill, handicapped and elderly
- Public contact
- Reasoning — applying procedures
- Using diplomacy and tact

Individuals in this position are required to carry or lift weights in this range:
- 10–25 pounds

Individuals in this position are exposed to:
- Bloodborne pathogens
- Chemical hazards (skin irritants)
- Respiratory hazards
- Vibrating equipment
- Use of sharp instruments
- Latex

Program Outcomes

Upon successful program completion, students are able to:
1. Demonstrate concepts of infection control and hazard management.
2. Apply principles of radiation hygiene and safety to obtain diagnostic radiographs.
3. Assist in clinical dental procedures.
4. Manipulate dental materials associated with chairside and laboratory procedures.
5. Perform basic dental business office procedures.
6. Demonstrate effective communication and professional ethics.

Accreditations/Affiliations

The Dental Assistant program is approved by the Kansas Board of Regents.

The program is also accredited by:
- Commission on Dental Accreditation
  of the American Dental Association
  211 E. Chicago Avenue
  Chicago, IL 60611-2678
  312.440.4653

HEALTH SCIENCES

Dietary Manager

Career Description

Demand for trained food service managers is growing as the types and number of noncommercial facilities expand. Trained food-service managers can find employment in retirement communities and rehabilitation, health-care, correctional and school food-service facilities.

Program Description

The Dietary Manager program combines classroom work and practical experience. Students must be employed in health-care food service or other noncommercial food services. A written recommendation for training from the facility administrator and a registered dietitian, willing to act as preceptor for field experience, is also required. Those working in other noncommercial food positions must make arrangements to complete the field experience for nutrition courses in a health-care facility.

This program prepares students for the requirements of the Kansas State Department of Aging for food-service directors in hospitals and long-term care facilities. Graduates are eligible to take the certification exam of the Dietary Managers Association.

Program Outcomes

Upon successful program completion, students are able to:
1. Demonstrate workplace safety, food safety and sanitation procedures.
2. Supervise and monitor quality of food production and service.
3. Demonstrate food-service management skills.
4. Supervise food-service staff.
5. Develop client nutritional care plans.

Admissions Requirements

- Be 17 years of age or older.
- Successfully complete preadmission testing.
- Currently employed in food service
- Complete a Dietary Manager Program Application.
- Complete a Dietary Manager Field Experience Agreement.

Accreditations/Affiliations

The Dietary Manager program is approved by the Kansas Board of Regents.

The program is also accredited by:
- Dietary Manager Association
  406 Surrey Woods Drive
  St. Charles, IL 60174
  630.587.6336

Certificate of Completion		13.0 Credits
CED 101	Computer Essentials	2.0
DME 141	Sanitation and Safety +	2.0
DME 157	Nutrition Management +	5.0
DME 158	Managing Food Service Operations +	5.0
	Certificate of Completion Total	14.0
Optional Continuing Education Courses		
ALH 003	ServSafe	1.0
DME 120	Certified Dietary Manager Exam Review +	1.0

+ *Course has prerequisites. See Course Descriptions.*

HEALTH SCIENCES

Health Care

Program Description

Successful completion of a technical program in a health occupation provides entry into the chosen profession. In the rapidly changing world of health care, employees in health professions need a broad awareness and understanding of the world around them, along with strong technical skills to maximize their potential in the workplace.

The Health Care associate of applied science (AAS) degree program incorporates the coursework of the Dental Assistant, Medical Assistant or Surgical Technology technical certificate program as the first year of the AAS degree program. The remaining courses for this degree provide a foundation in general education to expand students' awareness of the world around them. The advanced technical courses provide an overview of federal and state regulations, industry practices and legal and ethical issues that impact the health-care industry and challenges facing the industry as a whole. Today's competent health professionals are required to access and evaluate data and communicate this data through oral and written communications. The Health Care AAS degree program also includes development of some advanced technical skills consistent with learners' chosen professions.

While completion of the Health Care AAS degree does not lead to immediate salary increases within these professions, it can contribute to preferential selection from among equally qualified applicants, and the additional preparation can contribute to more rapid career advancement and increases in salary.

Admission Requirements

The majority of students applying to the Health Care AAS degree program are individuals who have earned technical certificates in the Dental Assistant, Medical Assistant or Surgical Technology programs. For these students, the following requirements apply:
- Compliance with college admission policies.
- Evidence of a Dental Assistant, Medical Assistant or Surgical Technology technical certificate.
- Upon acceptance, complete necessary health examinations, immunizations and pass a criminal background check and drug screen at their own expense at an agency designated by WATC prior to the first day of classes. This requirement is limited to students entering an advanced technical course with a clinical component.

While not criteria for admission, students need to take COMPASS math and writing exams for appropriate placement in math and English composition coursework.

Physical and Environmental Requirements

See Dental Assistant, Medical Assistant and Surgical Technology program information for these requirements.

Program Outcomes

Upon successful program completion, students are able to:
1. Integrate general education concepts into a broadened understanding of the student's health-care profession and the patients/clients served.

Associate of Applied Science Degree	
– Dental Assistant Graduates	**71.0 Credits**
– Medical Assistant Graduates	**72 .0 Credits**
– Surgical Technology Graduates	**71 .0 Credits**

Prerequisite
Successful completion of Dental Assistant, Medical Assistant or Surgical Technology program.

Session One

ENG 101	English Composition I +	3.0
HHS 210	Health Care Practice Management +	4.0
HHS 212	Legal and Ethical Issues in Health Care +	4.0
MTH 101	Intermediate Algebra or higher +	3.0
	Session One Total	**14.0**

Session Two

HHS 214	Seminar in Health Sciences +	2.0
PSY 101	General Psychology +	3.0
SOC 101	Introduction to Sociology +	3.0
SPH 101	Introduction to Public Speaking +	3.0
	Session Two Total	**11.0**

Session Three
Dental Assistant

DAS 210	Expanded Fundamentals in Dental Assisting + or	4.0
DAS 214	Supragingival Scaling for the Dental Assistant +	4.0

Medical Assistant

MEA 210	Advanced Procedures in Medical Assisting +	4.0

Surgical Technology

SGT 235	Specialty Surgical Practice +	4.0
	Session Three Total	**4.0**

+ *Course has prerequisites. See Course Descriptions.*

2. Relate events that have shaped the current health-care industry and the impact of these events on the student's health-care profession.
3. Formulate a personal management style that recognizes personal management preferences and addresses employee needs.
4. Compare and contrast the impact of laws and ethics on the delivery of health care.
5. Demonstrate effective oral and written communications that are consistent with correct use of the English language.
6. Demonstrate research skills that produce accurate and relevant information to address the question/problem being investigated.
7. Demonstrate advanced technical skills through performance of procedures of increased complexity in the student's profession.

Accreditations/Affiliations

The Health Care AAS degree program is approved by the Kansas Board of Regents.

HEALTH SCIENCES

Medical Assistant

Career Description

Medical assistants are multi-skilled professionals dedicated to assisting in patient-care management. These health-care professionals perform administrative and clinical duties and may manage emergency situations, facilities and/or personnel. Medical assistants work in physicians' offices, clinics, hospitals and other medical facilities under the supervision of a physician.

Career Titles

- Medical assistant
- Medical office assistant
- Receptionist
- File/records clerk
- Insurance coder
- EKG tech/monitor tech

Program Description

The Medical Assistant program provides the education and experience necessary to function in doctors' offices and clinics under the supervision of a physician. Graduates perform front-office (administrative) and back-office (clinical) duties. Graduates of the program may take the national certification examination to become Certificate Medical Assistants (CMAs).

Students may request consideration for advanced placement by submitting an official transcript of coursework. This program does not offer credit for experiential learning.

Admissions Requirements

In addition to the college's admissions policy, students registering in this program must:
- Be 17 years of age or older and 18 years of age by program completion.
- Attend an information session prior to registration.
- Successfully complete preadmission testing.
- Concurrent first-semester registration in, or successful completion of, a college-level Introduction to MS Office course or equivalent. Credit may be transferred by official transcript from an accredited institution. Students may demonstrate on an internal WATC examination the knowledge and proficiency necessary to receive credit for Introduction to MS Office. See Credit by Examination in the catalog.
- Concurrent first-semester enrollment in, or successful completion of, a college-level Anatomy and Physiology course. Credit may be transferred by official transcript from an accredited institution.
- Possess current American Heart Association's CPR for Healthcare Providers certification before start of second-semester coursework.
- Upon acceptance, complete necessary health examinations, immunizations and pass a drug screen test and criminal background check at their own expense at agencies designated by WATC prior to the first day of the course.

Technical Certificate	43.0 Credits
Semester One	
MEA 101 Professional Issues +	2.0
MEA 103 Medical Terminology *	2.0
MEA 110 Human Body	5.0
MEA 111 Patient Care I +	5.0
MEA 113 Administrative Aspects I * +	3.0
MEA 115 Insurance Billing and Coding * +	3.0
MEA 117 Pharmacology +	5.0
Semester One Total	**25.0**
Semester Two	
MEA 120 Diagnostic Procedures +	2.0
MEA 121 Patient Care II +	5.0
MEA 123 Administrative Aspects II +	1.0
MEA 125 Clinical Laboratory Procedures * +	4.0
MEA 131 Externship in Medical Assisting +	6.0
Semester Two Total	**18.0**
Technical Certificate Total	**43.0**

* Kansas Workforce Education Curriculum (KWEC) state curriculum.
+ Course has prerequisites. See Course Descriptions.

Open Registration
CED 115 Computer Applications	3.0

Physical and Environmental Requirements

The following sensory and physical activities are essential functions of this position and are performed in excess of levels required for ordinary movement:
- Accommodation
- Awkward position
- Bending
- Color vision
- Depth perception
- Feeling
- Fingering (manipulative finger movements)
- Grasping
- Handling
- Hearing
- Lifting
- Near visual acuity
- Pulling and pushing
- Reaching
- Reading
- Repetitive movement
- Sitting
- Speaking
- Standing
- Stooping
- Twisting
- Walking
- Writing

The following mental and communicative activities are essential to the performance of this position:
- Ability to handle stress and emotion
- Ability to organize materials
- Ability to remember procedures and instructions

- Careful attention to detail
- Concentrating on task
- Dealing with angry people
- Dealing with diverse populations
- Demonstrate honesty and dependability and safeguard patient confidentiality
- Fast reaction time
- Handling conflict
- Handling multiple priorities
- Performing task during limited time frame
- Positive attitude toward ill, handicapped and elderly
- Public contact
- Reasoning-applying procedures
- Using diplomacy and tact
- Verbal and nonverbal skills adequate for transmitting information

Individuals in this position are required to carry or lift weights in this range:
- 10–50 pounds

Individuals in this position are exposed to the following:
- Bloodborne pathogens
- Chemical hazards
- Electrical equipment
- Respiratory hazards
- Use of sharp instruments

Program Outcomes

Upon successful program completion, students are able to:
1. Communicate effectively with patients and health-care team members.
2. Demonstrate a positive work ethic while applying legal and ethical concepts to the practice of medicine.
3. Apply problem-solving and critical-thinking skills to the practice of medicine and time management.
4. Evaluate and use information technology effectively.
5. Demonstrate methods of infection control.
6. Collect, process and test patient specimens.
7. Prepare patients and assist physicians in performing medical procedures.
8. Calculate, administer and document medication administration.
9. Perform reception and administrative medical office duties.
10. Obtain medical practice reimbursement through accurate claims submission and accurate third-party billing.

Accreditations/Affiliations

The Medical Assistant program is approved by the Kansas Board of Regents.

The Medical Assistant program is also accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Review Board of the American Association of Medical Assistants' Medical Assisting Education Review Board (MAERB):

- Commission on Accreditation of
  Allied Health Education Programs
  35 E. Wacker Drive, Suite 1970
  Chicago, IL 60601-2208
  312.553.9355
  www.caahep.org

HEALTH SCIENCES

Phlebotomist

Career Description

Changes in blood and other body tissues and fluids often indicate something is wrong with the body. With the help of many health-care professionals, including the phlebotomist, physicians diagnose and treat disorders. The role of the phlebotomist in this process is to collect and process blood samples that are tested to provide vital information to assist physicians in making these decisions. It is critical that phlebotomists are careful in identifying patients, labeling samples and completing requisitions so that test results accurately reflect the patient's condition.

Since many patients do not come in contact with any laboratory personnel other than the phlebotomist, the phlebotomist becomes the patient's "window" to the laboratory. Patients often form an opinion as to the quality of the laboratory based on their relationship with the phlebotomist. For this reason the phlebotomist, in addition to being competent in collecting blood samples, needs to also display professional behavior and communicate effectively.

Phlebotomists work in hospitals, clinics, blood collection facilities, physicians' offices and independent laboratory facilities.

Program Description

The Phlebotomy program provides the education and experience necessary to perform laboratory specimen collection in clinical and reference laboratories, physician's offices and donor collection centers. Graduates are eligible to take national certification examinations offered by various certification organizations.

Admissions Requirements

In addition to the college's admissions policy, students must:
- Be 17 years of age or older.
- Attend an information session prior to registration.
- Successfully complete preadmission testing.

Upon acceptance to the program, students must
- Submit a negative TB skin test.
- Pay for and pass a criminal background check and drug screen test at an agency designated by WATC.
- Complete required health examinations and immunizations at their own expense by designated date.

Physical and Environmental Requirements

The following sensory and physical activities are essential functions of this position and are performed in excess of levels required for ordinary movement:
- Accommodation
- Awkward position
- Bending
- Color vision
- Depth perception
- Feeling
- Fingering (manipulative finger movements)
- Grasping
- Handling
- Hearing
- Lifting

Certificate of Completion		12.0 Credits
MLT 160	Concepts of Phlebotomy	4.0
MLT 161	Phlebotomy Lab	4.0
MLT 170	Phlebotomy Clinical Internship	4.0
	Certificate of Completion Total	**12.0**

- Near visual acuity
- Pulling and pushing
- Reaching
- Reading
- Repetitive movement
- Sitting
- Speaking
- Standing
- Stooping
- Twisting
- Walking
- Writing

The following mental and communicative activities are essential to the performance of this position:
- Ability to handle stress and emotion
- Ability to organize materials
- Ability to remember procedures and instructions
- Careful attention to detail
- Concentrating on task
- Dealing with angry people
- Dealing with diverse populations
- Demonstrate honesty and dependability and safeguard patient confidentiality
- Fast reaction time
- Handling conflict
- Handling multiple priorities
- Performing task during limited time frame
- Positive attitude toward ill, handicapped and elderly
- Public contact
- Reasoning-applying procedures
- Using diplomacy and tact
- Verbal and nonverbal skills adequate for transmitting information

Individuals in this position are required to carry or lift weights in this range:
- 10–50 pounds

Individuals in this position are exposed to the following:
- Bloodborne pathogens
- Chemical hazards
- Electrical equipment
- Respiratory hazards
- Use of sharp instruments

Program Outcomes

Upon successful program completion, students are able to:
1. Demonstrate methods of infection control by employing current safety equipment and practices.
2. Describe the services performed within the various components, departments and services of the health-care delivery network as related to phlebotomy.

3. Demonstrate knowledge of basic human body and circulatory structure, function and pathology as related to phlebotomy.
4. Collect, process and preserve blood and related specimens utilizing a variety of collection methods, equipment and procedures to assure integrity and appropriateness of each type of specimen.
5. Identify specimen requirements and laboratory tests commonly performed for the evaluation of each body system.

Accreditations/Affiliations

The Phlebotomist program is approved by the Kansas Board of Regents.

HEALTH SCIENCES

Practical Nurse

Career Description

Practical nurses are vital members of the health-care team who provide nursing care to selected patients under the supervision of a registered nurse or physician. Practical nurses utilize technical knowledge and skills to meet the health needs of people in a variety of settings. Practical nurses are employed primarily in nursing homes and hospitals. They may also be employed in clinics, physicians' offices, home health agencies and temporary nursing service agencies.

Career Titles

• Licensed practical nurse (LPN)
• Licensed vocational nurse (LVN)

Program Description

The Practical Nurse program provides the common body of knowledge and skills essential for the practical nurse's entry into practice. The curriculum fulfills the educational requirements for licensure as a LPN. Upon completion of the program, graduates are eligible to take the NCLEX-PN examination.

Students may request consideration for advanced placement by submitting an official transcript of coursework. This program does not offer credit for experiential learning. There are pathways for articulation to degree nursing programs. Students continuing their education for an ADN or BSN should consult a counselor regarding transfer of credit for all courses.

Curriculum and schedule subject to change based on clinical availability.

Locations

The Practical Nurse program is offered day and evening at Central Center. The Practical Nurse Satellite program is offered at the Kansas Veterans Home in Winfield, Kansas.

Admissions Requirements

In addition to the college's admissions policy, students must:
• Be 18 years of age or older.
• After application has been processed and applicant has been accepted for admission, complete a Health Sciences program application.
• Practical Nurse applicants must provide original high school or GED transcript according to Kansas State Board of Nursing guidelines. Request that transcript be mailed directly to Registrar.
• Be a current Kansas Certified Nurse Aide (CNA) and must submit copy of current CNA certificate from KDHE to WATC Main Campus, Admissions.
• Complete Anatomy and Physiology (A&P), CPR for Healthcare Providers, General Psychology, Developmental Psychology and Principles of Nutrition with a passing grade prior to entering program. A&P is acceptable for five years after completion of course; all others are acceptable for seven years. Students who are currently enrolled in prerequisite courses may bring a current, unofficial transcript or equivalent to the information session.

Technical Certificate		40.0 Credits
Required Prerequisites		
ALH 001	CPR for Healthcare Providers	0.0
MEA 110	Human Body	5.0
	or	
	Anatomy and Physiology	5.0
PNR 111	Principles of Nutrition +	3.0
PSY 101	General Psychology +	3.0
PSY 120	Developmental Psychology +	3.0
	Total Prerequisites	**14.0**
Semester One		
PNR 109	Pharmacology +	4.0
PNR 114	Orientation to Nursing +	2.0
PNR 115	Fundamentals of Nursing I +	2.0
PNR 116	Fundamentals of Nursing II +	8.0
PNR 162	Medical/Surgical Nursing I +	3.0
	Semester One Total	**19.0**
Semester Two		
PNR 150	Practical Nursing Issues +	2.0
PNR 160	Nursing Care of the Family +	6.0
PNR 163	Medical/Surgical Nursing II +	6.0
PNR 164	Mental Health Concepts +	1.0
PNR 165	Gerontology +	6.0
	Semester Two Total	**21.0**
	Technical Certificate Total	**40.0**
Certificate of Completion		**3.0**
ALH 160	IV Therapy for LPNS +	3.0
+ *Course has prerequisites. See Course Descriptions.*		

• Successfully complete the TEAS test with a minimum score of 55 in Math, English and Science and 60 in Reading. A photo ID and payment are required to take the assessments. Results are mailed to applicants in three to five business days and are valid for five years. Results are not given over the phone.
• Applicants must submit two letters of recommendation from an employer or instructor (former or current) to Admissions. Preprinted forms are available from Admissions.
• Attend an orientation session prior to registration. Dates and times are mailed to applicants.

Upon acceptance into program, applicants must:
• Pay for and pass a criminal background check and drug screen test at an agency designated by WATC.
• Complete required health examinations and immunizations at their own expense by designated date.

Note: The Kansas State Board of Nursing may deny licensure to persons who have been guilty of a misdemeanor involving an illegal drug offense unless the applicant or licensee establishes sufficient rehabilitation to warrant the public trust (KSA 65-1120), except that notwithstanding KSA 74-120 no license, certificate of qualification or authorization to practice nursing as a licensed professional nurse, as a licensed practical nurse, as an advanced registered nurse practitioner

or registered nurse anesthetist shall be granted to a person with a felony conviction for a crime against persons as specified in article 34 of chapter 21 of the Kansas Statutes Annotated and acts amendatory thereof or supplemental thereto.

Physical and Environmental Requirements

The following sensory and physical activities are essential functions of this position and are performed in excess of levels required for ordinary movement:
- Accommodation
- Awkward position
- Color vision
- Depth perception
- Feeling (touch)
- Fingering (manipulative finger movements)
- Grasping
- Handling
- Hearing
- Lifting
- Manual dexterity
- Near visual acuity
- Pulling and pushing
- Reaching
- Reading
- Repetitive movement
- Sitting
- Speaking
- Standing
- Stooping and bending
- Twisting
- Writing

The following mental and communicative activities are essential to the performance of this position:
- Ability to handle stress and emotions
- Ability to organize materials
- Ability to remember procedures and instructions
- Careful attention to detail
- Concentrating on task
- Dealing with angry people
- Dealing with diverse populations
- Fast reaction time
- Handling conflict
- Handling multiple priorities
- Honesty, dependability and safeguarding confidentiality of patient
- Making observations and exercising good judgment
- Performing task during limited time frame
- Positive attitude toward ill, handicapped and elderly
- Problem solving
- Public contact
- Reasoning — applying procedures
- Using diplomacy and tact
- Verbal/nonverbal skills adequate for transmitting information

Individuals in this position are required to carry or lift weights in this range:
- 50 pounds unassisted
- Over 50 pounds assisted

Individuals in this position are exposed to the following:
- Bloodborne pathogens
- Chemical hazards (skin irritants)
- Electrical equipment
- Respiratory hazards
- Use of sharp instruments

Program Outcomes

Upon successful program completion, students are able to:
1. Utilize the nursing process to assist in identifying basic physical, psychosocial, spiritual and cultural health-care needs in prevention and treatment of simple nursing situations.
2. Utilize the nursing process and critical-thinking skills to assist in planning and delegating nursing care to diverse populations.
3. Perform nursing care safely within a supportive and restorative practical nurse framework as a caring, ethical and accountable health-care team member.
4. Demonstrate effective communication skills with clients, significant others and interdisciplinary team members in planning and delivering health care.
5. Demonstrate continued learning as a part of personal and professional growth.

Accreditations/Affiliations

The Practical Nurse program is approved by the Kansas Board of Regents.

The program is also accredited by:
- National League for Nursing Accrediting Commission, Inc.
  61 Broadway, 33rd Floor
  New York, NY 10006
  212.363.5555

The program is also approved by:
- Kansas State Board of Nursing
  900 S.W. Jackson, Suite 1051
  Topeka, KS 66612-1230
  785.296.3782

HEALTH SCIENCES

Surgical Technology

Career Description

Surgical technologists assist in surgeries under the supervision of surgeons, registered nurses or other surgical personnel. They are members of operating-room teams that include surgeons, anesthesiologists and circulating nurses. Before operations, surgical technologists help prepare operating rooms by setting up surgical instruments and equipment, sterile drapes and sterile solutions. They assemble both sterile and non-sterile equipment and ensure it is working properly. Surgical technologists also prepare patients for surgery by washing, shaving and disinfecting incision sites. They transport patients to operating rooms, help position them on operating tables and cover them with sterile surgical drapes. Surgical technologists also observe patients' vital signs, check charts and assist the surgical team with putting on sterile gowns and gloves. During surgery, they pass instruments and other sterile supplies to surgeons and surgical assistants. They may hold retractors, cut sutures and help count sponges, needles, supplies and instruments. Surgical technologists help prepare, care for and dispose of specimens taken for laboratory analysis and assist in applying dressings. Some surgical technologists operate sterilizers, lights or suction machines and assist with diagnostic equipment. Surgical technologists may also help transfer patients to recovery rooms following surgery and clean and restock operating rooms.

Career Titles

- Surgical technologist
- Scrub tech
- Operating room technician (ORT)
- Sterile processing technician/manager
- Central supply manager
- Instrument technician
- Surgical technician

Program Description

The Surgical Technology program prepares students to function in the operating room environment by combining classroom and simulated laboratory instruction with actual surgical clinical experiences. Successful completion of the program allows graduates to take the National Certification examination to become a Certified Surgical Technologist (CST).

Students may request consideration for advanced placement by submitting an official transcript of coursework. This program does not offer credit for experiential learning.

Admissions Requirements

In addition to the college's admissions policy, students registering in this program must:
- Be 18 years of age or older.
- After application has been processed and applicant has been accepted for admission, complete a Health Sciences program application.
- Request that official transcript (high school, GED and any college credits) be mailed directly to Registrar.
- Successfully complete COMPASS preadmission testing with a score of 73 for reading, 23 for writing and 35 for math. A photo ID and payment are required to take the

Technical Certificate	42.0 Credits
Prerequisite Courses	
ALH 001 CPR for Healthcare Providers	0.0
CED 200 College-Level Introduction to MS Office +	3.0
MEA 110 Human Body	5.0
or	
Anatomy and Physiology	5.0
Total Prerequisites	**8.0**
Semester One	
SGT 101 Introduction to Surgical Technology +	2.0
SGT 105 Microbiology for Surgical Technology +	3.0
SGT 111 Patient Care I +	3.0
SGT 115 Surgical Procedures I +	5.0
SGT 116 Surgical Instruments +	2.0
SGT 119 Surgical Technology Clinical Experience I +	1.0
SGT 120 Principles and Practices in Surgical Technology I +	5.0
SGT 129 Surgical Technology Clinical Experience II +	4.0
Semester One Total	**25.0**
Semester Two	
SGT 107 Pharmacology for Surgical Technology +	2.0
SGT 121 Patient Care II +	2.0
SGT 125 Surgical Procedures II +	4.0
SGT 130 Surgical Technology Clinical Experience III +	4.0
SGT 131 Surgical Technology Clinical Experience IV +	3.0
SGT 133 Professional Issues in Surgical Technology +	2.0
Semester Two Total	**17.0**
Technical Certificate Total	**42.0**
+ *Course has prerequisites. See Course Descriptions.*	

assessments. Results are mailed to applicants in three to five business days and are valid for five years. Results are not given over the phone.
- Complete college-level Introduction to MS Office, CPR for Healthcare Providers (American Heart Association only) and Anatomy and Physiology (A&P) courses with passing grades prior to entering program. A&P is acceptable up until five years after completion of course. Credit may be transferred by official transcript from an accredited institution. (MEA 110 Human Body satisfies A&P requirement at WATC.)
- Applicants must submit two letters of recommendation from an employer or instructor (former or current) to Admissions. Preprinted forms are available from Admissions.
- Attend an information session prior to registration. Dates and times are mailed to applicants.
- Upon acceptance into program, applicants must:
  - Pay for and pass a criminal background check and drug screen test at an agency designated by WATC.
  - Complete all required health examinations and immunizations at their own expense by designated date.

Physical and Environmental Requirements

The following sensory and physical activities are essential functions of this position and are performed in excess of levels required for ordinary movement:
- Accommodation
- Awkward position
- Color vision
- Depth perception
- Feeling
- Fingering (manipulative finger movements)
- Flexing or rotating wrists
- Grasping
- Handling
- Hearing
- Lifting
- Mobility
- Near visual acuity
- Reaching
- Reading
- Repetitive movement
- Speaking
- Standing
- Stooping
- Twisting

The following mental and communicative activities are essential to the performance of this position:
- Ability to handle stress and emotion
- Ability to organize materials
- Ability to remember procedures and instructions
- Careful attention to detail
- Concentrating on task
- Dealing with angry people
- Dealing with diverse populations
- Fast reaction time
- Handling conflict
- Handling multiple priorities
- Performing task during limited time frame
- Positive attitude toward ill, handicapped and elderly
- Public contact
- Reasoning — applying procedures
- Using diplomacy and tact

Individuals in this position are required to carry or lift weights in this range:
- 10–50 pounds

Individuals in this position are exposed to the following:
- Bloodborne pathogens
- Chemical hazards
- Latex
- Physical hazards
- Radiation
- Respiratory hazards
- Use of sharp objects
- Vibrating equipment
- Wet hands

Program Outcomes

Upon successful program completion, students are able to:
1. Apply the principles of asepsis in providing optimal patient care.
2. Respect patients' rights to privacy, dignity and safety.
3. Understand and implement a surgical care plan, using knowledge derived from biological sciences.
4. Identify and utilize sterilization methods used for instruments and special equipment necessary for specific surgical procedures.
5. Develop and enhance skills for assisting surgeons.
6. Use time economically to minimize patient exposure trauma.
7. Demonstrate knowledge of pharmacologic agents used in surgical procedures.
8. Acknowledge responsibility for ethical and legal issues concerning surgical technologists.
9. Understand the need for continuing education to facilitate professional growth and leadership skills.
10. Participate in professional organizations.

Accreditations/Affiliations

The Surgical Technology program is approved by the Kansas Board of Regents and the Higher Learning Commission of the North Central Association.

The Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) on the recommendation of the Accreditation Review Committee on Education in Surgical Technology of the Association of Surgical Technologists (AST):
- National Board of Surgical Technology
  and Surgical Assisting
  6 West Dry Creek Circle, Suite 100
  Littleton, CO 80120
  303.694.9262

Manufacturing and Engineering Technology

MANUFACTURING AND ENGINEERING TECHNOLOGY

Architectural Design Technology

Career Description

Computer-aided drafting technicians translate ideas, rough sketches, specifications and calculations of engineers, architects, designers and business people into working drawings that are used in making a product, structure or presentation. Their drawings and presentations describe exactly what materials, processes and agenda clients can use on particular jobs.

Career Titles

- Design technician
- CAD technician
- Drafts person
- Designer
- CAD designer

Program Description

The technical courses for the associate of applied science (AAS) degree provide an educational experience through the solution of practical problems related to manufacturing technology. This is supplemented and supported by general education courses in math, English and communications, physical, social and behavioral sciences and humanities.

Graduates receive an AAS degree, which assists them in entering into middle-management technical jobs in the manufacturing industry or in continuing their education.

To receive the associate of AAS degree, students complete the technical certificate program of their choice and the required technical electives and general education credit hours for each degree area.

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

AAS Degree Program Outcomes

Upon successful program completion, students are able to:
1. Demonstrate effective reading, writing, speaking and listening skills.
2. Demonstrate mathematical skills.
3. Apply scientific concepts.
4. Identify and solve problems, applying knowledge in a critical, creative and ethical manner.
5. Recognize the value of self and others in order to be a productive member of a diverse global society.
6. Evaluate and use information technology effectively.
7. Achieve all technical certificate learning outcomes listed below.

Technical Certificate Program Outcomes

Upon successful program completion, students are able to:
1. Identify different materials and processes by inspection.
2. Apply geometry to geometric constructions.

Technical Certificate	50.0 Credits
Associate of Applied Science Degree	**74.0 Credits**
Session One	
ENG 101 English Composition I +	3.0
MCD 113 Technical Drafting +	3.0
MCD 116 Introduction to CAD	5.0
MCD 121 Descriptive Geometry +	3.0
Session One Total	**14.0**
Session Two	
CED 101 Computer Essentials	2.0
MCD 114 Architectural Drafting and Design +	3.0
MCD 115 Machine Drafting and Design +	3.0
Session Two Total	**8.0**
Session Three	
EBS 115 Pre-Algebra	3.0
MCD 124 Advanced AutoCAD +	4.0
MCD 132 Basic Chief Architect/Architectural Desktop	3.0
Session Three Total	**10.0**
Session Four	
EMP 100 Employability Skills	2.0
MTH 101 Intermediate Algebra	3.0
MCD 112 Industrial Materials and Processes	2.0
MCD 122 Architectural CAD	4.0
MCD 134 Advanced Chief Architect/Architectural Desktop	3.0
Session Four Total	**14.0**
Session Five	
MCD 140 Drafting Technology Internship	4.0
or	
Elective * (at least 4.0 credit hours)	
New students have the option to take General Education courses	
Session Five Total	**4.0**
Technical Certificate Total	**50.0**
Session Six — AAS Degree	
PSY 101 General Psychology	3.0
SPH 101 Introduction to Public Speaking	3.0
TBD Technical Elective * (minimum 3.0 credit hours)	3.0
TBD Technical Elective * (minimum 3.0 credit hours)	3.0
Session Six Total	**12.0**
Session Seven — AAS Degree	
MCD 203 Seminar on Architectural Design	3.0
MTH 113 Trigonometry	3.0
TBD Technical Elective * (minimum 3.0 credit hours)	3.0
TBD Technical Elective * (minimum 3.0 credit hours)	3.0
Session Seven Total	**12.0**
AAS Degree Total	**74.0**
* Electives (requires minimum of 12.0 credit hours)	
CON 171 Hand and Power Tools	1.0
MCD 204 Civil Drafting	3.0
MCD 205 Residential Drafting	3.0
MCD 206 Commercial Drafting and Design	3.0
MCD 207 Pipe Drafting and Design	3.0

3. Demonstrate design-sketching techniques.
4. Draw multi-view projections.
5. Apply architectural concepts for residential applications.
6. Draw using basic dimensioning variables.
7. Demonstrate techniques of the design process.
8. Independently interpret ideas into design documentation.
9. Use auxiliary programs.
10. Apply tooling principles to drawing.

Accreditations and Affiliations

The Architectural Design Technology program is approved by the Kansas Board of Regents.

MANUFACTURING AND ENGINEERING TECHNOLOGY

Mechanical Design Technology

Career Description

Computer-aided drafting technicians translate ideas, rough sketches, specifications and calculations of engineers, architects, designers and business people into working drawings that are used in making a product, structure or presentation. Their drawings and presentations describe exactly what materials, processes and agenda clients can use on particular jobs.

Career Titles

- Design technician
- CAD technician
- Drafts person
- Designer
- CAD designer

Program Description

The technical courses for the associate of applied science (AAS) degree provide educational experiences through the solution of practical problems related to manufacturing technology. This is supplemented and supported by general education courses in math, English and communications, physical, social and behavioral sciences and humanities.

Graduates receive an AAS degree, which assists them in entering into middle-management technical jobs in the manufacturing industry or in continuing their education.

To receive the AAS degree, students complete the technical certificate program of their choice, the required technical electives and the general education credit hours for each degree area.

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Degree Program Outcomes

Upon successful program completion, students are able to:
1. Demonstrate effective reading, writing, speaking and listening skills.
2. Demonstrate mathematical skills.
3. Apply scientific concepts.
4. Identify and solve problems, applying knowledge in a critical, creative and ethical manner.
5. Recognize the value of self and others in order to be a productive member of a diverse global society.
6. Evaluate and use information technology effectively.
7. Achieve all technical certificate learning outcomes listed below.

Technical Certificate Program Outcomes

Upon successful program completion, students are able to:
1. Identify different materials and processes by inspection.
2. Apply geometry to geometric constructions.

Technical Certificate	50.0 Credits
Associate of Applied Science Degree	**74.0 Credits**

Session One		
ENG 101	English Composition I +	3.0
MCD 113	Technical Drafting +	3.0
MCD 116	Introduction to CAD	5.0
MCD 121	Descriptive Geometry +	3.0
	Session One Total	**14.0**
Session Two		
CED 101	Computer Essentials	2.0
MCD 114	Architectural Drafting and Design +	3.0
MCD 115	Machine Drafting and Design +	3.0
	Session Two Total	**8.0**
Session Three		
EBS 115	Pre-Algebra	3.0
MCD 124	Advanced AutoCAD +	4.0
MCD 130	Basic Solidworks	5.0
	Session Three Total	**12.0**
Session Four		
EMP 100	Employability Skills	2.0
MTH 101	Intermediate Algebra	3.0
MCD 110	Principles of Tool Design	2.0
MCD 112	Industrial Materials and Processes	2.0
MCD 133	Advanced Solidworks	3.0
	Session Four Total	**12.0**
Session Five		
MCD 140	Drafting Technology Internship	4.0
	or	
	Elective * (Minimum of 4.0 credit hours)	
New students have the option to take General Education courses		
	Session Five Total	**4.0**
	Technical Certificate Total	**50.0**
Session Six — AAS Degree		
PSY 101	General Psychology	3.0
SPH 101	Introduction to Public Speaking	3.0
TBD	Technical Elective * (minimum 3.0 credit hours)	3.0
TBD	Technical Elective * (minimum 3.0 credit hours)	3.0
	Session Six Total	**12.0**
Session Seven — AAS Degree		
MCD 201	Geometric Dimensioning and Tolerance	3.0
MTH 113	Trigonometry	3.0
TBD	Technical Elective * (minimum 3 credit hours)	3.0
TBD	Technical Elective * (minimum 3 credit hours)	3.0
	Session Seven Total	**12.0**
	AAS Degree Total	**74.0**
* Electives (requires minimum of 12.0 credit hours)		
CWG 110	Welding Applications	4.0
MCD 204	Civil Drafting	3.0
MCD 207	Pipe Drafting and Design	3.0
MMG 147	Principles of Machining I	3.0

3. Demonstrate design-sketching techniques.
4. Draw multi-view projections.
5. Apply architectural concepts for residential applications.
6. Draw using basic dimensioning variables.
7. Demonstrate techniques of the design process.
8. Independently interpret ideas into design documentation.
9. Use auxiliary programs.
10. Apply tooling principles to drawing.

Accreditations and Affiliations

The Mechanical Design Technology program is approved by the Kansas Board of Regents.

MANUFACTURING AND ENGINEERING TECHNOLOGY

Machining Technology

Career Description

The machinist is a skilled worker who uses machine tools to make metal parts. Machinists can set up and operate most types of machine tools, including Computer Numerical Control (CNC) equipment. Their wide knowledge of shop practices and the working properties of metals, in addition to understanding the capabilities of various machine tools, enables them to produce parts that meet precise specifications.

Machinists select tools and materials required for each job and plan the cutting and finished work according to blueprints or written specifications. They make shop computations related to dimensions, tooling, feeds and speed. They often use precision instruments, such as micrometers and gauges, to measure the accuracy of the work to the thousandth of an inch.

Machinists who are employed in maintenance departments to make or repair metal parts have a broad knowledge of mechanical principles. They are employed in all parts of the country in all types of factories, industries and maintenance shops.

Career Titles

- Entry-level machinist
- CNC machine tool operator
- Maintenance machinist
- Machine set-up operator
- Machinist apprentice
- Prototype machinist
- Tool maker

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Program Description

This program allows students to gain skills and knowledge in various manufacturing procedures and operations including lathe and mill operations with emphasis on conventional/manual machining operations. Program includes classroom and laboratory instruction in safety, proper use of hand and power tools, blueprint reading and sketching, precision measuring and layout, setup, operation, clean-up and basic maintenance of lathes, milling machines and surface grinders with extra emphasis on CNC setup and operation.

Program Outcomes

Upon successful program completion, students are able to:
1. Read and interpret prints.
2. Maintain a clean and safe work environment.
3. Demonstrate proper use and care of machine and hand tools.
4. Machine parts to print specifications.
5. Develop job planning sheets for machining procedures.
6. Use proper cutting speeds and feeds.
7. Identify and use precision measuring tools.
8. Identify metal cutting operations.
9. Identify CNC machine types.
10. Run parts on CNC machines.

Accreditations/Affiliations

The Machining Technology program is approved by the Kansas Board of Regents.

The program is also affiliated with:
- Society of Manufacturing Engineers
  One SME Drive
  Dearborn, MI 48121
  313.271.1500

Technical Certificate	54.0 Credits
Session One	
MAT 101 General Mathematics	3.0
MMG 142 Manual Lathes	6.0
Session One Total	**9.0**
Session Two	
MMG 102 Blueprint Reading I	2.0
MMG 147 Principles of Machining I	2.0
ENG 101 English Composition I +	3.0
MMG 143 Manual Mills	6.0
Session Two Total	**13.0**
Session Three	
MMG 103 Blueprint Reading II	3.0
MMG 125 Introduction to CNC	3.0
EMP 100 Employability Skills	2.0
CAT 101 CATIA Part Design and Sketching	4.0
Session Three Total	**12.0**
Session Four	
MMG 144 CNC Mills	6.0
CED 101 Computer Essentials	2.0
MMG 148 Principles of Machining II	2.0
Session Four Total	**10.0**
Session Five	
MMG 152 CNC Lathes	6.0
CAT 105 CATIA Prismatic	4.0
or	
MMG 255 Machining Internship	4.0
Session Five Total	**10.0**
Technical Certificate Total	**54.0**

Manufacturing and Engineering Technology

Welding

Career Description

Welders work with a variety of metals such as steel, aluminum and stainless steel. They use several welding techniques such as oxy-acetylene, shielded metal arc, gas tungsten arc welding (TIG) and gas metal arc welding (MIG). Cutting operations include plasma, air arc and oxy-acetylene. Individuals may choose to diversify their training or specialize in a particular area, depending upon the material and process.

Welding is the joining together of two pieces of metal by heating them to their melting point. The fusion of the two pieces of metal into one unit may be accomplished with or without the addition of filler rod. Metal is heated by either a flame of combustible gas or by an electric arc. In today's applications, welding is performed by one of the electric processes. Metal is also separated or cut by the same methods.

Many jobs require all welds to be performed by an American Welding Society (AWS) qualified welder. WATC students have the opportunity to become an AWS qualified welder, which increases job opportunities and salaries.

Career Titles

- Aviation welder
- Manufacturing production welder
- Construction welding:
  - Pipefitter
  - Iron worker
- Maintenance welder
- Welding inspector

Program Description

The program allows students to gain knowledge and skills in cutting, arc welding, MIG and TIG welding and provides some exposure to oxy-acetylene cutting and welding. Program includes classroom and lab instruction in safety, blueprint reading and sketching, tools and materials used in the various forms of welding, machine adjustments and rod selection, skill requirements for various welding positions, weld testing and qualifications, fabrication and layout of various welding projects.

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Program Outcomes

Upon successful program completion, students are able to:
1. Demonstrate welding safety and proper use of shop tools.
2. Fabricate a project to specifications utilizing a print.
3. Inspect and test welds to American Welding Society (AWS) specifications.
4. Demonstrate ability to produce fillet welds.
5. Demonstrate ability to produce full penetration welds.

Technical Certificate	51.0 Credits
Session One	
CWG 101 Occupational Safety/Welding	1.0
CWG 110 Welding Applications	4.0
EBS 115 Pre-Algebra	3.0
CWG 141 Oxy-Acetylene Welding and Cutting	2.0
Session One Total	**10.0**
Session Two	
CWG 102 Print Reading I/Welding +	2.0
CWG 143 Gas Metal Arc Welding (GMAW)	5.0
CWG 149 Materials and Testing	2.0
ENG 101 English Composition I +	3.0
Session Two Total	**12.0**
Session Three	
CED 101 Computer Essentials	2.0
CWG 103 Print Reading II/Welding +	1.0
CWG 142 Shielded Metal Arc Welding	7.0
Session Three Total	**10.0**
Session Four	
CWG 145 Fabrication and Design +	2.0
CWG 147 Gas Tungsten Arc Welding (GTAW)	7.0
EMP 100 Employability Skills	2.0
Session Four Total	**11.0**
Session Five	
CWG 146 Flux Core Arc Welding (FCAW)	4.0
Elective *	4.0
Session Five Total	**8.0**
Technical Certificate Total	**51.0**
* Electives	
CWG 242 SMAW D1.1 Qualification +	4.0
CWG 243 GMAW D1.1 Qualification +	4.0
DIS 150 Directed Individual Study	1.0–12.0
+ *Course has prerequisites. See Course Descriptions.*	

6. Demonstrate oxy-acetylene and plasma cuttings.
7. Demonstrate shielded arc welding skills.
8. Demonstrate gas metal arc welding skills.
9. Demonstrate gas tungsten arc welding skills.

Accreditations/Affiliations

The Welding program is approved by the Kansas Board of Regents.

The program is also an AWS SENSE program:
- American Welding Society
  550 N.W. LeJune Road
  Miami, FL 33126
  1.800.443.9353

Online Learning

ONLINE LEARNING

Online Learning Programs and Courses

Program Description

To meet the needs of students, WATC is committed to providing courses and programs in formats that are accessible at alternative times and at greater distances. Online courses make educational opportunities available for WATC students no matter where they are located. Access to courses and instructors is over the Internet via WATC's learning management system. The learning management system is user-friendly and packed with tools to make online learning exciting and beneficial.

Some online courses may require a limited number of class meetings for speeches, labs, etc. Some courses require proctored tests that may be taken on WATC campuses or with an approved proctor. See the class schedule and individual course syllabus for details.

Admission Requirements

- Submit an application for admission.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduation from the program.
- Meet entrance exam requirements.

Accreditations and Affiliations

All Online Learning programs and courses are approved by the Kansas Board of Regents.

The Administrative Office Technology AAS degree is accredited by the Higher Learning Commission of the North Central Association.

Online Learning Programs and Courses

Note: Online offerings vary each semester. Please check the WATC online schedule for most current information at www.watc.edu.

ACC 105	Fundamentals of Accounting	3.0
ALH 002	Certified Nurse Aide Update	0.0
ALH 101	Medical Terminology	3.0
ALH 110	Principles of Nutrition	3.0
ALH 160	IV Therapy for LPNs	3.0
BIO 100	Biology Review	1.0
BIO 110	Principles of Biology	5.0
BUS 101	Beginning Document Processing	4.0
BUS 102	Intermediate Document Processing	4.0
BUS 104	Introduction to Business	3.0
BUS 105	Database Management	2.0
BUS 106	Office Procedures	2.0
BUS 108	Word Processing	3.0
BUS 121	Business Communications	3.0
BUS 122	Business Math	3.0
BUS 130	Personal Finance	3.0
BUS 160	Human Relation-People at Work	3.0
BUS 205	Advanced Word Processing	3.0
CED 101	Computer Essentials	2.0
CED 115	Computer Applications	3.0
CED 120	Advanced Computer Applications	3.0
CHM 100	Chemistry Review	1.0
CHM 110	General Chemistry	5.0
CRJ 101	Introduction to Criminal Justice	3.0
EMP 100	Employability Skills	2.0
ENG 101	English Composition I	3.0
ENG 120	English Composition II	3.0
GRA 019	Medication Aide Update	0.0
HHA 100	Home Health Aide	2.0
MTH 101	Intermediate Algebra	3.0
MTH 112	College Algebra	3.0
MTH 113	Trigonometry	3.0
PED 110	Lifetime Fitness	1.0
PHS 110	Physical Science	5.0
PNR 111	Principles of Nutrition	3.0
PSY 101	General Psychology	3.0
PSY 120	Developmental Psychology	3.0
PSY 130	Human Growth and Development	3.0
SOC 101	Introduction to Sociology	3.0
SPH 101	Introduction to Public Speaking	3.0

Skilled
Trades

SKILLED TRADES

Air Conditioning Technology

Program Description

The Air Conditioning Technology program is a sequence of courses that prepares students for careers in the air conditioning industry. Learning opportunities develop academic, occupational and professional knowledge and skills required for job acquisition, retention and advancement. The program emphasizes a combination of air conditioning theory and practical application necessary for successful employment. Program graduates receive an Air Conditioning Technology technical certificate and have the qualifications of an air conditioning technician.

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Accreditations and Affiliations

The Air Conditioning Technology program is approved by the Kansas Board of Regents.

This program is also affiliated with:

- Air Conditioning Contractors of America
  2800 Shirlington Road, Suite 300
  Arlington, VA 22206
  703.575.4477

- RSES Headquarters
  1666 Rand Road
  Des Plaines, IL 60016-3552
  1.800.295.5660 or 847.297.6464

Technical Certificate		57.0 Credits
Session One		
ACR 100	Refrigeration Fundamentals	3.0
ACR 101	Principles and Practices of Refrigeration +	5.0
IFC 100	Industrial Safety Procedures	2.0
EBS 115	Pre-Algebra	3.0
	Session One Total	**13.0**
Session Two		
ACR 102	Refrigeration Systems Components +	5.0
ACR 103	Electrical Fundamentals	5.0
CED 101	Computer Essentials	2.0
	Session Two Total	**12.0**
Session Three		
ACR 104	Electric Motors +	3.0
ACR 105	Electrical Components +	4.0
ACR 106	Electric Control Systems and Installation +	3.0
ENG 101	English Composition I +	3.0
	Session Three Total	**13.0**
Session Four		
ACR 107	Air Conditioning Principles +	4.0
ACR 108	Air Conditioning Systems and Installation +	2.0
ACR 109	Troubleshooting Air Conditioning Systems +	4.0
	Session Four Total	**10.0**
Session Five		
ACR 110	Gas Heating Systems +	3.0
ACR 111	Heat Pumps and Related Systems +	4.0
EMP 100	Employability Skills	2.0
	Session Five Total	**9.0**
	Technical Certificate Total	**57.0**

+ Course has prerequisites. See Course Descriptions.

Skilled Trades

Interior Design

Career Description

By profession, an interior designer is qualified by education, experience and examination to enhance the function and quality of interior spaces for the purpose of improving the quality of life, increasing productivity and protecting the health, safety and welfare of the public. Interior designers integrate their findings with their knowledge of the field and formulate plans to be practical and aesthetic to improve the lifestyle of the occupants.

Beginning salaries for an entry-level designer range from $24,000–$32,000 and an experienced designer can expect to earn in the range of $75,000–$125,000 annually.

Career Titles

- Residential designer
- Commercial designer
- Independent designer
- Retail designer
- Project coordinator
- Showroom manager
- Visual merchandiser
- Sales representative
- Retail owner
- Manager

Program Description

The Interior Design program provides competency-based training in research techniques, problem solving, proficiencies and presentation skills required to be a successful professional interior designer. The program focuses on creativity and critical thinking.

Students of this program learn the basics of interior design, including the principles and elements of design, blueprint reading, building technology, color theory, materials, fabrics, history of furniture and architecture, lighting technologies, drawing for interiors and business law for interiors, and they gain practical experience. Students build professional portfolios throughout the program.

Students completing the degree are eligible to take the national exam to become a licensed interior designer after appropriate completion of work experience as required by the National Council of Interior Design Qualifications.

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency.
- Meet entrance requirements.

Program Outcomes

Upon successful completion of the program, students will be able to:
1. Analyze the clients' needs, goals and life and safety requirements.
2. Integrate findings with knowledge of interior design.
3. Formulate preliminary design concepts that are appropriate, functional and aesthetic.

Certificate of Completion		4.0 Credits
Certificate of Completion		8.0 Credits
Associate of Applied Science Degree		68.0 Credits
Floral Design		
Session One		
INT 200	Floral Design I	1.0
	Session One Total	**1.0**
Session Two		
INT 210	Floral Design II	1.0
	Session Two Total	**1.0**
Session Three		
INT 220	Floral Design III	1.0
	Session Three Total	**1.0**
Session Four		
INT 230	Floral Design IV	1.0
	Session Four Total	**1.0**
	Certificate of Completion Total	**4 .0**
Painted and Faux Finishes		
Session One		
INT 101	Interior Design Fundamentals	2.0
	Session One Total	**2.0**
Session Two		
INT 130	Painted and Faux Finishes I	3.0
INT 135	Painted and Faux Finishes II	3.0
	Session Two Total	**6.0**
	Certificate of Completion Total	**8.0**
Associate of Applied Science Degree		
Session One		
CED 115	Computer Applications	3.0
INT 101	Interior Design Fundamentals	2.0
INT 105	Blueprint Reading for Interiors	2.0
INT 110	Color Theory	2.0
INT 120	Materials and Resources I	3.0
SPH 101	Public Speaking	3.0
	Elective *	2.0
	Session One Total	**17.0**
Session Two		
ENG 101	Composition I	3.0
INT 125	Materials and Resources II	2.0
INT 145	History of Furniture and Architecture I	3.0
INT 155	Lighting Technologies	3.0
INT 175	Seminars	2.0
INT 190	Drafting for Interiors	2.0
	Elective *	3.0
	Session Two Total	**18.0**
Session Three		
EMP 100	Employability Skills	2.0
INT 150	History of Furniture and Architecture II	3.0
INT 160	Design Studio I	3.0
MCD 116	Introduction to CAD	5.0
MTH 101	Intermediate Algebra	3.0
	Elective *	2.0
	Session Three Total	**18.0**

Session Four		
ECO 101	Principles of Macroeconomics	3.0
INT 165	Design Studio II	2.0
INT 170	Business Practices and Portfolio Development	3.0
INT 180	Internship	4.0
PSY 101	General Psychology	3.0
	Session Four Total	**15.0**
	AAS Degree Total	**68.0**
* Electives (minimum of 7.0 credit hours)		
CED 210	Internet Research	1.0
INT 100	Accessories	1.0
INT 130	Painted and Faux Finishes I	3.0
INT 135	Painted and Faux Finishes II	3.0
INT 200	Floral Design I	1.0
INT 210	Floral Design II	1.0
INT 215	Kitchen and Bath Design	3.0
INT 220	Floral Design III	1.0
INT 225	Advanced Kitchen and Bath Design	3.0
INT 230	Floral Design IV	1.0
INT 235	Computer Technologies for Kitchen and Bath Design	3.0
INT 245	Internship for Kitchen and Bath Design	3.0
MCD 132	Basic Chief Architecture/Architectural Desktop	3.0

4. Develop and present final design recommendations through appropriate presentation media.
5. Prepare working drawings and specifications of non-load-bearing interior construction, materials, finishes, space planning, furnishings, fixtures and equipment.
6. Collaborate with professional services of other licensed practitioners in the technical areas of mechanical, electrical and load-bearing design as required for regulatory approval.
7. Prepare and administer bids and contract documents as the clients' agent.
8. Review and evaluate design solutions during implementation and upon completion of projects.
9. Improve the quality of life, increase productivity and protect the health, safety and welfare of the public.
10. Develop an appropriate budget for the client.

Accreditations and Affiliations

The Interior Design program is approved by the Kansas Board of Regents.

Transportation

TRANSPORTATION

Automotive Collision Repair

Career Description

There will be a high demand for auto collision technicians during the next ten years. In larger shops in the auto collision industry, workers may specialize as either auto collision technicians or refinish technicians. In some mega-shop situations, structural and nonstructural repairs are assigned to different technicians. Painters and prep technicians in these shops are supported by make-ready personnel. In contrast, smaller shops may require one technician to possess all the skills to complete all auto body and refinish repairs. Technicians may advance to shop supervisors, estimators or even independent shop owners.

Career Titles

- Collision repair/refinishing technician
- Collision damage estimator
- Parts specialist
- Insurance adjustor

Program Description

This program allows students to gain skills and knowledge in the repair, assembly and refinishing of automotive vehicles. Program includes classroom and lab instruction in safety, nonstructural damage repair, structural damage repair, steering, suspension and alignment, electrical systems, painting, refinishing and estimating. Program has National Automotive Technicians Education Foundation accreditation at the secondary and postsecondary levels.

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Program Outcomes

Upon successful program completion, students are able to:
1. Accurately diagnose and repair suspension and steering systems.
2. Straighten or replace damaged panels — cosmetic or structural.
3. Align and repair unibody and/or body over frame damage.
4. Determine extent of structural damage.
5. Use frame machine to make structural repairs.
6. Demonstrate proper surface preparation.
7. Demonstrate spray gun and related equipment operation.
8. Prepare automobile for complete refinish.
9. Make accurate estimates of repairs including cost of parts and labor.

Accreditations and Affiliations

The Automotive Collision Repair program is approved by the Kansas Board of Regents.

Technical Certificate	34.0 Credits
Session One	
TAC 101 Occupational Safety	1.0
TAC 112 Refinish I	6.0
Session One Total	**7.0**
Session Two	
TAC 111 Structural Damage Analysis and Repair	8.0
Session Two Total	**8.0**
Session Three	
TAC 113 Nonstructural Damage Analysis and Repair	9.0
TAC 116 Electrical Systems	2.0
Session Three Total	**11.0**
Session Four	
TAC 114 Steering, Suspension and Alignment	3.0
Session Four Total	**3.0**
Session Five	
TAC 118 Refinish II	5.0
Session Five Total	**5.0**
Technical Certificate Total	**34.0**

This program is also accredited by:
- National Automotive Technicians Education Foundation
  13505 Dulles Technology Drive, Suite 2
  Herndon, VA 20171-3421
  Ph: 703.713.0100

This program is affiliated with:
- Inter-Industry Conference on Auto Collision Repair
  1342 Colonial Boulevard, Suite K-230
  Ft. Myers, FL 33907
  239.939.9667
  877.ICAR.MIG
  Fax: 239.939.9667
  E-Mail: welding@i-car.com
  Web Site: www.i-car.com

WATC is an approved I-CAR certified weld testing facility. For the most up-to-date information on the Automotive Steel GMA (MIG) and Automotive Aluminum GMA (MIG) Welding Qualification Tests, other I-CAR qualification tests and I-CAR training programs, visit I-CAR at www.i-car.com, or call 800.422.7872.

TRANSPORTATION

Automotive Technology

Career Description

Highly skilled automotive service specialists are a necessity for today's ever-changing technology. Service is becoming increasingly computerized, and the field of automotive service technology is constantly growing more complex. Jobs involving tune-ups, transmissions, front-ends and brakes can no longer be isolated and treated separately, but must be coordinated as integral parts of an interrelated system. There is a need for automotive service specialists, parts specialists and customer service specialists in the servicing of particular makes and models of vehicles. Future automotive service technology jobs will be based on the ability to communicate effectively, recognize components and accurately diagnose mechanical and electrical malfunctions.

The technical courses for the associate of applied science (AAS) degree provide an educational experience through the solution of practical problems related to transportation technology. This is supplemented and supported by general education courses in math, English and communications, physical, social and behavioral sciences and humanities.

Graduates receive an AAS degree, which assists them in entering into middle-management technical jobs in the automotive industry or in continuing their education.

To receive the AAS degree, students complete the technical certificate program of their choice, the required technical electives and the general education credit hours for each degree area.

Career Titles

- Automotive technician
- Service consultant
- Parts specialist
- Customer service specialist

Program Description

This program allows students to gain skills and knowledge to accurately diagnose, repair and service various automotive vehicles. Program includes classroom and lab instruction in safety, electrical and electronic systems, suspension and steering, engine performance, manual drive train and axles, heating and air conditioning, engine repair and brakes. Program has National Automotive Technicians Education Foundation accreditation at the secondary and postsecondary levels.

Degree Program Outcomes

Upon successful program completion, students are able to:
1. Demonstrate effective reading, writing, speaking and listening skills.
2. Demonstrate mathematical skills.
3. Apply scientific concepts.
4. Identify and solve problems, applying knowledge in a critical, creative and ethical manner.
5. Recognize the value of self and others to be a productive member of a diverse global society.
6. Evaluate and use information technology effectively.
7. Achieve all technical certificate learning outcomes listed below.

Technical Certificate		41.0 Credits
Associate of Applied Science Degree		**63.0 Credits**
Session One		
TAS 123	Suspension and Steering	4.0
TAS 124	Electrical and Electronic Systems I	4.0
	Session One Total	**8.0**
Session Two		
TAS 125	Electrical and Electronic Systems II	4.0
TAS 126	Manual Drive Train and Axles	4.0
	Session Two Total	**8.0**
Session Three		
TAS 122	Brakes	4. 0
TAS 131	Engine Performance I	4.0
	Session Three Total	**8.0**
Session Four		
TAS 121	Engine Repair	4.0
TAS 132	Engine Performance II	4.0
	Session Four Total	**8.0**
Session Five		
TAS 127	Automatic Transmissions and Transaxles	5.0
TAS 128	Heating and Air Conditioning	4.0
	Session Five Total	**9.0**
	Technical Certificate Total	**41.0**
Session Six — AAS Degree		
TAS 127	Automatic Transmissions and Transaxles	4.0
	Technical Electives *	3.0
	Session Six Total — AAS Degree Total	**7.0**
Session Seven — AAS Degree — Required General Education		
ENG 101	English Composition I	3.0
MTH 101	Intermediate Algebra or higher	3.0
SPH 101	Introduction to Public Speaking	3.0
	or	
SPH 111	Interpersonal Communication	3.0
	and	
A minimum of one course from each of the following areas:		
	Natural Sciences	
	Social Sciences	
	Minimum General Education Total	**15.0**
	Session Seven–AAS Degree Total	**15.0**
	Applied Science Degree Total	**63.0**

Technical Certificate Program Outcomes

Upon successful program completion, students are able to:
1. Demonstrate the ability to service and repair integrated electronic systems and components.
2. Perform diagnosis and repair on brake system components.
3. Diagnose and repair suspension and steering systems.
4. Diagnose and repair general drive train concerns.
5. Perform general transmission and transaxle diagnosis.
6. Service and repair heating and air conditioning systems according to state, local and federal guidelines.
7. Interpret and diagnose engine concerns.
8. Verify and repair engine concerns.
9. Diagnose and repair fuel-injection and emissions system.

Admission Requirements

- Submit an application for admission.
- Be 16 years of age or older.
- Show documentation of high school graduation or satisfaction of high school equivalency prior to graduating from the program.
- Meet entrance exam requirements.

Accreditations and Affiliations

The Automotive Technology program is approved by the Kansas Board of Regents.

The program is also accredited by:

- National Automotive Technician Education Foundation
  13505 Dulles Technology Drive, Suite 2
  Herndon, VA 20171-3421
  703.713.0100

This program is affiliated with:

- Automotive Service Association Educational Member
  7510 N. Palmer Avenue
  Kansas City, MO 64158
  816.781.5801

WATC is an approved I-CAR certified weld testing facility. For the most up-to-date information on the Automotive Steel GMA (MIG) and Automotive Aluminum GMA (MIG) Welding Qualification Tests, other I-CAR qualification tests and I-CAR training programs, visit I-CAR at www.i-car.com, or call 800.422.7872.

Transportation

Commercial Truck Driving

Career Description

Truck drivers play an integral role in the transportation of goods and merchandise all across the nation. Nearly everything purchased — from food, to clothes, to cars — is transported by truck at some time. Truck drivers can choose to be local or long-distance drivers. Local drivers generally provide services for a metropolitan area and its suburban areas. They are often assigned a regular route that allows them to be home in the evenings. Drivers on long-distance routes may transport goods across the country and even into Canada and Mexico. They can choose their own routes and create their own schedules as long as the goods arrive on time at the desired destination. Truck drivers are also responsible for routine safety checks and some minor maintenance on their trucks.

Career Titles

- Driver/sales worker
- Truck driver, heavy and tractor-trailer
- Truck driver, light or delivery services

The Commercial Truck Driving program is designed to help students develop the skills necessary to obtain a commercial driver's license (CDL) and secure employment in the trucking industry. The program includes:
- Classroom instruction
- Behind-the-wheel driving at a 3:1 ratio on range and a 4:1 ratio on the road.
- Lab, class or observation time
- Simulators designed exclusively for trucks.
- Driving range to develop skills prior to on-the-road driving.
- Skid pan training.
- Back road, city, two- and four-lane highway driving.
- Fleet of different makes of tractors and trailers.
- Night driving.
- Third-party CDL testing.

Admission Requirements

In addition to the college's admissions policy, students must:
- Successfully complete preadmission testing.
- Be at least 18 years old.
- Hold a valid Kansas driver's license.
- Have a good driving record.
- Pass the Department of Transportation (DOT) physical.
- Pass a drug and alcohol screening.

Prerequisites

- Full payment of tuition or signed contract for funding is required prior to class start date.
- Instructional permit is to be obtained on student's own time prior to the fifth day of class. (CDL manual and practice tests are issued at registration.)

Certifications

Upon satisfactory program completion, graduates receive a WATC Certification of Completion and are certified in the following:
- CPR Adult, Child and Infant — American Red Cross
- Standard First Aid — American Red Cross

Certificate of Completion		4.0 Credits
Certificate of Completion		**8.0 Credits**
CDL 101	Commercial Driver Education	8.0
	Certificate of Completion Total	**8.0**
CDL 102	Longer-Combination Vehicles * +	4.0
	Certificate of Completion Total	**4.0**

* Prerequisite: CDL 101 Commercial Driver Education or administrator approval.
+ Course has prerequisites. See Course Descriptions.

- Defensive Driving — National Safety Council
- Forklift Safety — National Safety Council

Students also take the CDL exam, and upon passing, results are then electronically submitted to the Department of Motor Vehicles. An eye examination is also administered before students receive their Kansas Class A CDL.

Graduates 18 to 20 years of age receive a restricted (intrastate) CDL, which allows them to drive only within the state of Kansas.

Program Outcomes

Upon successful program completion, students are able to:
1. Pass Kansas Class A CDL testing (written exams, vehicle inspection, basic skills and road test).
2. Understand and identify DOT Regulations and maintain legal logbook and check for violations.
3. Perform and pass vehicle inspection and know out-of-service criteria.
4. Perform preventive vehicle maintenance (change oil filter, lube tractor/trailer, perform brake adjustments and use fire extinguisher).
5. Achieve certifications in American Red Cross (First Aid, Adult and Infant/Child CPR) and National Safety Council's Defensive Driving and Forklift (loading/unloading).
6. Diagnose basic refrigeration problems, properly pre-trip the unit, start unit and properly adjust temperature controls and know the basic requirements for trailer security to maintain required temperatures (checking air-circulation and door seals).
7. Position emergency triangles, obey and interpret signs, signals and pavement markings.
8. Perform pre- and post-trip driving procedures and maintain interior tidiness.
9. Hook and unhook tractor/trailer.
10. Operate 9-, 10-, 13- and 15-speed transmissions, turn tractor/trailer, know brake techniques and spatial awareness.
11. Perform street, interstate and emergency (range and skid pan) driving.
12. Back tractor/trailer.
13. Driver performance in simulator classroom with driver reactions analyzer (brake response, signs/symbols and threat recognition).

14. Display the following personal characteristics: professional attitude, demonstrate self-control, minimize driving risks, follow instructions, obey traffic laws and drive courteously.
15. Demonstrate time management; manage resources; participate as a team member; utilize the following workplace skills: listening, speaking, problem-solving, decision-making, creative thinking; demonstrate work ethics including integrity and honesty; exhibit self-esteem; and demonstrate self-management.
16. Meet Professional Truck Driving Institute (PTDI) skill standards and certification standards and requirements for entry-level tractor-trailer driver courses.

Accreditations and Affiliations

The Commercial Truck Driving program is approved by the Kansas Board of Regents.

CDL 101 Commercial Driver Education is certified by the Professional Truck Driver Institute, which certifies that industry standards are met.

- Professional Truck Drivers Institute
  555 E. Braddock Road
  Alexandria, VA 22314
  703.647.7015

The program is also affiliated with:
- American Red Cross
  707 N. Main
  Wichita, KS 67203
  316.265.6601

- Kansas Department of Motor Vehicles
  Commercial Drivers License Division
  1821 W. 21st St. N.
  Wichita, KS 67204
  316.821.9920

- Kansas Motor Carriers Association
  P.O. Box 1673
  Topeka, KS 66601
  785.267.1641

- National Association of Publicly Funded
  Truck Driving Schools
  1900 Corporate Center Drive East, Suite 100
  Tobyhanna, PA 18466
  570.839.2778

- National Safety Council
  Kansas-Missouri Division
  5829 Troost Avenue
  Kansas City, MO 64110
  816.842.5223

- Technology Maintenance Council
  A Division of American Truckers Association
  2200 Mill Road
  Alexandria, VA 22314-4677
  703.838.1763

Longer-Combination Vehicles

The Federal Motor Carrier Safety Administration (FMCSA) issued a final rule in the March 30, 2004, Federal Register that established standards for minimum training requirements for the operators of longer-combination vehicles (LCVs). This additional training is in compliance with the FMCSA ruling.

This is a complete instructional program for novice longer-combination vehicle drivers. It aids drivers and companies in providing all the competencies required to operate twin- and triple-trailer vehicles.

Short Courses

The following courses are open to the general public. Students do not have to be attending the Commercial Truck Driving program to register in these courses. Except for the Forklift Safety course, students do not have to be 18 years old to register.

Defensive Driving and Forklift Safety

Length: 8 clock hours each

The National Safety Council's eight-hour Defensive Driving and Forklift Safety courses are offered at numerous times during the year. These eight-hour courses meet or exceed insurance companies' and OSHA requirements for defensive driving and forklift courses.

Adult CPR/First Aid, Infant Child

Length: 8 clock hours

This course is conducted by the American Red Cross. Students learn first aid and lifesaving skills needed to assist others in emergencies.

Customized Training

Customized training is available in:
- Class B Truck CDL
- Class A, B or C Bus CDL
- Simulation
- Threat Recognition
- Pre-Employment Road Test

WATC

**Catalog
2008–2009**

Course Descriptions

Course Descriptions

Academic Success

ASC 006   Self-Paced WorkKeys® Test Preparation   0.0 Cr Hrs
Designed for those who have math, reading and writing skills, but would like to practice before taking a placement test or designed for those who have taken either the ACT™ WorkKeys® Applied Math, Reading for Information, or Locating Information placement tests, to raise test scores for program admission. Graded Satisfactory/Unsatisfactory.

ASC 007   Self-Paced COMPASS™ Test Preparation   0.0 Cr Hrs
Designed for those who have math, reading and writing skills, but would like to practice before taking the COMPASS® placement test, or designed for those who have taken the COMPASS math, reading and/or writing placement tests, to raise test scores for program admission. Graded Satisfactory/Unsatisfactory.

ASC 008   Self-Paced TEAS® Test Preparation   0.0 Cr Hrs
Designed for those who have math, reading and writing skills, but who would like to quickly practice before taking the TEAS placement test, or designed for those who have taken the TEAS math, reading, English and/or science placement tests, to raise test scores for program admission. Graded Satisfactory/Unsatisfactory.

Aviation

Advanced Aerostructures Technician

AER 130   Aircraft Blueprint Reading   2.0 Cr Hrs
Studies basic aircraft blueprint and reading engineering drawings. Students develop the ability to locate and interpret dimensions on engineering drawings. The application of blueprint reading and interpreting dimension skills to the manufacturing environment is an integral part of this course.

AER 131   Precision Instrument   1.0 Cr Hr
Studies the basic measurement tools used in manufacturing today. Students achieve proficiency through using and reading basic measuring devices throughout the course. Primary focus is on micrometers, steel rules, Vernier calipers and other manufacturing related instruments.

AER 132   Aerostructures Assembly   4.0 Cr Hrs
Provides instruction in the fundamentals of assembly, meeting set standards, safety issues, use of common aircraft sheetmetal tools, sealant application, math and aircraft blueprint reading. Students learn to identify fasteners, install and remove fasteners, assemble sheetmetal components and identify and maintain proper "skin" quality. Students receive classroom instruction and demonstration as well as shop demonstration and performance.

AER 133   Advanced Aerostructures   2.0 Cr Hrs
Provides instruction in the advanced skills of assembly, using set standards, safety issues, use of common aircraft sheetmetal tools, sealant application, math and aircraft blueprint reading. Students learn to identify fasteners, install and remove fasteners, assemble sheetmetal components and identify and maintain proper "skin" quality. Repair techniques and the more difficult applicable skills for aviation manufacturing are the focus of this course. Students receive classroom instruction and demonstration as well as shop demonstration and performance.

CED 106   Computer Introduction   1.0 Cr Hr
Covers the fundamentals of computer usage. At the end of the course, students are able to utilize Microsoft Office Word 2007 to create a résumé and cover letter, Microsoft Excel 2007 to create a spreadsheet and Microsoft PowerPoint 2007 to create and present a graphic presentation. They also learn how to access and browse the Internet and download files.

EMP 100   Employability Skills   2.0 Cr Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

MSC 101   Occupational Safety   1.0 Cr Hr
Provides students with an appreciation and basic understanding of the safety rules and regulations that govern the manufacturing industry. Students learn and apply safe work habits when using tools and equipment. Students are given the opportunity to earn a 10-hour General Industry OSHA card.

MSC 102   Applied Shop Math   2.0 Cr Hrs
Focuses on the skills required to complete common shop mathematical problems including reading and interpreting part dimensions, checking part features and recording accurate measurements. Applying mathematical skills to the manufacturing environment is an integral part of this course.

Aviation Cabinetmaker / Aviation Cabinetmaker Assistant

CED 101   Computer Essentials   2.0 Cr Hrs
Develops students' computer literacy, keyboarding skills and meets the needs of students in associate degree and technical certificate programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets and graphical presentations in the Windows environment.

CON 168 Occupational Safety   1.0 Cr Hr
Provides students with an appreciation and basic understanding of the safety rules and regulations that govern the manufacturing industry. Students learn and apply safe work habits in the use of tools and equipment. Students will have the opportunity to earn a 10-hour General Industry OSHA card.

CON 170   Aircraft Blueprint Reading   2.0 Cr Hrs
Introduces students to a basic set of aviation blueprints including the pictorial drawings, orthographic projections, isometric sketchings and basic reference lines throughout the airplane.

CON 171   Hand and Power Tools   1.0 Cr Hr
Introduces students to the various hand and power tools used in the aviation industry specifically related to those in their specific occupational area. The correct and safe use of hand and power tools is 60 percent of the class. Students are required to pass a written and performance safety test on all power equipment used for 40 percent of the class.

CON 172   Materials and Processes   6.0 Cr Hrs
Students gain knowledge and working experience with soft woods, hard woods, honeycomb and laminated plywood used in aircraft industry applications. Students are required to complete lab projects. (150 clock hours) *Prerequisites: CON 170 Aircraft Blueprint Reading and CON 171 Hand and Power Tools or concurrent registration.*

CON 173   Beginning Cabinetmaking and Joinery   6.0 Cr Hrs
Teaches students to measure and lay out materials needed in the aircraft industry. Students are evaluated on their ability to operate handsaws, surface, drill, bore, shape and profile materials using a variety of hand and stationary power tools. Emphasizes the different types of mechanical fasteners, inserts, etc. used in aircraft cabinetmaking. *Prerequisites: CON 170 Aircraft Blueprint Reading and CON 171 Hand and Power Tools or concurrent registration.*

CON 175   Inspection and Quality   2.0 Cr Hrs
Covers proper quality requirements for aviation industries. Emphasis is placed on the following: 40 percent on developing awareness of self-inspection of work; 40 percent on following proper processes according to the prints; and 20 percent on making students aware of the factors that determine whether a product is average or high quality. *Prerequisites: CON 170 Aircraft Blueprint Reading and CON 171 Hand and Power Tools or concurrent registration.*

CON 176   Overlay and Laminate   1.0 Cr Hr
Covers the characteristics, processes, applications of decorative laminates and other materials utilized in aircraft industries. Sixty percent of the emphasis is placed on overlays, adhesives, substrates and fabrication techniques. Students are evaluated on written tests and lab projects for the additional 40 percent. *Prerequisites: CON 170 Aircraft Blueprint Reading and CON 171 Hand and Power Tools or concurrent registration.*

CON 188   Cabinet Finish Processes   4.0 Cr Hrs
Introduces students to the processes involved in the application of various finishes, characteristics of finish materials, care in handling and basic finish repair techniques. *Prerequisites: CON 170 Aircraft Blueprint Reading and CON 171 Hand and Power Tools or concurrent registration.*

ENG 101   English Composition I   3.0 Cr Hrs
Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.*

EMP 100   Employability Skills   2.0 Cr Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

MSC 102   Applied Shop Math   2.0 Cr Hrs
Focuses on the skills required to complete common shop mathematical problems including reading and interpreting part dimensions, checking part features and recording accurate measurements. Applying mathematical skills to the manufacturing environment is an integral part of this course.

Aviation Maintenance Technology

AMT 105   Technical Mathematics   2.0 Cr Hrs
Studies multiple concepts in mathematics. Students obtain a functional efficiency in ratios, proportions, areas, volumes, angular measurements, graphs, roots, squares, cubes and basic trigonometry.

AMT 107   Aircraft Drawings   1.0 Cr Hr
Studies the basics of blueprint drawings, and students practice obtaining desired information from blueprints. Includes types of drawings, lines, dimensions, tolerances, specifications, sketching techniques and graphic interpolation.

AMT 108   Aircraft Coverings   2.0 Cr Hrs
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to airframe coverings. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to the Airframe Subjects No. 4 and No. 5.

AMT 109   Physics   2.0 Cr Hrs
Provides basic information on principles, fundamentals and technical procedures of physics as they relate to an aircraft.

AMT 111   Materials and Processes   4.0 Cr Hrs
Allows students to identify plumbing lines by size and fitting, different tube forming processes and types of aircraft bolts and threaded fasteners. Students will be able to demonstrate knowledge of torques, torque wrenches, control cables, rivets, seals, wipers, sealing compounds and acquire technical skills required for preventative maintenance inspections.

AMT 112   Assembly and Rigging   4.0 Cr Hrs
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to aircraft assembly and rigging. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to the Airframe mechanic.

AMT 113   Basic Electricity   4.0 Cr Hrs
A fundamental treatment of electricity with emphasis on physical circuit components, direct current circuit analysis and related mathematics.

AMT 115   Aircraft Weight and Balance   2.0 Cr Hrs
An introduction to Federal Aviation Administration required subjects relating to weighing of aircraft, the performance of weight and balance calculations and appropriate maintenance record entries.

AMT 116   Aircraft instrument Systems   1.0 Cr Hr
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to aircraft instrument systems. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to Airframe Subjects No. 36 and No. 37.

AMT 117   Mechanic Privileges and Limitations 1.0 Cr Hr
Acquaints and exercises mechanic privileges within the limitations prescribed by part 65 of the Federal Aviation Regulations Aviation Maintenance Technology manual.

AMT 119 Maintenance Publication Forms and Records   2.0 Cr Hrs
Enables students to read, comprehend and apply information contained in Federal Aviation Administration and manufacturers' aircraft maintenance specifications, data sheets, manuals, publications and related Federal Aviation Regulations. Designed to enable students to write descriptions of work performed including aircraft discrepancies and corrective actions using typical aircraft maintenance records.

AMT 120 Airframe Inspection   3.0 Cr Hrs
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to airframe inspection. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to Airframe Subject No. 28.

AMT 123 Cleaning and Corrosion Control   1.0 Cr Hr
Provides basic information on identifying and selecting cleaning materials, inspecting, removing and treating aircraft corrosion and performing aircraft cleaning.

AMT 125 Fluid Lines and Fittings   1.0 Cr Hr
Provides basic information on principles, fundamentals and technical procedures relating to fuel, fuel systems, fluid lines and fittings.

AMT 127 Ground Operations and Service   2.0 Cr Hrs
Provides basic information on principles, fundamentals and technical procedures used in ground handling and support equipment as they relate to an aircraft. Students should learn to demonstrate the correct and safe procedures for aircraft tie down, fueling, using auxiliary power units and identifying the different types of fire extinguishers and their proper applications.

AMT 131 General Review and Test   1.0 Cr Hr
Upon completion of Airframe or Powerplant, students complete the General Laser Grade written exam and complete the General oral and practical exam.

AMT 136 Propellers   4.0 Cr Hrs
Provides basic information on principles, fundamentals and technical procedures associated with propellers as they relate to the powerplant rating. Designed to enable students to inspect, check, service and repair propeller synchronizing and ice control systems; repair fixed-pitch, constant-speed and feathering propellers and propeller-governing systems; identify and select propeller lubricants; balance propellers; repair propeller control system components; and repair aluminum alloy propeller blades.

AMT 151 Aircraft Electrical Systems   6.0 Cr Hrs
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to aircraft electrical systems. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to Airframe Subjects No. 48, No. 49 and No. 50.

AMT 153 Hydraulic and Pneumatic Power Systems   2.0 Cr Hrs
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to hydraulic and pneumatic power systems. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to Airframe Subjects No. 30, No. 31 and No. 32.

AMT 155 Aircraft Landing Gear Systems   4.0 Cr Hrs
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to aircraft landing gear systems. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to Airframe Subject No. 29.

AMT 159 Aircraft Fuel Systems   2.0 Cr Hrs
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to aircraft fuel systems. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to Airframe Subjects No. 41, No. 42, No. 43, No. 44, No. 45, No. 46 and No. 47.

AMT 161 Fire Protection Systems   1.0 Cr Hr
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to fire protection systems. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to Airframe Subjects No. 54 and No. 55.

AMT 163 Ice and Rain Control Systems   1.0 Cr Hr
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to ice and rain control systems. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to Airframe Subject No. 53.

AMT 165 Cabin Atmosphere Control Systems   2.0 Cr Hrs
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to cabin atmosphere control systems. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to Airframe Subjects No. 33, No. 34 and No. 35.

AMT 167 Aircraft Welding   2.0 Cr Hrs
Topics address repair procedures for steel, magnesium, brass and aluminum materials used in aircraft assembly and selection and application of appropriate methods of welding, brazing and soldering steel, magnesium, brass and aluminum.

AMT 169 Communication and Navigation Systems   2.0 Cr Hrs
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to aircraft communication and navigation systems. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to Airframe Subjects No. 38, No. 39 and No. 40.

AMT 173 Position and Warning Systems   1.0 Cr Hr
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to aircraft position and warning systems. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to the Airframe mechanic.

AMT 177 Wood Structures   1.0 Cr Hr
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to airframe wood structure. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to the airframe mechanic.

**AMT 179   Aircraft Sheetmetal
and Non-Metallic Structures   8.0 Cr Hrs**
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to airframe aircraft sheetmetal structures. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to the Airframe mechanic.

AMT 183   Aircraft Finishes   2.0 Cr Hrs
Develops correct safety practices, comprehensive knowledge and technical skills required to perform maintenance procedures relevant to aircraft finishes. The curriculum is designed to meet specific Federal Aviation Administration regulations that pertain to Airframe Subjects No. 7, No. 8 and No. 9. Academic standard for passing this class is a minimum of 70 percent for the written and practical project exams.

AMT 186   Airframe Review and Test   4.0 Cr Hrs
Students apply for Airframe certification, complete the Airframe Laser Grade written exam and the Airframe oral and practical exam.

AMT 200   Reciprocating Engines   11.0 Cr Hrs
Designed to enable students to inspect and repair radial engines; overhaul reciprocating engines; inspect, check, service and repair opposed and radial engines and reciprocating engine installations; troubleshoot and remove reciprocating engines; and perform powerplant conformity and airworthiness inspections.

AMT 202   Engine Inspection   2.0 Cr Hrs
Enables students to perform powerplant conformity and air-worthiness inspections.

AMT 203   Ignition and Starting Systems   3.0 Cr Hrs
Enables students to overhaul magneto and ignition harness, repair engine ignition and starting system components, inspect, check, service, troubleshoot and repair reciprocating and turbine engine ignition systems and pneumatic starting system components.

AMT 204   Engine Fuel Systems   1.0 Cr Hr
Enables students to inspect, check, service, troubleshoot and repair engine fuel systems and components.

AMT 206   Auxiliary Power Units   1.0 Cr Hr
Enables students to inspect, check, service and troubleshoot turbine driven auxiliary power units and provide basic information on principles, fundamentals and technical procedures involving auxiliary power units as they relate to the powerplant rating.

AMT 207   Fuel Metering Systems   4.0 Cr Hrs
Enables students to overhaul aircraft carburetors, repair engine fuel metering system components, inspect, check, service, troubleshoot repair and adjust turbine engine fuel metering systems and electronic engine fuel controls and reciprocating engine fuel metering systems.

AMT 208   Engine Electrical Systems   2.0 Cr Hrs
Provides students with the basic information to install, check, service and repair engine electrical system components, electrical wiring, controls, switches, indicators and protective devices.

AMT 211   Engine Cooling Systems   1.0 Cr Hr
Enables students to repair engine cooling system components and inspect, check, troubleshoot, service and repair engine cooling systems.

AMT 213   Engine Lubrication Systems   3.0 Cr Hrs
Enables students to learn to identify and select correct lubricants for aircraft use, repair engine lubrication system components and inspect, check, service, troubleshoot and repair engine lubrication systems.

AMT 217   Induction and Airflow Systems   1.0 Cr Hr
Covers the basics of induction and airflow systems. Students learn to inspect, check, troubleshoot, service and repair engine ice and rain control systems, heat exchangers, superchargers and turbine engine airflow and temperature control systems as well as carburetor air intake and induction manifolds.

AMT 219   Engine Exhaust and Reverser Systems   2.0 Cr Hrs
Enables students to learn to repair engine exhaust system components, inspect, check, troubleshoot, service and repair engine exhaust systems and engine thrust reverser systems and related components.

AMT 223   Engine Fire Protection Systems   1.0 Cr Hr
Provides basic information on principles, fundamentals and technical procedures in the engine fire-protection system as it relates to the powerplant rating. Students learn to inspect, check, service, troubleshoot and repair engine fire-detection and extinguishing systems.

AMT 225   Engine Instrument Systems   1.0 Cr Hr
Enables students to troubleshoot, service, inspect and repair electrical and mechanical fluid rate-of-flow indicating systems and engine temperature, pressure and rpm indicating systems.

AMT 227   Turbine Engines   9.0 Cr Hrs
Enables students to overhaul, install, troubleshoot and remove turbine engines. Students inspect unducted fans; check, service and repair turbine engines and turbine engine installations; and perform powerplant conformity and air-worthiness inspections.

AMT 231   Powerplant Review and Test   4.0 Cr Hrs
Students apply for powerplant certification, complete the Powerplant Laser Grade written exam and complete the Powerplant oral and practical exam.

Avionics Technology

AVT 100   Technical Mathematics   3.0 Cr Hrs
Provides technical math principles.

AVT 101   Basic Electricity and Electronics   3.0 Cr Hrs
Introduces students to the world of electricity. Students learn the proper measurement and troubleshooting of the various component level circuits including, solid state devices, motors and generators, wire bundles and complex circuits involving alternating and direct current. Prepares students for a more advanced, broad-based program. *Prerequisites: AVT 100 Technical Mathematics or basic algebra (may be taken concurrently); concurrent enrollment in AVT 102 Basic Electricity and Electronics Lab.*

AVT 102   Basic Electricity and Electronics Lab   4.0 Cr Hrs
Enables students to apply the skills they learned in the fundamentals course. They become familiar with various

components, wiring techniques and soldering. They use a state-of-the-art computer-based lab to help them learn how to wire up a pre-designed circuit and experience the joy of success when their circuit comes alive. *Prerequisite: AVT 101 Basic Electricity and Electronics.*

AVT 103   Introduction to Avionics   3.0 Cr Hrs
Helps students increase their knowledge and skills to work in the avionics field and work toward a Federal Communications Commission general class radiotelephone license. Students develop the safety procedures and competencies needed to apply the principles of avionics operation and maintenance required of the avionics technician. *Prerequisites: AVT 100 Technical Mathematics or equivalent; AVT 101 Basic Electricity and Electronics.*

AVT 105   Avionics Systems and Troubleshooting   2.0 Cr Hrs
Helps students increase their knowledge and acquire the hands-on skills to work in the avionics field and work toward a Federal Communications Commission general class radiotelephone license. Students develop the safety procedures and competencies needed to apply the principles of avionics operation and maintenance required of the avionics technician. *Prerequisites: AVT 100 Technical Mathematics or equivalent, AVT 101 Basic Electricity and Electronics and AVT 103 Introduction to Avionics.*

AVT 106   Avionics Systems and Troubleshooting Lab   2.0 Cr Hrs
Helps students increase their knowledge and acquire the hands-on skills to work in the avionics filed and work toward an Federal Communications Commission general class radiotelephone license. Students develop the safety procedures and competencies needed to apply the principles of avionics operation and maintenance required of the avionics technician. *Prerequisites: AVT 100 Technical Mathematics or equivalent, AVT 101 Basic Electricity and Electronics, and AVT 103 Introduction to Avionics. This course must be taken concurrently with AVT 105 Avionics Systems and Troubleshooting.*

AVT 107   Basic Communication Electronics   3.0 Cr Hrs
Helps students increase their knowledge and acquire the hands-on skills to work in the avionics field and work toward a Federal Communications Commission general class radiotelephone license. Students develop the safety procedures and competencies needed to apply the principles of electronics that are required of the avionics technician. *Prerequisites: AVT 100 Technical Mathematics or equivalent and AVT 101 Basic Electricity and Electronics.*

AVT 108   Wiring and Cannon Plug Lab   2.0 Cr Hrs
Helps students prepare to troubleshoot and repair wire harnesses and cannon plugs. *Prerequisites: AVT 100 Technical Mathematics or equivalent, AVT 101 Basic Electricity and Electronics and AVT 107 Basic Communication Electronics.*

AVT 110   Aircraft Electrical, Communication and Navigation Systems with Lab   12.0 Cr Hrs
Studies aircraft electrical, communication and navigation systems. Topics include install, check and service airframe electrical wiring, controls, switches, indicators and protective devices; inspect, check, troubleshoot, service and repair alternating and direct current electrical systems; repair and inspect aircraft electrical system components, crimp and splice wiring to manufacturer's specifications and repair pins and sockets of aircraft connectors; inspect, check and troubleshoot autopilot servos and approach coupling systems; inspect, check

and service aircraft electronic communication and navigation systems including VHF passenger address interphones and static discharge devices, aircraft VOR, ILS LORAN, radar beacon transponders, flight management computers and GPWS; inspect and repair antenna and electronic equipment installations; and inspect, check and troubleshoot constant speed and integrated speed drive generators. *Prerequisite: AVT 100 Technical Mathematics or equivalent.*

AVT 115   Basic Communications Lab   4.0 Cr Hrs
Helps students increase their knowledge and acquire the hands-on skills to work in the avionics field and work toward a Federal Communications Commission general class radiotelephone license. Students develop the safety procedures and competencies needed to apply the principles of electronics that are required of the avionics technician. *Prerequisites: AVT 100 Technical Mathematics or equivalent and AVT 101 Basic Electricity and Electronics.*

AVT 120   Principles of Avionics   4.0 Cr Hrs
Helps students increase their knowledge and acquire the hands-on skills to work in the avionics field and work toward an Federal Communications Commission general class radiotelephone license. Introduces students to a more advanced understanding of the principles involved in avionics. *Prerequisites: AVT 100 Technical Mathematics or equivalent, AVT 101 Basic Electricity and Electronics and AVT 103 Introduction to Avionics.*

AVT 121   Test Bench Lab   3.0 Cr Hrs
Helps students increase their knowledge and acquire the hands-on skills to work in the avionics field and work toward an associate of applied science degree in Avionics Technology. *Prerequisites: AVT 100 Technical Mathematics or equivalent, AVT 101 Basic Electricity and Electronics and AVT 103 Introduction to Avionics.*

AVT 122   Practical Electronics Technology   3.0 Cr Hrs
Helps student increase the knowledge and skills required to troubleshoot and repair practical electronics projects. *Prerequisites: AVT 100 Technical Mathematics or equivalent, AVT 101 Basic Electricity and Electronics and AVT 103 Introduction to Avionics.*

AVT 123   Test Equipment Lab   3.0 Cr Hrs
Helps students increase their knowledge and acquire the hands-on skills to work in the avionics field and work toward an associate of applied science degree in Avionics Technology. *Prerequisites: AVT 100 Technical Mathematics or equivalent, AVT 101 Basic Electricity and Electronics and AVT 103 Introduction to Avionics.*

EMP 100   Employability Skills   2.0 Cr Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

ENG 101   English Composition I   3.0 Cr Hrs
Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory*

assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.

MTH 101   Intermediate Algebra   3.0 Cr Hrs
Simplifying algebraic expressions. Solving equations and word problems involving linear and quadratic polynomials, rational expressions, rational exponents and radicals. Graphing linear and quadratic functions. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: Minimum grade of C in EBS 120 Elementary Algebra or satisfactory course placement assessment scores. This course does not count toward AS, AA, AGS or AAS degrees to fulfill a math requirement.*

SPH 101   Introduction to Public Speaking   3.0 Cr Hrs
Fundamental basic to all good private and public speaking experiences; elements in voice production and improvement, bodily movement, confidence, poise, understanding of all types of public speeches. Required of all transfer curricula.

SPH 111   Interpersonal Communication   3.0 Cr Hrs
Improves individual communication skills. By understanding the elements of effective communication, students are able to create environments that bring out the best in themselves and others. In addition, students learn how to better turn ideas and feelings into words, how to listen more effectively, respond more appropriately to what others have said and, most important of all, how to maintain and develop good interpersonal relationships with their families, their peers and fellow workers. Emphasis is placed on small-group activities, interviewing skills and both verbal and non-verbal communication.

Composites Fabrication Technician

CED 106   Computer Introduction   1.0 Cr Hr
Covers the fundamentals of computer usage. At the end of the course, students are able to utilize Microsoft Office Word 2007 to create a résumé and cover letter, Microsoft Excel 2007 to create a spreadsheet and Microsoft PowerPoint 2007 to create and present a graphic presentation. They also learn how to access and browse the Internet and download files.

**CFT 100   Occupational Safety
               and Precision Measurement   1.0 Cr Hr**
Covers basic safety requirements within the composites fabrication process. Also covers the hazards commonly experienced with certain types of materials, overexposure to vapors, inhalation of particulate fiber, industrial dermatitis (rashes, irritation and other skin disorders) and the potential for severe eye injury with catalysts and by flying particles from grinding composite materials. It is extremely important to use safety glasses, at a minimum, when using catalysts and when grinding composite materials.

CFT 101   Introduction to Composites   2.0 Cr Hrs
An introductory course into the materials and processes associated with polymer composite structures, components and design. Emphasis is placed on material properties (resins and fibers), manufacturing processes and safety. Some hands-on lab activities supplement classroom content.

CFT 105   Blueprint Reading for Composites   1.0 Cr Hr
Fundamental course covers drawing format/layout, interpretation of drawing views and ply stack/laminate determination. Students perform exercises on actual composite drawings.

CFT 106   Composites Finish Trim   2.0 Cr Hrs
Gives students the skills necessary to safely apply the trim and finishing tools used with composite materials. The use of trim fixtures, grinding and sanding tools, routers, cutoff wheels, band saw and other power tools are taught. The finish component includes the preparation and application of surfacing products, surface coats, bonding primers, etc. Painting of composite surfaces is taught also.

CFT 107   Composites Assembly   2.0 Cr Hrs
Teaches the fundamentals of joining composite structures. Adhesive bonding and mechanical fastening are covered. Safe procedures are emphasized. Hole preparation for mechanical fastening and surface preparation for adhesive bonding are essential elements of this course. The course consists of theory and practical application through hands-on projects.

CFT 130   Composites Fabrication Methods/Applications 2.0 Cr Hrs
Covers fundamentals of composite structure fabrication methods and applications including hand lay-up, bonding, vacuum bagging and resin transfer molding. Emphasis is also placed on composites safety and inspection/testing of composite components.

EMP 100   Employability Skills   2.0 Cr Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

MSC 102   Applied Shop Math   2.0 Cr Hrs
Focuses on the skills required to complete common shop mathematical problems including reading and interpreting part dimensions, checking part features and recording accurate measurements. Applying mathematical skills to the manufacturing environment is an integral part of this course.

Business and Technology

Accounting

ACC 101   Principles of Accounting I   4.0 Cr Hrs
Introduces the basic concepts of the complete accounting cycle and provides students with the necessary skills to maintain a set of books for a sole proprietorship. Topics include accounting vocabulary and concepts, the accounting cycle and accounting for a personal service business, the accounting cycle and accounting for a merchandising enterprise and cash control. Laboratory work demonstrates theory presented in class. Prerequisite: Program admission competency levels.

ACC 102   Principles of Accounting II   3.0 Cr Hrs
Applies the basic principles of accounting to specific account classifications and subsidiary record accounting. Topics include receivables, inventory, plant assets, payroll, payables, partnerships and sales tax returns. Laboratory work

demonstrates theory presented in class. *Prerequisite: ACC 101 Principles of Accounting I.*

ACC 103   Principles of Accounting III   4.0 Cr Hrs
Emphasizes a fundamental understanding of corporate and cost accounting. Topics include accounting for a corporation, statement of cash flows, cost accounting, budgeting and long-term liabilities. Laboratory work demonstrates theory presented in class. *Prerequisites: ACC 101 Principles of Accounting I and ACC 102 Principles of Accounting II.*

ACC 104   Computerized Accounting   3.0 Cr Hrs
Emphasizes operation of computerized accounting systems (Quickbooks) from manual input forms. Topics include equipment use, general ledger, accounts receivable and payable, payroll, cash management and financial reports. Laboratory work demonstrates theoretical and technical application. P*rerequisites: ACC 102 Principles of Accounting II and CED 101 Computer Essentials.*

ACC 106   Accounting Spreadsheet Fundamentals   3.0 Cr Hrs
Provides instruction in the use of electronic spreadsheet software packages for program-related spreadsheet applications. Students become proficient in creating, modifying and combining spreadsheets. Topics include spreadsheet creation, data entry, data entry modification, computation using functions and program-related spreadsheet applications. Laboratory work demonstrates theoretical and technical application. *Prerequisite: CED 101 Computer Essentials.*

ACC 107   Full-Time Accounting Internship   8.0 Cr Hrs
Provides in-depth application and reinforcement of accounting and employability principles in actual job settings. Allows students to become involved in intensive on-the-job accounting applications that require full-time concentration, practices and follow through. Topics include appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations and progressive productivity. The full-time accounting internship is implemented through the use of written individualized training plans, written performance evaluation, weekly documentation or seminars and/or other projects as required by the instructor. *Prerequisites: All non-elective courses required for completion.*

ACC 108   Half-Time Accounting Internship   4.0 Cr Hrs
Introduces the application and reinforcement of accounting and employability principles in an actual job setting. Acquaints students with realistic work situations and provides insights into accounting applications on the job. Topics include appropriate work habits, acceptable job performance, application of accounting knowledge and skills, interpersonal relations and development of productivity. The half-time accounting internship is implemented through the use of a written individualized training plan, written performance evaluation and weekly documentation of seminars and/or other projects as required by the instructor. *Prerequisites: All non-elective courses required for completion.*

ACC 152   Payroll Accounting   2.0 Cr Hrs
Provides an understanding of the laws that affect a company's payroll structure and practical application skills in maintaining payroll records. Topics include payroll tax laws, payroll tax forms, payroll and personnel records, computing wages and salaries, taxes affecting employees and employers and analyzing and journalizing payroll transactions. *Prerequisite: ACC 101 Principles of Accounting I.*

ACC 156   Business Tax Accounting   2.0 Cr Hrs
Provides instruction for preparation of state and federal partnerships, corporation and other business tax returns. Topics include organization form, overview of taxation partnerships, special partnership issues, corporate tax elections, adjustments to income and expenses, tax elections, forms and schedules, tax credits, reconciliation of book and tax income, tax depreciation methods and tax calculations. *Prerequisites: ACC 101 Principles of Accounting I and ACC 125 Individual Taxation.*

ACC 159   Accounting Simulation   2.0 Cr Hrs
Develops skills for the potential accountant to effectively prepare financial statements for presentations and income tax returns. Emphasis is placed on providing students with opportunities for application and demonstration of skills associated with automated accounting. Topics include financial statement preparation, accounting system installation, automated accounting worksheet preparation, automated accounting income tax return preparation and job-search planning. *Prerequisites: ACC 104 Computerized Accounting, ACC 106 Accounting Spreadsheet Fundamentals and CED 101 Computer Essentials.*

BUS 101   Beginning Document Processing   4.0 Cr Hrs
Introduces the touch system of keyboarding with emphasis on correct techniques, mastery of the keyboard and basic business documents. Students attain a minimum typing speed of 25 words per minute with a maximum of three errors on a three-minute, timed keyboarding test. Topics include learning the keyboard, building speed and accuracy, formatting basic business documents, language arts and proofreading. Laboratory practice parallels class instruction.

BUS 108   Word Processing   3.0 Cr Hrs
Emphasizes an intensive use of word processing software to create and revise business documents. Topics include equipment and supplies maintenance and usage, work area management, word processing software and productivity. *Prerequisites: BUS 101 Beginning Document Processing and/or CED 101 Computer Essentials.*

BUS 120   Business English   3.0 Cr Hrs
Emphasizes a functional and comprehensive review of English usage. Topics include English grammar, sentence structure and composition fundamentals. *Prerequisite: Program admission competency levels.*

BUS 121   Business Communications   3.0 Cr Hrs
Provides knowledge and application of written and oral communications found in business situations. Topics include writing fundamentals and speaking fundamentals. *Prerequisite: BUS 120 Business English.*

BUS 122   Business Math   3.0 Cr Hrs
Emphasizes mathematical concepts found in business situations. Topics include basic mathematical skills, mathematical skills in business-related problem solving, mathematical information for documents, graphs and mathematical problems using electronic calculators (not to include the touch method). *Prerequisite: Program admission competency levels.*

CED 101   Computer Essentials   2.0 Cr Hrs
Develops students' computer literacy, keyboarding skills and meets the needs of students in associate degree and technical certificate programs. Students learn from hands-on

experiences, basic skills in file management utilities, word processing, spreadsheets and graphical presentations in the Windows environment.

EMP 100   Employability Skills   2.0 Cr Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

Administrative Office Technology (online)

BUS 101   Beginning Document Processing   4.0 Cr Hrs
Introduces the touch system of keyboarding with emphasis on correct techniques, mastery of the keyboard and basic business documents. Students attain a minimum typing speed of 25 words per minute with a maximum of three errors on a three-minute, timed keyboarding test. Topics include learning the keyboard, building speed and accuracy, formatting basic business documents, language arts and proofreading. Laboratory practice parallels class instruction.

BUS 102   Intermediate Document Processing   4.0 Cr Hrs
Develops keyboarding speed and accuracy with further mastery of correct keyboarding techniques. Students attain a minimum typing speed of 40 words per minute with a maximum of five errors on a five-minute timed keyboarding test. Topics include building speed and accuracy, formatting and producing business documents, language arts and proofreading. Laboratory practice parallels class instruction. *Prerequisite: BUS 101 Beginning Document Processing.*

BUS 103   Advanced Document Processing   4.0 Cr Hrs
Develops keyboarding speed and accuracy with further mastery of correct keyboarding techniques. Students attain a minimum typing speed of 50 words per minute with a maximum of five errors on a five-minute timed keyboarding test. Topics include building speed and accuracy, integrated projects/applications, decision making, language arts and proofreading. Laboratory practice parallels class instruction. *Prerequisite: BUS 102 Intermediate Document Processing.*

BUS 105   Database Management   2.0 Cr Hrs
Emphasizes use of database management software packages to access, manipulate and create file data. Topics include data entry, data access, data manipulation, database creation and file documentation. *Prerequisite: CED 101 Computer Essentials.*

BUS 106   Office Procedures   2.0 Cr Hrs
Emphasizes essential skills required for the business office. Topics include office protocol, time management, travel and meeting arrangements. *Prerequisite: BUS 101 Beginning Document Processing.*

BUS 107   Machine Transcription   2.0 Cr Hrs
Emphasizes transcribing mailable documents from dictation using word processing software. Topics include equipment and supplies maintenance and usage, work area management, transcription techniques, productivity and accuracy, proofreading and language arts skills. *Prerequisites: BUS 102 Intermediate Document Processing, BUS 120 Business English and CED 101 Computer Essentials.*

BUS 108   Word Processing   3.0 Cr Hrs
Emphasizes an intensive use of word processing software to create and revise business documents. Topics include equipment and supplies maintenance and usage, work area management, word processing software and productivity. *Prerequisites: BUS 101 Beginning Document Processing and/or CED 101 Computer Essentials.*

BUS 120   Business English   3.0 Cr Hrs
Emphasizes a functional and comprehensive review of English usage. Topics include English grammar, sentence structure and composition fundamentals. *Prerequisite: Program admission competency levels.*

BUS 121   Business Communications   3.0 Cr Hrs
Provides knowledge and application of written and oral communications found in business situations. Topics include writing fundamentals and speaking fundamentals. *Prerequisite: BUS 120 Business English.*

BUS 122   Business Math   3.0 Cr Hrs
Emphasizes mathematical concepts found in business situations. Topics include basic mathematical skills, mathematical skills in business-related problem solving, mathematical information for documents, graphs and mathematical problems using electronic calculators (not to include the touch method). *Prerequisite: Program admission competency levels.*

BUS 150   Office Simulations   3.0 Cr Hrs
Provides an opportunity for further development and practice of information and office technology skills. Topics include accuracy and skills improvement, interpersonal skills application, information gathering and problem solving. *Prerequisite: All non-elective courses required for completion.*

BUS 151   Telephone Training   3.0 Cr Hrs
Familiarizes students with the use of current telephone equipment, techniques and attributes. Topics include telephone equipment use, telephone techniques and telephone voice.

BUS 152   Desktop Publishing   3.0 Cr Hrs
Emphasizes intensive use of desktop publishing software to create publishing documents such as letterheads, résumés, flyers, brochures, reports, newsletters and business cards. Topics include desktop publishing concepts, using desktop publishing software, electronic page layouts, basic graphic design and practical applications. *Prerequisites: BUS 101 Beginning Document Processing and BUS 103 Advanced Document Processing.*

BUS 205   Advanced Word Processing   3.0 Cr Hrs
Provides instruction in advanced word processing. Topics include advanced word processing concepts, applications and proofreading. *Prerequisites: BUS 108 Word Processing and BUS 120 Business English.*

BUS 206   Spreadsheet Management   3.0 Cr Hrs
Provides instruction in the use of electronic spreadsheet software in business applications. Students become proficient in creating and modifying spreadsheets in a business environment and in printing files that meet business standards. Topics include spreadsheet creation, data entry, entry modification, computation using functions, charts and graphs and printing. *Prerequisites: BUS 122 Business Math and CED 101 Computer Essentials.*

BUS 207 Business Accounting 5.0 Cr Hrs

Introduces fundamental accounting concepts. Topics include accounting equation, debits, credits, journalizing, posting and proving ledger, accounts receivable, accounts payable and payroll. Both manual and computerized concepts are taught. *Prerequisite: BUS 122 Business Math.*

BUS 208 Medical Terminology 3.0 Cr Hrs

Introduces basic spelling and pronunciation of medical terms and the use of these terms as they relate to anatomy, treatment, surgery and drugs. Topics include word analysis, word elements, spelling, pronunciation and semantics. *Prerequisite: Program admission competency levels.*

CED 101 Computer Essentials 2.0 Cr Hrs

Develops students' computer literacy, keyboarding skills and meets the needs of students in associate degree and technical certificate programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets and graphical presentations in the Windows environment.

DIS 150 Directed Individual Study 1–12.0 Cr Hrs

Provides students the opportunity to work in special learning environments. Instruction is delivered through occupational work experiences, practicums, advanced projects, industry-sponsored workshops, seminars or specialized and/or innovative learning arrangements. Topics include application of occupational technical skills, adaptability to the work environment and problem solving. Each course is documented with a written agreement between the instructor and the student detailing expected requirements. The course is offered with variable credits ranging from 1.0 to 12.0 credit hours.

EMP 100 Employability Skills 2.0 Cr Hrs

Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

ENG 101 English Composition I 3.0 Cr Hrs

Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 Composition I.*

MTH 101 Intermediate Algebra 3.0 Cr Hrs

Simplifying algebraic expressions. Solving equations and word problems involving linear and quadratic polynomials, rational expressions, rational exponents and radicals. Graphing linear and quadratic functions. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: Minimum grade of C in EBS 120 Elementary Algebra or satisfactory course placement assessment scores. This course does not count toward AS, AA, AGS or AAS degrees to fulfill a math requirement.*

MTH 112 College Algebra 3.0 Cr Hrs

An introduction of algebraic functions and some transcendental functions with application in business and life, natural and social sciences. Topics include solving equations, zeros, rational functions, matrices, exponentials and logarithms and systems. Additional topics are included as time permits. This course requires that students furnish their own TI-83 or TI-83 PLUS graphing calculator. *Prerequisites: A minimum grade of C in MTH 101 Intermediate Algebra or satisfactory course placement assessment or 21 ACT math score.*

PSY 101 General Psychology 3.0 Cr Hrs

A general introduction to the scientific study of human behavior as it applies to daily living. The scope of this course includes history, basic theories and biological bases of behavior, development, cognitive processes, individual awareness, motivation, emotion, personal adjustment and social psychology.

SOC 101 Introduction to Sociology 3.0 Cr Hrs

An introductory study to acquaint students with the influence of human social behavior. Sociology studies the processes and patterns of individuals and group interaction by acquainting students with the development, characteristics and functioning of human groups, the relationships between groups and group influences on individual behavior. It includes the study of how social relationships are created, maintained and changed.

SPH 101 Introduction to Public Speaking 3.0 Cr Hrs

Fundamental basic to all good private and public speaking experiences; elements in voice production and improvement, bodily movement, confidence, poise, understanding of all types of public speeches. Required of all transfer curricula.

Computer Technology

CED 100 Introduction to Windows XP 1.0 Cr Hr

Students learn Windows XP basic skills, including working with the Windows programs of WordPad and Paint, managing files and folders, customizing Windows using the Control Panel, maintaining the computer and exploring the Internet with Microsoft Internet Explorer.

CED 101 Computer Essentials 2.0 Cr Hrs

Develops students' computer literacy, keyboarding skills and meets the needs of students in associate degree and technical certificate programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets and graphical presentations in the Windows environment.

CED 115 Computer Applications 3.0 Cr Hrs

Develops students' computer literacy and meets the needs of students in associate degree programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets, database management and graphical presentations in the Windows environment. *Prerequisite: Students are encouraged to complete a self-assessment to determine skill set prior to enrolling in this course.*

CED 120 Advanced Computer Applications 3.0 Cr Hrs

Enhances students' computer literacy and meets the needs of students in associate degree and/or certificate programs. Students learn from hands-on experiences, advanced skills in word processing, spreadsheet applications, database

management and graphical presentations in the Windows environment. *Prerequisite: CED 115 Computer Applications or acceptable prior experience with Microsoft Word, Excel, Access and PowerPoint.*

CED 200   Introduction to MS Office   1.0 Cr Hr
Provides a basic understanding of computer terminology and software concepts for students who have little or no previous computer experience. Students are exposed to Windows, word processing, spreadsheets and database systems. *Prerequisite: Typing speed of 20 wpm or instructor consent.*

CED 206   MS Excel   1.0 Cr Hr
Simple workbooks and worksheets are created in Excel. Students also create basic formulas, use some of the more common functions and learn some formatting techniques to produce professional-looking documents. *Prerequisite: CED 200 Introduction to MS Office or equivalent or instructor consent.*

CED 208   MS Office Level 2   1.0 Cr Hr
Continuation of CED 200 Introduction to MS Office. Students gain a better understanding of working with word processing documents, spreadsheets and databases and receive an overview of creating presentations. *Prerequisite: CED 200 Introduction to MS Office or equivalent or instructor consent.*

CED 209   Basic Internet   1.0 Cr Hr
Explores different Internet search-engine tools and basic Internet usage to familiarize students with using the World Wide Web. Topics include how to use search engines, organize Internet bookmarks and set security and privacy settings.

CED 210   Internet Researching   1.0 Cr Hr
Focuses on Internet research as a tool in the writing process, including technical writing, research papers, composition and English essays. Students explore various Internet research tools and library resources that are available to help answer questions about the research and writing process. *Prerequisite CED 209 Basic Internet, or instructor consent.*

CED 211   MS Access   1.0 Cr Hr
Explores planning relational databases, uses the tools in Access to create and format tables, creates forms for efficient data entry, uses the query tools to effectively sort and filter data and creates professional looking reports using the tables and queries. *Prerequisite: CED 200 Introduction to MS Office or equivalent or instructor consent.*

CED 216   MS Excel Level 2   1.0 Cr Hr
Teaches students how to create simple workbooks, worksheets and basic formulas, use some of the more common functions and some formatting techniques to produce professional-looking documents. *Prerequisite: CED 206 MS Excel or equivalent or instructor consent.*

CED 218   MS Word   1.0 Cr Hr
Documents are created in Word using the various document wizards. Students learn various formatting techniques and how to set different types of tabs, proof a document by checking spelling and grammar, set up headers and footers and insert graphics. *Prerequisite: CED 200 Introduction to MS Office or equivalent or instructor consent.*

CED 219   MS Access Level 2   1.0 Cr Hr
Teaches students how to work with multiple tables, create custom forms and reports and use macros and switchboards. *Prerequisite: CED 211 MS Access or equivalent.*

CED 222   MS PowerPoint   1.0 Cr Hr
Teaches students how to create PowerPoint presentations from templates, use drawing tools, incorporate clip art and WordArt, create and enhance organization charts and create and edit charts. *Prerequisite: CED 200 Introduction to MS Office.*

CED 228   MS Word Level 2   1.0 Cr Hr
Teaches students how to use the more advanced features in Word, such as WordArt, styles, hyphenation and justification, text boxes, advanced formatting techniques, templates, tables, charts, diagrams, forms and text animation and how to track changes, mail merge and print tables and envelopes. *Prerequisite: CED 218 MS Word or equivalent.*

General Education

ACC 105   Fundamentals of Accounting   3.0 Cr Hrs
Designed for students who wants a working knowledge of accounting, but not to the extent as the person working primarily in the accounting field. Although the basic accounting principles are learned and applied, the course, in comparison to Principles of Accounting I, covers a smaller amount of material at a somewhat slower pace. Recommended for the student with no previous accounting background.

ACC 120   Accounting with Computers   3.0 Cr Hrs
Students generate transactions and complete accounting procedures of a sole proprietorship, a partnership and a corporation using computerized accounting software. Students review software features for various types of businesses.

ACC 160   Principles of Accounting I   3.0 Cr Hrs
Designed to help students develop a basic understanding of accounting theory, concepts and procedures. It provides a foundation for further study for students seeking a career in accounting or business administration or for students entering into the occupational field.

ACC 165   Payroll Accounting   2.0 Cr Hrs
Provides practice in all payroll operations both manually and through the use of computerized payroll software. The course covers topics including the preparation of employee earnings records, payroll registers and federal and state reports. A basic payroll accounting system is used to introduce calculations and recording of earnings and taxes.

ACC 170   Principles of Accounting II   3.0 Cr Hrs
A continuation of Principles of Accounting I. A study of partnerships and corporations that includes organization and operations; stockholders' equity, earnings and dividends; long-term liabilities and investments, income tax and their effect on business decisions; and the value of accounting as a basis for management decisions. *Prerequisite: ACC 160 Principles of Accounting I with grade of C or above.*

ALH 101   Medical Terminology   3.0 Cr Hrs
Medical Terminology is designed to present basic principles of medical word building. The study develops competencies in the basic elements forming medical words, categorizing major suffixes and group prefixes. Anatomical, physiological and pathological terms are reviewed so students better understand special medical procedures. This is the introductory course in medical terminology and is intended for all who desire knowledge in this subject.

ALH 105   First Aid and CPR   3.0 Cr Hrs
Cause, prevention and first aid care of life-threatening respiratory and cardiac emergencies and non-life threatening emergencies for infant, child and adults as outlined by the American Red Cross.

ALH 110   Principles of Nutrition   3.0 Cr Hrs
A study of the health of the individual as related to food and its assimilation in the human body. Principles of normal nutrition, food values and adequate nutrient allowances for growth and maintenance will be examined.

ALH 125   Personal Health/Community Hygiene   3.0 Cr Hrs
Gives students a working knowledge of fundamental principles of healthful living as applied to the work of the individual, the school, the community and the various levels of government in promoting health programs. Considerable emphasis is placed on mental health, stimulants and narcotics, dietary disturbances and dangers, glands of internal secretion, parenthood and communicable diseases.

ART 100   Art Appreciation   3.0 Cr Hrs
Develops a personal appreciation of art. By combining a study of concepts and artist's works, students should improve their judgment and ability to understand art critically.

BIO 100   Biology Review   1.0 Cr Hr
Introduces materials covered in BIO 110 Principles of Biology. Recommended for students planning to take BIO 150 Human Anatomy and Physiology or BIO 160 Microbiology who have not had a life science course within the past five years, or students wishing to prepare for BIO 110 Principles of Biology.

BIO 110   Principles of Biology   5.0 Cr Hrs
An introduction to the biological concepts included in the General Education Biology Core Competencies. This includes understanding the nature of science, levels of organization, bioenergetics, reproduction and inheritance and the mechanisms of change. Laboratory stresses the process of scientific investigation and observation of biological processes.

BIO 150   Human Anatomy and Physiology   5.0 Cr Hrs
A detailed study of the structure and functions of the human body. Laboratory work includes tissue examination, basic physiological experiments and structural identification of all organ systems. Prerequisite: The student must complete one of the following: BIO 110 Principles of Biology, BIO 100 Biology Review or successful completion of a life science lab class within the past five years. Students not meeting this requirement will be required to enroll in and complete BIO 100 Biology Review Online within the first two weeks of the semester, or they will be administratively withdrawn from the class.

BIO 160   Microbiology   5.0 Cr Hrs
An introduction to the microorganisms and their morphology, physiology, genetics and distribution. Emphasis is placed on the relationship of microorganisms to disease and the human immune responses. Techniques involving staining, culturing, identifying and biochemistry are considered in laboratory. *Prerequisites: The student must complete one of the following: BIO 110 Principles of Biology, BIO 100 Biology Review or successful completion of a life science lab class within the past five years. Suggested Prerequisite: CHM 110 General Chemistry.*

BUS 104   Introduction to Business   3.0 Cr Hrs
Acquaints students with the nature and scope of business, its component parts, how business is owned, organized and managed. Emphasis is upon environmental forces and historical conditions that have influenced the growth of business from its early years to the present day.

BUS 130   Personal Finance   3.0 Cr Hrs
Designed for business and non-business majors. The focus of the course is efficient management of money as a primary requirement for a successful personal life. The course aids individuals in establishing and maintaining credit, using a budget, safeguarding and investment of savings and arranging personal insurance.

BUS 140   Principles of Marketing   3.0 Cr Hrs
Production and marketing of goods and services are the essence of economic life in any society. All organizations perform these two basic functions to satisfy their commitments to society, their customers and their owners. Marketing examines the problems of transferring title and moving goods from producer to consumer, buying, selling, storing, transporting, standardizing, financing, risk-bearing and supplying market information. The free enterprise and the government's contribution, retailing and international marketing are discussed at length.

BUS 160   Human Relation – People at Work   3.0 Cr Hrs
Designed to help employees and supervisors gain human relations skills needed for success at their work sites. The case method is used to analyze situations in which actual job relations are presented.

BUS 200   Principles of Management   3.0 Cr Hrs
Student in the course explore the basic management functions of planning, controlling organizing and directing an organization. The basic management theories, functions and aspects of various types of business are studied.

CED 115   Computer Applications   3.0 Cr Hrs
Develops students' computer literacy and meets the needs of students in associate degree programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets, database management and graphical presentations in the Windows environment. *Prerequisite: Students are encouraged to complete a self-assessment to determine skill set prior to enrolling in this course.*

CED 120   Advanced Computer Applications   3.0 Cr Hrs
Enhances students' computer literacy and meets the needs of students in associate degree and/or certificate programs. Students learn from hands-on experiences, advanced skills in word processing, spreadsheet applications, database management and graphical presentations in the Windows environment. *Prerequisite: CED 115 Computer Applications or acceptable prior experience with Microsoft Word, Excel, Access and PowerPoint.*

CHM 100   Chemistry Review   1.0 Cr Hr
Introduces basic concepts covered in CHM 125 Chemistry I. It is recommended for students who will enroll in Chemistry I or a higher level chemistry course the following semester. It is not recommended for those taking CHM 110 General Chemistry.

CHM 110   General Chemistry   5.0 Cr Hrs
An introduction to chemistry that includes the study of matter, atoms, molecules, chemical arithmetic, chemical reactions, gas laws, acids and bases, organic chemistry and laboratory experimentation. *Prerequisite: EBS 120 Elementary Algebra or a higher level math course with a grade of C or better, completed within the past five years, or a math ACT score of 18 or better or an equivalent assessment score.*

CHM 125   Chemistry I   5.0 Cr Hrs
An introduction to inorganic chemistry with emphasis on atomic structure, molecular bonding and structure, the periodic table, kinetic theory, changes of state, solutions and concentrations, chemical reactions and oxidation reduction and fundamental organic chemistry. *Prerequisites: CHM 110 General Chemistry or high school chemistry within the last five years and high school advanced algebra or MTH 101 Intermediate Algebra with a C or better within the last five years. Can take MTH 112 College Algebra concurrently.*

CRJ 101   Introduction to Criminal Justice   3.0 Cr Hrs
Introduction to the historical backgrounds, agencies and process, purposes and functions of the system, the ethics, administration and legal problems of the criminal justice system.

EBS 101   College Reading Skills   3.0 Cr Hrs
Enables students to develop the reading skills necessary for successful completion of postsecondary coursework. Instruction is based on application of research-based reading strategies to authentic college texts. It is required that any student scoring in the range of 0–60 on the COMPASS reading assessment enroll in this course. This course does not count toward AS, AA, AGS or AAS degrees.

EBS 105   Becoming a Master Student   3.0 Cr Hrs
Designed to help students learn effective study skills that enable them to be academically successful. Students learn how to make application of these skills in a course of study. The course covers time management, goal setting, listening, note taking, test strategies and online learning. It is recommended that any student who has a GPA of 2.0 or lower upon initial enrollment of after their first semester of college course work enroll in this class. This course does not count toward AS, AA, AGS or AAS degrees.

EBS 110   English   3.0 Cr Hrs
Designed to equip students for success in the writing required during academic endeavors. Review of grammar is individualized and self-paced. Writing assignments include a number of paragraphs and major essay. To demonstrate readiness for and be allowed to enroll in ENG 101 English Composition I, students must pass this course with a grade of C or above and pass the final exam. This course does not count toward AS, AA, AGS or AAS degrees.

EBS 115   Pre-Algebra   3.0 Cr Hrs
Arithmetic with fractions, decimals and percents. Introduction to the metric system. Applications to measurement and consumer math. This course does not count toward AS, AA, AGS or AAS degrees.

EBS 120   Elementary Algebra   3.0 Cr Hrs
Introduction to variables, properties of real numbers, polynomials, solving linear and quadratic equations and graphing linear equations. *Prerequisite: Minimum grade of C in EBS 115 Pre-Algebra or satisfactory course placement assessment*

scores. This course does not count toward AS, AA, AGS or AAS degrees.

ECO 105   Principles of Macroeconomics   3.0 Cr Hrs
Explores the fundamental aspects of the U.S. economy including growth, fiscal and monetary policy, unemployment, inflation, national debt, money and the Federal Reserve System. National and international policy topics will be discussed.

ECO 110   Principles of Microeconomics   3.0 Cr Hrs
Focuses on the methods of producing goods and services that our economy provides. The following areas are explored at length — supply, demand, pricing, scarcity, business firms and businesses anti-trust and public interest, incomes, wages and salaries, income distribution, taxes and tax reform.

EMP 100   Employability Skills   2.0 Cr Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

ENG 101   English Composition I   3.0 Cr Hrs
Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.*

ENG 120   English Composition II   3.0 Cr Hrs
Through a study of poetry, short story, drama and essays as literary forms, this course furthers students' writing skills This course also improves research techniques through writing an in-depth research essay in MLA style. It emphasizes accuracy and fluency in expressing sound ideas in class discussions, assignments and essays. *Prerequisites: Completion of ENG 101 English Composition I with a grade of C or above. High school students should have senior standing to enroll in ENG 120.*

MTH 101   Intermediate Algebra   3.0 Cr Hrs
Simplifying algebraic expressions. Solving equations and word problems involving linear and quadratic polynomials, rational expressions, rational exponents and radicals. Graphing linear and quadratic functions. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: Minimum grade of C in EBS 120 Elementary Algebra or satisfactory course placement assessment scores. This course does not count toward AS, AA, AGS or AAS degrees to fulfill a math requirement.*

MTH 102   Intermediate Algebra with Review   5.0 Cr Hrs
Covers the same topics as EBS 120 Elementary Algebra and MTH 101 Intermediate Algebra. Students meet twice a week instead of once a week. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: Minimum grade of C in EBS 115 Pre-Algebra or satisfactory course placement assessment scores. This course does not count toward AS, AA, AGS or AAS degrees to fulfill a math requirement.*

MTH 111   College Algebra with Review   5.0 Cr Hrs
Covers the same topics as MTH 112 College Algebra but will move at a slower pace and incorporate review material. Students meet twice a week instead of once a week. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: A minimum grade of C in MTH 101 Intermediate Algebra or MTH 102 Intermediate Algebra with Review or satisfactory course placement assessment or 21 ACT math score.*

MTH 112   College Algebra   3.0 Cr Hrs
An introduction of algebraic functions and some transcendental functions with application in business and life, natural and social sciences. Topics include solving equations, zeros, rational functions, matrices, exponentials and logarithms and systems. Additional topics are included as time permits. This course requires that students furnish their own TI-83 or TI-83 PLUS graphing calculator. *Prerequisites: A minimum grade of C in MTH 101 Intermediate Algebra or satisfactory course placement assessment or 21 ACT math score.*

MTH 113   Trigonometry   3.0 Cr Hrs
Trigonometric functions using the unit circle and right angle trigonometry, graphing applications, analytic trigonometry, vectors, trigonometric complex number applications, parametric and polar equations. This course requires that students furnish their own TI-83 or TI-83PLUS graphing calculator. *Prerequisites: Minimum grade of C in MTH 111 College Algebra with Review or MTH 112 College Algebra or 23 ACT math score.*

MTH 115   Pre-Calculus   5.0 Cr Hrs
An introduction to function theory, the algebraic and trigonometric functions and selected topics such as matrices, probability and statistics. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: Minimum grade of C in MTH 111 College Algebra with Review or MTH 112 College Algebra or 23 ACT math score.*

MTH 125   Calculus I   5.0 Cr Hrs
Differentiation and integration of the algebraic, logarithmic and exponential functions. Applications to physical, social, life and business sciences. This course requires that students furnish their own TI-83 or TI-84 Series graphing calculator. *Prerequisites: Minimum grade of a C in MTH 113 Trigonometry, or a C in MTH 112 College Algebra with recent trigonometry in high school or satisfactory course placement assessment or 25 ACT math score.*

MTH 150   Calculus II   5.0 Cr Hrs
An extension of MTH 125 Calculus I with topics to include advanced integration techniques, sequences and series, length, area and volumes. Application includes business and life, natural and social sciences. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: A minimum grade of a C in MTH 125 Calculus I.*

PED 110   Lifetime Fitness   1.0 Cr Hr
Exposes students to facts about and experiences in dealing with motor, physical, physiological, psychological and nutritional aspects of the human being and the responsibility to maintain fitness during a life span.

PHL 110   Ethics   3.0 Cr Hrs
A practical approach to recognizing, understanding and solving ethical problems confronting individuals in today's society. Basic concepts of applied ethical theories in moral philosophy and reasoning are examined using critical thinking and responsible decision-making skills.

PHS 110   Physical Science   5.0 Cr Hrs
A non-technical course intended for students who are majoring in fields other than science. The application of scientific knowledge to daily life activities is emphasized by examining the fundamental principles in physics, chemistry, geology and astronomy utilizing the scientific method.

PHS 120   Physics   5.0 Cr Hrs
Topics include: Mechanics — linear motion, rotational motion, force, work, energy, momentum and conservation principles; Heat — temperature, ideal gas, eating as a form of energy, first law of thermodynamics, second law of thermodynamics and entropy; Wave Motion — simple harmonic motion, elasticity and the wave equation. This class is designed for those students needing five hours of physics without calculus. This class is taught in the fall. *Prerequisites: College Algebra, high school trigonometry or college trigonometry and basic computer skills.*

PSY 101   General Psychology   3.0 Cr Hrs
A general introduction to the scientific study of human behavior as it applies to daily living. The scope of this course includes history, basic theories and biological bases of behavior, development, cognitive processes, individual awareness, motivation, emotion, personal adjustment and social psychology.

PSY 120   Developmental Psychology   3.0 Cr Hrs
A study of individual development from conception through death. This includes the general areas of biological, physical, cognitive, social, emotional and personality development at each stage of life. *Prerequisite: PSY 101 General Psychology.*

PSY 130   Human Growth and Development   3.0 Cr Hrs
Provides an overview of the theories, methods and content in the field of child development. The framework for this course has four major dimensions: a) basic theoretical and research issues; b) development from an interdisciplinary perspective; c) interaction of life experiences and human change; d) applying this understanding to the real world.

PTR 100   Introduction to Personal Training   3.0 Cr Hrs
Provides students with the information necessary for designing, implementing and managing successful training programs. Students fulfill the criteria necessary to obtain the NSCA-CPT certification through the National Strength and Conditioning Association.

PTR 101   Principles of Strength and Conditioning   1.0 Cr Hr
Provides students with the information necessary for designing and implementing successful strength and conditioning programs through assessment and analysis of fitness and sport movement.

SOC 101   Introduction to Sociology   3.0 Cr Hrs
An introductory study to acquaint students with the influence of human social behavior. Sociology studies the processes and patterns of individuals and group interaction by acquainting students with the development, characteristics and functioning of human groups, the relationships between groups and group influences on individual behavior. It includes the study of how social relationships are created, maintained and changed.

SPH 101   Introduction to Public Speaking   3.0 Cr Hrs
Fundamental basic to all good private and public speaking experiences; elements in voice production and improvement, bodily movement, confidence, poise, understanding of all types of public speeches. Required of all transfer curricula.

SPH 111   Interpersonal Communication   3.0 Cr Hrs
Improves individual communication skills. By understanding the elements of effective communication, students are able to create environments that bring out the best in themselves and others. In addition, students learn how to better turn ideas and feelings into words, how to listen more effectively, respond more appropriately to what others have said and, most important of all, how to maintain and develop good interpersonal relationships with their families, their peers and fellow workers. Emphasis is placed on small-group activities, interviewing skills and both verbal and non-verbal communication.

Health Sciences

Allied Health

ALH 001   CPR for Healthcare Providers   0.0 Cr Hr
Prepares healthcare providers to perform basic life support following American Heart Association guidelines. Specific skills presented include one- and two-rescuer CPR for adults, children and infants, Cricoid pressure, barrier devices, advanced airway and bag-valve-mask ventilation, relief of choking and Automated External Defibrillator. Instruction also includes hands-on manikin practice and written testing.

ALH 002   Certified Nurse Aide Update   0.0 Cr Hr
Provides the continuing education required by the Kansas Department of Health and Environment (KDHE) for renewal of the certified nurse aide (CNA) certificate when CNA is not gainfully employed. (12 contact hours) *Prerequisite: GRA 101 Certified Nurse Aide.*

ALH 003   ServSafe   1.0 Cr Hr
A nationally recognized course for food service employees or management. Presents the fundamental concepts of food safety and applies these concepts to the operation of a food service operation. Course is updated with the changes in the FDA Model Food Code. Hazard Analysis Critical Control Point (HACCP) principles are included in the course.

ALH 150   Assisted Living Operator Training   2.0 Cr Hrs
Approved by the Kansas Department of Health and Environment as meeting the requirement that operators of assisted living facilities, residential care facilities, home plus and adult day care facilities complete a course on principles of assisted living. In Kansas, operators must be 21 years of age and have a high school diploma or equivalent.

ALH 160   IV Therapy for LPNs   3.0 Cr Hrs
Prepares LPNs to perform activities as defined in KAR 60-16-102 (b). Presents knowledge, skills and competencies in administration of IV fluid therapy. Approved by the Kansas State Board of Nursing. *Prerequisite: LPN with proof of license. Contact practical nurse department chair for additional information.*

Certified Nurse Aide / Related Courses

ALH 002   Certified Nurse Aide Update   0.0 Cr Hr
Provides the continuing education required every two years by the Kansas Department of Health and Environment (KDHE) for renewal of the certified nurse aide (CNA) certificate when CNA is not gainfully employed. (12 contact hours) *Prerequisite: GRA 101 Certified Nurse Aide.*

ALH 150   Assisted Living Operator Training   2.0 Cr Hrs
Approved by the Kansas Department of Health and Environment as meeting the requirement that operators of assisted living facilities, residential care facilities, home plus and adult day care facilities complete a course on principles of assisted living. In Kansas, operators must be 21 years of age and have a high school diploma or equivalent.

GRA 019   Medication Aide Update   0.0 Cr Hr
Provides the continuing education required every two years by the Kansas Department of Health and Environment for renewal of the medication aide certificate. (12 contact hours) *Prerequisites: GRA 101 Certified Nurse Aide and GRA 119 Medication Aide.*

GRA 101   Certified Nurse Aide   5.0 Cr Hrs
Prepares students to be caregivers in nursing homes while working under the supervision of licensed nurses. Includes classroom instruction, laboratory and clinical experience. Program meets Kansas State Department of Health and Environment guidelines. Graduates may take the state examination to become a certified nurse aide.

GRA 108   Rehabilitation Aide   2.0 Cr Hrs
Provides the certified nurse aide additional training to assist physical and occupational therapists in long-term care settings. *Prerequisite: GRA 101 Certified Nurse Aide or Kansas Certified Nurse Aide certification.*

GRA 110   Social Services Designee   2.0 Cr Hrs
Teaches how to assist a licensed social worker in a long-term care facility. Responsibilities include orientation of the resident and family to the facility, participation in care planning and maintenance of accurate records. *Prerequisite: Kansas Certified Nurse Aide certification or department approval.*

GRA 113   Activity Director   2.0 Cr Hrs
Teaches how to plan and implement a comprehensive activity program in a long-term care setting based on the physical and psychosocial needs of the resident. *Prerequisite: Kansas Certified Nurse Aide certification or department approval.*

GRA 116   Activity Director/Social Services Designee   3.0 Cr Hrs
Activity director: Teaches certified nurse aides (CNA) in long-term care settings how to plan and implement a comprehensive activity program based on the physical and psychosocial needs of residents.

Social service designee: Teaches CNAs how to assist licensed social workers in long-term care facilities. Responsibilities include orientation of residents and families to the facility, participation in care planning and maintenance of accurate records. (60 clock hours) *Prerequisite: GRA 101 Certified Nurse Aide or Kansas Certified Nurse Aide certification or department approval.*

GRA 119   Medication Aide   5.0 Cr Hrs
Focuses on the knowledge and skills needed for safe medication administration in long–term care facilities. Graduates are eligible to take the Kansas certification examination to become Certified Medication Aides (CMAs). *Prerequisite: GRA 101 Certified Nurse Aide or Kansas Certified Nurse Aide certification.*

HHA 100   Home Health Aide   2.0 Cr Hrs
Prepares the certified nurse aide (CNA) to care for clients in community and home settings. Graduates may take the Kansas certification examination to become a home health aide (HHA). *Prerequisite: GRA 101 Certified Nurse Aide or Kansas Certified Nurse Aide certification.*

Dental Assistant

DAS 020   Theoretical Application of Nitrous Oxide   0.0 Cr Hr
One-day course designed to prepare dental assistants to safely administer and monitor nitrous oxide/oxygen inhalation sedation. (6 clock hours) *Prerequisite: Must be a current WATC dental assistant student or graduate of a formal dental assistant education program or have two years work experience as a dental assistant and current CPR certification.*

DAS 102   Fundamentals in Dental Assisting   3.0 Cr Hrs
Introduces the profession of dental assisting, which includes educational requirements, functions and credentials of dental health team members, ethics and legal aspects of dentistry, dental terminology, basic dental business office skills and communication skills. *Prerequisite: Admission to Dental Assistant program.*

DAS 107   Anatomy for Dental Assistants   1.0 Cr Hr
Covers basic structures and functions of human body systems with emphasis on the head and neck. The primary and permanent teeth are studied in detail with respect to macroscopic anatomy, development, eruption, positional and occlusal relationships. Includes tooth drawing and placement of restorations in mannequin teeth. *Prerequisite: Admission to Dental Assistant program.*

DAS 108   Dental Health Education   2.0 Cr Hrs
Covers basic study of nutrition and diet and relationship to oral health with emphasis on dental health education, the philosophy of preventive dentistry, personal oral hygiene and dental disease. Basic skills of oral hygiene instruction, fluoride treatments and coronal polishing of the teeth will be implemented. *Prerequisites: Admission to Dental Assistant program and concurrent registration in DAS 112 Dental Materials I and DAS 115 Chairside Assisting I.*

DAS 111   Fundamentals in Dental Assisting II   2.0 Cr Hrs
Covers dental terminology and spelling; dental charting; introductory business office procedures, including greeting and receiving patients, telephone technique, filing and patient record management, appointment scheduling and recall. *Prerequisite: Completion of DAS 102 Fundamentals in Dental Assisting.*

DAS 112   Dental Materials I   3.0 Cr Hrs
Covers identification of materials used in general dentistry; physical and chemical properties, functions and classifications. Includes principles of safety and aseptic technique involved in working with materials and equipment. Laboratory practice with impression materials and gypsum products. *Prerequisites:*

Admission to Dental Assistant program and completion or concurrent enrollment in DAS 115 Chairside Assisting I and DAS 119 Dental Anatomy.

DAS 115   Chairside Assisting I   4.0 Cr Hrs
Introduction to dental equipment, hand and rotary instruments, basic duties and responsibilities of the chairside assistant such as seating and dismissing the patient, oral evacuation, retraction and instrument transfer. Introduction to principles of microbiology, disease transmission, standard precautions and infection control techniques according to OSHA and ADA guidelines. *Prerequisites: Admission into the Dental Assistant program and completion or concurrent enrollment in DAS 112 Dental Materials I and DAS 119 Dental Anatomy.*

DAS 118   Dental Radiology I   2.0 Cr Hrs
Basic principles of diagnostic radiology, equipment, radiation characteristics, radiation biology, protective measures and regulations, bisecting angle and paralleling techniques, extraoral radiology and anatomical landmarks. Instruction and laboratory techniques include exposure, processing, mounting and evaluation of dental films using the Dxttr mannequin. *Prerequisites: Admission to the Dental Assistant program and completion or concurrent enrollment in DAS 107 Anatomy for Dental Assistants and DAS 115 Chairside Assisting I.*

DAS 119   Dental Anatomy   2.0 Cr Hrs
Covers the development of the oral cavity, teeth and supporting structures. The primary and permanent teeth are studied in detail as well as the major anatomic landmarks of the head and neck. Includes tooth drawing and placement of restorations in manikin teeth. *Prerequisites: Admission into the Dental Assistant program and completion or concurrent enrollment in DAS 107 Anatomy for Dental Assistants.*

DAS 125   Dental Science I   2.0 Cr Hrs
Provides students with knowledge of medical emergencies that may arise in the dental setting. Students are expected to recognize signs and symptoms of specific emergencies to assist in the delivery of the suggested treatment. CPR for the health-care professional, basic first aid and skills in taking and recording vital signs will be taught. Pharmacology for the dental assistant and theoretical application of nitrous oxide is also included. *Prerequisites: DAS 107 Anatomy for Dental Assistants and DAS 135 Chairside Assisting II.*

DAS 129   Dental Science II   1.0 Cr Hr
Study of disease processes, especially those involving the oral cavity. *Prerequisites: DAS 107 Anatomy for Dental Assistants, DAS 119 Dental Anatomy and concurrent enrollment in DAS 155 Chairside Assisting IV.*

DAS 132   Dental Materials II   2.0 Cr Hrs
Continuation of DAS 112 Dental Materials I. Laboratory practice with dental cements, waxes, resins and restorative materials. Custom trays, dies, articulated models and temporary crowns are fabricated. *Prerequisite: Completion of DAS 112 Dental Materials I.*

DAS 135   Chairside Assisting II   3.0 Cr Hrs
Continuing practice of clinical dental assisting skills plus study of dental anesthesia, restorative dentistry with practice in application of matrix bands and dental dams and fixed prosthodontics. *Prerequisite: Completion of DAS 115 Chairside Assisting I.*

DAS 138   Dental Radiology II   2.0 Cr Hrs
Continuation of DAS 118 Dental Radiology I with more intensive experience in exposing, processing and mounting intraoral x-ray films using the Dxttr mannequin and patients. Students are closely supervised and an evaluation will be made of each completed survey. Radiographic safety and infection control procedures are emphasized. *Prerequisite: DAS 118 Dental Radiology I.*

DAS 142   Dental Office Procedures   2.0 Cr Hrs
Provides instruction in additional business office procedures: supplies and inventory, expenses and disbursements, banking procedures, recording fees charged and paid, collections, computer applications in the dental office and dental insurance. Job-seeking skills are also included. *Prerequisites: DAS 111 Fundamentals in Dental Assisting II and concurrent enrollment in DAS 145 Chairside Assisting III and DAS 155 Chairside Assisting IV.*

DAS 143   Dental Materials III   1.0 Cr Hr
Continuation of Dental Materials I and II. This course includes identification of materials used in general dentistry and dental laboratory procedures. Proper manipulation of materials, their uses and correct storage are practiced. Various laboratory procedures including waxing, investing and casting of a crown, construction of baseplates and bite rims, bleaching trays and an orthodontic retainer are practiced. Student are instructed in and expected to demonstrate the safe operation of laboratory equipment. *Prerequisites: DAS 132 Dental Materials II and concurrent enrollment in DAS 145 Chairside Assisting III.*

DAS 144   Clinical Externship I   4.0 Cr Hrs
Opportunity to apply and practice the principles and procedures studied in the formal academic program. In private practice dental offices (both general practice and specialty offices), government clinics and public health facilities, students demonstrate the principles of chairside assisting, dental laboratory procedures and dental office procedures. *Prerequisites: Concurrent enrollment in DAS 125 Dental Science I, DAS 138 Dental Radiology II, DAS 143 Dental Materials III and DAS 145 Chairside Assisting III.*

DAS 145   Chairside Assisting III   1.0 Cr Hr
Continuation of Chairside Assisting I and II. This course provides a foundation for assisting in the dental specialties of oral and maxillofacial surgery, endodontics and removable prosthodontics. Procedures, instruments and materials involved in these areas are studied. *Prerequisites: DAS 135 Chairside Assisting II and concurrent enrollment in DAS 143 Dental Materials III.*

DAS 155   Chairside Assisting IV   1.0 Cr Hr
Continuation of Chairside Assisting I, II and III. This course provides a foundation for assisting in the dental specialties of periodontics, orthodontics and dentofacial orthopedics and pediatric dentistry. Procedures, instruments and materials involved in these areas are studied. *Prerequisites: DAS 145 Chairside Assisting III and concurrent enrollment in DAS 143 Dental Materials III.*

DAS 156   Clinical Externship II   4.0 Cr Hrs
In private practice dental offices (both general practice and specialty offices), government clinics and public health facilities, students demonstrate the principles of chairside assisting, dental laboratory procedures and business

office procedures. Scheduled clinical seminars provide opportunities to review and discuss experiences and procedures. *Prerequisites: Concurrent enrollment in DAS 129 Dental Science II, DAS 138 Dental Radiology II, DAS 142 Dental Office Procedures, DAS 143 Dental Materials III and DAS 155 Chairside Assisting IV.*

DAS 210   Expanded Fundamentals in Dental Assisting   4.0 Cr Hrs
Experienced dental assistants enhance their skills and knowledge beyond those obtained in the Dental Assistant core curriculum. Curriculum meets the current needs of the dental community. *Prerequisites: Must be a graduate of an ADA accredited dental program or CDA and three years employment as a dental assistant within the last five years.*

DAS 214   Supragingival Scaling for the Dental Assistant   4.0 Cr Hrs
Designed for experienced dental assistants to expand their skills in preventive dentistry with didactic, laboratory and clinical instruction in supragingival scaling and polishing. Includes review of dental anatomy and terminology, radiography and infection control, as well as didactic instruction in nutrition, periodontal disease, dental caries, oral hygiene instruction, topical fluoride, principles of instrumentation, communication skills and risk management. *Prerequisites: Graduate of an accredited dental assistant program and CDA and six months of experience as a dental assistant or three years employment as a dental assistant within the last five years or departmental consent.*

Dietary Manager / Related Courses

ALH 003   ServSafe   1.0 Cr Hr
A nationally recognized course for food-service employees or management. Presents the fundamental concepts of food safety and applies these concepts to the operation of a food-service operation. Course is updated with the changes in the FDA Model Food Code. Hazard Analysis Critical Control Point (HACCP) principles are included in the course.

CED 101   Computer Essentials   2.0 Cr Hrs
Develops students' computer literacy, keyboarding skills and meets the needs of students in associate degree and technical certificate programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets and graphical presentations in the Windows environment.

DME 120   Certified Dietary Manager Exam Review   1.0 Cr Hr
Prepares students who have completed an accredited dietary manager program to take the exam to qualify for certification as a dietary manager. Reviews food production and service, nutritional care, sanitation and food-service management principles. *Prerequisite: Completion of an accredited dietary manager program.*

DME 141   Sanitation and Safety   2.0 Cr Hrs
Describes the food-service manager's responsibilities for maintaining food safety including regulations, inspections and crisis management. Teaches food code requirements, techniques for safe handling of food and the HACCP food safety system. *Prerequisite: Concurrent employment in institutional food service.*

DME 157   Nutrition Management   5.0 Cr Hrs
Studies the principles of basic nutrition and diet therapy including nutrition screening and modified diets, the

care planning process, responsibilities of various health-care providers on the care team, evaluation of care given and practices medical terminology and documentation. *Prerequisite: Concurrent employment in institutional food service.*

DME 158   Managing Food Service Operations   5.0 Cr Hrs
Introduces students to organization and management including personnel, financial and time-management skills. Covers the principles of quantity food production and delivery, menu planning, purchasing and inventory control and basic skills for managing budgets. *Prerequisite: Concurrent employment in institutional food service.*

Health Care

DAS 210   Expanded Fundamentals in Dental Assisting   4.0 Cr Hrs
Provides a review of dental anatomy and terminology, cavity classifications, charting, temporary and restorative dental materials, matrices and dental dam and principles of instrumentation. Lab experiences include placing and carving amalgams, placing and finishing composite and glass ionomer restorations, fabrication of provisional coverages, sealants, denture repair and using the intraoral camera. Learning experiences are designed in accordance with the Kansas State Dental Practice Act as defined by the Kansas Dental Board. *Prerequisite: Graduate of an accredited Dental Assistant program.*

DAS 214   Supragingival Scaling for the Dental Assistant 4.0 Cr Hrs
Includes review of dental anatomy and terminology, radiography and infection control and didactic instruction in nutrition, periodontal disease, dental caries, oral hygiene instruction, topical fluoride, principles of instrumentation, communication skills and risk management. Lab and clinical experiences provide instruction and practice of coronal polishing, supragingival scaling, fluoride treatment, charting, patient instruction and instrument use and sharpening. These activities are designed in accordance with the Kansas State Dental Practice Act as defined by the Kansas Dental Board. *Prerequisite: Graduate of an accredited Dental Assistant program.*

ENG 101   English Composition I   3.0 Cr. Hrs
Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.*

HHS 210   Health Care Practice Management   4.0 Cr Hrs
Examines organizational principles and practices in the management of health service organizations and includes an overall perspective on the study of health services organizations: the managerial role — motivation, leadership, conflict management and negotiation, job analysis and work design, coordination and communication, managing power and political processes, organizational design and performance, strategic alliances, innovation and change and future issues and challenges. *Prerequisite: Graduate of an accredited Dental Assistant, Medical Assistant or Surgical Technology program.*

HHS 212   Legal and Ethical Issues in Health Care   4.0 Cr Hrs
Explores the legal, ethical and political issues related to health-care workers. Topics studied are medical practice, sources of law and governmental organizations, state practice acts, implementing change, professional organizations, patient records, business structure of the health-care practice, government regulations, employment law and professional ethics. Includes introduction to and application of research methods and quality assurance policies and procedures. *Prerequisite: Graduate of an accredited Dental Assistant, Medical Assistant or Surgical Technology program.*

HHS 214   Seminar in Health Sciences   2.0 Cr Hrs
Students develop a self-study plan to review and enhance clinical skills or to investigate a concept related to their respective professional area. *Prerequisite: Graduate of an accredited Dental Assistant, Medical Assistant or Surgical Technology program.*

MEA 210   Advanced Procedures in Medical Assisting   4.0 Cr Hrs
Provides Medical Assistant graduates opportunities to expand current knowledge and expertise in specialized testing areas and in assisting with the performance of more complex clinical duties. *Prerequisite: Graduate of an accredited Medical Assistant program.*

MTH 101   Intermediate Algebra   3.0 Cr. Hrs
Simplifying algebraic expressions. Solving equations and word problems involving linear and quadratic polynomials, rational expressions, rational exponents and radicals. Graphing linear and quadratic functions. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: Minimum grade of C in EBS 120 Elementary Algebra or satisfactory course placement assessment scores. This course does not count toward AS, AA, AGS or AAS degrees to fulfill a math requirement.*

SGT 235   Specialty Surgical Practice   4.0 Cr Hrs
Provides Surgical Technology graduates opportunities to expand current knowledge and expertise in specialized surgical areas and in assisting with the performance of more complex surgical duties. Covers transplant, trauma, ophthalmology, cardiac, orthopedic, plastic and neurological surgeries. Students select two specialty areas. During the course, students are expected to apply and build on previous surgical knowledge and experiences. *Prerequisite: Graduate of an accredited Surgical Technology program.*

PSY 101   General Psychology   3.0 Cr. Hrs
A general introduction to the scientific study of human behavior as it applies to daily living. The scope of this course includes history, basic theories and biological bases of behavior, development, cognitive processes, individual awareness, motivation, emotion, personal adjustment and social psychology.

SOC 101   Introduction to Sociology   3.0 Cr. Hrs
An introductory study to acquaint students with the influence of human social behavior. Sociology studies the processes and patterns of individuals and group interaction by acquainting students with the development, characteristics and functioning of human groups, the relationships between groups and group influences on individual behavior. It includes the study of how social relationships are created, maintained and changed.

SPH 101   Introduction to Public Speaking   3.0 Cr. Hrs
Fundamental basic to all good private and public speaking experiences; elements in voice production and improvement, bodily movement, confidence, poise, understanding of all types of public speeches. Required of all transfer curricula.

Medical Assistant

CED 115   Computer Applications   3.0 Cr. Hrs
Develops students' computer literacy and meets the needs of students in associate degree programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets, database management and graphical presentations in the Windows environment. *Prerequisite: Students are encouraged to complete a self-assessment to determine skill set prior to enrolling in this course.*

MEA 101   Professional Issues *   2.0 Cr Hrs
Focuses on the basic concepts in the professional practice of medicine and the role and function of the medical assistant. Students discuss personal and professional characteristics and legal and ethical standards for medical assistants, explores professional and personal therapeutic communications and addresses time management and goal setting. (30 clock hours) *Prerequisite: Admission to Medical Assistant program.*

MEA 103   Medical Terminology *   2.0 Cr Hrs
Focuses on introduction to medical terminology. Vocabulary is explored to structure of words, prefixes, suffixes and root words. Emphasis is on proper usage, pronunciation, spelling and definition of each of the structures commonly used in the medical field. (30 clock hours)

MEA 110   Human Body   5.0 Cr Hrs
Discusses the basic structure and function of the human body, from cells through systems to the human organism, with emphasis on the interaction of systems and physiological functions. Includes lecture and laboratory work. (90 clock hours)

MEA 111   Patient Care I   5.0 Cr Hrs
Introduces basic clinical skills necessary for medical assistants. Presents aseptic practices for the medical office and studies patient interaction, such as interviewing, obtaining, evaluating and documenting vital signs and assisting with basic physical exams and testing. (120 clock hours) *Prerequisites: Admission to Medical Assistant program and completion or concurrent registration in MEA 110 Human Body or Anatomy and Physiology with a laboratory component.*

MEA 113   Administrative Aspects I *   3.0 Cr Hrs
Contains the administrative skills of the health-care team member. Skills include effective telephone techniques, scheduling patients for appointments, management of facilities, record management and use of office equipment. (75 clock hours) *Prerequisites: Admission to Medical Assistant program and documentation showing concurrent enrollment or completion of a college-level computer course within the last five years.*

MEA 115   Insurance Billing and Coding *   3.0 Cr Hrs
Educates the health-care team member on the mechanics of submission of electronic/paper insurance claim forms and current industry coding for medical office treatments and procedures. (60 clock hours) *Prerequisites: Admission to Medical Assistant program and completion or concurrent registration in MEA 113 Administrative Aspects for Medical*

Assisting I. Insurance Billing and Coding may also be taken as an open-enrollment course with instructor's approval.

MEA 117   Pharmacology *   5.0 Cr Hrs
Focuses on the medical assistant's role in the calculation, preparation and administration of various medications. Studies administration of topical, oral and buccal medications; return demonstrations are required. (105 clock hours) *Prerequisites: Admission to Medical Assistant program and completion or concurrent registration in MEA 111 Patient Care I.*

MEA 120   Diagnostic Procedures   2.0 Cr Hrs
Focuses on the specialized procedures associated with the human body. Students perform pulmonary function testing, electrocardiograms and learn basic EKG interpretation. (45 clock hours) *Prerequisites: Successful completion of all Medical Assistant program first-semester coursework and competencies. Diagnostic Procedures may also be taken as an open-enrollment course, with instructor's approval.*

MEA 121   Patient Care II   5.0 Cr Hrs
Focuses on expanding the knowledge gained in MEA 111 Patient Care I and MEA 117 Pharmacology for Medical Assistants. Explores more complex and independent procedures performed by medical assistants. Minor surgical procedures, physical therapy, sterile procedures, emergency procedures and medication administration by injection and intravenous are addressed. Return demonstration and competency are required. (120 clock hours) *Prerequisites: Successful completion of all Medical Assistant program first-semester coursework and competencies.*

MEA 123   Administrative Aspects II   1.0 Cr Hr
This upper-level course combines previous coursework as an introduction to the expanded role of the medical assistant as the medical office manager. Students design and produce patient information documents. Students perform proofreading on a variety of medical document seen in the medical office. Professional communications, job-seeking and interviewing skills are expanded through résumé writing and the creation of job descriptions applicable to the Medical Assistant. (30 clock hours) *Prerequisites: Successful completion of all Medical Assistant program first-semester coursework and competencies.*

MEA 125   Clinical Laboratory Procedures *   4.0 Cr Hrs
Addresses the role and function of the professional in the clinical laboratory setting. Topics include safety, Clinical Laboratory Improvement Act of 1988 (CLIA-88) government regulations and quality assurance in the laboratory. Students learn concepts and perform procedures in the different departments of the laboratory, including specimen collection and performance of CLIA-88 low- and/or moderate-complexity testing. Students demonstrate competencies in a wide variety of techniques used to collect, process and test specimens. (90 clock hours) *Prerequisites: Successful completion of all Medical Assistant program first-semester coursework and competencies.*

MEA 131   Externship in Medical Assisting   6.0 Cr Hrs
The application phase of the Medical Assistant program is designed to give students an opportunity to apply and practice the principles and procedures learned while participating in supervised, non-remunerative externship experiences in physicians' offices and clinics. Students are expected to adapt to individual medical office's rules and routines. Evaluation is based on student's preparation for duties, active participation,

attendance and professionalism. Guidelines and participation requirements specific to the externship are explained. (240 clock hours) *Prerequisites: Successful completion of all Medical Assistant program first-semester coursework and competencies. Minimum grade of C in all second-semester coursework that has been completed or is running concurrently with MEA 131 Externship in Medical Assisting.*

* *Kansas Workforce Education Curriculum (KWEC) state curriculum.*

Phlebotomist

MLT 160   Concepts of Phlebotomy   4.0 Cr Hrs
Develops students' interpersonal and technical skills that are required for competent blood specimen collection in both hospital and outpatient settings. Includes classroom lecture to develop medical terminology and basic understanding of laboratory specimen collection techniques and methods. Emphasis is given to professional behavior, proper patient identification and procedures for a variety of sample collection methods. A grade of C or better is required in this course to be eligible for enrollment in MLT 170 Phlebotomy Internship. *Prerequisite: Meet requirements for Health Sciences programs.*

MLT 161   Phlebotomy Lab   4.0 Cr Hrs
Develops the laboratory skills required of a phlebotomist. Application of current laboratory safety and infection control practices while performing clinical laboratory specimen collection and processing. Simulated laboratory practice of phlebotomy skills includes utilizing artificial arms to start and progressing to real (student) arms. Reinforces material related to the clinical practice of phlebotomy. A grade of C or better is required in this course to be eligible for enrollment in MLT 170 Phlebotomy Internship. *Prerequisite: Taken concurrently with MLT 160 Concepts of Phlebotomy.*

MLT 170   Phlebotomy Internship   4.0 Cr Hrs
Supervised phlebotomy experience in a health-care facility. Students are assigned to affiliated clinical laboratories. Provides students with opportunity to apply knowledge and skill in performing clinical phlebotomy procedures. Professional attitudes are developed by interacting with other health-care professionals and consumers. Graduates are eligible to take a national phlebotomy certification exam. *Prerequisite: Successful completion of MLT 160 Concepts of Phlebotomy and MLT 161 Phlebotomy Lab.*

Practical Nurse

ALH 001   CPR for Healthcare Providers *   0.0 Cr. Hrs
Prepares healthcare providers to perform basic life support following American Heart Association guidelines. Specific skills presented include one- and two-rescuer CPR for adults, children and infants, Cricoid pressure, barrier devices, advanced airway and bag-valve-mask ventilation, relief of choking and Automated External Defibrillator. Instruction also includes hands-on manikin practice and written testing.

MEA 110   Human Body *   5.0 Cr. Hrs
Discusses the basic structure and function of the human body, from cells through systems to the human organism, with emphasis on the interaction of systems and physiological functions. Includes lecture and laboratory work. (90 clock hours) *May take MEA 110 Human Body or Anatomy and Physiology.*

PNR 109   Pharmacology   4.0 Cr Hrs
Introduces pharmaco-therapeutic principles and nursing process relevant to safe administration of drug therapy. A 15-hour lab correlates with theory and assists students with safe drug administration techniques. *Prerequisite: Admission into the Practical Nurse program or department consent.*

PNR 111   Principles of Nutrition *   3.0 Cr Hrs
Presents basic principles of nutritional needs and application of these principles in the maintenance and restoration of health. Emphasis is placed on the essential nutrients and how they may be obtained in both normal and therapeutic diets. (45 clock hours) *Prerequisite: Course must be taken prior to admission into the Practical Nurse program.*

PNR 114   Orientation to Nursing   2.0 Cr Hrs
Emphasizes the history of nursing, the nursing process, communication techniques, critical thinking, introduction to the scope of practice and the Kansas Nurse Practice Act. *Prerequisite: Admission into the Practical Nurse program or department consent.*

PNR 115   Fundamentals of Nursing I   2.0 Cr Hrs
Presents basic principles and skills necessary for patient care using the nursing process to identify patients' needs and provide care. A 30-hour lab correlates with theory and allows students to progress in nursing skills. *Prerequisite: Admission into the Practical Nurse program or department consent.*

PNR 116   Fundamentals of Nursing II   8.0 Cr Hrs
Continuation of PNR 115 Fundamentals of Nursing I with emphasis on more advanced principles and skills necessary for patient care while using the nursing process. A 30-hour lab correlates with theory and allows students to progress in nursing skills. *Prerequisite: Successful completion of PNR 115 Fundamentals of Nursing I.*

Clinical component of Fundamentals of Nursing: This experience correlates with theory and allows students to progress in nursing skills and function with other members of the health-care team in acute care and long-term care settings. *Prerequisite: Admission into the Practical Nurse program or department consent.*

PNR 150   Practical Nursing Issues   2.0 Cr Hrs
Assists students in making the transition from student to beginning practitioner. Emphasizes ethical, legal and cultural aspects of nursing and responsibilities of LPNs. Emphasizes the need for personal and professional growth. Introduces students to organizations, employment and educational opportunities. *Prerequisite: Satisfactory completion of first semester.*

PNR 160   Nursing Care of the Family   6.0 Cr Hrs
Covers the needs of obstetric patients and their families, including newborn infants and children through adolescence. Emphasis is placed on the practical nurse role in the prevention and treatment of common obstetrical problems and childhood illnesses. Clinical experience applies principles of nutrition and pharmacology to the needs of mothers and growing children. *Prerequisite: Satisfactory completion of first semester.*

PNR 162   Medical/Surgical Nursing I   3.0 Cr Hrs
Covers medical/surgical nursing care with emphasis on the physiological and psychological aspects of disease and the effects of disease on the whole person. *Prerequisite: Admission into the Practical Nurse program or department consent.*

PNR 163   Medical/Surgical Nursing II   6.0 Cr Hrs
Covers medical/surgical nursing care with emphasis on the physiological and psychological aspects of disease and the effects of disease on the whole person. Clinical experience in acute-care facilities provides application of the nursing process in the total care of patients including patient education and medical administration. *Prerequisite: Satisfactory completion of first semester.*

PNR 164   Mental Health Concepts   1.0 Cr Hr
Uses the nursing process to meet the needs of patients with mental health disorders. *Prerequisite: Satisfactory completion of first semester.*

PNR 165   Gerontology   6.0 Cr Hrs
Uses the nursing process to meet the needs of older adult patients in long-term care facilities. Provides experience in drug administration and team leadership. *Prerequisite: Satisfactory completion of first semester.*

PSY 101   General Psychology *   3.0 Cr. Hrs
A general introduction to the scientific study of human behavior as it applies to daily living. The scope of this course includes history, basic theories and biological bases of behavior, development, cognitive processes, individual awareness, motivation, emotion, personal adjustment and social psychology.

PSY 120   Developmental Psychology   3.0 Cr Hrs
A study of individual development from conception through death. This includes the general areas of biological, physical, cognitive, social, emotional and personality development at each stage of life. *Prerequisite: PSY 101 General Psychology.*

* Prerequisite course for Practical Nurse program.

Certificate of Completion

Upon licensure, students may register for IV Therapy for LPNs.

ALH 160   IV Therapy for LPNs   3.0 Cr Hrs
Prepares LPNs to perform activities as defined in KAR 60-16-102(b). Presents knowledge, skills and competencies in administration of IV fluid therapy. Approved by the Kansas State Board of Nursing. *Prerequisite: LPN with proof of license. Contact Practical Nurse department chair for additional information.*

Surgical Technology

ALH 001   CPR for Healthcare Providers *   0.0 Cr. Hrs
Prepares healthcare providers to perform basic life support following American Heart Association guidelines. Specific skills presented include one- and two-rescuer CPR for adults, children and infants, Cricoid pressure, barrier devices, advanced airway and bag-valve-mask ventilation, relief of choking and Automated External Defibrillator. Instruction also includes hands-on manikin practice and written testing.

CED 200   Introduction to MS Office *   3.0 Cr. Hrs
Provides a basic understanding of computer terminology and software concepts for students who have little or no previous computer experience. Students are exposed to Windows, word processing, spreadsheets and database systems. *Prerequisite: Typing speed of 20 wpm or instructor consent.*

MEA 110   Human Body *   5.0 Cr. Hrs
Discusses the basic structure and function of the human body, from cells through systems to the human organism, with emphasis on the interaction of systems and physiological functions. Includes lecture and laboratory work. (90 clock hours) *May take MEA 110 Human Body or Anatomy and Physiology.*

SGT 101   Introduction to Surgical Technology   2.0 Cr Hrs
Introduces the roles and functions of surgical team members and operating room organization. Presents legal and ethical issues, division of duties, hospital organization and management, medical terminology, basic communication skills and interpersonal relationships. *Prerequisite: Admission to Surgical Technology program.*

SGT 105   Microbiology for Surgical Technology   3.0 Cr Hrs
Presents principles of microbiology, disease transmission, universal precautions, infection-control techniques and wound-healing concepts. *Prerequisite: Admission to Surgical Technology program or departmental consent.*

SGT 107   Pharmacology for Surgical Technology   2.0 Cr Hrs
Presents systems of measurement with the equivalents of weights, capacity, length of duration and availability of drugs that are commonly used in surgery. Discusses preoperative medications, types of anesthesia and agents used to obtain anesthesia. *Prerequisites: Completion or concurrent registration in SGT 101 Introduction to Surgical Technology and SGT 103 Microbiology for Surgical Technology.*

SGT 111   Patient Care I   3.0 Cr Hrs
Emphasizes pre-, intra- and post-operative care of the surgical patient. Includes specific application in preoperative case management, patient safety and potential complications for surgical patients. *Prerequisites: Completion or concurrent registration in SGT 120 Principles and Practices in Surgical Technology, SGT 105 Microbiology for Surgical Technology and SGT 107 Pharmacology for Surgical Technology.*

SGT 115   Surgical Procedures I   5.0 Cr Hrs
Coordinates study of theoretical and practical applications of various surgical procedures. Emphasis is placed on pathology, a methodical approach to surgical procedures and preparation and application of aseptic techniques with extensive laboratory experience to develop critical skills that are required to function in the operating-room environment. *Prerequisites: Completion or concurrent registration in SGT 120 Principles and Practices in Surgical Technology, SGT 105 Microbiology for Surgical Technology, SGT 107 Pharmacology for Surgical Technology and SGT 111 Patient Care I.*

SGT 116   Surgical Instruments   2.0 Cr Hrs
Covers basic instrumentation for each surgical specialty. Emphasizes proper names, common names used in surgery, handling and care of all surgical instruments and performing basic setup. *Prerequisite: Completion or concurrent registration in SGT 115 Surgical Procedures I.*

SGT 119   Surgical Technology Clinical Experience I   1.0 Cr Hr
Allows students to participate in supervised, non-remunerative clinical experiences in hospital operating rooms with emphasis on general surgical procedures. *Prerequisites: Completion or concurrent registration in SGT 111 Patient Care I and SGT 115 Surgical Procedures I.*

**SGT 120   Principles and Practices in
                      Surgical Technology   5.0 Cr Hrs**
Presents basic principles and practices necessary to prepare students for clinical experiences. Aseptic techniques and supplies, equipment, sterilization, disinfection and decontamination are major components of the course. Includes rotations through central processing, preoperative care and transportation areas. *Prerequisites: Completion or concurrent registration in SGT 101 Introduction to Surgical Technology and SGT 105 Microbiology for Surgical Technology.*

SGT 121   Patient Care II   2.0 Cr Hrs
Continuation of SGT 111 Patient Care I with discussions about catheterization, biopsychosocial needs of patients, death and dying and the surgical technologist's role in emergency procedures. *Prerequisites: Concurrent registration in SGT 125 Surgical Procedures II and SGT 129 Clinical Experience II.*

SGT 125   Surgical Procedures II   4.0 Cr Hrs
Continuation of SGT 115 Surgical Procedures I. Studies more specialized surgeries to expand the knowledge of supplies, equipment and steps involved in more complex surgeries. *Prerequisites: Concurrent registration in SGT 121 Patient Care II and SGT 129 Clinical Experience II.*

SGT 129   Surgical Technology Clinical Experience II   4.0 Cr Hrs
Students are assigned to supervised, non-remunerative clinical practice in hospital operating rooms approximately 24 hours per week. Emphasis is placed on clinical specialties, such as general, gynecology, genito/urinary, EENT with rotations through endoscopy and labor and delivery. *Prerequisites: Concurrent registration in SGT 121 Patient Care II and SGT 125 Surgical Procedures II.*

SGT 130   Surgical Technology Clinical Experience III   4.0 Cr Hrs
Students are assigned to supervised, non-remunerative clinical practice in hospital operating rooms approximately 24 hours per week. Emphasis is placed on clinical specialties, such as orthopedics and neurosurgery with rotations through post-anesthesia rooms. *Prerequisites: Concurrent registration in SGT 121 Patient Care II and SGT 125 Surgical Procedures II.*

SGT 131   Surgical Technology Clinical Experience IV   3.0 Cr Hrs
Students are assigned to supervised, non-remunerative clinical practice in hospital operating rooms approximately 24 hours per week. Emphasis is placed on clinical specialties, such as thoracic and cardiovascular with rotations through cardiac catheterization. *Prerequisites: Concurrent registration in SGT 121 Patient Care II and SGT 125 Surgical Procedures II.*

SGT 133   Professional Issues in Surgical Technology   2.0 Cr Hrs
Explores ways of transitioning from student to employment as a beginning surgical technologist in the operating suite. Skills necessary for successful employment are reinforced and opportunities for personal and professional growth are stressed. Explores basic principles of physics, robotics and electricity, how they relate to today's surgical environment and how they may be used in surgeries in the future. *Prerequisite: Concurrent registration in SGT 129 Clinical Experience II.*

* Prerequisite course for Surgical Technology program.

Manufacturing and Engineering Technology

Architectural Design Technology

CED 101   Computer Essentials   2.0 Cr Hrs
Develops students' computer literacy, keyboarding skills and meets the needs of students in associate degree and technical certificate programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets and graphical presentations in the Windows environment.

CON 171   Hand and Power Tools   1.0 Cr. Hrs
Introduces students to the various hand and power tools used in the aviation industry specifically related to those in their specific occupational area. The correct and safe use of hand and power tools is 60 percent of the class. Students are required to pass a written and performance safety test on all power equipment used for 40 percent of the class.

EBS 115   Pre-Algebra   3.0 Cr Hrs
Arithmetic with fractions, decimals and percents. Introduction to the metric system. Applications to measurement and consumer math. This course does not count toward AS, AA, AGS or AAS degrees.

EMP 100   Employability Skills   2.0 Cr. Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

ENG 101   English Composition I   3.0 Cr Hrs
Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.*

MCD 112   Industrial Materials and Processes   2.0 Cr Hrs
Includes instruction in materials, measurement, specifications, design principles, hardware and fasteners, vocabulary, machine fabrication, Geometric Dimensioning and Tolerance (GD&T), Machinery's Handbook, surface finishes and an understanding of the fabrication practices used in manufacturing and construction.

MCD 113   Technical Drafting   3.0 Cr Hrs
Includes instruction in sketching and lettering, use and care of drafting equipment, geometric construction, multi-views, basics of isometrics, oblique projection and a study of drafting technology and ANSI Standards. Students draw introductory drawings to scale.

MCD 114   Architectural Drafting and Design   3.0 Cr Hrs
Includes instruction in freehand drawing, basic residential planning, creative design, dimensioning, working details,

light construction principles, building systems and blueprint development, learning construction terminology, applying ANSI Standards, local codes and drawing prints to industry standards. *Prerequisite: MCD 116 Introduction to CAD or instructor approval.*

MCD 115   Machine Drafting and Design   3.0 Cr Hrs
Includes instruction in creative design, geometric construction, auxiliaries, dimensioning, sectioning, isometrics, obliques, specifications and notes, manufacturing engineering techniques and the Machinery's Handbook. Includes developing prints of working drawings, researching trade periodicals, learning machine terminology, using ANSI Standards and basic manufacturing blueprint development. *Prerequisites: MCD 113 Technical Drafting and MCD 121 Descriptive Geometry or instructor approval.*

MCD 116   Introduction to CAD   5.0 Cr Hrs
Introduces computer-aided drafting (CAD) and examines the hardware that makes up a CAD workstation. It also covers the operating system (Microsoft Windows) that enables the equipment to function as a unit. The course shows how to use AutoCAD to set up drawings and construct lines, circles, arcs, other shapes, geometric constructions and text. Students use display and editing techniques as well to obtain information about their drawings and work with drawing files. This course also introduces recommended drafting standards for students to use for properly preparing drawings with AutoCAD.

MCD 121   Descriptive Geometry   3.0 Cr Hrs
Students use computers to study descriptive geometry as it applies to drafting and they determine true length of lines, true shapes of planes and apply descriptive geometry to real problems. Students also create flat pattern layouts for form three dimensional shapes. *Prerequisite: MCD 116 Introduction to CAD or instructor approval.*

MCD 122   Architectural CAD   4.0 Cr Hrs
Students use computers for architectural detailing problems, working with foundation details, wall sections, roof details and stairway details. Using the computer, students draw a set of plans for a house of their own design. *Prerequisite: MCD 114 Architectural Drafting and Design or instructor approval.*

MCD 124   Advanced AutoCAD   4.0 Cr Hrs
Explores the three-dimensional construction and viewing capabilities of AutoCAD. Topics covered include a review of point coordinate entry and the user coordinate system (UCS). Spherical and cylindrical coordinate entry, 3D viewing and display techniques, construction of 3D solid primitives, 2D regions, solid modeling composites and surfaces are also introduced. The use of multiple viewports for 3D constructions and creating 2D layouts are covered. Visual styles and rendering are also discussed. *Prerequisite: MCD 115 Machine Drafting and Design or instructor approval.*

MCD 132   Basic Chief Architect/Architectural Desktop   3.0 Cr Hrs
Students use the computers to learn how to utilize three-dimensional software to design houses. This course provides instruction in how to use the software and draw walls, windows, doors, foundations and roofs. *Prerequisite: MCD 114 Architectural Drafting and Design or instructor approval.*

MCD 134   Advanced Chief Architect/Architectural Desktop   3.0 Cr Hrs
Students use the computers to learn how to utilize three-dimensional software to design houses. This course provides instruction in how to add interior furniture, terrains, elevations, working drawings, presentation drawings and how to use the camera functions. *Prerequisite: MCD 132 Basic Chief Architect or instructor approval.*

MCD 140   Drafting Internship   4.0 Cr Hrs
Introduces students to the application and reinforcement of drafting and employability principles in an actual job setting. This internship acquaints the student with realistic work situations and provides insights into a drafting job. Topics include appropriate work habits, acceptable job performance, application of drafting/CAD knowledge and skills, interpersonal relations and development of productivity. *Prerequisite: Instructor approval.*

MCD 203   Seminar on Architectural Design   3.0 Cr Hrs
An introductory course that emphasizes professional development though resources and artistic exploration. This course is held outside the classroom in real-world settings. Tours of museums, building of architectural interest and local vendors and showrooms are the target of this course. Students develop networking skills and create a resource library for future use in the field of architectural drafting.

MCD 204   Civil Drafting and Design   3.0 Cr Hrs
Emphasizes drawing assignments related to the most common mapping and civil site planning design problems. Topics include loan and boundary surveys, as-builts, plan and profile drawings, cross-sections, earth-work determination and grade determination.

MCD 205   Residential Drafting   3.0 Cr Hrs
Introduces architectural drawing skills necessary to produce a complete set of construction drawings given floor plan information. Topics include footing, foundation and floor plans; interior and exterior elevations; sections and details; window, door and finish schedules; site plans; and specifications.

MCD 206   Commercial Drafting and Design   3.0 Cr Hrs
Introduces commercial drawing skills necessary to produce construction drawings given floor plan information. Topics include structural steel detailing, reflected ceiling plans, rebar detailing and commercial construction drawings.

MCD 207   Pipe Drafting and Design   3.0 Cr Hrs
Enables students to understand the fundamentals of pipe drafting and their integration into computer-aided design (CAD). Student are introduced to valves, joints, fittings, pumps, tanks and vessels.

MTH 101   Intermediate Algebra   3.0 Cr Hrs
Simplifying algebraic expressions. Solving equations and word problems involving linear and quadratic polynomials, rational expressions, rational exponents and radicals. Graphing linear and quadratic functions. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: Minimum grade of C in EBS 120 Elementary Algebra or satisfactory course placement assessment scores. This course does not count toward AS, AA, AGS or AAS degrees to fulfill a math requirement.*

MTH 113   Trigonometry   3.0 Cr. Hrs
Trigonometric functions using the unit circle and right angle trigonometry, graphing applications, analytic trigonometry, vectors, trigonometric complex number applications, parametric and polar equations. This course requires that students furnish their own TI-83 or TI-83PLUS graphing calculator. *Prerequisites: Minimum grade of C in MTH 111 College Algebra with Review or MTH 112 College Algebra or 23 ACT math score.*

PSY 101   General Psychology   **3.0 Cr. Hrs**
A general introduction to the scientific study of human behavior as it applies to daily living. The scope of this course includes history, basic theories and biological bases of behavior, development, cognitive processes, individual awareness, motivation, emotion, personal adjustment and social psychology.

SPH 101   Introduction to Public Speaking   **3.0 Cr. Hrs**
Fundamental basic to all good private and public speaking experiences; elements in voice production and improvement, bodily movement, confidence, poise, understanding of all types of public speeches. Required of all transfer curricula.

Mechanical Design Technology

CED 101   Computer Essentials   **2.0 Cr Hrs**
Develops students' computer literacy, keyboarding skills and meets the needs of students in associate degree and technical certificate programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets and graphical presentations in the Windows environment.

EBS 115   Pre-Algebra   **3.0 Cr Hrs**
Arithmetic with fractions, decimals and percents. Introduction to the metric system. Applications to measurement and consumer math. This course does not count toward AS, AA, AGS or AAS degrees.

EMP 100   Employability Skills   **2.0 Cr. Hrs**
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

ENG 101   English Composition I   **3.0 Cr Hrs**
Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.*

MCD 110   Principles of Tool Design   **2.0 Cr Hrs**
Provides an understanding of the general methods of tool design with emphasis on jigs and fixtures. Instruction and projects enable students to develop ideas into practical specifications for modern manufacturing methods.

MCD 112   Industrial Materials and Processes   **2.0 Cr Hrs**
Includes instruction in materials, measurement, specifications, design principles, hardware and fasteners, vocabulary, machine fabrication, Geometric Dimensioning and Tolerance (GD&T), Machinery's Handbook, surface finishes and an understanding of the fabrication practices used in manufacturing and construction.

MCD 113   Technical Drafting   **3.0 Cr Hrs**
Includes instruction in sketching and lettering, use and care of drafting equipment, geometric construction, multi-views, basics of isometrics, oblique projection and a study of drafting technology and ANSI Standards. Students draw introductory drawings to scale.

MCD 114   Architectural Drafting and Design   **3.0 Cr Hrs**
Includes instruction in freehand drawing, basic residential planning, creative design, dimensioning, working details, light construction principles, building systems and blueprint development, learning construction terminology, applying ANSI Standards, local codes and drawing prints to industry standards. *Prerequisite: MCD 116 Introduction to CAD or instructor approval.*

MCD 115   Machine Drafting and Design   **3.0 Cr Hrs**
Includes instruction in creative design, geometric construction, auxiliaries, dimensioning, sectioning, isometrics, obliques, specifications and notes, manufacturing engineering techniques and the Machinery's Handbook. Includes developing prints of working drawings, researching trade periodicals, learning machine terminology, using ANSI Standards and basic manufacturing blueprint development. *Prerequisites: MCD 113 Technical Drafting and MCD 121 Descriptive Geometry or instructor approval.*

MCD 116   Introduction to CAD   **5.0 Cr Hrs**
Introduces computer-aided drafting (CAD) and examines the hardware that makes up a CAD workstation. It also covers the operating system (Microsoft Windows) that enables the equipment to function as a unit. The course shows how to use AutoCAD to set up drawings and construct lines, circles, arcs, other shapes, geometric constructions and text. Students use display and editing techniques as well to obtain information about their drawings and work with drawing files. This course also introduces recommended drafting standards for students to use for properly preparing drawings with AutoCAD.

MCD 121   Descriptive Geometry   **3.0 Cr Hrs**
Students use computers to study descriptive geometry as it applies to drafting and they determine true length of lines, true shapes of planes and apply descriptive geometry to real problems. Students also create flat pattern layouts for form three dimensional shapes. *Prerequisite: MCD 116 Introduction to CAD or instructor approval.*

MCD 124   Advanced AutoCAD   **4.0 Cr Hrs**
Explores the three-dimensional construction and viewing capabilities of AutoCAD. Topics covered include a review of point coordinate entry and the user coordinate system (UCS). Spherical and cylindrical coordinate entry, 3D viewing and display techniques, construction of 3D solid primitives, 2D regions, solid modeling composites and surfaces are also introduced. The use of multiple viewports for 3D constructions and creating 2D layouts are covered. Visual styles and rendering are also discussed. *Prerequisite: MCD 115 Machine Drafting and Design or instructor approval.*

MCD 130   Basic Solidworks   **5.0 Cr Hrs**
Students learn how to draw machine pars on the computer and the most common methods used to illustrate these parts. Students understand the method and reason for using these techniques. Students work in a parametric modeling program to complete all assignments for this course. *Prerequisite: MCD 124 Advanced AutoCAD or instructor approval.*

MCD 133   Advanced Solidworks   3.0 Cr Hrs
Students learn how to draw machine pars on the computer and the most common methods used to illustrate these parts. Students understand the method and reason for using these techniques. Students work in a parametric modeling program to complete all assignments for this course. Students will understand assembly drawings and how to convert these assembly drawings into a working print. *Prerequisite: MCD 130 Basic Solidworks or instructor approval.*

MCD 140   Drafting Internship   4.0 Cr Hrs
Introduces students to the application and reinforcement of drafting and employability principles in an actual job setting. This internship acquaints the student with realistic work situations and provides insights into a drafting job. Topics include appropriate work habits, acceptable job performance, application of drafting/CAD knowledge and skills, interpersonal relations and development of productivity. *Prerequisite: Instructor approval.*

MCD 201   Geometric Dimensioning and Tolerance   3.0 Cr Hrs
An in-depth study designed to develop a basic working knowledge in geometric dimensioning and tolerancing (GD&T). It is delivered per the ASME Y14.5M, 1994 standard. This program has been presented and refined over the past 25 years and covers what personnel need to know to work in an industrial environment on a daily basis. The course includes emphasis on all the basics, such as the rules, measurement theory, the datum reference frame, form, orientation, profile and positional tolerancing. The program materials contain a variety of computer color animated graphics, video clips and plastic models which allow students to clearly understand the concepts.

MCD 204   Civil Drafting   3.0 Cr Hrs
Emphasizes drawing assignments related to the most common mapping and civil site planning design problems. Topics include loan and boundary surveys, as-builts, plan and profile drawings, cross-sections, earth-work determination and grade determination.

MCD 207   Pipe Drafting and Design   3.0 Cr Hrs
Enables students to understand the fundamentals of pipe drafting and their integration into computer-aided design (CAD). Student are introduced to valves, joints, fittings, pumps, tanks and vessels.

MTH 101   Intermediate Algebra   3.0 Cr Hrs
Simplifying algebraic expressions. Solving equations and word problems involving linear and quadratic polynomials, rational expressions, rational exponents and radicals. Graphing linear and quadratic functions. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: Minimum grade of C in EBS 120 Elementary Algebra or satisfactory course placement assessment scores. This course does not count toward AS, AA, AGS or AAS degrees to fulfill a math requirement.*

MTH 113   Trigonometry   3.0 Cr. Hrs
Trigonometric functions using the unit circle and right angle trigonometry, graphing applications, analytic trigonometry, vectors, trigonometric complex number applications, parametric and polar equations. This course requires that students furnish their own TI-83 or TI-83PLUS graphing calculator. *Prerequisites: Minimum grade of C in MTH 111 College Algebra with Review or MTH 112 College Algebra or 23 ACT math score.*

PSY 101   General Psychology   3.0 Cr. Hrs
A general introduction to the scientific study of human behavior as it applies to daily living. The scope of this course includes history, basic theories and biological bases of behavior, development, cognitive processes, individual awareness, motivation, emotion, personal adjustment and social psychology.

SPH 101   Introduction to Public Speaking   3.0 Cr. Hrs
Fundamental basic to all good private and public speaking experiences; elements in voice production and improvement, bodily movement, confidence, poise, understanding of all types of public speeches. Required of all transfer curricula.

Machining Technology

CAT 101   CATIA Part Design and Sketcher   4.0 Cr Hrs
Core course of CATIA V5. Course covers the creation of solid parts without complex contours. Students are introduced to the part environment of CATIA V5 and learn how to work between the Sketcher and Part Design workbenches to create individual parts.

CAT 105   CATIA Prismatic   4.0 Cr Hrs
Extension of the part environment; covers the use of wireframe and surface geometry to create complex contours. Course concentrates on the tools available and how to integrate this geometry back into a solid part.

CED 101   Computer Essentials   2.0 Cr Hrs
Develops students' computer literacy, keyboarding skills and meets the needs of students in associate degree and technical certificate programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets and graphical presentations in the Windows environment.

EBS 115   Pre-Algebra   3.0 Cr Hrs
Arithmetic with fractions, decimals and percents. Introduction to the metric system. Applications to measurement and consumer math. This course does not count toward AS, AA, AGS or AAS degrees.

EMP 100   Employability Skills   2.0 Cr. Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

ENG 101   English Composition I   3.0 Cr Hrs
Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.*

MMG 102   Blueprint Reading I   2.0 Cr Hrs
Gives instruction in the universal language of drawing interpretation from which information is conveyed for the manufacture of parts and assemblies.

MMG 103   Blueprint Reading II   **3.0 Cr Hrs**
Continuation of MMG 102 Blueprint Reading I. Explores multi-view drawings, machining operations as they relate to drawing, auxiliary views and geometric dimensioning and tolerancing.

MMG 125   Introduction to CNC   **3.0 Cr Hrs**
Introduces basic computer numerical control (CNC) machining centers. Acquaints students with the Cartesian coordinate system, incremental and absolute measuring systems and how to write a manual program using preparatory and miscellaneous functions including canned cycles and circular interpolation.

MMG 142   Manual Lathes   **6.0 Cr Hrs**
Includes theory and lab instruction of basic manual lathe operations, safety, use and care of hand and machine tools. Addresses basic manual lathe operations such as turning, facing, drilling, tapping and tool grinding.

MMG 143   Manual Mills   **6.0 Cr Hrs**
Includes both theory and lab instruction of basic manual mill operations, safety and use and care of hand tools and machine operation and set-ups.

MMG 144   CNC Mills   **6.0 Cr Hrs**
Introduces the actual machine set-up utilizing various clamping vises and fixtures along with CNC machine operation methods and techniques necessary to produce a variety of discrete parts on the CNC mills.

MMG 147   Principles of Machining I   **2.0 Cr Hrs**
Introduces students to basic metal-working concepts, including metal-cutting fundamentals, identification and use of hand and cutting tools, various machine tool operations and the use and care of precision measuring instruments. Course is a preliminary to matching lab courses and addresses the safe use of machine and hand tools.

MMG 148   Principles of Machining II   **2.0 Cr Hrs**
More in-depth class on metal-working concepts, including metal-cutting fundamentals, identification and use of hand and cutting tools, various machine tool operations and the use and care of precision measuring instruments.

MMG 152   CNC Lathes   **6.0 Cr Hrs**
Introduces students to two-axis CNC lathe machining. The theory of operations is developed in classroom with application of the program accomplished on industry type machines. Student are able to set up the machine and know the terminology of coordinates. Cutter paths, angle cutting and linear are studied.

MMG 255   Machining Internship   **4.0 Cr Hrs**
The internship course offers students an opportunity to be employed in their field with a 40-hour work week to expand their work experience related to their field of study.

MTH 101   Intermediate Algebra   **3.0 Cr Hrs**
Simplifying algebraic expressions. Solving equations and word problems involving linear and quadratic polynomials, rational expressions, rational exponents and radicals. Graphing linear and quadratic functions. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: Minimum grade of C in EBS 120 Elementary Algebra or satisfactory course placement assessment scores. This course does not count toward AS, AA, AGS or AAS degrees to fulfill a math requirement.*

Welding

CED 101   Computer Essentials   **2.0 Cr Hrs**
Develops students' computer literacy, keyboarding skills and meets the needs of students in associate degree and technical certificate programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets and graphical presentations in the Windows environment.

CWG 101   Occupational Safety/Welding   **1.0 Cr Hr**
Provides students with an appreciation and basic understanding of the safety rules and regulations that govern the construction industry. Students learn and apply safe work habits in the use of hand and power tools as well as the handling, use and application of hazardous materials. Films, videos, field trips and guest speakers supplement course.

CWG 102   Print Reading I/Welding   **2.0 Cr Hrs**
Gives instruction in the universal language of drawing interpretation from which information is conveyed for the manufacture of parts and assemblies.

CWG 103   Print Reading II/Welding   **1.0 Cr Hr**
Gives instruction in the universal language of drawing interpretation from which information is conveyed for the manufacture of parts and assemblies. *Prerequisite: CWG 102 Print Reading I/Welding and concurrent registration in any welding lab course.*

CWG 110   Welding Applications   **4.0 Cr Hrs**
Provides instruction in the major welding and cutting operations. Students develop knowledge and skills to identify and safely operate a variety of welding and cutting machines/equipment including arc welding, mig welding, tig welding, oxy-acetylene welding and cutting and shearing operations.

CWG 141   Oxy-Acetylene Welding and Cutting   **2.0 Cr Hrs**
Includes lecture and lab and teaches students to set up and operate oxy-acetylene welding and cutting equipment with emphasis on safety.

CWG 142   Shielded Metal Arc Welding   **7.0 Cr Hrs**
Includes lecture and lab and teaches students the proper setup and operation of various types and brands of arc welders. Lab time includes demonstrations and practice time for students to acquire arc-welding skills used in industry.

CWG 143   Gas Metal Arc Welding (GMAW)   **5.0 Cr Hrs**
Includes lecture and lab and teaches the fundamentals of setting up and adjusting various MIG welding machines. Students practice American Welding Society basic joint designs and positions of welds and attain the skills necessary to gain entry-level employment in gas metal arc welding.

CWG 145   Fabrication and Design   **2.0 Cr Hrs**
Applies the basic principles gained for fabrication of various student or WATC campus-related projects. (45 clock hours) *Prerequisite: Any welding lab course or administrator approval.*

CWG 146   Flux Core Arc Welding (FCAW)   **4.0 Cr Hrs**
Provides instruction in the field of flux core arc welding (FCAW). Students develop skills to identify machines, wires and other mechanics of FCAW.

CWG 147   Gas Tungsten Arc Welding (GTAW)   **7.0 Cr Hrs**
Provides instruction in the field of gas tungsten arc welding. Students develop skills needed to be employed in the welding areas of aluminum and steel.

CWG 149   Materials and Testing   2.0 Cr Hr
Provides knowledge and skills in the areas of metallurgy and weld testing. Teaches the different uses and testing procedures for steel, stainless steel, aluminum and various alloys. Emphasizes welds approved for testing by the American Welding Society (AWS). *Prerequisite: Concurrent registration in any welding lab course or administrator approval.*

CWG 242   SMAW D1.1 Qualification   4.0 Cr Hrs
Assists students in preparing to take the SMAW qualification test. Students follow all safety procedures related to the various tools and equipment involved in this course. They understand the qualification and code system for structural qualification; identify, measure, cut and prepare the material required for this qualification; learn the skills for structural welding. Students have time in class to practice these skills in preparation for the structural certification test(s). Completion of this course does not ensure qualification. *Prerequisite: CWG 142 Shielded Metal Arc Welding or administrator approval.*

CWG 243   GMAW D1.1 Qualification   4.0 Cr Hrs
Assists students in preparing to take the GMAW qualification test. Students follow all safety procedures related to the various tools and equipment involved in this course; understand the qualification and code system for structural qualification; identify, measure, cut and prepare materials required for this qualification; and learn the skills for structural welding. Students have time in class to practice these skills in preparation for the structural qualification test(s). Completion of this course does not ensure qualification. *Prerequisite: CWG 143 Gas Metal Arc Welding or administrator approval.*

DIS 150   Directed Individual Study   1–12.0 Cr Hrs
Provides students the opportunity to work in special learning environments. Instruction is delivered through occupational work experiences, practicums, advanced projects, industry-sponsored workshops, seminars or specialized and/or innovative learning arrangements. Topics include application of occupational technical skills, adaptability to the work environment and problem solving. Each course is documented with a written agreement between the instructor and the student detailing expected requirements. The course is offered with variable credits ranging from 1.0 to 12.0 credit hours.

EBS 115   Pre-Algebra   3.0 Cr Hrs
Arithmetic with fractions, decimals and percents. Introduction to the metric system. Applications to measurement and consumer math. This course does not count toward AS, AA, AGS or AAS degrees.

EMP 100   Employability Skills   2.0 Cr. Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

ENG 101   English Composition I   3.0 Cr Hrs
Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.*

Online Learning

Online Learning Courses

Note: Online offerings vary each semester. Please check the WATC online schedule for most current information at www.watc.edu.

ACC 105   Fundamentals of Accounting   3.0 Cr Hrs
Designed for students who want a working knowledge of accounting, but not the extent as would the person working primarily in the accounting field. Although the basic accounting principles are learned and applied, the course, in comparison to Principles of Accounting I, covers a smaller amount of material at a somewhat slower pace. Recommended for the student with no previous accounting background.

ALH 002   Certified Nurse Aide Update   0.0 Cr Hr
Provides continuing education required by the Kansas Department of Health and Environment (KDHE) for renewal of the certified nurse aide (CNA) certificate when person is not gainfully employed as a CNA. *Prerequisite: GRA 101 Certified Nurse Aide.*

ALH 101   Medical Terminology   3.0 Cr Hrs
Designed to present basic principles of medical word building. The study develops competencies in the basic elements forming medical words, categorizing major suffixes and group prefixes. Anatomical, physiological and pathological terms are reviewed so that students better understand special medical procedures. This is the introductory course in medical terminology and is intended for all who desire knowledge in this subject.

ALH 110   Principles of Nutrition   3.0 Cr Hr
A study of the health of the individual as related to food and its assimilation in the human body. Principles of normal nutrition, food values and adequate nutrient allowances for growth and maintenance are examined.

ALH 160   IV Therapy for LPNs   3.0 Cr Hrs
Prepares LPNs to perform activities as defined in KAR 60-16-102(b). Presents knowledge, skills and competencies in administration of IV fluid therapy. Approved by the Kansas State Board of Nursing. *Prerequisite: LPN with proof of license. Contact Practical Nurse department chair for additional information.*

BIO 100   Biology Review   1.0 Cr Hr
Designed to introduce materials covered in BIO 110 Principles of Biology. It is recommended for students planning to take BIO 150 Human Anatomy and Physiology or BIO 160 Microbiology who have not had a life science course within the past five years, or students wishing to prepare for BIO 110 Principles of Biology.

BIO 110   Principles of Biology   5.0 Cr Hrs
An introduction to the biological concepts included in the General Education Biology Core Competencies. This includes understanding the nature of science, levels of organization, bioenergetics, reproduction and inheritance and the

mechanisms of change. Laboratory stresses the process of scientific investigation and observation of biological processes.

BUS 101   Beginning Document Processing   4.0 Cr Hrs
Introduces the touch system of keyboarding with emphasis on correct techniques, mastery of the keyboard and basic business documents. Students attain a minimum typing speed of 25 words per minute with a maximum of three errors on a three-minute, timed keyboarding test. Topics include learning the keyboard, building speed and accuracy, formatting basic business documents, language arts and proofreading. Laboratory practice parallels class instruction.

BUS 102   Intermediate Document Processing   4.0 Cr Hrs
Develops keyboarding speed and accuracy with further mastery of correct keyboarding techniques. Students attain a minimum typing speed of 40 words per minute with a maximum of five errors on a five-minute timed keyboarding test. Topics include building speed and accuracy, formatting and producing business documents, language arts and proofreading. Laboratory practice parallels class instruction. *Prerequisite: BUS 101 Beginning Document Processing.*

BUS 104   Introduction to Business   3.0 Cr Hrs
Acquaints student with the nature and scope of business, its component parts, how business is owned, organized and managed. Emphasis is upon environmental forces and historical conditions that have influenced the growth of business from its early years to the present day.

BUS 105   Database Management   2.0 Cr Hrs
Emphasizes use of database management software packages to access, manipulate and create file data. Topics include data entry, data access, data manipulation, database creation and file documentation. *Prerequisite: CED 101 Computer Essentials.*

BUS 106   Office Procedures   2.0 Cr Hrs
Emphasizes essential skills required for the business office. Topics include office protocol, time management, travel and meeting arrangements. *Prerequisite: BUS 101 Beginning Document Processing.*

BUS 108   Word Processing   3.0 Cr Hrs
Emphasizes an intensive use of word processing software to create and revise business documents. Topics include equipment and supplies maintenance and usage, work area management, word processing software and productivity. *Prerequisites: CED 101 Computer Essentials and/or BUS 101 Beginning Document Processing.*

BUS 121   Business Communications   3.0 Cr Hrs
Provides knowledge and application of written and oral communications found in business situations. Topics include writing fundamentals and speaking fundamentals. *Prerequisite: BUS 120 Business English.*

BUS 122   Business Math   3.0 Cr Hrs
Emphasizes mathematical concepts found in business situations. Topics include basic mathematical skills, mathematical skills in business-related problem solving, mathematical information for documents, graphs and mathematical problems using electronic calculators (not to include the touch method). *Prerequisite: Program admission competency levels.*

BUS 130   Personal Finance   3.0 Cr Hrs
Designed for business and non-business majors. The focus of the course is efficient management of money as a primary requirement for a successful personal life. The course aids the individual in establishing and maintaining credit, use of a budget, safeguarding and investment of savings and arranging personal insurance.

BUS 160   Human Relation-People at Work   3.0 Cr Hrs
Designed to help employees and supervisors gain human relations skills needed for success at their work site. The case method is used to analyze situations in which actual job relations are presented.

BUS 205   Advanced Word Processing   3.0 Cr Hrs
Provides instruction in advanced word processing. Topics include advanced word processing concepts and applications and proofreading. *Prerequisites: BUS 108 Word Processing and BUS 120 Business English.*

CED 101   Computer Essentials   2.0 Cr Hrs
Develops students' computer literacy, keyboarding skills and meets the needs of students in associate degree and technical certificate programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets and graphical presentations in the Windows environment

CED 115   Computer Applications   3.0 Cr Hrs
Develops students' computer literacy and to meet the needs of students in the associate degree programs. Students learn from hands-on experiences basic skills in file management utilities, word processing, spreadsheets, database management and graphical presentations in the Windows environment. *Prerequisite: Students are encouraged to complete a self-assessment to determine skill set prior to enrolling in this course.*

CED 120   Advanced Computer Applications   3.0 Cr Hrs
Enhances students' computer literacy and meets the needs of students in the associate degree and/or certificate programs. Students learn from hands-on experiences advanced skills in word processing, spreadsheet applications, database management and graphical presentations in the Windows environment. *Prerequisite: CED 115 Computer Applications, or acceptable prior experience with Microsoft Word, Excel, Access and PowerPoint.*

CHM 100   Chemistry Review   1.0 Cr Hr
Introduces basic concepts covered in CHM 125 Chemistry I. It is recommended for students who will enroll in Chemistry I or a higher level chemistry course the following semester. It is not recommended for those taking CHM 110 General Chemistry.

CHM 110   General Chemistry   5.0 Cr Hrs
An introduction to chemistry that includes the study of matter, atoms, molecules, chemical arithmetic, chemical reactions, gas laws, acids and bases, organic chemistry and laboratory experimentation. *Prerequisite: EBS 120 Elementary Algebra or a higher level math course with a grade of C or better, completed within the past five years, or a math ACT score of 18 or better or an equivalent assessment score.*

CRJ 101   Introduction to Criminal Justice   3.0 Cr Hrs
Introduction to the historical backgrounds, agencies and process, purposes and functions of the system. The ethics, administration and legal problems of the criminal justice system.

EMP 100   Employability Skills   2.0 Cr Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

ENG 101   English Composition I   3.0 Cr Hrs
Designed to improve the reading and writing skills of students. The emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays are used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT, or a grade of C or above and a passing grade on the post test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.*

ENG 120   English Composition II   3.0 Cr Hrs
Through a study of poetry, short story, drama and essays as literary forms, this course furthers students' writing skills This course also improves research techniques through writing an in-depth research essay in MLA style. It emphasizes accuracy and fluency in expressing sound ideas in class discussions, assignments and essays. *Prerequisite: Completion of ENG 101 English Composition I with a grade of C or above. High school students should have senior standing to enroll in ENG 120.*

GRA 019   Medication Aide Update   0.0 Cr Hr
Provides the continuing education required every two years by the Kansas Department of Health and Environment for renewal of the medication aide certificate. *Prerequisites: GRA 101 Certified Nurse Aide and GRA 119 Medication Aide.*

HHA 100   Home Health Aide   2.0 Cr Hrs
Prepares the certified nurse aide (CNA) to care for clients in community and home settings. Graduates may take the Kansas certification examination to become a home health aide (HHA). *Prerequisite: GRA 101 Certified Nurse Aide or Kansas Certified Nurse Aide certification.*

MTH 101   Intermediate Algebra   3.0 Cr Hrs
Simplifying algebraic expressions. Solving equations and word problems involving linear and quadratic polynomials, rational expressions, rational exponents and radicals. Graphing linear and quadratic functions. This course requires that students furnish their own TI-83 or TI-83 PLUS graphing calculator and purchase the specific online course software. *Prerequisites: Minimum grade of C in EBS 115 Pre-Algebra or satisfactory course placement assessment scores. This course does not count toward AS, AA, AGS or AAS degrees to fulfill a math requirement.*

MTH 112   College Algebra   3.0 Cr Hrs
An introduction of algebraic functions and some transcendental functions with application in business and life, natural and social sciences. Topics include solving equations, zeros, rational functions, matrices, exponentials and logarithms and systems. Additional topics are included as time permits. This course requires that students furnish their own TI-83 or TI-83 PLUS graphing calculator and purchase the specific online course software. *Prerequisites: A minimum grade of C in MTH 101 Intermediate Algebra or MTH 102 Intermediate Algebra with*

Review or satisfactory course placement assessment or 21 ACT math score.

MTH 113   Trigonometry   3.0 Cr Hrs
Trigonometric functions using the unit circle and right angle trigonometry, graphing applications, analytic trigonometry, vectors, trigonometric complex number applications, parametric and polar equations. This course requires that students furnish their own TI-83 or TI-83PLUS graphing calculator and purchase the specific online course software. *Prerequisites: Minimum grade of C in MTH 111 College Algebra with Review or MTH 112 College Algebra or 23 ACT math score.*

PED 110   Lifetime Fitness   1.0 Cr Hr
Designed to expose students to facts about and experiences in dealing with motor, physical, physiological, psychological and nutritional aspects of the human being. The responsibility to maintain fitness during a life span.

PHS 110   Physical Science   5.0 Cr Hrs
A non-technical course intended for students who are majoring in fields other than science. The application of scientific knowledge to daily life activities is emphasized by examining the fundamental principles in physics, chemistry, geology and astronomy utilizing the scientific method.

PNR 111   Principles of Nutrition   3.0 Cr Hrs
Presents basic principles of nutritional needs and application of these principles in the maintenance and restoration of health. Emphasis is placed on the essential nutrients and how they may be obtained in both normal and therapeutic diets. (45 clock hours) *Prerequisite: Course must be taken prior to admission into the Practical Nurse program.*

PSY 101   General Psychology   3.0 Cr Hrs
Explores the principal proponents of psychological theories by using accepted methods of scientific inquiry. Topics include behavior, learning theories, cognitive processes, intelligence, sensation, motivation, maturation, personality, psychological disorders and their treatments/therapies. (45 clock hours)

PSY 120   Developmental Psychology   3.0 Cr Hrs
A study of individual development from conception through death. This includes the general areas of biological, physical, cognitive, social, emotional and personality development at each stage of life. *Prerequisite: PSY 101 General Psychology.*

PSY 130   Human Growth and Development   3.0 Cr Hrs
Provides an overview of the theories, methods and content in the field of child development. The framework for this course has four major dimensions: a) basic theoretical and research issues; b) development from an interdisciplinary perspective; c) interaction of life experiences and human change; d) applying this understanding to the real world.

SOC 101   Introduction to Sociology   3.0 Cr Hrs
Introduces students to the science of society and its approach to human social life. Students learn how sociologists conduct research and the basic concepts and theories they use to explain the social world.

SPH 101   Introduction to Public Speaking   3.0 Cr Hrs
Fundamental basic to all good private and public speaking experiences; elements in voice production and improvement, bodily movement, confidence, poise, understanding of all types of public speeches. Required of all transfer curricula.

Skilled Trades

Air Conditioning Technology

ACR 100   Refrigeration Fundamentals   3.0 Cr Hrs
Introduces basic concepts and theories of refrigeration. Topics include the laws of thermodynamics, pressure and temperature relationships, heat transfer, refrigerant identification, the refrigeration cycle and safety.

ACR 101   Principles and Practices of Refrigeration   5.0 Cr Hrs
Introduces the use of refrigeration tools, materials and procedures needed to install, repair and service refrigeration systems. Topics include refrigeration tools; piping practices; service valves; leak testing; refrigerant recovery, recycling and reclamation; evacuation; charging; and safety. *Prerequisite: ACR 100 Refrigeration Fundamentals.*

ACR 102   Refrigeration Systems Components   5.0 Cr Hrs
Provides students with the skills and knowledge to install, test and service major components of a refrigeration system. Topics include compressors, condensers, evaporators, metering devices, service procedures, refrigeration systems and safety. *Prerequisites: ACR 100 Refrigeration Fundamentals; ACR 101 Principles and Practices of Refrigeration.*

ACR 103   Electrical Fundamentals   5.0 Cr Hrs
Introduces fundamental electrical concepts and theories as applied to the air conditioning industry. Topics include AC and DC theory, electric meters, electric diagrams, distribution systems, electrical panels, voltage circuits, code requirements and safety.

ACR 104   Electric Motors   3.0 Cr Hrs
Continues the development of skills and knowledge necessary for application and service of electric motors commonly used by the refrigeration and air conditioning industry. Topics include diagnostic techniques, capacitors, installation procedures, types of electric motors, electric motor service and safety. *Prerequisite: ACR 103 Electrical Fundamentals.*

ACR 105   Electrical Components   4.0 Cr Hrs
Provides instruction in identifying, installing and testing commonly used electrical components in an air conditioning system. Topics include pressure switches, overload devices, transformers, magnetic starters, other commonly used controls, diagnostic techniques, installation procedures and safety. *Prerequisite: ACR 103 Electrical Fundamentals.*

ACR 106   Electrical Control Systems and Installation   3.0 Cr Hrs
Provides instruction on wiring various types of air conditioning systems. Topics include servicing procedures, solid state controls, system wiring, control circuits and safety. *Prerequisite: ACR 105 Electrical Components.*

ACR 107   Air Conditioning Principles   4.0 Cr Hrs
Introduces fundamental theory and techniques needed to identify major components and functions of air conditioning systems. Instruction is given on types of air conditioning systems and use of instrumentation. Topics include types of AC systems, heat-load calculation, properties of air, psychrometrics, duct design, air filtration and safety principles. *Prerequisite: ACR 102 Refrigeration Systems Components.*

ACR 108   Air Conditioning Systems and Installation   2.0 Cr Hrs
Provides instruction on the installation and service of residential air conditioning systems. Topics include installation procedures, service, split-systems, add-on systems, packaged systems and safety. *Prerequisites: ACR 102 Refrigeration Systems Components and ACR 104 Electrical Motors.*

ACR 109   Troubleshooting Air Conditioning Systems   4.0 Cr Hrs
Provides instruction on troubleshooting and repair of major components of a residential air conditioning system. Topics include troubleshooting techniques, electrical controls, air flow, refrigeration cycle and safety. *Prerequisite: ACR 108 Air Conditioning Systems and Installation.*

ACR 110   Gas Heating Systems   3.0 Cr Hrs
Introduces principles of combustion and service requirements for gas heating systems. Topics include service procedures, electrical controls, piping, gas valves, venting, code requirements, principles of combustion and safety. *Prerequisites: ACR 102 Refrigeration Systems Component, ACR 106 Electric Control Systems and Installation and MAT 101 General Mathematics.*

ACR 111   Heat Pumps and Related Systems   4.0 Cr Hrs
Provides instruction on the principles, application and operation of a residential heat pump system. Topics include installation procedures, servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, troubleshooting, valves and safety. *Prerequisites: ACR 102 Refrigeration Systems Components and ACR 106 Electrical Control Systems and Installation.*

CED 101   Computer Essentials   2.0 Cr Hrs
Develops students' computer literacy, keyboarding skills and meets the needs of students in associate degree and technical certificate programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets and graphical presentations in the Windows environment.

EBS 115   Pre-Algebra   3.0 Cr Hrs
Arithmetic with fractions, decimals and percents. Introduction to the metric system. Applications to measurement and consumer math. This course does not count toward AS, AA, AGS or AAS degrees.

EMP 100   Employability Skills   2.0 Cr. Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

ENG 101   English Composition I   3.0 Cr Hrs
Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.*

IFC 100   Industrial Safety Procedures   2.0 Cr Hrs
Provides an in-depth study of the health and safety practices required for maintenance of industrial, commercial and home electrically operated equipment. Topics include introduction

to OSHA regulations; safety tools, equipment and procedures; and first aid and cardiopulmonary resuscitation.

Floral Design / Painted and Faux Finishes / Interior Design

CED 115   Computer Applications   3.0 Cr. Hrs
Develops students' computer literacy and meets the needs of students in associate degree programs. Students learn from hands-on experiences, basic skills in file management utilities, word processing, spreadsheets, database management and graphical presentations in the Windows environment. *Prerequisite: Students are encouraged to complete a self-assessment to determine skill set prior to enrolling in this course.*

CED 210   Internet Research   1.0 Cr. Hr
Focuses on Internet research as a tool in the writing process, including technical writing, research papers, composition and English essays. Students explore various Internet research tools and library resources that are available to help answer questions about the research and writing process. *Prerequisite CED 209 Basic Internet, or instructor consent.*

ECO 105   Principles of Macroeconomics   3.0 Cr Hrs
Explores the fundamental aspects of the U.S. economy including growth, fiscal and monetary policy, unemployment, inflation, national debt, money and the Federal Reserve System. Discusses national and international policy topics.

EMP 100   Employability Skills   2.0 Cr. Hrs
Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include human relations, job acquisition, job retention, job advancement and professional image skills.

ENG 101   English Composition I   3.0 Cr Hrs
Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.*

INT 100   Accessories   1.0 Cr Hr
An introduction to decorative accessories that focuses on the components of display for effective visual presentation. This course utilized the principles and techniques that are common to display work in interiors and various businesses. The main emphasis is on design and color principals, hangers and materials used for arrangement and display and safety issues.

INT 101   Interior Design Fundamentals   2.0 Cr Hrs
An introduction to the fundamentals of design through the exploration of design elements and principles. Topics include fundamentals of traffic flow patterns, color rendering, space planning and problem solving skills that are used in interior design. This course includes research, creating illustration boards and honing presentation skills.

INT 105   Blueprint Reading for Interiors   2.0 Cr Hrs
An introduction to blueprints for interior construction and service systems. Students learn basic mechanical drawings, architectural drawings and symbol and abbreviation identification used in blueprints. By using an architectural scale students learn to plot floor plans. Construction documents, time management and communication with architects and contractors are included in this course.

INT 110   Color Theory   2.0 Cr Hrs
Introduces the use of color for interior design. Emphasis is on color theory, psychology of color and how it affects the brain and moods and application of color in interior environments and lighting conditions. Included is the vocabulary of color, color temperatures, the principals of the color wheel and how to use it. With the use of paint, values and tones are mastered.

INT 120   Materials and Resources I   3.0 Cr Hrs
By the end of the semester, students will know various soft materials and treatments necessary for design of interior spaces, the functions of each and their appropriate uses. Students should feel confident in researching design products. Each student will start a reference library of local and national vendors.

INT 125   Materials and Resources II   2.0 Cr Hrs
By the end of this semester, students will know various hard treatments necessary for design of interior spaces, the functions of each and their appropriate uses. Students should feel confident in researching design products. Each student will start a reference library of local and national vendors.

INT 130   Painted and Faux Finishes I   3.0 Cr Hrs
An introduction to the techniques used to produce painted finishes on furniture and interior walls. Topics include the history of faux finishing, color mixing, technology of paint, materials used for creating faux finishes and specific issues related to wall glazing, ragging, sponging, strie, wood graining, textured granites, stones and other techniques.

INT 135   Painted and Faux Finishes II   3.0 Cr Hrs
Designed to help the student increase their knowledge of painted and faux finishes. Various types of paints, glazes, brushes and other faux tools are utilized in this course. It also introduces students to basic business practices for painted and faux finishing, bookkeeping and pricing for techniques. Upon completion of the course, students are able to produce a wide variety of finishes such as marble, wood graining, semiprecious stones through paint applications. Venetian plasters and raised plaster techniques are introduced in this section. Students are also trained in interior design principles and have an exposure to business practices of faux and painted finishing.

INT 145   History of Furniture and Architecture I   3.0 Cr Hrs
Provides students with the historical foundation of architecture and furniture, furniture styles, accent pieces and accessories from Egyptian period through Medieval. Students learn chronologies, key terms, designer contributions and ruler influence on furniture and architectural elements in a time line manner. Through hands on experience with furniture and actually creating pieces of "art styled" furnishings they will comprehend what is involved in furniture making.

INT 150 History of Furniture and Architecture II 3.0 Cr Hrs
Provides students with the historical foundation of architecture and furniture, furniture styles, accent pieces and accessories from Renaissance through Post Modern. Students learn chronologies, key terms, designer contributions and ruler influence on furniture and architectural elements in a time line manner. Through hands on experience with furniture and actually creating pieces of "art styled" furnishings they will comprehend what is involved in furniture making.

INT 155 Lighting Technologies 3.0 Cr Hrs
An introduction to the basics of lighting technologies used in interior design; color, lighting styles and lighting fixtures. Students learn to read lamp indicators, calculate lumens and foot-candles and proper heights and usage for various lighting techniques. An understanding of light analysis, residential and commercial lighting, lighting design, lighting applications and requirements for various types of lighting are studied. Developments of lighting and electrical layouts on floor plans are inclusive in this course.

INT 160 Design Studio I 3.0 Cr Hrs
Provides long and short-term projects that address real life design situation. It develops competencies in solving design problems and teamwork. Technical and conceptual concerns, color theory, lighting technology, scale, materials selection and creative design articulation through presentation and illustrations are critical elements for this class. Deployment of invoicing techniques, material selection and working with a budget is emphasized in this course.

INT 165 Design Studio II 2.0 Cr Hrs
Provides long and short-term projects that address real life design situation. It develops competencies in solving design problems and teamwork. Technical and conceptual concerns, color theory, lighting technology, scale, materials selection and creative design articulation through presentation and illustrations are critical elements for this class. Development of invoicing techniques, material selection and working with a budget is emphasized in the course. Students work with real-time case studies. (Students may be invited to participate in events such as The Symphony Show House Design, Judge in the Wichita Area Building Associations Parade of Homes, or shadow designers with a project.)

**INT 170 Business Practices
and Portfolio Development 3.0 Cr Hrs**
Covers client contracts, presentation skills, resource development, business forms and legal forms, business management and laws pertaining to interior design. A professional personal portfolio is refined in this class for employment purposes. A professional résumé is included as part of the portfolio package. Students obtain background knowledge necessary for successful business practices for interior design.

INT 175 Seminars 2.0 Cr Hrs
Designed to help students increase their knowledge concerning professional development though resources and artistic exploration. This course is held outside the classroom in real-world settings. Tours of museums, building of architectural interest and local vendors and showrooms are the target of this course. Students develop networking skills and create a resource library for future use in the field of interior design.

INT 180 Internship 4.0 Cr Hrs
Student provide an in-depth application and reinforcement of interiors and employability principles to an actual job setting. Internship allows students to get involved with on-the-job applications that require full-time commitment. The intern is evaluated by the use of written performance evaluations, Application of interior principles, problem solving, adaptability to job setting, uses of personal skills, development of constructive work habits and ethics, practice confidentially, development of productively and job performance through practice.

INT 190 Drafting for Interiors 2.0 Cr Hrs
An introduction to drafting for interior construction and service systems. Students learn basic mechanical drawings, architectural drawings and symbol and abbreviation identification used in drafting blueprints. By using an architectural scale, students learn to plot floor plans. Construction documents, time management and communication with architects and contractors are included in this course.

INT 200 Floral Design I 1.0 Cr Hr
An introduction to floral arrangements focuses on the components of display for effective visual presentation. This course utilizes the principles and techniques that are common to display work in interiors and various businesses. The main emphasis is on design and color principals, tools and materials used for floral arrangement and display and safety issues.

INT 210 Floral Design II 1.0 Cr Hr
Designed to help students increase their knowledge of floral design, professional opportunities and care and handling of fresh cut flowers. Wedding floral design and solemn occasions are emphasized in this course as well as working within a budget.

INT 220 Floral Design III 1.0 Cr Hr
Designed to help students increase their knowledge of floral design, professional opportunities and care and handling of fresh cut flowers. Plant and plant care, artificial and dried flowers, holidays and theme arrangements are emphasized in this course.

INT 230 Floral Design IV 1.0 Cr Hr
Designed to help the student increase their knowledge of floral design business, securing funds, laws and licensing, shop layout, wholesale market and pricing strategies.

INT 215 Kitchen and Bath Design 3.0 Cr Hrs
Designed to help students develop the special considerations necessary to design and plan kitchens and baths. Topics include toe study of the basic principles of kitchen and bath design, planning, proper function and layout, accurate measuring techniques, specification documentation, theme and historical design.

INT 225 Advanced Kitchen and Bath Design 3.0 Cr Hrs
Designed to help students develop the advanced knowledge in the design of kitchens and baths. The study an application of the National Kitchen and Bath Association's Guidelines of Planning Standards and Safety Criteria for residential kitchens and bathrooms including Universal Design concepts are covered. Topics include the use of building codes, safety criteria, universal and accessibility criteria and ergonomics.

**INT 235   Computer Technologies
for Kitchen and Bath Design   3.0 Cr Hrs**
Designed to help students develop advanced skills necessary
to design and present kitchen and bath solutions through the
use of current industry software applications. Project design
is done completely on computer.

INT 245   Internship for Kitchen and Bath Design   3.0 Cr Hrs
Designed to help students develop in-depth application and
reinforcement of kitchen and bath employability principles
through working in an approved industry environment. This
internship allows students to become involved in intensive
on the job kitchen and bath application that require full-
time concentration, practice and follow though. The KBD
internship is implemented through written performance
evaluations.

MCD 116   Introduction to CAD   5.0 Cr. Hrs
Introduces computer-aided drafting (CAD) and examines the
hardware that makes up a CAD workstation. It also covers
the operating system (Microsoft Windows) that enables the
equipment to function as a unit. The course shows how to use
AutoCAD to set up drawings and construct lines, circles, arcs,
other shapes, geometric constructions and text. Students use
display and editing techniques as well to obtain information
about their drawings and work with drawing files. This course
also introduces recommended drafting standards for students
to use for properly preparing drawings with AutoCAD.

MCD 132   Basic Chief Architecture/Architectural Desktop   3.0 Cr. Hrs
Students use the computers to learn how to utilize three-
dimensional software to design houses. This course provides
instruction in how to use the software and draw walls,
windows, doors, foundations and roofs. *Prerequisite: MCD
114 Architectural Drafting and Design or instructor approval.*

MTH 101   Intermediate Algebra   3.0 Cr. Hrs
Simplifying algebraic expressions. Solving equations and
word problems involving linear and quadratic polynomials,
rational expressions, rational exponents and radicals.
Graphing linear and quadratic functions. This course requires
that students furnish their own TI-83 or TI-84 PLUS graphing
calculator. *Prerequisites: Minimum grade of C in EBS 120
Elementary Algebra or satisfactory course placement assessment
scores. This course does not count toward AS, AA, AGS or AAS
degrees to fulfill a math requirement.*

PSY 101   General Psychology   3.0 Cr. Hrs
A general introduction to the scientific study of human
behavior as it applies to daily living. The scope of this
course includes history, basic theories and biological bases
of behavior, development, cognitive processes, individual
awareness, motivation, emotion, personal adjustment and
social psychology.

SPH 101   Introduction to Public Speaking   3.0 Cr. Hrs
Fundamental basic to all good private and public speaking
experiences; elements in voice production and improvement,
bodily movement, confidence, poise, understanding of all
types of public speeches. Required of all transfer curricula.

Transportation

Automotive Collision Repair

TAC 101   Occupational Safety   1.0 Cr Hr
Provides students with an appreciation and basic
understanding of the safety rules and regulations that govern
the transportation industry. Students learn and apply safe
work habits in the use of hand and power tools as well as the
handling, use and application of hazardous materials. Films,
videos, field trips and guest speakers are used to supplement
course.

TAC 111   Structural Damage Analysis and Repair   8.0 Cr Hrs
Includes frame inspection and repair on body-over-frame
and unibody inspection measurement and repair. Students
comply with personal and environmental safety practices and
recognize that measuring, dimensioning and tolerance limits
in unibody vehicles are critical to repair of these vehicles
and that suspension/steering mounting points and engine
power train attaching points are critical to vehicle handling,
performance and safety. Also addresses the replacement of
fixed glass and metal welding and cutting.

TAC 112   Refinish I   6.0 Cr Hrs
Students comply with personal and environmental safety
practices and identify and take necessary precautions
with hazardous operations. Introduces students to surface
preparation, spray gun and related equipment operation,
paint mixing, matching, applying, solving paint application
problems, recognizing finish defects, causes and cures and
final automobile detail. *Prerequisite: TAC 101 Occupational
Safety or administrator approval.*

TAC 113   Nonstructural Damage Analysis and Repair   9.0 Cr Hrs
Students review damage reports and analyze damage to
determine appropriate methods for overall repair. Instruction
includes classroom and lab activities, panel repairs,
replacements, adjustments, metal finishing, body filling,
moveable glass, hardware and metal welding and cutting.

TAC 114   Steering, Suspension and Alignment   3.0 Cr Hrs
Involves the analysis, repair and replacement of suspension
and steering components along with angles and pivot-point
alignment involved in proper steering alignment.

TAC 116   Electrical Systems   2.0 Cr Hrs
Includes classroom and laboratory instruction on basic
electricity, use of test equipment, schematic reading, general
automotive electronics and the repair of electrical components
commonly damaged during collision.

TAC 118   Refinish II   5.0 Cr Hrs
Continuation of TAC 112 Refinish I. Includes a large amount
of time in laboratory instruction to develop spraying and
polishing techniques including the development of a refinish
plan, paint mixing and color matching. *Prerequisite: TAC 112
Refinish I or administrator approval.*

Automotive Technology

ENG 101   English Composition I   **3.0 Cr Hrs**

Improves the reading and writing skills of students. Emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs and expository themes. Critical analysis of essays will be used to aid in developing the student's thinking, support of thesis and style. Students are introduced to the basic components of research by writing a documented essay in MLA style. *Prerequisites: Satisfactory assessment score and/or minimum of 20 on ACT or a grade of C or above and a passing grade on the post-test in EBS 110 English are required for enrollment. High school students should have senior standing to enroll in ENG 101 English Composition I.*

MTH 101   Intermediate Algebra   **3.0 Cr. Hrs**

Simplifying algebraic expressions. Solving equations and word problems involving linear and quadratic polynomials, rational expressions, rational exponents and radicals. Graphing linear and quadratic functions. This course requires that students furnish their own TI-83 or TI-84 PLUS graphing calculator. *Prerequisites: Minimum grade of C in EBS 120 Elementary Algebra or satisfactory course placement assessment scores. This course does not count toward AS, AA, AGS or AAS degrees to fulfill a math requirement.*

SPH 101   Introduction to Public Speaking   **3.0 Cr. Hrs**

Fundamental basic to all good private and public speaking experiences; elements in voice production and improvement, bodily movement, confidence, poise, understanding of all types of public speeches. Required of all transfer curricula.

SPH 111   Interpersonal Communication   **3.0 Cr. Hrs**

Improves individual communication skills. By understanding the elements of effective communication, students are able to create environments that bring out the best in themselves and others. In addition, students learn how to better turn ideas and feelings into words, how to listen more effectively, respond more appropriately to what others have said and, most important of all, how to maintain and develop good interpersonal relationships with their families, their peers and fellow workers. Emphasis is placed on small-group activities, interviewing skills and both verbal and non-verbal communication.

TAS 121   Engine Repair   **4.0 Cr Hrs**

Includes classroom and lab instruction in the diagnosis, removal, repair and installation of automotive engine assemblies, along with diagnosis and repair of general automotive engine systems, cylinder head and value train systems, engine block assembly, lubrication and cooling systems.

TAS 122   Brakes   **4.0 Cr Hrs**

Includes classroom and lab instruction in the operation, inspection, diagnosis and repair of hydraulic brake systems, drum and disc brakes, power brakes, miscellaneous and related braking systems such as wheel bearing, parking brakes, electrical, etc. and anti-lock brake systems.

TAS 123   Suspension and Steering   **4.0 Cr Hrs**

Includes classroom and lab instruction in the operation, diagnosis, adjustment and repair of automotive suspension and steering systems, including the diagnosis and repair of steering systems, suspension systems, wheels and tires and alignment concerns.

TAS 124   Electrical and Electronic Systems I   **4.0 Cr Hrs**

Includes classroom and lab instruction in the operation, diagnosis, service and repair of automotive electrical/electronic systems, including the diagnosis, service and repair of the general electrical system, battery, the starting, charging and lighting systems, gages, warning devices and driver information systems, horn and wiper/washer as well as other electrical/electronic accessories.

TAS 125   Electrical and Electronic Systems II   **4.0 Cr Hrs**

Includes classroom and lab instruction in the operation, diagnosis, service and repair of automotive electrical/electronic systems, including the diagnosis, service and repair of the general electrical system, charging and lighting systems, gages, warning devices and driver information systems, horn and wiper/washer as well as other electrical/electronic accessories.

TAS 126   Manual Drive Train and Axles   **4.0 Cr Hrs**

Includes classroom and lab instruction in the operation, inspection, diagnosis, adjustment and repair of manual drive trains and axles, including the diagnosis and repair of clutches, drive and half shaft universal and constant velocity (CV), joints, rear axles and four-wheel drive components.

TAS 127   Automatic Transmissions and Transaxles   **5.0 Cr Hrs**

Includes classroom and lab instruction in the operation, diagnosis, adjustment and repair of automatic transmissions and transaxles, both on and off the vehicle and includes the disassembly of oil pumps, converters, gear trains, shafts, bushings, cases and friction and reaction units.

TAS 128   Heating and Air Conditioning   **4.0 Cr Hrs**

Includes classroom and lab instruction in the operation, diagnosis, adjustment and repair of automotive heating and air conditioning systems, including the diagnosis and repair of all related refrigerant system components, heating, ventilation and engine cooling systems. Provides training on refrigerant recovery and handling in according with strict federal government guidelines.

TAS 131   Engine Performance I   **4.0 Cr Hrs**

Includes classroom and lab instruction in operation, diagnosis, adjustment and repair of drivability concerns in the automotive engine system, including the diagnosis and repair of general engine performance systems, computerized engine control systems, ignition systems, fuel, air induction, exhaust systems and emissions standards.

TAS 132   Engine Performance II   **4.0 Cr Hrs**

Includes classroom and lab instruction in operation, diagnosis, adjustment and repair of drivability concerns in the automotive engine system, including the diagnosis and repair of general engine performance systems, computerized engine control systems, fuel, air induction, exhaust systems and emissions standards.

Commercial Truck Driving

CDL 101   Commercial Driver Education   8.0 Cr Hrs
Develops the necessary skills required to obtain a commercial driver's license and gain employment in the trucking industry as an entry-level truck driver.

CDL 102   Longer-Combination Vehicles   4.0 Cr Hrs
Enhances the safety of commercial vehicle operations and helps ensure that drivers of large trucks have the knowledge and skills necessary to safely operate longer-combination vehicles on the nation's highways. *Prerequisite: CDL 101 Commercial Driver Education or administrator approval.*

WATC

www.watc.edu

**Catalog
2008–2009**

Calendar and Notes

Calendar and Notes

Calendar 2008–2009

July 2008
S	M	T	W	T	F	S
		1	2	3	(4)	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
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27	28	29	30	31		

August 2008
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24	25	26	27	28	29	30
31						

September 2008
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28	29	30				

October 2008
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26	27	28	29	30	31	

November 2008
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30						

December 2008
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28	29	30	31			

January 2009
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February 2009
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March 2009
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April 2009
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May 2009
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31						

June 2009
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14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Note: This calendar may be altered at the discretion of the WATC Board and/or WATC administration.
WATC Board Approved 07.01.08

Wichita Area Technical College does not discriminate with regard to race, religion, color, sex, disability, national origin or ancestry, age or gender in its admissions, progress or activities.
MCR 07.03.08

Schedule
July	1–3	Faculty Annual Leave
	4	Independence Day Holiday
	7	Summer Session Begins
	18	All-College Inservice
	31	Summer Session Ends
August	4–15	Pre-Semester Classes In Session
	12	New Student Orientation
	13–14	Faculty Professional Development Inservice
	15	Adjunct Faculty Orientation, Southside Education Center
	18–23	Fall Semester Begins (varies by location)
September	1	Labor Day Holiday
	2	Aviation Tech Center Fall Session Begins
October	13–20	First Eight Week Session Ends (varies by location)
	14	Faculty Work Day / Grades Due
	15–20	Faculty Annual Leave
	21	Faculty Work Day
	21–22	Second Eight Week Session Begins (varies by location)
November	2	Daylight Saving Time Ends
	26	Faculty Annual Leave
	27–28	Thanksgiving Holiday
December	15–19	Fall Semester Ends (varies by location)
	19	Faculty Work Day / Grades Due
	22–26	Winter Holiday
	29–31	Faculty Annual Leave
January	1	New Year's Holiday
	2–7	Faculty Annual Leave
	5–16	Pre-Semester Classes In Session
	7	Aviation Tech Center Spring Session Begins
	8	All-College Inservice
	9	Faculty Professional Development Inservice
	9	New Student Orientation
	12–21	Spring Semester Begins (varies by location)
	19	Martin Luther King Jr. Birthday Observance
March	8	Daylight Saving Time Begins
	9–12	First Eight Week Session Ends (varies by location)
	10	Faculty Work Day / Grades Due
	11–20	Faculty Annual Leave
	23	Second Eight Week Session Begins
May	4	Aviation Tech Center Summer Session Begins
	11–19	Spring Semester Ends (varies by location)
	18–19	Faculty Work Day / Grades Due
	20	Faculty Professional Development Inservice
	20	Commencement Ceremony
	21	All-College Inservice
	25	Memorial Day Holiday
	26–31	Faculty Annual Leave
June	1–3	Faculty Annual Leave
	4–5	Faculty Work Day
	8	Summer Semester Begins
	25	GED Graduation

Legend
(Start) Semester Begins	( ) Holiday — No Classes / Offices Closed
(End) Semester Ends	☐ Faculty Work Day — No Classes / Offices Open
(Start) Alternative Session Begins	[ ] Annual Leave* — No Classes / Offices Open
(End) Alternative Session Ends	— Professional Development Inservice — No Classes / Offices Open
New Student Orientation	■ All-College Inservice — No Classes / Offices Closed

12 Holidays • 30 Annual Leave* / Vacation* Days (*must have supervisor approval)

WATC
www.watc.edu

Wichita Area Technical College ┃ 301 S. Grove ┃ Wichita, KS 67211-2099 ┃ 316.677.9400

Phone Numbers

Name	Phone Number

WATC

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