

# **WESTERN DAKOTA TECH**

## **COURSE CATALOG**

**2010-2011**

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RAPID CITY, SD 57703**

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**[WWW.WDT.EDU](http://WWW.WDT.EDU)**



This publication should not be considered a contract between Western Dakota Tech and any prospective student. As much as possible, program and course offerings will be offered as listed. However, Western Dakota Tech reserves the right to modify course offerings according to current conditions. Western Dakota Tech also retains the right to make changes in programs, policies, graduation requirements, tuition, fees, and refunds without notice.

The institution shall not discriminate on the basis of race, color, religion, national origin, sex, gender bias, age, disability, marital status, or military veteran status, as is defined by law, in employment, admission to, or operation of its educational programs and activities as prescribed by state and federal laws, regulations, and executive orders.

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# **WELCOME TO WESTERN DAKOTA TECH**

**WELCOME**

**MISSION**

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**CORPORATE EDUCATION CENTER**

## **WELCOME**

When you choose Western Dakota Tech, you choose exactly what you want to study. WDT provides a diverse mixture of educational programs with hands-on learning. Our small class sizes, combined with extensive hands-on experience, creates a personalized education that assures our graduates are well prepared for success in today's technical job market and for the 21st Century. Visit our Rapid City campus. The instructors, staff, and students are anxious to share with you the Western Dakota Tech experience.

Western Dakota Tech is one of four state-supported postsecondary technical institutes in South Dakota. WDT offers more than 20 educational programs granting diplomas and Associate in Applied Science degrees. Programs range in length from nine months to two years. In addition, a wide variety of non-credit classes, workshops, professional programs, and seminars are available through the Corporate Education Center. Choose Western Dakota Tech today and learn for the 21st Century.

## **MISSION**

Western Dakota Technical Institute is a public institution of higher learning where students acquire the knowledge, skills, and behaviors necessary for successful employment.

## **OBJECTIVES**

Students will demonstrate:

1. The occupational skills necessary to obtain and retain successful employment in their field of training.
2. Proficiency in academic skills in the area of communications, mathematics, computer use, and social studies appropriate to their program of study.

The Institute will:

1. Develop and implement short-term and customized training opportunities through the Corporate Education Center.
2. Maintain efficient and effective facilities designed to serve the needs of the students.
3. Develop and retain a staff of technically competent and highly trained individuals.
4. Secure adequate financial resources necessary to accomplish its mission.
5. Assure equal access to those who are disabled, economically or academically disadvantaged, in non-traditional programs of study, and/or of limited English proficiency.
6. Provide services to those requiring academic assistance, counseling, and career guidance.
7. Provide assistance in securing training-related employment to students and graduates.
8. Provide opportunities for higher learning to high school students.
9. Promote lifelong learning.

## **PHILOSOPHY**

We believe that all individuals should be afforded an educational opportunity to develop and maximize their technical abilities through opportunities offered by Western Dakota Technical Institute.

## **VISION STATEMENT**

It is the vision of Western Dakota Tech to prepare our students for living, lifelong learning, working, and succeeding in the 21<sup>st</sup> Century. In order to realize our vision, we dedicate our energy and efforts to the following principles:

- WDT strives to provide a caring, nurturing, and disciplined learning environment for students of all ages and backgrounds, and does so by providing quality courses and programs, encouraging academic rigor, and maintaining a skilled, dedicated, and student-oriented faculty and professional staff.
- WDT strives to provide programs that lead to successful employment and career pathways for our graduates by providing opportunities both for existing careers and for new employment trends and opportunities.
- WDT strives to be a model civic partner by collaboratively engaging communities, organizations, and businesses in programs, projects, and activities that lead to improved economic development, greater levels of service, and enhanced quality of life.
- WDT strives to utilize the most effective teaching and learning technologies and strategies that enhance student skills and abilities now and into the future.
- WDT strives to build a community of lifelong learners of all ages and backgrounds who have the skills and ability to understand and respond to a changing world and its impact on business, technology, economy, and strategies.

- WDT strives to reach its goals by operating in an ethical, open, and cost efficient manner in all of its programs and business affairs.

And finally, it is the vision of Western Dakota Tech to be a leader, in both our State and region, for quality educational programs and service, and to develop and/or adopt those practices which will result in continuous improvement, improved quality of life for our graduates and communities, and for providing a trained workforce who will meet the challenges of the 21<sup>st</sup> Century.

## **CORE ABILITIES**

Core abilities are essential skills that cut across occupational and academic titles. They are broad, common abilities that students must possess to be prepared for the workforce and for lifelong learning.

Core abilities are different from course competencies in that they are not course-specific. They are not taught in lessons. Instead, they are broader skills that run through courses and lessons. These abilities enable learners to perform competencies.

Core abilities are comprised of transferable skills, attitudes, and abilities expected to be mastered by learners completing a program. They go beyond a specific program, are integrated throughout the learning experience, and are institutional.

The following core abilities and indicators are derived from the mission statement and objectives of WDT and its guiding principles:

1. **Life Skills** - Means that an individual applies the principles of physical and psychological wellness to his or her life.
  - a. Take responsibility for own behavior.
  - b. Balance family, work, finances, and personal needs.
  - c. Relate personal values and goals to the work environment.
  - d. Recognize the importance of personal wellness.
2. **Analytical Skills** - Means that the individual applies the principles and strategies of purposeful, active, and organized thinking.
  - a. Evaluate technology.
  - b. Identify problems.
  - c. Apply an appropriate problem solving process.
  - d. Make informed decisions.
  - e. Respect others' points of view.
  - f. Differentiate fact from opinion.
  - g. Experiment with original ideas.
  - h. Accept ambiguity.
3. **Communication Skills** - Means that an individual is able to apply appropriate writing, speaking, and listening skills in order to precisely convey information, ideas, and opinions.
  - a. Use standard English principles (spelling, grammar, and structure).
  - b. Use language and details appropriate to the level of audience.
  - c. Check for accuracy.
  - d. Present information in a readable form.
  - e. Listen.
4. **Technology Skills** - Means that an individual possesses the knowledge and skills necessary to use a computer and other technology methods utilized within his or her chosen field.
  - a. Use technology to communicate.
  - b. Solve problems using technology.
  - c. Use appropriate technology to manage information.
  - d. Recognize the impact of technology.
5. **Teamwork Techniques** - Means that an individual is capable of working with others to complete tasks, solve problems, and resolve conflicts.
  - a. Demonstrate respect in relating to people.
  - b. Cooperate and resolve conflicts effectively.
  - c. Participate in shared problem solving.

6. Social Values – Means that an individual possesses an awareness of differences in backgrounds and cultures and demonstrates respect while working with different backgrounds/cultures.
  - a. Acknowledge personal prejudices and biases.
  - b. Appreciate perspectives of people outside own background/culture.
  - c. Work collaboratively with persons from other backgrounds/cultures.
  
7. Employability – Means that an individual possesses and applies effective work habits and attitudes within the classroom or training situation.
  - a. Manage time and workload.
  - b. Attend classes as scheduled.
  - c. Turn in quality work.
  - d. Adhere to safety rules and regulations.
  - e. Act professionally to fulfill job duties within chosen field.
  - f. Demonstrate flexibility and self-directedness in learning.

## **ACCREDITATION**

The Higher Learning Commission, a Commission of the North Central Association of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago, IL 60602 2504, 800 621-7440, [www.ncahigherlearningcommission.org](http://www.ncahigherlearningcommission.org), accredits Western Dakota Tech.

The South Dakota Board of Education has approved Western Dakota Tech to grant the Associate in Applied Science degree and one- and two-year Diplomas.

## **CERTIFIED PROGRAMS**

Various professional organizations approve or certify certain programs. These include:

- Collision Repair Technology: National Automobile Technicians Education Foundation
- Fire Science: ProBoard COA
- Law Enforcement Technology: Seasonal Law Enforcement Training Program, National Park Service; State of South Dakota Law Enforcement Standards and Training Commission
- Paralegal: American Bar Association
- Pharmacy Technician: American Society of Health-System Pharmacists
- Practical Nursing: South Dakota Board of Nursing
- Surgical Technology: Association of Surgical Technologists
- Transportation Technology: National Automobile Technicians Education Foundation
- Welding/Manufacturing: American Welding Society

## **PROFESSIONAL MEMBERSHIPS**

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American Association for Paralegal Educators  
American Association of PA's  
American Association of Community Colleges  
American Association of Medical Transcriptionists  
American Association of University Women  
American College Counseling Association  
American Counseling Association  
American Heart Association  
American Legion Post 22  
American Library Association  
American Society of Health Systems Pharmacists  
American Technical Education Association  
American Welding Association  
Association for Career and Technical Education  
Associated General Contractors of South Dakota Building Chapter  
AutoCAD Users Group International  
Automotive Service Excellence

Black Hills Association of Education for Young Children  
Black Hills Home Builders Association  
Black Hills Legal Professionals  
Black Hills Regional Job Fair  
Black Hills Society for Human Resource Management  
Black Hills Society of Trainers and Developers

Campus and Community Prevention Coalition  
Council of North Central Two-Year Colleges

Dakota Association for College Admissions Counseling  
Delta Kappa Gamma  
Downtown Kiwanis-Rapid City

Front Porch Coalition (Suicide Prevention)

Girl Scouts of the Black Hills – Board of Directors

Hot Springs Chamber of Commerce

International Association Of Electrical Inspectors  
Instructional Technology Council, AACC  
International Association of Firefighters

Learning Resources Network (LERN)  
Loss Team

National Vocational Ag Teachers Association  
National Association for College Admissions Counseling  
National Association of College Stores  
National Association of Colleges and Employers  
National Association of Health Unit Coordinators  
National Association of Publicly Funded Truck Driving Schools  
National Association of Agricultural Education  
National Association of Student Financial Aid Administrators  
National Automotive Technicians Education Foundation  
National Board of Certified Counselors, Inc.  
National Center for Construction Research and Education  
National Council of Teachers of English in Two-Year Colleges  
National Tech Prep Network  
North American Conference Auto Technology  
North American Council of Automotive Teachers

Pharmacy Technician Educators Counsel  
Rapid City Area Chamber of Commerce  
Rapid City Area Economic Development Partnership  
Rapid City Postal Customer Council  
Rapid City Rotary Club  
Rocky Mountain As. of Student Financial Aid Administrators

Skills USA  
Society of Human Resources Management  
South Dakota Advocacy Network for Women  
South Dakota Association of Career & Technical Education  
South Dakota Association of Child Care Directors  
South Dakota Association of Pharmacy Technicians  
South Dakota Association of Student  
Financial Aid Administrators  
South Dakota Autobody Association  
South Dakota Bar Association  
South Dakota Career Planning & Placement Association  
South Dakota Chamber of Commerce  
South Dakota College Personnel Association  
South Dakota Counseling Association  
South Dakota Directors Association  
South Dakota Education Association  
South Dakota Emergency Medical Technician's Assoc.  
South Dakota Library Association  
South Dakota Library Network  
South Dakota LPN Association  
South Dakota Mental Health Counseling Association  
South Dakota Paralegal Association  
South Dakota Pharmacy Technician Association  
South Dakota School Counseling Association  
South Dakota Society of CPA's  
South Dakota Vocational Agriculture Teachers Association  
South Dakota Vocational Association  
South Dakota Trucking Association

The Higher Learning Commission, a commission of the  
North Central Association of Colleges & Schools  
The Network: Addressing Collegiate Alcohol and  
Other Drug Use  
Tobacco Free – Rapid City  
Tri State Bookstore Association

West River Counseling Association  
Western South Dakota Child Protection Council  
Women Work

## **ADVISORY COMMITTEES**

Advisory Committees from business and industry represent the strong partnership Western Dakota Tech enjoys with the region and the Rapid City community. The committees meet at least twice a year with program instructors to discuss current job market trends, recent developments in the industry, task competencies for courses, equipment selection, and student performance. As resource persons, the committee members are the most direct and up-to-date sources for current trends in the industry. This education and business partnership ensures the validity of the task competencies and the effectiveness of the Institute.

## **PROGRAM & COURSE INFORMATION**

Course descriptions in the catalog are only summaries of the actual course content. Western Dakota Tech reserves the right to alter course content and curricula without notice. Western Dakota Tech also reserves the right to cancel any tentatively scheduled class and to combine class sections due to insufficient enrollment. In the event of a class cancellation, refunds will be issued. The Marketing Department of Western Dakota Tech publishes the catalog. Western Dakota Tech reserves the right to make changes in courses and regulations published in this catalog and other publications without obligation or prior notice.

## **TECH PREP**

South Dakota Tech Prep's mission is to "prepare secondary and postsecondary students to live and work in the highly technical world of the 21st century through a *rigorous* education program that meets the performance standards of business and industry and provides the basis for the transition to additional education and/or the world of work." <http://doe.sd.gov/octe/techprep/>

Schools in Western South Dakota now participate through articulation agreements, professional development, ESA collaboration, consortium membership, career development, guidance, and advisory programs. Tech Prep goes wherever there are students, education professionals, and parents motivated to prepare students for the world of the 21<sup>st</sup> century. For further information, refer to <http://isd742.org/CTE/AspectsOfIndustry.pdf>.

### **Articulation:**

Course articulation is the process by which one institution matches its courses or requirements to course work completed at another institution. Students use course articulation to assure that the courses they complete will not have to be repeated at the institution to which they are transferring.

Articulation agreements between individual secondary schools, the state Office of Curriculum Career and Technical Education (OCCTE), and post secondary schools provide the opportunities for high school graduates to apply high school credits as credits toward technical institute graduation. In other words, an incoming high school graduate may not have to repeat or pay for part of a course or courses already completed in high school if that student can document articulated high school courses (see guidelines at <http://www.wdt.edu/techprep.aspx?id=4664>) by submitting a transcript to WDT. An added benefit to the student is that those articulatable credits can be used at any of the four technical institutes in the state. See your high school counselor for a list of state OCCTE approved courses in your school.

Articulation agreement renewal is required every year to ensure a match between secondary level coursework and postsecondary level coursework. These agreements are coordinated through the West River Tech Prep Consortium office at WDT, The state Office of Curriculum Career and Technical Education, and the high schools.

Specific information about courses listed on each school's articulation agreement can also be found at the website link or through the West River Tech Prep office. Students interested in enrolling at WDT with articulated credit should contact the Admissions Coordinator.

### **Professional Development:**

High school teachers can earn college credit through a variety of Tech Prep activities that focus on career education, integrative curriculum, applied academics and methodology, and work-based learning experiences. As funding is available, member schools in the West River Tech Prep Consortium may receive financial assistance in paying for the costs of sending teachers and counselors to these activities. Learn more at <http://www.wdt.edu/techprep.aspx?id=5875>

## **CORPORATE EDUCATION CENTER**

Today's constantly changing demands the continual upgrading of skills and education. The Corporate Education Center helps meet those demands. The Corporate Ed Center offers a variety of short term, non-credit courses designed for the working adult. Learning in the classroom one day is applied on the job the next. The Corporate Ed Center can also customize courses to meet an individual business' needs. Training may be accomplished both on-site and off-site. The Corporate Ed Center offers courses on computer software, truck driving, business, construction, welding, professional development, and various health topics. WDT is an official American Heart Association Training Center and provides CPR, First Aid, and EMT training. WDT is also a South Dakota State CDL Testing Sponsor and provides Third Party Examinations for Class B commercial vehicles. The Corporate Ed Center also offers online courses providing the opportunity to learn at home, at the office, or while traveling.

Programs and courses are offered in the eight skill areas that are critical for corporate and individual success: employability, social values, teamwork, life skills, analytical skills, communication skills, technology skills, and industry specific skills. The training is offered in three tracks, each one building on the other so skills grow on a solid base. Students are tracked as they progress, using state-of-the-art software that creates individualized transcripts for every person who takes part in any training with us. This allows employers to build and track a comprehensive training program for every employee in any organization. The Corporate Education

Center believes that investing in lifelong learning leads employees toward more satisfying, productive working lives. It also enhances job performance, teamwork, and overall competitiveness.

# **STUDENT RESPONSIBILITY FOR CATALOG INFORMATION**

The information contained in this catalog is the most accurate available at the time of publication, but changes may become effective before the next catalog is printed. It is ultimately the student's responsibility to stay abreast of current regulations, curricula, and the status of specific program offerings. Each student is responsible for compliance with the information appearing in the catalog, the current issue of the Student Handbook, and any published addenda. The official Catalog includes this Catalog plus any published addenda.

Further, WDT reserves the right to modify requirements and curricula offerings and to add, alter, or delete courses and programs through appropriate procedures. While reasonable efforts are made to publicize such changes, a student is encouraged to seek current information from appropriate offices. The WDT also reserves the right to make changes in tuition, fees, admission requirements, and regulations without notice or obligation. The official program curricula are those contained in the master curricula file maintained in the Office of Curriculum and Instruction.

## **DRUG FREE ENVIRONMENT**

## **STUDENT RIGHT TO KNOW & CAMPUS SECURITY ACT**

## **AFFIRMATIVE ACTION/ EQUAL OPPORTUNITY**

## **STUDENT HANDBOOK**

## **ATTENDANCE REQUIREMENTS**

## **CANCELLATION OF CLASSES**

## **TOBACCO FREE CAMPUS**

## **PARKING**

## **FAMILY EDUCATIONAL RIGHTS & PRIVACY ACT**

## **DRUG FREE ENVIRONMENT**

Western Dakota Tech requires and maintains a drug free work environment. All employees and students are required to comply with this policy. This policy is published in the Student and Faculty handbooks. Disciplinary measures may be necessary for violations of this policy. Discipline may include a reprimand, suspension, and/or termination. Individuals found in violation will be referred to the appropriate professionals and officials. Western Dakota Tech supports rehabilitation of employees and students with substance abuse problems.

## **STUDENT RIGHT TO KNOW & CAMPUS SECURITY ACT**

Western Dakota Tech will make available to each prospective student, upon request, the completion or graduation rates of diploma or degree seeking full-time students. The period covered by this report is the one-year period ending on June 30 of the preceding year. Western Dakota Tech is required under Public Law 101 542 to encourage students to report all crimes that occur on campus to the local law enforcement office and to the Student Services Office. A statistical report contained in the Student Handbook is made available annually to all students and employees in the student handbook. The handbook is available online at [www.wdt.edu/studenthandbook](http://www.wdt.edu/studenthandbook).

## **AFFIRMATIVE ACTION/EQUAL OPPORTUNITY**

It is the policy of Western Dakota Tech not to discriminate in admission to or participation in its programs and activities on the basis of race, color, national origin, ancestry, creed, religion, family or medical leave, disability, age, gender, sexual orientation, or an arrest or conviction record. (Note: Students enrolled in the Law Enforcement Technology, and Paralegal programs are subject to requirements that are more stringent.) For more information contact Western Dakota Tech or the Regional Director, U.S. Department of Education, Office for Civil Rights, 10220 North Executive Hills Boulevard, 8th Floor, Kansas City, Missouri 64153 1367 or call (816) 880 4202.

## **STUDENT HANDBOOK**

The Student Handbook details the policies and contains beneficial information that can help students achieve their educational goals. It is designed to serve as a ready reference for student rights and responsibilities, academic procedures, graduation requirements, and other useful information. The handbook is available online at [www.wdt.edu/studenthandbook](http://www.wdt.edu/studenthandbook).

## **ATTENDANCE REQUIREMENTS**

Programs require regular attendance for all students. Satisfactory attendance is stressed as part of the training and based on accepted industry standards. Poor attendance may result in grade reduction, academic probation, or suspension.

## **CANCELLATION OF CLASSES**

Western Dakota Tech reserves the right to cancel any classes with insufficient enrollment. Any tuition paid will be refunded.

## **TOBACCO FREE CAMPUS**

Effective July 1, 2009, the use of tobacco products are prohibited on any WDT owned property. Students, faculty, staff, and visitors to the campus must confine the use of tobacco products to their personal vehicles.

## **PARKING**

The parking lots located on the campus have designated areas for handicapped, visitor, staff, and faculty parking. Individuals parking in any unauthorized area may be towed. Students, faculty, and staff will be issued a parking decal that must be displayed in a visible location within the personal vehicle. Visitors to campus should obtain a visitor's parking pass from the Information Desk.

## **FAMILY EDUCATIONAL RIGHTS & PRIVACY ACT**

The Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, protects the privacy of educational records, establishes the students' rights to inspect their educational records, provides guidelines for correcting inaccurate or misleading data through informal and formal hearings, and permits students to file complaints with FERPA concerning alleged failures of the Institution to comply with the Act. The following items are considered public data/information and may be disclosed by Western Dakota Tech in response to inquiries concerning individual students, whether the inquiries are in person, in writing or by telephone:

1. Name
2. Affirmation of whether currently enrolled
3. Campus location

The following items, in addition to those listed on the previous page, are considered public/directory information and may be included in appropriate campus directories and publications and may be disclosed by designated staff members in response to inquiries concerning individual students, whether the inquiries are in person, in writing, or by telephone:

1. School, college, department, major or division
2. Dates of enrollment
3. Degree(s) received
4. Honors received
5. Local address, telephone number and email address
6. Permanent home address
7. Participation in officially recognized activities and sports

To block dissemination of this information, a student must officially file a written request with the registrar within seven working days after the first day of registration.

Western Dakota Tech has the responsibility for effectively supervising any access to and/or the release of official data/information about its students. Certain items of information about individual students are fundamental to the educational process and must be recorded. This recorded information concerning students must be used only for clearly defined purposes, must be safeguarded and controlled to avoid violations of personal privacy, and must be appropriately disposed of when the justification for its collection and retention no longer exists. In this regard, Western Dakota Tech is committed in protecting, to the maximum extent possible, the right of privacy of all individuals about whom it holds information, records, and files. Access to and release of such records is restricted to the student concerned, to others with the student's written consent, to officials within the Institute, to a court of competent jurisdiction, and otherwise pursuant to law.

# STUDENT SERVICES

The services of the Student Services Office occur prior to, during, and after the student attends WDT. These functions include a wide range of services including career development, diagnostic testing, prior learning evaluation for advanced standing, various types of educational placement assessments, orientation, housing assistance, counseling and ongoing support services, advisement, financial aid, the graduation process, job placement assistance, and records management.

**LIBRARY**

**LEGAL RESOURCE CENTER**

**CHILD DEVELOPMENT CENTER**

**BOOKSTORE**

**DAKOTA GRILL**

**CAREER SERVICES**

**ACADEMIC PREPARATION**

**ACADEMIC ASSISTANCE CENTER**

**DISABILITY SERVICES**

**SPECIAL SERVICES PROGRAM**

**COUNSELING SERVICES**

## **LIBRARY – DEBORAH ARNE**

The library provides materials, informational resources, and services to support your program and individual interest and provides Interlibrary Loans.

Library Literacy Classes are offered throughout the semester to help you understand how to find information for your assignment, how to evaluate and know you have credible information. Your library barcode number is located on the backside of your WDT campus ID card. It will be 21560xxxxx. To gain access to the library catalog and electronic databases you will need to log on to [www.sdln.net](http://www.sdln.net), key in your barcode and last name as your password. For help: please contact the Circulation Desk 718-2427 or Reference 718-2904. Your library card will be active as long as you are a student at WDT.

Be sure to use the library's web page to guide you in finding more resources and how to use the library. Go to [www.wdt.edu](http://www.wdt.edu), go to Current Students, then a directory will appear, then find the Library.

## **LEGAL RESOURCE CENTER – SUSIE WOLD**

The Legal Resource Center is a law library specifically designed for the Paralegal program. The LRC provides students with a convenient and quiet study area that is close to classes and legal research sources. The legal collection consists of regional, federal and state laws, statutes, and cases which provide an excellent base of resources for paralegal students preparing for their profession.

## **CHILD DEVELOPMENT CENTER – JILL WINTER**

Western Dakota Tech operates a childcare facility on campus. The Center is a state licensed facility able to care for 75 children between the ages of 4 weeks and 10 years. This quality care is available at a reasonable fee and promotes the intellectual, social, emotional, and physical development of the child. Activities are based on the child's interests and developmental needs. Enrollment is limited to the children of Western Dakota Tech students and staff. For more information regarding fees and openings, contact the Center Director at 394-5488.

## **BOOKSTORE – RICK WALDO**

Western Dakota Tech operates a bookstore that provides students with textbooks (both new and used), supplies, clothing, and a variety of soft goods. All sales are cash, personal checks (for the amount of purchase only), or credit card unless funded by an authorized agency. The Bookstore hours are posted. Refunds are given for merchandise in original condition the first two weeks of each semester only and must be accompanied by a receipt. See the Student Handbook for the book buy back policy and information.

## **DAKOTA GRILL – CAROL JONES**

WDT's Dakota Grill provides food service from with a daily menu including breakfast from 7:00 am to 10:30 am, lunch specials, and a variety of short orders from 10:30 am until 1:30 pm. The short order grill closes at 12:30 pm. Catering services will also be provided as requested and approved. Vending machines, a microwave, and a refrigerator are available in the both the Mickelson and Rushmore commons areas.

## **CAREER SERVICES – CURT LAUNGER**

Western Dakota Tech's Career Services office is committed to serving our students, alumni, and the employers who hire our graduates. Western Dakota Tech's graduates enter the job market equipped with the most advanced technical skills available in their chosen profession. The role of the Career Services office is to facilitate a successful match between a graduate's employment interests and available career opportunities. In addition to informing students and alumni of employment opportunities, the Career Services office assists students with developing interview skills, resume writing, and networking. The staff compiles a yearly Graduate Placement Report that identifies wage trends and employers who hire WDT graduates.

## **ACADEMIC PREPARATION – JILL ELDER**

Western Dakota Tech is dedicated to helping students succeed in their chosen academic field. Upon completion and review of the COMPASS exam, students may be required to enroll in classes designed to upgrade their skills in math, writing, and reading. Academic preparation classes are each two credits and do not count toward the program graduation requirement. Please contact the Admissions Office for specific information.

## **ACADEMIC ASSISTANCE CENTER/STUDY SKILLS – MARY ANN SLANINA**

The Academic Assistance Skills Center offers course-specific tutoring for students enrolled in diploma or Associate in Applied Science degree courses. The service is free and designed to give individualized attention to students who want to improve their performance in specific curriculum areas. The Center employs peer tutors who are assigned based upon their area of expertise. Various study skill workshops are conducted. The topics include note taking, memory skills, listening skills, time management, and test taking.

### **DISABILITY SERVICES – MARY ANN SLANINA**

Western Dakota Tech's training programs and facilities are accessible to persons with disabilities who satisfy the general admission requirements. Any applicant with a disability may be accepted, providing the program goals are appropriate and in accordance with established program and industry standards. Applicants with a documented disability are encouraged to contact the Student Services Office during the initial stages of the admissions process for accommodations.

### **SPECIAL SERVICES PROGRAM – MELANIE KRAUTER**

This program provides support services to the minority, single parent, displaced homemaker, single pregnant women, first-generation, and non-traditional student populations. Services provided include financial assistance; resource and referral with local agencies; academic, career, and personal counseling; and social and cultural activities.

### **COUNSELING SERVICES – RAE GETZ**

The counseling services' mission is to provide quality counseling and guidance to students at WDT, tailored to each unique individual's circumstances and needs, while maintaining a healthy perspective in their physical, mental, emotional, educational, and social well-being.

# STUDENT LIFE & ACTIVITIES

School organization membership is encouraged. Social, civic, and service projects foster a broadened appreciation of the world outside the classroom and enhance the personal development of each student. Business, health, and industrial leaders recognize the value of club participation in identifying leadership potential in their prospective employees. Activities that supplement the regular curricula offerings contribute to the educational, cultural, and physical well-being of students. Organized activities are provided for student cooperation and competition in individual or group efforts and allow for the demonstration of students' talents.

**BUSINESS MANAGEMENT AND MARKETING CAREER  
ENHANCEMENT CLUB**

**CONSTRUCTION TRADES CLUB**

**EAGLE FEATHER SOCIETY**

**ELECTRONICS CLUB**

**FIRE SCIENCE CLUB**

**INDUSTRIAL ELECTRONICS CLUB**

**NON-TRADITIONAL STUDENT ORGANIZATION**

**LEGAL EAGLES PARALEGAL CLUB**

**SKILLS USA**

**STUDENT AMBASSADORS**

**STUDENT CHAPTER OF THE BLACK HILLS  
HOME BUILDERS ASSOCIATION**

**STUDENT GOVERNMENT ASSOCIATION**

**WELDING MANUFACTURING SKILLS CLUB**

**WOMEN IN NON-TRADITIONAL EMPLOYMENT ROLES**

## **BUSINESS MANAGEMENT AND MARKETING CAREER ENHANCEMENT CLUB**

The purpose of the BM&M Career Enhancement Club is to engage students in social activities and etiquette activities that will enhance their careers. The club strives to help students with professional development through activities that enhance their social awareness and etiquette skills while promoting community involvement.

## **CONSTRUCTION TRADES CLUB**

Membership is open to any member of the Construction Trades department. Students work on projects to raise funds for equipment, field trips, and scholarships.

## **EAGLE FEATHER SOCIETY**

Eagle Feather Society is a club for students of any tribe, race, or nationally in any program at WDT. The purpose is to sponsor cultural awareness/appreciation, special activities, projects, and employment/scholarship opportunity information. New students may be provided transitional planning, assistance, referral, and peer mentoring.

## **ELECTRONICS CLUB**

The club exists to promote and further the technical and social aspects of electronics and computing in the community by providing a forum for the exchange of information and ideas through formal talks, training, visits, field events, competitions, and group discussions. Membership is open to any person who is interested in electronics or a related computer subject and wishes to take part in and contribute to club activities.

## **FIRE SCIENCE CLUB**

Fire Science Club membership is open to any member of the WDT Fire Science program. Students sponsor fund-raising projects and use the funds for social benefit and Club activities. The purpose of the Fire Science Club is to engage students in social activities that will enhance their lives and careers. The club strives to help students with professional development through activities that enhance their social responsibility awareness and teamwork skills while promoting community involvement.

## **INDUSTRIAL ELECTRONICS CLUB**

Membership is open to any member of the Industrial Electronics program. Students sponsor fund-raising projects and use the funds for field trips and end-of-semester activities.

## **NON-TRADITIONAL STUDENT ORGANIZATION**

All non-traditional students are invited to join this organization. Non-traditional students are defined as single parents/single pregnant women, homemakers/displaced homemakers, minority students, first generation college students, and students enrolled in non-traditional programs (i.e. a male in Nursing or a female in Welding.) NTSO provides support and community to all non-traditional students at WDT.

## **LEGAL EAGLES PARALEGAL CLUB**

Membership is open to any student in the Paralegal/Legal Assistant program. The club's purpose is to establish and maintain student involvement within the legal community. This is accomplished through a variety of fund-raising activities, field trips, and guest speakers.

## **SKILLS USA**

Skills USA-VICA (Vocational Industrial Clubs of America) is the national organization for students in trade, industrial, technical, and health occupations training. Skills USA is an applied method for preparing America's high performance workers in public, technical programs. It provides quality education experiences for the students in leadership, teamwork, citizenship, and character development.

## **STUDENT AMBASSADORS**

Student ambassadors support the Admissions Office throughout the year. Their duties include leading campus tours, visiting with potential students, assisting with special events, and making prospective student callbacks. This group of students is selected and trained by the admissions staff. These are paid positions.

## **STUDENT CHAPTER OF THE BLACK HILLS HOME BUILDERS ASSOCIATION**

Membership to the student chapter of the Black Hills Home Builders Association is open to any student of the construction trades programs. Its purpose is to establish and maintain student involvement within the construction community. This is accomplished through a variety of fund-raising activities, field trips, and construction projects.

## **STUDENT GOVERNMENT ASSOCIATION**

The Student Government Association is comprised of representatives from the student body who are elected through their individual program at the beginning of each school year. The SGA serves as an advisory body, working with students, faculty, and administration on social, educational, and cultural activities. All efforts are directed toward the enhancement of the school. The SGA is also a major sponsor of student social activities on campus and allocates funds to other student organizations.

## **WELDING MANUFACTURING SKILLS CLUB**

This club is open to all Welding Manufacturing students with a goal of 100% student participation. Students will pay a minimal fee and have opportunities to earn money through fund-raising projects and donations that will allow them to participate in various competitions and related fun activities.

## **WOMEN IN NON-TRADITIONAL EMPLOYMENT ROLES (WINTER)**

Women in Non-Traditional Employment Roles (WINTER) is devoted to the support, role modeling, and mentoring of female students enrolled in non-traditional programs at WDT. Female students in the following programs are encouraged to join: Collision Repair Technology, Computer-Aided Drafting, Programming and Computer Networking, Electrical and Electronic Technology, Environmental Engineering Tech, Fire Science, Law Enforcement Technology, Transportation Technology – Heavy and Light Duty, and Welding Manufacturing.

# ADMISSION REQUIREMENTS

Any person sixteen years of age or older who may benefit from a technical education program may be enrolled upon application and acceptance in accordance with published school policies.

These are minimum requirements for all programs. Additional requirements may apply to satisfy bona fide occupational qualifications in specific programs of study.

## **FEDERAL ABILITY TO BENEFIT REGULATIONS**

## **APPLICATION PROCEDURE**

## **ONLINE APPLICATION PROCEDURE**

## **PRE-ENROLLMENT ASSESSMENT**

## **HOME-SCHOOLED STUDENTS**

## **SPECIAL ADMISSIONS PROCEDURES**

## **ACCEPTANCE**

## **ACADEMIC COUNSELING**

## **ADVISEMENT**

## **ADVANCED STANDING**

## **TRANSFER CREDITS**

## **CREDIT BY EXAM/LIFE EXPERIENCE**

## **REGISTRATION**

## **WITHDRAWAL REFUNDS**

## **TEXTBOOKS & TOOLS**

## **LAPTOP COMPUTERS**

## **ACADEMIC RECORDS**

## **GRADUATION**

## **GRADING SYSTEM**

## **GENERAL EDUCATION REQUIREMENTS**

## **HOUSING**

## **FEDERAL ABILITY TO BENEFIT REGULATIONS**

Federal regulations, resulting from a law passed in November, 1990, require students enrolling in post-high school vocational-technical education be high school graduates, have a GED, or prove ability to benefit from post-high school education by achieving a satisfactory level on a federally approved test. The regulations also require that someone administer the test without connection to the institution of intended enrollment.

## **APPLICATION PROCEDURE**

**EARLY APPLICATION IS RECOMMENDED FOR ALL PROGRAMS.** All applicants seeking admission to Western Dakota Tech must provide the Admissions Office with the following:

1. Submit a completed application for admissions and a non-refundable \$20 application fee. (Practical Nursing and Surgical Technology applications are ONLY accepted through March 31.)
2. Schedule to take the COMPASS test. The COMPASS test is a placement exam over math, English and reading. There is a \$15.00 testing fee. (The COMPASS test will be waived if you have an ACT composite score of an 18 or better, or an SAT combine score of an 860 or better, and it is current within the last five years, or have completed 35 or more post-secondary credits with a 2.5 cumulative GPA or better.)
3. Request an official High School transcript or GED scores sent to the admissions office. (Additionally, an official transcript must be submitted if you have attended other post-secondary institutions or universities.)
4. Submit a certification from a licensed physical physician that you have received or are in the process of receiving the required two doses of immunization against measles, mumps, and rubella (MMR). (This is required for all on campus students.)
5. Once you receive your acceptance letter, the enclosed green confirmation form must be completed and returned within 10 days with a \$35.00 non-refundable registration fee. This will confirm and hold your spot in the program.

## **ONLINE APPLICATION PROCEDURE**

The admissions process for online students is the same for on-campus students. All applicants seeking admission to Western Dakota Tech must provide the Admissions Office with the following:

1. Submit a completed application for admissions and a non-refundable \$20 application fee.
2. Schedule to take the COMPASS test. The COMPASS test is a placement exam over math, English and reading. There is a \$15.00 testing fee. (The COMPASS test will be waived if you have an ACT composite score of an 18 or better, or an SAT combine score of an 860 or better, and it is current within the last five years, or have completed 35 or more post-secondary credits with a 2.5 cumulative GPA or better.)
3. Request an official High School transcript or GED scores sent to the admissions office. (Additionally, an official transcript must be submitted if you have attended other post-secondary institutions or universities.)
4. Once you receive your acceptance letter, enclosed will be a green confirmation form that must be completed and returned within 10 days with a \$35.00 non-refundable registration fee. This will confirm and hold your spot in the program.

## **PRE-ENROLLMENT ASSESSMENT**

A pre-enrollment assessment is required of all individuals seeking admission into a program at WDT. The COMPASS is administered during the initial stages of the application process. Individuals who have taken the SAT or ACT within the past five years may be able to waive the COMPASS if their composite score is adequate. Desired academic credentials for admission include one of the following:

1. Transferring from a postsecondary institution with a total of 35 credits and a 2.5 cumulative GPA or above.
2. A composite ACT score of 18 or above; or a total score on the SAT of 860 or above; or acceptable COMPASS scores.

The information derived from this assessment is used as a counseling tool to determine an individual's ability to benefit from instruction and to provide proper program placement for the applicant. Program placement may include regular acceptance or recommendations to receive additional assistance from the Academic Services Center Coordinator before or during enrollment. The result of the COMPASS test may require the individual to complete remedial coursework. Alternate test sites are available to those individuals residing more than 100 miles from Rapid City. Please contact the Admissions Office for the location of test sites.

## **HOME-SCHOOLED STUDENTS**

Western Dakota Tech welcomes applications from home-schooled students wishing to pursue a technical education. WDT requires all applicants to demonstrate the ability to benefit from instruction at the Institute. This is accomplished by one of the following methods:

1. Submit a transcript of standardized instruction from a nationally recognized home-school organization.
2. Submit a transcript of classes completed, along with a certificate of registration with the school district in which the student lives.
3. Submit your GED as evidence of completing a commonly accepted body of secondary course work.

Additionally, applicants must satisfactorily complete the standard admissions steps, such as completing a COMPASS through Western Dakota Tech or by submitting a qualifying ACT or SAT composite score. The ACT and SAT are administered independently of local school systems and are open to anyone.

## **SPECIAL ADMISSIONS PROCEDURES**

Law Enforcement Technology requires all applicants to complete a background check, drug test, and an informal interview during the initial application stages based on the direction of the advisory committees and state regulatory agencies that endorse this program.

Pharmacy Technician program requires all applicants to complete an informal interview with the lead instructor during the application process based on the regulations of the accrediting body.

Practical Nursing program requires all applicants to take the HOBET or other WDT admissions test. Applicants must submit three professional recommendation forms and a resume based on the regulations of the accrediting body. Deadline to apply for admissions is March 31.

Surgical Technology program requires all applicants to take the HOBET test. Applicants must submit three professional recommendation forms, goal statement and resume based on the regulations of the accrediting body. Deadline to apply for admissions is March 31<sup>st</sup>.

## **ACCEPTANCE**

Students who successfully complete the admissions process will receive a letter of acceptance. At that time, the student is required to complete and return a confirmation form and pay the confirmation fee. If there are more applicants than space available, acceptance will be based upon the date the admissions process is completed. Waiting lists are established as programs reach maximum enrollment. Individuals will be accepted from the waiting list based on the date assigned to the list.

## **ACADEMIC COUNSELING**

Counselors/advisors are ready to assist prospective students with one of life's most important decisions. Sound career decisions are based upon information and personal choice. Counseling services are also available to all students during their enrollment when personal and educational problems arise. In addition, counseling services are available to veterans, students with disabilities, non-traditional students, ethnic minorities, single parents, and displaced homemakers.

## **ADVISEMENT**

Advising and counseling are shared commitments of faculty advisors and the Student Services staff. Each student enrolled in a program is assigned a faculty advisor from the student's program of study. The role of each advisor is to guide students through their chosen programs. This includes developing appropriate schedules each semester.

## **ADVANCED STANDING**

Advanced standing refers to being placed in higher-level courses upon initial enrollment based on prior education or training. Advanced standing for courses may be obtained through the following methods:

1. Transfer of credits from other accredited institutions
2. Credit transferred by department evaluation
3. Credits through high school or college credit courses
4. Credits through examination (\$10 per credit hour fee)
5. Credits through assessment of life and/or work experiences

## **TRANSFER CREDITS**

Students requesting credit at WDT for postsecondary work completed at other schools must submit an official transcript from the higher education institutions previously attended. Postsecondary level credits from an accredited higher education institution in which the student has earned a grade of "C" or higher, or its equivalent, will be considered for transfer. Program faculty, with administrative approval, will make the determination of acceptance. Appropriate staff will review military credit for transfer. All

requests for transfer of credit from a higher education institution must be received by midterm of the final semester of a student's enrollment to qualify for graduation at the end of that term.

## **CREDIT BY EXAM/LIFE EXPERIENCE**

Students wishing to challenge course work for credit are required to successfully complete an examination. Approval must be requested through the Student Services Office. A fee of \$10 per credit hour will be assessed for any course challenged. Credit by exam must be accomplished prior to the end of the second week of the semester. Credit may be granted based on previous work history if approved by the appropriate instructor with administrative approval. However, if a proficiency exam is required, the normal credit by exam fees will be charged.

## **REGISTRATION**

Registration is the process of enrolling in classes. Students may register in the day, evening or online programs on a full- or part-time basis. A full-time student is someone registered for 12 or more credit hours during a 16-week semester or 8-week summer session. A standard full-time schedule is generally 18 credits each semester. Students wishing to schedule 21 credits or more any one semester must have the recommendation of their advisor and approval of the Registrar.

A part-time student is one enrolled in less than 12 credit hours per semester or summer session. Class size is restricted in many programs and priority is given to full-time students, especially for daytime classes. If a student is registering for online classes, the student must acquire the required software, have access to a computer system capable of running the software, and adequate connectivity to the Internet. See the WDT Helpdesk or a class instructor for support questions.

## **WITHDRAWAL REFUNDS**

Tuition and fees are refunded when a request is initiated by the student, according to the schedule established by WDT. The refund policy is subject to change. Current refund schedules are available from the Student Services Office and are published in the Financial Aid Handbook. If a student finds it necessary to withdraw from school, the student must contact the WDT Counselor located in Student Services. Many problems that students encounter that may affect their status as a student may be resolved after working with a Student Services counselor.

## **TEXTBOOKS & TOOLS**

Students are required to purchase their own textbooks, tools, and supplies. Textbooks are available through the WDT Bookstore. The refund policy on book purchases is posted at the campus bookstore. Used books are generally available through the WDT Bookstore or from individual students.

Several programs require students to purchase tools. The student is provided a list of required tools. Western Dakota Tech does not endorse any particular brand of tool, and students are encouraged to shop for reasonably priced quality tools. Students should not feel obligated to purchase "extras" or to purchase "deals."

## **LAPTOP COMPUTERS**

Students are required to have a wireless laptop computer for all programs at WDT. It is recommended that students in the Computer-Aided Drafting program purchase the required computer from WDT. Software licensing costs for this program are greatly reduced when the computers are purchased through WDT. WDT offers computer purchasing through a third-party vendor. Computer specifications sheets are listed by program under the Information Services tab at [www.wdt.edu](http://www.wdt.edu). Any computer ordered through WDT or purchased through the website will have all required program and antivirus software loaded free of charge. All student laptops will be provided network access. All laptops will be required to have either Windows OS7, Vista Business, or Windows XP Pro.

## **ACADEMIC RECORDS**

A transcript is a record of courses taken, credits received, grades earned, and the grade point average earned while attending WDT. Also listed on the transcript are credit hours transferred from other institutions or gained through advanced standing. Transcripts are usually required when students are applying for scholarships, employment, or admission to other schools. Students are encouraged to review their transcript and keep a record of courses, credit hours, and grades for work completed. Students may receive a copy of their transcript by completing a Transcript Request Form, paying a generation fee, and submitting it to the Student Services Office. Students will be required to pay for subsequent transcripts. Transcripts will not be issued to anyone with outstanding student account charges.

## **GRADUATION**

All students enrolled in an Associate in Applied Science degree or a diploma program must maintain an overall "C" average (2.0 grade point average) or better, with no failing grades, for all required courses of the program. Students not maintaining a "C" average are urged to consult with their advisor and a Student Services counselor. Students must complete at least 50% of the course work at WDT in order to receive a diploma or degree. Advanced standing does not count as work completed. All requests for transfer of credit from a higher education institution must be received by midterm of the final semester of a student's enrollment to qualify for graduation at the end of that term.

## **GRADING SYSTEM**

Students will be graded for each course. A grade report will be issued at the end of each semester and placed on the student's transcript. If an "incomplete" (I) is received for the reporting period, all work must be completed within two weeks of the end of the semester or the "I" will automatically become an "F" grade. No incomplete grade will be issued if the student does not enroll in the subsequent semester or summer session or if the student is not in good academic standing. All students must maintain a minimum 2.0 grade point average and meet all requirements of the "Satisfactory Progress Standards." Students not meeting the respective "Satisfactory Progress Standards" will be placed on academic probation. Definition of the letter and points assigned are as follows:

|    |            |
|----|------------|
| A  | 4.0 points |
| B  | 3.0 points |
| C  | 2.0 points |
| D  | 1.0 points |
| F  | No points  |
| I  | No points  |
| CE | No points  |
| S  | No points  |
| SU | No points  |
| W  | No points  |
| AU | No points  |
| TC | No points  |
| AC | No points  |

A student may elect to receive an Audit grade. To do this, a student must register, pay full fees for the course, and inform the instructor (by the end of the second week of class or earlier). Audit status is not available in courses involving clinical assignments or laboratories or where waiting lists are established. Transfer credit, credit by exam, and articulated credits are not used in determining a student's grade point average.

## **GENERAL EDUCATION REQUIREMENTS**

The General Education program at Western Dakota Tech is designed to help students develop the knowledge and skills that will contribute to their intellectual, personal, and professional growth and place them on a path of lifelong learning. General Education provides the skills that employers demand in today's world and the core abilities needed to be *knowledge workers* in a global society. All students are required to successfully complete the prescribed courses in mathematics, behavioral science, computer literacy, social science, and communications. Additional general education courses are required for programs that grant Associate in Applied Science degrees. Credit may be allowed for previous postsecondary education in these areas. Documentation of previous education in these areas must be provided to the Student Services Office for approval prior to scheduling courses.

## **HOUSING**

Off-campus housing is available in the Rapid City community. A housing referral list is maintained in the Student Services Office. When arranging for off-campus housing, students should have a definite understanding with landlords regarding provision of occupancy and services to be rendered. WDT is not responsible for off-campus housing.

WDT has a formal agreement with National American University (NAU) located in downtown Rapid City that allows WDT students to live in the NAU residence halls. Fees are established by NAU. Contact Student Services at WDT for more information.

# FINANCIAL AID

WDT is pleased to be eligible to offer students federal financial aid through the U.S. Department of Education's Title IV Programs. Financial aid includes both gift aid such as grants and educational loans such as the student and parent loans. For a complete listing of federal financial aid programs, please visit the financial aid page at [www.wdt.edu](http://www.wdt.edu).

The Financial Aid Office of Western Dakota Tech provides financial assistance to students who, without such aid, would be unable to attend school. Students and/or their parents are required to complete a Free Application for Federal Student Aid (FAFSA) and submit

## **STEPS TO APPLY**

## **STUDENT CONSUMER INFORMATION**

## **FEDERAL STUDENT FINANCIAL AID FUNDING SOURCES**

## **OTHER STUDENT FINANCIAL AID**

## **ONLINE FINANCIAL AID INFORMATION**

WDT is pleased to be eligible to offer students federal financial aid through the U.S. Department of Education's Title IV Programs. Financial aid includes both gift aid such as grants and educational loans such as the student and parent loans. For a complete listing of federal financial aid programs, please visit the financial aid page at [www.wdt.edu](http://www.wdt.edu).

The Financial Aid Office of Western Dakota Tech provides financial assistance to students who, without such aid, would be unable to attend school. Students and/or their parents are required to complete a Free Application for Federal Student Aid (FAFSA) and submit it to the US Department of Education.

## **STEPS TO APPLY**

**Applying for Federal Financial Aid at WDT is a 5-step process!**

### **Step #1: Complete the FREE Application for Federal Student Aid ([www.fafsa.ed.gov](http://www.fafsa.ed.gov))**

*Items needed include:*

- 4-digit PIN ([www.pin.ed.gov](http://www.pin.ed.gov)) to e-sign FAFSA
- 2009 federal taxes (Call the IRS at 1-800-829-1040 to obtain a copy)
- Social Security number
- Driver's license number
- Other income: SSI, food stamps, WIC, TANF, child support, etc.

### **Step #2: Complete the Federal Student Loan Application ([www.wdt.edu](http://www.wdt.edu))**

*Items needed include:*

- 4-digit PIN ([www.pin.ed.gov](http://www.pin.ed.gov)) to e-sign MPN
- You may have two options: 1.) select the lender you wish to select; or 2). Select "Direct Loans" through the US Department of Education
- Two personal references
- Social Security number
- Driver's license

### **Step #3: Complete WDT Aid Forms ([www.wdt.edu](http://www.wdt.edu))**

*Forms include (as applicable):*

- Aid Information Sheet
- Verification Form (Student and parent) must submit a copy of their 2009 income taxes.
- Household Size Inquiry Form
- Dependent Status Inquiry Form

### **Step #4: Aid is Awarded**

You will receive an email notifying you of your aid award. Print, sign, date, and return your award letter to complete the acceptance process.

### **Step #5: Aid is Disbursed**

Financial aid is disbursed at the beginning of the term. However, the student must have registered for classes, and corresponding charges must be posted in order for a student's awarded aid to be available. Contact the Student Accounts Office to inquire about how your aid is disbursed. **NEW students MUST complete Entrance Counseling, presented during Welcome Day, BEFORE aid can be disbursed.**

The WDT Financial Aid Office is dedicated to administering the U.S. Department of Education's Title IV Financial Assistance Program in a fair, consistent, and efficient manner and assisting students in seeking funding opportunities in order to fulfill their post-secondary educational goals by providing personalized assistance, accurate and meaningful interpretation of federal eligibility regulations, and guidance regarding long-term financial considerations and default management.

## **STUDENT CONSUMER INFORMATION**

The following information is available regarding the rights and responsibilities of students who are applying for or receiving any financial assistance from Federal Pell Grant, FSEOG, ACG, FWS, and Federal Stafford Loan Programs. The Financial Aid Office may be contacted for student consumer information listed below.

- Continued eligibility for financial aid
- Satisfactory academic progress
- Methods and means of financial aid payment

- Responsibility of student repayment of loans and grants
- Terms and conditions of work-study employment
- Costs of attending WDT
- Tuition and fees refund policy

## **FEDERAL STUDENT FINANCIAL AID FUNDING SOURCES**

The following programs are available to students who demonstrate financial need, as determined by results of the Free Application for Federal Student Aid (FAFSA).

### **Federal Pell Grant**

The Federal Pell Grant program is a Federal Student Aid program designed to provide financial assistance to those who need it to attend postsecondary educational institutions. These grants are intended to be the foundation of a financial aid package and may be combined with other forms of aid. The Pell Grant award is a grant and, unlike a loan, does not have to be repaid, if the student finishes the term.

The amount of the Federal Pell Grant is contingent on the determined need of the student, the student's enrollment status, and the cost of the program of study for which the student is enrolled. Eligibility is based on information provided by the applicant and/or the applicant's family.

Disbursement of funds will be made (pending receipt of funds from the U.S. Government) near the beginning of each term for which the student is eligible. Equal disbursements of funds will be made near the beginning of each term. Funds may be in the form of a check or credit to the student account.

### **Federal Supplemental Educational Opportunity Grant (FSEOG)**

This grant program is intended for students who demonstrate financial need, with preference going to the Pell Grant recipients. The receipt of a FSEOG is contingent on the need of the student. Similar to the Pell Grant, the FSEOG does not have to be repaid if the student finishes the term. Equal disbursements of funds will be made near the beginning of each term.

### **Academic Competitiveness Grant Program (ACG)**

This grant program is intended for full-time students who are Pell eligible and have completed a rigorous secondary school program of study. First-year students cannot have been previously enrolled in a program of undergraduate education, and second year students must have earned at least a 3.0 GPA. An ACG grant may range from \$750 for a first-year student to \$1,350 for a second-year student.

### **Federal Work Study (FWS)**

This program enables students to work while attending school. Students are paid an hourly wage for work performed either on campus or for a public or private non-profit employer off campus. (Almost all jobs are located on campus.) Students who demonstrate financial need will be referred to the Career Services Coordinator by the Financial Aid Office and must maintain satisfactory academic progress while employed. Students will usually work 10 to 20 hours per week and must average at least 5 hours per week. Wages will be paid based on the number of hours worked during a pay period. Students who have received a FWS award should contact the Career Services Coordinator for job assignments after the beginning of the school year. At least seven percent of FWS funds are allocated for employment filling community service requirements.

### **Federal Stafford Subsidized Student Loan**

These loans are low-interest, deferred-payment educational loans. Students may borrow, depending on need, a set amount for school-related costs. The amount depends on the current year of the student. The maximum loan each year may not exceed the educational costs minus family contribution and other financial aid received. Students borrow this money from a lending institution (bank or credit union). The Federal Government insures these loans.

A default fee is deducted from each loan disbursement. The interest is fixed. Loan repayment will normally begin six months after the student leaves school. Payments are usually scheduled for five to ten years with a minimum payment required each month. The amount of the monthly payments will depend on the total amount of the debt.

Students may defer repayment for a period if they meet the deferment criteria for the loan. Borrowers are provided deferment information for each type of loan before receiving the first loan disbursement and prior to graduation.

Student eligibility for the Stafford Student Loan is determined by the results of a Free Application for Federal Student Aid. Before the school can certify the Stafford Student Loan application, the student must be eligible. The lending institution each term makes disbursement of loan funds. The WDT Student Accounts Coordinator releases the loan checks after the student has attended a required entrance counseling session and/or classes. Disbursements of Stafford Loan checks are usually scheduled for registration days. Enrollment for less than a full academic year may result in prorating loan amounts.

### **Federal Stafford Unsubsidized Student Loan**

These loans are the same as the Stafford Subsidized loan, with the following exceptions:

- Borrowers are responsible for interest while in school and during the grace period.
- For “Dependent or Independent Students,” the total annual maximum with any subsidized Stafford Loan may not exceed a certain amount for first- and second-year students.
- Eligibility for the loan is calculated by subtracting the estimated financial aid from the cost of education.

## **Parent Loans for Undergraduate Students (PLUS)**

This Federal program was established for parents of dependent students to borrow funds to meet postsecondary education costs. The student must be enrolled in an eligible program. The student’s parents may borrow up to the cost of attendance minus other aid per year. The rate of interest is fixed. The loans, in no case, can exceed the student’s estimated cost of attendance minus the estimated financial assistance that the student will be awarded for the period for which the loan is intended. Repayment begins within 60 days after the last disbursement.

## **OTHER STUDENT FINANCIAL AID**

### **Bureau of Indian Affairs (BIA)**

The Employment Assistance Program of the Bureau of Indian Affairs assists “diploma” students who reside on or near the reservation to enroll in and pay for vocational education programs. Students must be one quarter or more Native American descent. Financial aid may cover the cost of tuition, school fees, tools, books, and a monthly living expense allowance. In order to determine eligibility for the program, the student should contact the Employment Assistance office on their home reservation. The student is expected to apply for other types of aid and the amount of this aid may be deducted from the amount the student is eligible to receive from Employment Assistance. The Higher Education Fund may assist Native American students who are enrolled in degree-granting programs. Applicants should contact the Higher Education office on their home reservation; there are application deadlines for each school term.

### **Workforce Investment Act (WIA)**

WIA established a program to provide comprehensive services, which include the training, education, and other services needed to enable individuals to secure and retain employment. Eligible students may receive financial assistance in meeting direct school costs at Western Dakota Tech. To determine eligibility, check with your area South Dakota Career Center representative.

### **National Guard Benefits**

Members of the South Dakota National Guard may be eligible for educational benefits. Students should contact their unit to determine eligibility and certification procedures. The Financial Aid Office at Western Dakota Tech will accept tuition certification forms from eligible students each term until the date for submission of the roster to the state. This date will be listed in student announcements each term. No certification will be honored after that date. The student will forfeit the benefit for the term in progress; he/she may submit the request for the tuition waiver for the next term before the date stated for submission of the roster.

### **Migrant & Seasonal Farm Workers Program**

Migrant and Seasonal Farm Workers program pays some school and living costs for eligible students who have earned wages as farm employees or ranch hands. To determine eligibility, students should apply to the Migrant and Seasonal Farm Workers program.

### **Scholarships**

Numerous scholarships are available from private organizations, public entities, and individuals. A list of scholarships is available from the WDT Financial Aid Office. For additional scholarship information, contact local organizations, school counselors, and local libraries, or search the Internet.

### **Service to the Visually Impaired**

The Service to the Visually Impaired is a special section of the Division of Rehabilitation Services. It assists those individuals who experience some type of visual disability. In the case of persons who are in need of training or retraining in order to obtain gainful employment, this agency may provide financial assistance to those who need it. Students are expected to apply for all other aid, which may be available. If the student’s need for funds is not met, the Service to the Visually Impaired may provide the needed funds. In order to determine eligibility, students must contact their local office of the Service to the Visually Impaired.

### **Special Services Office**

This program provides resource and referral to first generation college students, single parents, displaced homemakers, minority students, single pregnant women, and nontraditional students. Limited emergency assistance may be available. In order to determine eligibility, students should request an appointment with the Special Services Coordinator.

### **Veteran’s Administration (VA)**

Veterans, members of the National Guard, and/or dependents of veterans who are disabled or deceased may qualify for educational financial assistance through the Veteran’s Administration. Since the regulations regarding eligibility are quite extensive and many

times need interpretation, the student is referred to the Veteran's Administration Center, Box 5046, Sioux Falls, SD 57117, 1-800-827-1000, or contacts your local County Veteran's Service Office for more information. The Rapid City Veteran's Service Officer located in the Public Service Building, 725 North La Crosse Street, Rapid City, SD 57701, 605-394-2266.

### **Vocational Rehabilitation**

The Vocational Rehabilitation program is intended to assist those students with physical and/or mental disabilities to become active members of the labor market. Students who think they may qualify are encouraged to contact their local office of the South Dakota Division of Rehabilitation Services, 111A New York Street, Rapid City, SD 57701, 605-394-2261. Students will be expected to apply for the Federal Pell Grant.

### **ONLINE FINANCIAL AID INFORMATION**

There are many financial aid sites available on the Internet providing student financial aid assistance and information for students and their families. The websites are maintained by a variety of institutions, professional organizations, and governmental agencies. Visit Western Dakota Tech's Financial Aid ([www.wdt.edu](http://www.wdt.edu)) web page for important links.

# GENERAL EDUCATION

## GENERAL EDUCATION PHILOSOPHY

The General Education program at Western Dakota Tech is designed to help students develop the knowledge and skills that will contribute to their intellectual, personal, and professional growth and place them on a path of lifelong learning. General Education provides the skills that employers demand in today's world and the core abilities needed to be *knowledge workers* in a global society. Knowledge workers use their abilities and intellect to solve problems. The core abilities at Western Dakota Tech include life skills, analytic techniques, communication skills, technology skills, teamwork techniques, social values, and employability.

### **Specifically, knowledge workers will:**

- Apply the principles of physical and psychological wellness to their lives
- Apply the principles and strategies of purposeful, active, and organized thinking
- Apply appropriate writing, speaking, and listening skills in order to precisely convey information, ideas, and opinions
- Possess the knowledge and skills necessary to use a computer and other technology methods utilized within their chosen fields
- Be capable of working with others to complete tasks, solve problems, and resolve conflicts
- Possess an awareness of differences in backgrounds/cultures and demonstrate respect while working with different backgrounds/cultures
- Possess and apply effective work habits and attitudes

### **Student Learning Outcomes:**

As a result of completing the General Education program, the graduates of Western Dakota Tech will be able to:

- Take responsibility for their behavior
- Use time management skills
- Demonstrate good judgment in etiquette and ethics
- Make sound inferences from data
- Use effective problem-solving techniques
- Communicate effectively through speaking, listening, writing, and reading
- Use technology
- Interact effectively
- Accept individual differences
- Recognize importance of community
- Appreciate diversity
- Acquire the skills to obtain employment

Both Diploma and Associate in Applied Science Degree candidates are required to successfully complete general education courses as designated by the technical department. General Education courses are designed to enhance the student's major field of study. Core abilities outlined by Western Dakota Tech and business and industry are stressed.

## **ONE- OR TWO-YEAR DIPLOMA**

Students pursuing a one-year diploma are required to complete a minimum of 2\* credits in communications, 3\* credits in computer literacy, 2\* credits in mathematics, and 3\* credits in behavioral science.

Communication courses include:

|          |                          |            |
|----------|--------------------------|------------|
| ENGL 102 | Career Communications*** | (2 credit) |
|----------|--------------------------|------------|

Computer courses available include:

|         |                      |            |
|---------|----------------------|------------|
| CIS 090 | Intro to Computers** | (1 credit) |
| CIS 100 | Intro to Keyboarding | (1 credit) |
| CIS 109 | Word I               | (1 credit) |
| CIS 111 | Word II              | (1 credit) |
| CIS 112 | Excel I              | (1 credit) |
| CIS 113 | Excel II             | (1 credit) |
| CIS 114 | PowerPoint I         | (1 credit) |
| CIS 115 | PowerPoint II        | (1 credit) |
| CIS 116 | Access I             | (1 credit) |
| CIS 117 | Access II            | (1 credit) |
| CIS 118 | Publisher I          | (1 credit) |

Mathematic courses available include:

|          |                   |             |
|----------|-------------------|-------------|
| MATH 090 | Basic Mathematics | (2 credits) |
|----------|-------------------|-------------|

Behavior science courses available include:

|          |                                  |             |
|----------|----------------------------------|-------------|
| PSYC 103 | Human Relations in the Workplace | (3 credits) |
|----------|----------------------------------|-------------|

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\* Individual programs may require additional credits or higher-level courses.

\*\*This course is remedial and does not meet minimum computer requirements.

\*\*\* This course cannot be front- loaded.

## **AAS DEGREE**

Students pursuing the Associate in Applied Science Degree are required to complete a minimum of 3\* general education credits in each of the following subject areas. Students have the following general education course options to choose from:

|                           |     |  |                            |
|---------------------------|-----|--|----------------------------|
| <b>Communications</b>     |     |  | <b>3 Credits Required*</b> |
| ENGL                      | 101 | Composition I                          | 3                          |
| ENGL                      | 201 | Technical Writing I                    | 3                          |
| ENGL                      | 202 | Technical Communications***            | 3                          |
| ENGL                      | 203 | Technical Writing II - online          | 3                          |
| SPCM                      | 101 | Fundamentals of Speech                 | 3                          |
| <b>Mathematics</b>        |     |  | <b>3 Credits Required*</b> |
| MTH                       | 100 | Elementary Algebra                     | 3                          |
| MATH                      | 101 | Intermediate Algebra                   | 3                          |
| MATH                      | 102 | College Algebra                        | 3                          |
| MATH                      | 104 | Technical Math                         | 3                          |
| MATH                      | 112 | Business Math                          | 3                          |
| MATH                      | 120 | Trigonometry                           | 3                          |
| <b>Computer Literacy</b>  |     |  | <b>3 Credits Required*</b> |
| CIS                       | 090 | Intro to Computers**                   | 1                          |
| CIS                       | 100 | Intro to Keyboarding                   | 1                          |
| CIS                       | 109 | Word I                                 | 1                          |
| CIS                       | 111 | Word II                                | 1                          |
| CIS                       | 112 | Excel I                                | 1                          |
| CIS                       | 113 | Excel II                               | 1                          |
| CIS                       | 114 | PowerPoint I                           | 1                          |
| CIS                       | 116 | Access I                               | 1                          |
| CIS                       | 117 | Access II                              | 1                          |
| CIS                       | 118 | Publisher I                            | 1                          |
| <b>Behavioral Science</b> |     |  | <b>3 Credits Required*</b> |
| PSYC                      | 101 | General Psychology                     | 3                          |
| PSYC                      | 103 | Human Relations in the Workplace       | 3                          |
| <b>Social Science</b>     |     |  | <b>3 Credits Required*</b> |
| ECN                       | 202 | Principles of Economics (Macro)        | 3                          |
| ECN                       | 204 | Principles of Macroeconomics (on-line) | 3                          |
| SOC                       | 100 | Introduction to Sociology              | 3                          |

\* Individual programs may require additional credits or higher-level courses.

\*\*This course is remedial and does not meet minimum computer requirements.

\*\*\* This course cannot be front- loaded.

## **PREPARATORY COURSES**

Some students may be required, according to placement test scores, to complete review/preparatory courses to help strengthen their skills and prepare them for success in diploma or degree courses.

1. Students pursuing the diploma or AAS degree with low placement test score in math must complete Math 090 Basic Mathematics with a “C” grade or better *before* proceeding into their technical subject math.
2. Students pursuing the AAS Degree with a low placement test score in algebra will be required to complete one or more of the following:  
MATH 090 Basic Mathematics (2 credits) *before* entering MTH 100 Elementary Algebra or MATH 101 Intermediate Algebra. Students must complete Math 090 Basic Mathematics with a “C” grade or better *before* proceeding into their technical subject math.  
  
MTH 100 Elementary Algebra (3 credits) *before* entering MATH 101 Intermediate Algebra or MATH 104 Technical Mathematics. Students must complete MTH 100 Elementary Algebra with a “C” grade or better before proceeding into their technical subject math.  
  
MATH 101 Intermediate Algebra (3 credits) *before* entering MATH 120 Trigonometry.
3. Students pursuing the AAS Degree with low placement test scores in reading or writing will be required to complete: ENGL 091 Basic Writing (2 credits) *before* entering ENGL 101 composition, ENGL 201 Technical Writing or ENGL 202 Technical Communications.
4. Students may be advised to take the Pre-Tech workshop during the summer session before entering a program. Pre-Tech is an intensive academic review workshop designed to help students improve test scores in reading, comprehension, study skills, and math. At the conclusion of the Pre-Tech week, students will be re-tested to determine their academic progress. The Admissions office has more information.

# PROGRAMS

Technical programs at Western Dakota Tech offer a wide array of career options. Students attending WDT know they receive the training that leads to immediate employment, a good salary, and professional satisfaction. Students are learning the skills they will need to enter the job market for the first time, to make a career change, to advance more quickly with their current employer, or to keep pace with technological change.

The programs at Western Dakota Tech are in step not only with today's job requirements, but also with the developments that will affect students in the future. Instructors are in touch with the realities of the working world. The equipment, facilities, and courses for each program are reviewed annually with the assistance of professional advisory board committee members.

This section contains an overview of each program along with the program outlines for each department. Program and general education course descriptions are located under Course Descriptions.

**ACCOUNTING**

**ADMINISTRATIVE SERVICES**

**ALLIED HEALTH**

**BUSINESS MANAGEMENT & MARKETING**

**COLLISION REPAIR TECHNOLOGY**

**COMPUTER-AIDED DRAFTING TECHNICIAN**

**ELECTRICAL AND ELECTRONIC TECHNOLOGY**

**ENVIRONMENTAL ENGINEERING TECHNICIAN**

**FIRE SCIENCE**

**HEALTH UNIT COORDINATOR/PATIENT CARE  
TECHNICIAN**

**HOT ROD TECHNOLOGY**

**LAW ENFORCEMENT TECHNOLOGY**

**MEDICAL ADMINISTRATIVE SERVICES**

**MEDICAL ASSISTANT**

**MEDICAL TRANSCRIPTION**

**PARALEGAL/LEGAL ASSISTANT**

**PHARMACY TECHNICIAN**

**PHLEBOTOMY/LABORATORY ASSISTANT**

**PRACTICAL NURSING**

**PROGRAMMING & COMPUTER NETWORKING**

**PROGRAMMING/APPLICATION DEVELOPMENT**

**SURGICAL TECHNOLOGY**

**TRANSPORTATION TECHNOLOGY**

**WELDING MANUFACTURING**

## ACCOUNTING

### Associate in Applied Science, 71 Credit Hours, 18-Month Program

The Accounting program will prepare students for entry-level positions in accounting-related employment opportunities by providing them with technical and social skills.

Because accountants and bookkeepers are an organization's financial record keepers and assistants to management, graduation from this two-year course with an AAS degree can lead to a number of good-paying employment opportunities. Students will learn the principles of accounting and the concepts behind the principles. Students receive up-to-date training on some of the latest software available. Payroll accounting, taxes, and managerial accounting are included in this program. With the general education and business courses required to obtain this degree, graduates are well equipped to compete for employment.

| Course No.                            | Course Title                              | CREDITS   |
|---------------------------------------|---|-----------|
| <b>GENERAL EDUCATION REQUIREMENTS</b> |   |           |
| CIS 109                               | WORD, LEVEL I                             | 1         |
| CIS 112                               | EXCEL, LEVEL I                            | 1         |
| CIS 114                               | POWER POINT                               | 1         |
| CIS 130                               | INTRODUCTION TO 10-KEY                    | 1         |
| ECN 202                               | PRINCIPLES OF ECONOMICS (MACRO) <i>or</i> | 3         |
| ECN 204                               | PRINCIPLES OF MACROECONOMICS (ONLINE)     |           |
| ENGL 101                              | COMPOSITION* <i>or</i>                    | 3         |
| ENGL 203                              | TECHNICAL WRITING II** - online           |           |
| MATH 101                              | INTERMEDIATE ALGEBRA**                    | 3         |
| MATH 112                              | BUSINESS MATHEMATICS                      | 3         |
| ORT 010                               | ORIENTATION                               | 1         |
| PSYC 101                              | GENERAL PSYCHOLOGY <i>or</i>              | 3         |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE          |           |
|                                       | <b>Total</b>                              | <b>20</b> |
| <b>Technical Requirements</b>         |   |           |
| ACCT 210                              | PRINCIPLES OF ACCOUNTING I                | 4         |
| ACCT 211                              | PRINCIPLES OF ACCOUNTING II               | 4         |
| ACCT 212                              | INTERMEDIATE ACCOUNTING I                 | 4         |
| ACCT 213                              | INTERMEDIATE ACCOUNTING II                | 4         |
| ACCT 215                              | PAYROLL ACCOUNTING                        | 3         |
| ACCT 218                              | TAX ACCOUNTING I                          | 3         |
| ACCT 223                              | MANAGERIAL ACCOUNTING                     | 3         |
| ACCT 227                              | EXCEL FOR ACCOUNTING                      | 3         |
| ACCT 228                              | QUICKBOOKS ACCOUNTING                     | 3         |
| ACCT 290                              | INTERNSHIP <i>or</i>                      | 3         |
| ACCT 280                              | ETHICS IN ACCOUNTING AND BUSINESS         |           |
| BUS 134                               | WRITTEN COMMUNICATIONS FOR BUSINESS       | 4         |
| BUS 136                               | ORAL COMMUNICATIONS IN BUSINESS           | 2         |
| BUS 140                               | BUSINESS LAW                              | 3         |
| BUS 210                               | SUPERVISORY MANAGEMENT                    | 3         |
| BUS 224                               | PERSONAL FINANCE                          | 3         |
| BUS 226                               | PERSONAL INVESTMENTS                      | 2         |
|                                       | <b>Total</b>                              | <b>51</b> |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Elementary Algebra.

\*\*\*Prerequisite: 30 wpm required or satisfactory completion of CIS100

**Semester breakdown on next page**

| <b>First Semester</b> |                                      |           | <b>Second Semester</b> |  |           |
|-----------------------|--------------------------------------|-----------|------------------------|--|-----------|
|                       |                                      | <b>CR</b> |                        |  | <b>CR</b> |
| ACCT 210              | Principles of Accounting I           | 4         | ACCT 211               | Principles of Accounting II              | 4         |
| BUS 136               | Oral Communications                  | 2         | ACCT 215               | Payroll Accounting                       | 3         |
| CIS 109               | Word, Level I                        | 1         | ACCT 228               | QuickBooks Accounting                    | 3         |
| CIS 112               | Excel, Level I                       | 1         | BUS 134                | Written Communications for               | 4         |
| CIS 114               | Power Point                          | 1         |                        | Business                                 |           |
| CIS 130               | Introduction to 10-Key               | 1         | MATH 101               | Intermediate Algebra                     | 3         |
| MATH 112              | Business Math                        | 3         |                        | <b>Total Credit Hours</b>                | <b>17</b> |
| ORT 010               | Orientation                          | 1         |                        |  |           |
| PSYC 101              | General Psychology <i>or</i>         | 3         |                        |  |           |
| PSYC 103              | Human Relations in the               |           |                        |  |           |
|                       | Workplace                            |           |                        |  |           |
|                       | <b>Total Credit Hours</b>            | <b>17</b> |                        |  |           |
| <b>Third Semester</b> |                                      |           | <b>Fourth Semester</b> |  |           |
|                       |                                      | <b>CR</b> |                        |  | <b>CR</b> |
| ACCT 212              | Intermediate Accounting I            | 4         | ACCT 213               | Intermediate Accounting II               | 4         |
| ACCT 218              | Tax Accounting I                     | 3         | ACCT 223               | Managerial Accounting                    | 3         |
| ACCT 227              | Excel for Accounting                 | 3         | ACCT 290               | Internship <i>or</i>                     | 3         |
| BUS 210               | Supervisory Management               | 3         | ACCT 280               | Ethics in Accounting and Business        |           |
| BUS 224               | Personal Finance                     | 3         | BUS 140                | Business Law                             | 3         |
| ENGL 101              | Composition <i>or</i>                | 3         | BUS 226                | Personal Investments                     | 2         |
| ENGL 203              | Technical Writing II - <b>online</b> |           | ECN 202                | Principles of Economics-Macro <i>or</i>  | 3         |
|                       | <b>Total Credit Hours</b>            | <b>19</b> | ECN 204                | Princ of Macro Economics - <b>online</b> |           |
|                       |                                      |           |                        | <b>Total Credit Hours</b>                | <b>18</b> |

## **ADMINISTRATIVE SERVICES**

### **Diploma, 35 Credit Hours, 9-Month Program**

Administrative Services personnel prepare reports, speeches, letters, and other business correspondence. They also utilize records management techniques, schedule appointments, answer telephone calls, record payments, and sometimes transcribe documents.

| <b>Course No.</b>                     | <b>Course Title</b>                 | <b>Credits</b> |
|---------------------------------------|-------------------------------------|----------------|
| <b>General Education Requirements</b> |                                     |                |
| CIS 109                               | WORD, LEVEL I                       | 1              |
| CIS 112                               | EXCEL, LEVEL I                      | 1              |
| CIS 113                               | EXCEL, LEVEL II                     | 1              |
| CIS 114                               | POWERPOINT, LEVEL I                 | 1              |
| CIS 116                               | ACCESS, LEVEL I                     | 1              |
| CIS 111                               | WORD, LEVEL II                      | 1              |
| ENGL 010                              | BASIC ENGLISH                       | 3              |
| MATH 112                              | BUSINESS MATHEMATICS                | 3              |
| ORT 010                               | ORIENTATION                         | 1              |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE    | 3              |
|                                       | <b>Total</b>                        | <b>16</b>      |
| <b>Technical Requirements</b>         |                                     |                |
| BUS 134                               | WRITTEN COMMUNICATIONS FOR BUSINESS | 4              |
| BUS 136                               | ORAL COMMUNICATIONS FOR BUSINESS    | 2              |
| BUS 137                               | PROFESSIONAL DEVELOPMENT            | 1              |
| COC 110                               | KEYBOARDING I                       | 3              |
| COC 120                               | KEYBOARDING II                      | 3              |
| COC 132                               | RECORDS MANAGEMENT                  | 3              |
|                                       | ELECTIVE                            | 3              |
|                                       | <b>Total</b>                        | <b>19</b>      |

### **Semester Breakdown**

| <b>First Semester</b> |                                  |           | <b>Second Semester</b> |                                     |           |
|-----------------------|----------------------------------|-----------|------------------------|-------------------------------------|-----------|
|                       |                                  | <b>CR</b> |                        |                                     | <b>CR</b> |
| COC 110               | Keyboarding I                    | 3         | BUS 134                | Written Communications for Business | 4         |
| COC 132               | Records Management               | 3         | BUS 137                | Professional Development            | 1         |
| BUS 136               | Oral Communications for Business | 2         | COC 120                | Keyboarding II                      | 3         |
| CIS 109               | Word, Level I                    | 1         | CIS 111                | Word, Level II                      | 1         |
| CIS 112               | Excel, Level I                   | 1         | CIS 113                | Excel, Level II                     | 1         |
| CIS 114               | PowerPoint, Level I              | 1         | CIS 116                | Access, Level I                     | 1         |
| ENGL 010              | Basic English                    | 3         | PSYC 103               | Human Relations in the Workplace    | 3         |
| MATH 112              | Business Math                    | 3         |                        | Elective                            | 3         |
| ORT 010               | Orientation                      | 1         |                        | <b>Total Credit Hours</b>           | <b>17</b> |
|                       | <b>Total Credit Hours</b>        | <b>18</b> |                        |                                     |           |

## ALLIED HEALTH

### Associate in Applied Science, 65 Credit Hours, 18-Month Program

Students entering the Allied Health AAS degree will also enter one or more WDT health programs. Each of the health programs has separate entry requirements students need to meet. Included in the diploma entry requirements are General Education course placement requirements. These placement requirements are not entry requirements into WDT programs, but are designed to place students initially into the most appropriate writing and math course or into preparatory courses. COMPASS test scores may also inform students they could succeed in a higher-level course than the required course when available.

The following curriculum is designed to fit the needs of students in the array of health programs at WDT. The technical requirements in some programs such as Surgical Technology will not fulfill the total technical requirements for this AAS degree. These students will supplement the technical elective courses with health courses. This will add to their skills in health occupations. Students in other health programs such as Practical Nursing will have technical requirements that exceed the technical requirements for this degree. Their total credits for the AAS degree will exceed the minimum requirements of 64 credits. These excess credit requirements will not exceed 68 credits.

| Course No.                                    | Course Title   | Credits   |
|---|--|-----------|
| <b>General Education Requirements</b>         |  |           |
| CHEM 106                                      | Chemistry Survey   | 3         |
| CHEM 106L                                     | Chemistry Lab  | 1         |
| CIS 109                                       | Word, Level I  | 1         |
| CIS 112                                       | Excel, Level I   | 1         |
| CIS 114                                       | PowerPoint, Level I  | 1         |
| ENGL 101                                      | Composition*   | 3         |
| ENGL 202                                      | Technical Communication*   | 3         |
| ENGL 201                                      | Technical Writing I* <i>or</i>   | 3         |
| SPCM 101                                      | Fundamentals of Speech   |           |
| MATH 101                                      | Intermediate Algebra** <i>or</i>   | 3         |
| MATH 102                                      | College Algebra  |           |
| ORT 100                                       | Orientation  | 1         |
| PSYC 101                                      | General Psychology <i>or</i>   | 3         |
| PSYC 103                                      | Human Relations in the Workplace   |           |
| SOC 100                                       | Introduction to Sociology  | 3         |
| <b>Total General Education Requirements</b>   |  | <b>26</b> |
| HC 113  | Medical Terminology  | 2         |
| HC 114  | Anatomy & Physiology   | 3         |
| ALH 200                                       | See below for technical elective breakdown   |           |
|   | Technical Requirements:  | 34        |
|   | Complete the technical requirements in at least one of the following health programs: Health Unit Coordinator, Medical Administrative Assistant, Pharmacy Technician, Phlebotomy/Laboratory Assistant, Practical Nursing, Surgical Technology. |           |
| <b>Total Technical Requirements (minimum)</b> |  | <b>39</b> |
| <b>Total Requirements for AAS (minimum)</b>   |  | <b>65</b> |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Basic Math.

## **Technical Electives**

**ALH200 – Technical Electives**

**CPR100**

**HC145 Electronic Health Records**

**ALH203 – Technical Elective: Perioperative Concepts in Orthopedic Surgery**

**ALH204 – Technical Elective: Introduction to Care of the Perioperative Patient**

**ALH205 – Technical Elective: Introduction to Ophthalmic Surgery**

**See the program advisor for the appropriate technical electives for the following programs:**

**Health Unit Coordinator-16 Credits**

**Medical Administrative Services-6 Credits**

**Pharmacy Technician-6 Credits**

**Phlebotomy/Lab Assistant-17 Credits**

## **BUSINESS MANAGEMENT & MARKETING**

### **Associate in Applied Science, 72 Credit Hours, 18-Month Program**

The Business Management and Marketing program prepares students for careers in business. The blending of extensive classroom instruction, in-the-field internships, and specialized projects allow students to develop skills required in business occupations.

Business Management and Marketing offers students opportunities for both financial and personal growth. Endless employment avenues are available with a business management and marketing degree. This program is also being offered online.

| <b>Course</b>                         | <b>No.</b> | <b>Course Title</b>                         | <b>Credits</b> |
|---------------------------------------|------------|---|----------------|
| <b>General Education Requirements</b> |            |   |                |
| CIS                                   | 109        | WORD, LEVEL I                               | 1              |
| CIS                                   | 112        | EXCEL LEVEL I                               | 1              |
| CIS                                   | 114        | POWER POINT I                               | 1              |
| ECN                                   | 202        | PRINCIPLES OF ECONOMICS (MACRO) <i>or</i>   | 3              |
| ECN                                   | 204        | PRINCIPLES OF MACROECONOMICS (online)       |                |
| ENGL                                  | 101        | COMPOSITION* <i>or</i>                      | 3              |
| ENGL                                  | 203        | TECHNICAL WRITING II - online               |                |
| MATH                                  | 112        | BUSINESS MATHEMATICS                        | 3              |
| ORT                                   | 010        | ORIENTATION                                 | 1              |
| PSYC                                  | 101        | GENERAL PSYCHOLOGY <i>or</i>                | 3              |
| PSYC                                  | 103        | HUMAN RELATIONS IN THE WORKPLACE            |                |
| <b>Total</b>                          |            |   | <b>16</b>      |
| <b>Technical Requirements</b>         |            |   |                |
| ACCT                                  | 210        | PRINCIPLES OF ACCOUNTING I                  | 4              |
| ACCT                                  | 228        | QUICKBOOKS ACCOUNTING                       | 3              |
| BUS                                   | 101        | INTRODUCTION TO BUSINESS                    | 3              |
| BUS                                   | 120        | PRINCIPLES OF MARKETING                     | 3              |
| BUS                                   | 134        | WRITTEN COMMUNICATIONS FOR BUSINESS         | 4              |
| BUS                                   | 136        | ORAL COMMUNICATIONS FOR BUSINESS            | 2              |
| BUS                                   | 137        | PROFESSIONAL DEVELOPMENT                    | 1              |
| BUS                                   | 140        | BUSINESS LAW                                | 3              |
| BUS                                   | 150        | ADVERTISING                                 | 3              |
| BUS                                   | 152        | DESKTOP PUBLISHING FOR MARKETING I          | 3              |
| BUS                                   | 156        | WEBSITE DEVELOPMENT FOR BUSINESS            | 3              |
| BUS                                   | 157        | MULTIMEDIA FOR BUSINESS                     | 3              |
| BUS                                   | 160        | PRINCIPLES OF SELLING                       | 3              |
| BUS                                   | 210        | SUPERVISORY MANAGEMENT                      | 3              |
| BUS                                   | 224        | PERSONAL FINANCE                            | 3              |
| BUS                                   | 225        | RETAIL MANAGEMENT                           | 3              |
| BUS                                   | 233        | SMALL BUSINESS ENTREPRENEURSHIP             | 3              |
| BUS                                   | 240        | ADVANCED COMPUTER APPLICATIONS FOR BUSINESS | 4              |
| BUS                                   | 290        | INTERNSHIP <i>or</i>                        | 2              |
| BUS                                   | 226        | PERSONAL INVESTMENTS                        |                |
| <b>Total</b>                          |            |   | <b>56</b>      |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

**Semester breakdown on next page**

## Semester Breakdown

| <b>First Semester</b> |                                     |           | <b>Second Semester</b> |   |           |
|-----------------------|-------------------------------------|-----------|------------------------|---|-----------|
|                       |                                     | <b>CR</b> |                        |   | <b>CR</b> |
| BUS 101               | Introduction to Business            | 3         | BUS 120                | Principles of Marketing                   | 3         |
| BUS 136               | Oral Communications for Business    | 2         | BUS 156                | Website Development for Business          | 3         |
| ACCT 210              | Principles of Accounting I          | 4         | BUS 134                | Written Communications for Business       | 4         |
| CIS 109               | Word, Level I                       | 1         | BUS 137                | Professional Development                  | 1         |
| CIS 112               | Excel, Level I                      | 1         | BUS 140                | Business Law                              | 3         |
| CIS 114               | Power Point I                       | 1         | ACCT 228               | QuickBooks Accounting                     | 3         |
| MATH 112              | Business Mathematics                | 3         |                        | <b>Total Credit Hours</b>                 | <b>17</b> |
| ORT 010               | Orientation                         | 1         |                        |   |           |
| PSYC 101              | General Psychology <i>or</i>        | 3         |                        |   |           |
| PSYC 103              | Human Relations in the Workplace    |           |                        |   |           |
|                       | <b>Total Credit Hours</b>           | <b>19</b> |                        |   |           |
| <b>Third Semester</b> |                                     |           | <b>Fourth Semester</b> |   |           |
|                       |                                     | <b>CR</b> |                        |   | <b>CR</b> |
| BUS 152               | Desktop Publishing for Marketing I  | 3         | BUS 150                | Advertising                               | 3         |
| BUS 160               | Principles of Selling               | 3         | BUS 157                | Multimedia for Business                   | 3         |
| BUS 210               | Supervisory Management              | 3         | BUS 225                | Retail Management                         | 3         |
| BUS 224               | Personal Finance                    | 3         | BUS 233                | Small Business Entrepreneurship           | 3         |
| BUS 240               | Advanced Computer Apps for Business | 4         | ECN 202                | Principles of Economics (Macro) <i>or</i> | 3         |
| ENGL 101              | Composition <i>or</i>               | 3         | ECN 204                | Principles of Macro Economics (online)    |           |
| ENGL 203              | Technical Writing II - online       |           | BUS 290                | Internship <i>or</i>                      | 2         |
|                       | <b>Total Credit Hour</b>            | <b>19</b> | BUS 226                | Personal Investments                      |           |
|                       |                                     |           |                        | <b>Total Credit Hours</b>                 | <b>17</b> |

## **COLLISION REPAIR TECHNOLOGY**

### **Associate in Applied Science, 74 Credit Hours, 18-Month Program**

The mission of Western Dakota Tech's Collision Repair Technology program is to conduct an academic, hands-on training program that provides highly qualified employees for entry-level positions in all categories of the professional auto-collision repair trade. This program will afford the student the opportunity to attain an Associate in Applied Science degree. A close working relationship will be maintained with a collision repair industry advisory council to keep abreast of the needs of future employers.

Costly damage to motor vehicles occurs from traffic accidents every day. Collision repair technicians straighten bent bodies, remove dents, and replace crumpled parts that are beyond repair. Collision repair work has variety and challenges—each damaged vehicle presents a different problem. Repairers must develop appropriate methods for each job, using their broad knowledge of automotive construction and repair techniques. Collegiate training is highly desirable because advances in technology have greatly changed the structure, components and materials used in automobiles. Formal training in collision repair can enhance opportunities for employment and promotion.

| <b>Course No.</b>                     | <b>Course Title</b>                | <b>Credits</b> |
|---------------------------------------|------------------------------------|----------------|
| <b>General Education Requirements</b> |                                    |                |
| CIS 109                               | WORD, LEVEL I                      | 1              |
| CIS 112                               | EXCEL, LEVEL I                     | 1              |
| CIS 114                               | POWERPOINT, LEVEL I                | 1              |
| CPR 100                               | CPR/FIRST RESPONDER                | 1              |
| ECN 202                               | PRINCIPLES OF ECONOMICS <i>or</i>  | 3              |
| SOC 100                               | INTRODUCTION TO SOCIOLOGY          |                |
| ENGL 101                              | COMPOSITION*                       | 3              |
| ENGL 102                              | CAREER COMMUNICATIONS              | 2              |
| MATH 104                              | TECHNICAL MATH**                   | 3              |
| ORT 010                               | ORIENTATION                        | 1              |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE   | 3              |
| <b>Total</b>                          |                                    | <b>19</b>      |
| <b>Technical Requirements</b>         |                                    |                |
| ATB 112                               | SHOP ORIENTATION MAINT. & SAFETY   | 1              |
| ATB 116                               | PANEL REPLACEMENTS & ADJUSTMENTS   | 4              |
| ATB 119                               | BASIC SHEET METAL WORK             | 5              |
| ATB 120                               | WELDING/EQUIPMENT                  | 5              |
| ATB 125                               | PANEL REPLACEMENT & ADJUSTMENTS II | 5              |
| ATB 137                               | PAINT DEFECTS/CAUSES AND CURES     | 2              |
| ATB 138                               | ESTIMATING                         | 3              |
| ATB 139                               | REFINISHING                        | 5              |
| ATB 148                               | AUTO PLASTICS REPAIR               | 2              |
| ATB 149                               | FINAL DETAILING                    | 1              |
| ATB 154                               | REFINISHING II                     | 5              |
| ATB 155                               | TINTING AND BLENDING               | 3              |
| ATB 156                               | UNIBODY DIAGNOSING                 | 5              |
| ATB 157                               | CONVENTIONAL FRAME DIAGNOSTICS     | 4              |
| ATB 158                               | TWO-TONE & TRI-COAT FINISHES       | 1              |
| ATB 159                               | COMPETENCY PANEL                   | 2              |
| ATB 160                               | MASKING                            | 2              |
| <b>Total</b>                          |                                    | <b>55</b>      |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Basic Math.

**Semester breakdown on next page**

## Semester Breakdown

| First Semester |  |           | Second Semester |                                    |           |
|----------------|--|-----------|-----------------|------------------------------------|-----------|
|                |  | CR        |                 |                                    | CR        |
| ATB 112        | Shop Orientation, Maintenance & Safety | 1         | ATB 137         | Paint Defects/Causes & Cures       | 2         |
| ATB 116        | Panel Replacement & Adjustments        | 4         | ATB 138         | Estimating                         | 3         |
| ATB 119        | Basic Sheet Metal Work                 | 5         | ATB 139         | Refinishing                        | 5         |
| ATB 120        | Welding/Equipment                      | 5         | ATB 148         | Auto Plastics Repair               | 2         |
| MATH 104       | Technical Math                         | 3         | ATB 149         | Final Detailing                    | 1         |
| ORT 010        | Orientation                            | 1         | ATB 160         | Masking                            | 2         |
|                | <b>Total Credit Hours</b>              | <b>19</b> | CPR 100         | CPR/First Responder                | 1         |
|                |  |           | CIS 109         | Word, Level I                      | 1         |
|                |  |           | CIS 112         | Excel, Level I                     | 1         |
|                |  |           | CIS 114         | PowerPoint, Level I                | 1         |
|                |  |           |                 | <b>Total Credit Hours</b>          | <b>19</b> |
| Third Semester |  |           | Fourth Semester |                                    |           |
|                |  | CR        |                 |                                    | CR        |
| ATB 154        | Refinishing II                         | 5         | ATB 125         | Panel Replacement & Adjustments II | 5         |
| ATB 155        | Tinting and Blending                   | 3         | ATB 156         | Unibody Diagnosing                 | 5         |
| ATB 158        | Two-tone and Tri-coat Finishes         | 1         | ATB 157         | Conventional Frame Diagnostics     | 4         |
| ATB 159        | Competency Panel                       | 2         | ECN 202         | Principles of Economics <i>or</i>  | 3         |
| ENGL 101       | Composition                            | 3         | SOC 100         | Introduction to Sociology          |           |
| PSYC 103       | Human Relations in the Workplace       | 3         | ENGL 102        | Career Communications              | 2         |
|                | <b>Total Credit Hours</b>              | <b>17</b> |                 | <b>Total Credit Hours</b>          | <b>19</b> |

## COMPUTER-AIDED DRAFTING TECHNICIAN

### Associate in Applied Science, 72 Credit Hours, 18-Month Program

The Computer-Aided Drafting Technician program prepares students for entry into the computer-aided drafting profession and for lifelong learning.

**Goals:**

1. Achieve working knowledge of AutoDesk CAD software and its applications
2. Have a working knowledge of theory specific to the discipline
3. Integrate “hands-on” and theory to complete assigned projects

Computer-aided architectural or mechanical drafters prepare technical drawings and plans used by production workers to build residential and commercial buildings or to build manufactured products such as industrial machinery or custom parts. Architectural drafters assist architects in the development of building plans by drafting technical plans and details that show the dimensions, construction material, and processes used for building projects. Mechanical drafters prepare detail and assembly drawings of a wide variety of machinery and mechanical devices, indicating dimensions, fastening methods, and other requirements. Civil drafters work on drawings for plot plans, survey plans, and roadways, among other things. Most civil drafters also work with GIS data that is becoming increasingly common in the industry.

| Course No.   | Course Title                              | Credits   |
|--|---|-----------|
| <b>General Education Requirements</b>                |   |           |
| CIS 109  | WORD, LEVEL I                             | 1         |
| CIS 112  | EXCEL, LEVEL I                            | 1         |
| CIS 114  | POWERPOINT, LEVEL I                       | 1         |
| ECN 202  | PRINCIPLES OF ECONOMICS (MACRO) <i>or</i> | 3         |
| SOC 100  | INTRO TO SOCIOLOGY                        |           |
| ENGL 101   | COMPOSITION* <i>or</i>                    | 3         |
| ENGL 201   | TECHNICAL WRITING I                       |           |
| ENGL 202   | TECHNICAL COMMUNICATIONS                  | 3         |
| MATH 104   | TECHNICAL MATHEMATICS**                   | 3         |
| ORT 010  | ORIENTATION                               | 1         |
| PSYC 101   | GENERAL PSYCHOLOGY <i>or</i>              | 3         |
| PSYC 103   | HUMAN RELATIONS IN THE WORKPLACE          |           |
|  | <b>Total</b>                              | <b>19</b> |
| <b>Technical Requirements</b>                        |   |           |
| CAD 101  | DRAFTING FUNDAMENTALS                     | 3         |
| CAD 111  | ARCHITECTURAL DRAFTING I                  | 3         |
| CAD 116  | COMPUTERS FOR CAD                         | 3         |
| CAD 130  | INTRODUCTION TO CAD                       | 3         |
| CAD 135  | ARCHITECTURAL CONSTRUCTION THEORY I       | 3         |
| CAD 201  | INTERMEDIATE CAD                          | 3         |
| CAD 202  | MECHANICAL DRAFTING                       | 3         |
| CAD 203  | PRINCIPLES OF COMMERCIAL THEORY I         | 3         |
| CAD 214  | INTRODUCTION TO CIVIL DRAFTING            | 3         |
| CAD 232  | MECHANICAL PRINCIPLES                     | 3         |
| CAD 234  | MECHANICAL PRINT READING                  | 2         |
| CAD 237  | ARCHITECTURAL DRAFTING II                 | 3         |
| CAD 250  | INTRODUCTION TO MAPPING/GPS               | 2         |
| CAD 252  | INTRODUCTION TO SURVEYING                 | 3         |
| CAR 216  | BLUE PRINT READING                        | 2         |
|  | <b>Total</b>                              | <b>42</b> |
| <b>Technical Electives-Choose minimum 11 credits</b> |   |           |
| CAB 228  | KITCHEN DESIGN & LAYOUT                   | 4         |
| CAD 215  | LIGHT COMM CONST W/MECH & ELECTRICAL      | 3         |
| CAD 221  | MECHANICAL DIMENSIONING                   | 3         |
| CAD 222  | PRINCIPLES OF COMMERCIAL THEORY II        | 3         |
| CAD 239  | ARCHITECTURAL DRAFTING III                | 3         |
| CAD 242  | COMPUTER AUTOMATED MANUFACTURING          | 2         |
| CAD 244  | 3-D ENGINEERING DESIGN                    | 3         |
| CAD 251  | INTRODUCTION TO GIS                       | 3         |
| CAD 298  | PROFESSIONALISM                           | 2         |
| CAD 299  | INTERNSHIP                                | 2         |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Basic Math.

Semester breakdown on next page

## Semester Breakdown

| First Semester |                                     |           | Second Semester |  |           |
|----------------|-------------------------------------|-----------|-----------------|--|-----------|
|                |                                     | CR        |                 |  | CR        |
| CAD 101        | Drafting Fundamentals               | 3         | CAD 111         | Architectural Drafting I   | 3         |
| CAD 116        | Computers for CAD                   | 3         | CAD 130         | Introduction to CAD  | 3         |
| CAD 135        | Architectural Construction Theory I | 3         | CAD 232         | Mechanical Principles  | 3         |
| CAD 250        | Introduction to Mapping/GPS         | 2         | CAD 234         | Mechanical Print Reading   | 2         |
| CIS 109        | Word, Level I                       | 1         | CAD 252         | Introduction to Surveying  | 3         |
| CIS 112        | Excel, Level I                      | 1         | CAR 216         | Blueprint Reading  | 2         |
| CIS 114        | PowerPoint, Level I                 | 1         | ENGL 101        | Composition <i>or</i>  | 3         |
| MATH 104       | Technical Mathematics               | 3         | ENGL 201        | Technical Writing I  | 3         |
| ORT 010        | Orientation                         | 1         |                 | <b>Total Credit Hours</b>  | <b>19</b> |
|                | <b>Total Credit Hours</b>           | <b>18</b> |                 |  |           |
| Third Semester |                                     |           | Fourth Semester |  |           |
|                |                                     | CR        |                 |  | CR        |
| CAD 201        | Intermediate CAD                    | 3         |                 | <b>Required Courses</b>  |           |
| CAD 202        | Mechanical Drafting                 | 3         | ECN 202         | Principles of Economics (Macro) <i>or</i>  | 3         |
| CAD 203        | Principles of Commercial Theory I   | 3         | SOC 100         | Introduction to Sociology  |           |
| CAD 214        | Introduction to Civil Drafting      | 3         | PSYC 101        | General Psychology <i>or</i>   | 3         |
| CAD 237        | Architectural Drafting II           | 3         | PSYC 103        | Human Relations in the Workplace   |           |
| ENGL 202       | Technical Communications            | 3         |                 | <b>Technical Electives</b>   |           |
|                | <b>Total Credit Hours</b>           | <b>18</b> | CAB 228         | Kitchen Design & Layout  | 4         |
|                |                                     |           | CAD 215         | Light Commercial Construction with Mechanical & Electrical                             | 3         |
|                |                                     |           | CAD 221         | Mechanical Dimensioning  | 3         |
|                |                                     |           | CAD 222         | Principles of Commercial Theory II   | 3         |
|                |                                     |           | CAD 239         | Architectural Drafting III   | 3         |
|                |                                     |           | CAD 242         | Computer-Automated Mfg   | 2         |
|                |                                     |           | CAD 244         | 3-D Engineering Design   | 3         |
|                |                                     |           | CAD 251         | Introduction to GIS  | 3         |
|                |                                     |           | CAD 298         | Professionalism  | 2         |
|                |                                     |           | CAD 299         | Internship   | 2         |
|                |                                     |           |                 | <b>(A minimum of 17 credit hours required for this semester – 11 elective credits)</b> |           |

# **ELECTRICAL & ELECTRONIC TECHNOLOGY**

## **Associate in Applied Science, 73 Credit Hours, 18-Month Program**

This program provides in-depth instruction in the theories and principles of electricity and electrical construction. Strong math skills are a requirement. Principles of operation for electrical devices and equipment, and correct and safe operation of tools are covered. A typical job description for an Electrician may include typically working 40 hours per week; however, some jobs may require working evenings or weekends, ladder work, must be physically capable of climbing and working at heights, outside work and other physical work may be required.

The student will study and learn to interpret and apply the requirements of the National Electric Code. A solid background in the theory and technology of the electrical field will give you the knowledge and ability to install, maintain, trouble shoot, and the repair of electrical circuits and equipment.

The training gives you the flexibility to pursue different areas of employment as entry-level electricians. Most of lab time is spent on actual work sites and gaining real-life work experience.

| <b>Course No.</b>                                      | <b>Course Title</b>                                     | <b>Credits</b> |
|--|---|----------------|
| <b>General Education Requirements</b>                  |   |                |
| CIS 109  | WORD, LEVEL I   | 1              |
| CIS 112  | EXCEL, LEVEL I  | 1              |
| CIS 114  | POWERPOINT, LEVEL I <i>or</i>                           | 1              |
| CIS 116  | ACCESS LEVEL I  |                |
| CPR 100  | CPR/FIRST RESPONDER                                     | 1              |
| ECN 202  | PRINCIPLES OF ECONOMICS (MACRO) <i>or</i>               | 3              |
| SOC 100  | INTRO TO SOCIOLOGY                                      |                |
| ENGL 102   | CAREER COMMUNICATIONS                                   | 2              |
| ENGL 201   | TECHNICAL WRITING I                                     | 3              |
| MATH 104   | TECHNICAL MATHEMATICS**                                 | 3              |
| ORT 010  | ORIENTATION   | 1              |
| PSYC 103   | HUMAN RELATIONS IN THE WORKPLACE                        | 3              |
|  | <b>Total</b>  | <b>19</b>      |
| <b>Technical Requirements – Industrial Electronics</b> |   |                |
| ELT 123  | BASIC SOLDERING FOR ELECTRONICS                         | 1              |
| ELT 217  | COMPUTER HARDWARE INSTALLATION & TROUBLESHOOTING        | 4              |
| IEL 110  | DIRECT CURRENT CIRCUITS – THEORY & LAB                  | 3              |
| IEL 115  | ALTERNATING CURRENT CIRCUITS- THEORY & LAB              | 3              |
| IEL 123  | INDUSTIRAL DATA COMMUNICATIONS                          | 2              |
| IEL 124  | SOLID STATE DEVICES                                     | 3              |
| IEL 127  | BLUEPRINT READING                                       | 2              |
| IEL 130  | INTRO TO ELECTRICAL WIRING                              | 2              |
| IEL 135  | BASIC ELECTRICAL MATERIALS AND DEVICES                  | 1              |
| IEL 140  | WELDING & FABRICATION FOR LIGHT COMMERCIAL APPLICATIONS | 2              |
| IEL 226  | ELECTRICAL MOTOR FUNDAMENTALS & MAINT                   | 2              |
| IEL 129  | INTRO TO ELECTRICAL WIRING LAB                          | 1              |
| IEL 223  | ELECTRICAL MOTOR FUNDAMENTALS & MAINT LAB               | 1              |
| IEL 201  | NATIONAL ELECTRICAL CODE I                              | 3              |
| IEL 213  | ELECTRIC HEATING AND APPLIANCES                         | 2              |
| IEL 219  | ELECTRICAL PLANNING & ESTIMATING                        | 2              |
| IEL 218  | WIRING LAB I  | 3              |
| IEL 211  | ELECTRICAL MOTOR CONTROL                                | 3              |
| IEL 216  | MOTOR CONTROL LAB                                       | 2              |
| IEL 214  | NATIONAL ELECTRICAL CODE II                             | 2              |
| IEL 221  | PROGRAMMABLE LOGIC CONTROLLERS                          | 2              |
| IEL 222  | PROGRAMMABLE LOGIC CONTROLLERS LAB                      | 3              |
| IEL 220  | WIRING LAB II   | 3              |
| IEL 224  | POWER DISTRIBUTION                                      | 2              |
|  | <b>Total</b>  | <b>54</b>      |

### Technical Electives

|         |  |   |
|---------|--|---|
| AET 240 | INTRODUCTION TO ALTERNATIVE POWER SYSTEMS    | 3 |
| AET 242 | ELECTRICAL CODE STUDY FOR ALTERNATIVE ENERGY | 1 |
| AET 245 | ELECTRONIC CONTROLS                          | 2 |
| AET 246 | ELECTRONIC CONTROLS LAB                      | 2 |
| AET 248 | WIND & SOLAR POWER SYSTEMS THEORY            | 3 |
| AET 249 | WIND & SOLAR POWER SYSTEMS LAB               | 3 |
| IEL 299 | ELECTRICIAN INTERNSHIP/CO-OP                 | 6 |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Basic Math.

### Semester Breakdown

| First Semester |                                       |                 | Second Semester |   |           |
|----------------|---------------------------------------|-----------------|-----------------|---|-----------|
|                |                                       | CR              |                 |   | CR        |
| ELT 123        | Basic Soldering for Electronics       | 1               | ELT 217         | Computer Hardware Installation/Trouble shooting     | 4         |
| IEL110         | DC Circuits - Theory & Lab            | 3               | IEL 123         | Industrial Data Communication                       | 2         |
| IEL115         | AC Circuits – Theory & Lab            | 3               | IEL 129         | Intro to Electrical Wiring Lab                      | 1         |
| IEL 124        | Solid State Devices                   | 3               | IEL 130         | Intro to Electrical Wiring                          | 2         |
| CIS 109        | Word, Level I                         | 1               | IEL 135         | Basic Electrical Materials and Devices              | 1         |
| CIS 112        | Excel, Level I                        | 1               | IEL 140         | Welding & Fabrication for Lt Commercial Application | 2         |
| CIS 114        | Power Point Level 1 <i>or</i>         | 1               | IEL 226         | Electrical Motor Fundamentals & Maint.              | 2         |
| CIS 116        | Access, Level I                       | 1               | IEL 223         | Electrical Motor Fundamentals & Main Lab            | 1         |
| CPR 100        | CPR/First Responder                   | 1               | ENGL 201        | Technical Writing                                   | 3         |
| MATH 104       | Technical Mathematics                 | 3               |                 | <b>Total Credit Hours</b>                           | <b>18</b> |
| ORT010         | Orientation                           | 1               |                 |   |           |
|                | <b>Total Credit Hours</b>             | <b>18</b>       |                 |   |           |
| Third Semester |                                       |                 | Fourth Semester |   |           |
|                |                                       | CR              |                 |   | CR        |
| IEL 201        | National Electrical Code I            | 3               | IEL 127         | Blueprint Reading                                   | 2         |
| IEL 213        | Electrical Heating & Appliances       | 2               | IEL 214         | National Electrical Code II                         | 2         |
| IEL 211        | Electrical Motor Control              | 3               | IEL 220         | Wiring Lab II                                       | 3         |
| IEL 216        | Motor Control Lab                     | 2               | IEL 221         | Programmable Logic Controllers-PLC's                | 2         |
| IEL 218        | Wiring Lab I                          | 3               | IEL 222         | PLC Labs  | 3         |
| IEL 219        | Electrical Planning & Estimating      | 2               | IEL 224         | Power Distribution                                  | 2         |
| ECN 202        | Prin of Economics-Macro <i>or</i>     | 3               | ENGL 102        | Career Communications                               | 2         |
| SOC 100        | Intro to Soc                          |                 | PSYC 103        | Human Relations in the Workplace                    | 3         |
| IEL 299        | Optional Electrician Internship/CO-OP | (6)             |                 | <b>Total Credit Hours</b>                           | <b>19</b> |
|                | <b>Total Credit Hours</b>             | <b>18/ (24)</b> |                 |   |           |

# **ENVIRONMENTAL ENGINEERING TECHNICIAN**

## **Associate in Applied Science, 71-73 Credit, 18-month Program**

The Environmental Engineering Technician program is designed to prepare students for work in an exciting and growing field. As our population grows, society puts an ever increasing demand on our natural resources. Program graduates primarily work outdoors in the field, collecting information used to assess how increased demand affects the quality and quantity of our nation's natural resources. Our graduates work in a broad range of jobs such as collecting and analyzing water and soil samples, measuring stream flow and groundwater levels, and conducting soils testing. The work can be physically demanding, requiring technicians to climb or hike long distances, carrying equipment to remote locations. Field work often entails working under varying climatic conditions such as hot summers or cold winters. Technicians may be required to drive off-road vehicles such as 4-wheelers and snowmobiles, or even ride horses, boats or helicopters, to access some remote sampling sites.

Upon graduation, students can be employed with federal, state, county, and city environmental departments, water treatment facilities, or with private businesses such as consulting engineers, mining companies, and testing labs.

Students will gain experience in environmental sampling and monitoring throughout the program. Field Engineering courses provide students with an excellent balance of theory and hands-on experience that will enable them, upon graduation, to conduct environmental investigations under the supervision of professional Geologists, Engineers or Hydrologists. Courses such as Soil Testing, Field Instrumentation, Hydrology, and Field Methods, provide students with hands-on experience. Some of the other required courses in the program include Mapping, Global Positioning Systems, Surveying, and Geographic Information Systems. In addition, students take courses in communications, human relations, computers, and mathematics that will provide them with the skills necessary to advance in their careers.

| <b>Course No.</b>                     | <b>Course Title</b>                         | <b>Credits</b> |
|---------------------------------------|---|----------------|
| <b>General Education Requirements</b> |   |                |
| CIS 109                               | WORD, LEVEL I                               | 1              |
| CIS 112                               | EXCEL, LEVEL I                              | 1              |
| CIS 114                               | POWERPOINT, LEVEL I                         | 1              |
| CPR 100                               | CPR/FIRST RESPONDER                         | 1              |
| CHEM 106                              | CHEMISTRY SURVEY                            | 3              |
| CHEM 106L                             | CHEMISTRY SURVEY LAB                        | 1              |
| ECN 202                               | PRINCIPLES OF ECONOMICS (MACRO) <i>or</i>   | 3              |
| SOC 100                               | INTRODUCTION TO SOCIOLOGY                   |                |
| ENGL 101                              | COMPOSITION* <i>or</i>                      | 3              |
| ENGL 201                              | TECHNICAL WRITING I                         |                |
| ENGL 202                              | TECHNICAL COMMUNICATIONS                    | 3              |
| MATH 101                              | INTERMEDIATE ALGEBRA**                      | 3              |
| MATH 120                              | TRIGONOMETRY                                | 3              |
| ORT 010                               | ORIENTATION                                 | 1              |
| PSYC 101                              | GENERAL PSYCHOLOGY <i>or</i>                | 3              |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE            |                |
|                                       | <b>Total</b>                                | <b>27</b>      |
| <b>Technical Requirements</b>         |   |                |
| CAD 250                               | INTRODUCTION TO MAPPING/GPS                 | 2              |
| CAD 251                               | INTRODUCTION TO GIS                         | 3              |
| CAD 252                               | INTRODUCTION TO SURVEYING                   | 3              |
| CNS 100                               | INTRODUCTION TO ELECTRICITY & DIGITAL LOGIC | 2              |
| FET 102                               | ENVIRONMENTAL INSTRUMENTATION               | 4              |
| FET 105                               | INTRODUCTION TO ENVIRONMENTAL SCIENCES      | 4              |
| FET 106                               | INTRODUCTORY FIELD METHODS                  | 3              |
| FET 110                               | SOILS TESTING                               | 3              |
| FET 111                               | ENVIRONMENTAL GEOLOGY                       | 3              |
| FFT 118                               | 40 HOUR HAZWOPPER CERTIFICATION             | 2              |
| FETE 202                              | WATER QUALITY                               | 3              |
| FETE 205                              | PRINCIPLES OF HYDROLOGY                     | 3              |
| FETE 204                              | ENVIRONMENTAL REGULATION                    | 2              |
| FETE 222                              | INTRO TO WASTEWATER TECHNOLOGIES <i>or</i>  | 3              |
| FETG 235                              | CONSTRUCTION MATERIALS SAMPLING & TESTING   | 4              |
| FET 298                               | TECHNICAL COOPERATIVE WORK EXPERIENCE       |                |
| FET 299                               | INTERNSHIP (OPTIONAL)                       | 2              |
|                                       | <b>Total</b>                                | <b>44/46</b>   |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Elementary Algebra.

**Semester Breakdown on next page**

## Semester Breakdown

|                                 |                                  |           |                        |   |           |
|---------------------------------|----------------------------------|-----------|------------------------|---|-----------|
| <b>First Semester</b>           |                                  |           | <b>Second Semester</b> |   |           |
|                                 |                                  | <b>CR</b> |                        |   | <b>CR</b> |
| FET 105                         | Intro to Environmental Sciences  | 4         | FET 102                | Environmental Instrumentation             | 4         |
| FET 106                         | Introductory Field Methods       | 3         | CAD 251                | Introduction to GIS                       | 3         |
| FFT 118                         | 40 Hr Hazwopper Certification    | 2         | CNS 100                | Intro to Electricity & Digital Logic      | 2         |
| CAD 250                         | Introduction to Mapping/GPS      | 2         | MATH 101               | Intermediate Algebra**                    | 3         |
| CPR 100                         | CPR/First Responder              | 1         | ECN 202                | Principles of Economics (Macro) <i>or</i> | 3         |
| CIS 109                         | Word, Level I                    | 1         | SOC 100                | Introduction to Sociology                 |           |
| CIS 112                         | Excel, Level I                   | 1         |                        | <b>Total Credit Hours</b>                 | <b>15</b> |
| CIS 114                         | PowerPoint, Level I              | 1         |                        |   |           |
| ORT 010                         | Orientation                      | 1         |                        |   |           |
| PSYC 101                        | General Psychology <i>or</i>     | 3         |                        |   |           |
| PSYC 103                        | Human Relations in the Workplace |           |                        |   |           |
|                                 | <b>Total Credit Hours</b>        | <b>19</b> |                        |   |           |
| <b>Third Semester</b>           |                                  |           | <b>Fourth Semester</b> |   |           |
|                                 |                                  | <b>CR</b> |                        |   | <b>CR</b> |
| FETE 202                        | Water Quality                    | 3         | FET 110                | Soils Testing                             | 3         |
| FETE 205                        | Principles Of Hydrology          | 3         | FET 111                | Environmental Geology                     | 3         |
| FETE 204                        | Environmental Regulation         | 2         | FETG 235               | Construction Materials Sampling & Testing | 4         |
| CHEM 106                        | Basic Chemistry Survey           | 3         | FET 298                | Technical Cooperative Work Experience     |           |
| CHEM 106L                       | Survey Lab                       | 1         |                        | <i>or</i>                                 |           |
| MATH 120                        | Trigonometry                     | 3         | FETE 222               | Intro to Wastewater Technologies          | 3         |
| ENGL 101                        | Composition <i>or</i>            | 3         | ENGL 202               | Technical Communications                  | 3         |
| ENGL 201                        | Technical Writing I              |           | CAD 252                | Introduction to Survey                    | 3         |
|                                 | <b>Total Credit Hours</b>        | <b>18</b> |                        | <b>Total Credit Hours</b>                 | <b>19</b> |
| <b>Optional Summer Semester</b> |                                  |           |                        |   |           |
|                                 |                                  | <b>CR</b> |                        |   |           |
| FET 299                         | Internship                       | 2         |                        |   |           |
|                                 | <b>Total Credit Hours</b>        | <b>2</b>  |                        |   |           |

## **FIRE SCIENCE**

### **Associate in Applied Science, 68-72 Credit, 18-month Program**

The Fire Science program prepares students for careers in the wildland and structural fire service. The combination of classroom instruction, extensive hands on training, in-the-field experience, and internships allow the student to develop skills required for successful employment in the fire service.

This program is designed to meet the specific needs of municipal and wildland firefighting agencies in the Great Plains and Black Hills regions. Completion of the program will result in a firefighter well-prepared to work on a fire in the hills or respond to a large structural fire. The successful student will achieve numerous State and National certifications.

| <b>Course No.</b>                              | <b>Course Title</b>                                 | <b>Credits</b> |
|--|---|----------------|
| <b>General Education Requirements</b>          |   |                |
| CIS 109  | WORD, LEVEL I                                       | 1              |
| CIS 112  | EXCEL, LEVEL I                                      | 1              |
| CIS 114  | POWERPOINT, LEVEL I                                 | 1              |
| ENGL 101                                       | COMPOSITION <i>*or</i>                              | 3              |
| ENGL 201                                       | TECHNICAL WRITING I                                 |                |
| ENGL 202                                       | TECHNICAL COMMUNICATIONS                            | 3              |
| MTH 100  | ELEMENARY ALGEBRA** (OR HIGHER)                     | 3              |
| ORT 010  | ORIENTATION   | 1              |
| PSYC 101                                       | GENERAL PSYCHOLOGY <i>or</i>                        | 3              |
| PSYC 103                                       | HUMAN RELATIONS IN THE WORKPLACE                    |                |
| SOC 100  | INTRODUCTION TO SOCIOLOGY                           | 3              |
| <b>Total</b>                                   |   | <b>19</b>      |
| <b>Technical Requirements</b>                  |   |                |
| FFT 100  | WILDLAND FIREFIGHTER I                              | 3              |
| FFT 102  | RESCUE I  | 3              |
| FFT 105  | PHYSICAL EDUCATION I                                | 2              |
| FFT 106  | STRUCTURE FIREFIGHTER                               | 6              |
| FFT 110  | BUILDING CONSTRUCTION                               | 3              |
| FFT 111  | FORESTRY  | 3              |
| FFT 116  | HAZARDOUS MATERIALS OPERATIONS                      | 3              |
| FFT 203  | FIREFIGHTER FITNESS TESTING                         | 1              |
| FFT 205  | STRUCTURE FIRE ORIGIN & CAUSE                       | 2              |
| FFT 206  | WILDLAND FIRE SERVICE DRIVING <i>or</i>             | 1              |
| FFT 209  | EMERGENCY VEHICLE OPERATIONS (EVOC)                 |                |
| FFT 210  | WILDLAND FIREFIGHTER II                             | 2              |
| FFT 215  | WILDLAND URBAN INTERFACE FIREFIGHTING               | 3              |
| FFT 218  | STRATEGY & TACTICS                                  | 3              |
| FFT 222  | ADVANCED WILDLAND FIREFIGHTER                       | 3              |
| FFT 299  | INTERNSHIP  | 2-6            |
| CPR 103  | INTRODUCTION TO EMERGENCY MEDICAL TECHNICIAN        | 6              |
| <b>Total</b>                                   |   | <b>46-50</b>   |
| <b>Electives for all Fire Science Students</b> |   |                |
| FFT 112  | PUBLIC FIRE EDUCATION                               | 3              |
| FFT 117  | FIRE CODES & INSPECTION PROCEDURES                  | 3              |
| FFT 202  | RESCUE II   | 3              |
| FFT 204  | DRIVER OPERATOR                                     | 3              |
| FFT 207  | FIRE INVESTIGATION – WILDLAND                       | 1              |
| FFT 212  | ARFF (AIRCRAFT RESCUE FIREFIGHTING)                 | 3              |
| FFT 221  | FIRE OFFICER I                                      | 3              |
| FFT 223  | PROTECTIVE SYSTEMS (STRUCTURE)                      | 2              |
| FFT 224  | FIRE SERVICE INSTRUCTOR                             | 1              |
| FFT 227  | HAZARDOUS MATERIALS TECHNICIAN                      | 3              |
| FFT 228  | URBAN SEARCH & RESCUE (STRUCTURE COLLAPSE TRAINING) | 3              |
| FFT 229  | INDUSTRY STANDARDS FIRE SCIENCE                     | 3              |
| FFT 231  | FIRE OFFICER II                                     | 3              |
| CAD 250  | INTRODUCTION TO MAPPING/GPS                         | 2              |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Basic Math.

## Semester Breakdown

| First Semester |                               |           | Second Semester |                                    |           |
|----------------|-------------------------------|-----------|-----------------|------------------------------------|-----------|
|                |                               | CR        |                 |                                    | CR        |
| FFT 100        | Wildland Firefighter I        | 3         | FFT 111         | Forestry                           | 3         |
| FFT 105        | Physical Education            | 2         | FFT 206         | Wildland Driver Operator <i>or</i> | 1         |
| FFT 106        | Structural Firefighter        | 6         | FFT 209         | EVOC                               |           |
| ORT 010        | Orientation                   | 1         | FFT 210         | Wildland Firefighter II            | 2         |
| MTH 100        | Elementary Algebra            | 3         | CPR 103         | Introduction to EMT                | 6         |
| PSYC 101       | General Psychology            | 3         | CIS 109         | Word, Level I                      | 1         |
|                | <b>Total Credit Hours</b>     | <b>18</b> | CIS 112         | Excel, Level I                     | 1         |
|                |                               |           | CIS 114         | PowerPoint, Level I                | 1         |
|                |                               |           | ENGL 101        | Composition <i>or</i>              | 3         |
|                |                               |           | ENGL201         | Technical Writing I                |           |
|                |                               |           |                 | <b>Total Credit Hours</b>          | <b>18</b> |
| Third Semester |                               |           | Fourth Semester |                                    |           |
|                |                               | CR        |                 |                                    | CR        |
| FFT 102        | Rescue I                      | 3         | FFT 110         | Building Construction              | 3         |
| FFT 203        | Fire Fighter Fitness Testing  | 1         | FFT 116         | Hazardous Materials Operation      | 3         |
| FFT 205        | Structure Fire Origin & Cause | 2         | FFT 215         | Wildland/Urban Interface           | 3         |
| FFT 222        | Advanced Wildland Firefighter | 3         | FFT 218         | Strategy & Tactics                 | 3         |
| SOC 100        | Intro to Sociology            | 3         | FFT 299         | Internship                         | 2-6       |
| ENGL 202       | Technical Communications      | 3         |                 | Electives                          | 0-4       |
|                | Electives                     | 3         |                 | <b>Total Credit Hours</b>          | <b>18</b> |
|                | <b>Total Credit Hours</b>     | <b>18</b> |                 | (minimum of 18 credits)            |           |

## HEALTH UNIT COORDINATOR/PATIENT CARE TECHNICIAN

### Diploma, 36 Credit Hours, 9-Month Program

The Health Unit Coordinator/Patient Care Technician program prepares students for employment as entry-level health unit coordinators and patient care techs in healthcare settings.

Health Unit Coordinators (HUC) coordinate patient services in healthcare facilities. They function under the supervision of an RN responsible for the management of a nursing unit. The HUC is crucial to the communications of a healthcare unit. They initiate records for new patients; record information from nursing records and other departmental records; use medical terminology, abbreviations and symbols appropriately; transcribe physicians orders; perform clerical functions for admission; discharge and transfer patients, maintain unit supplies; and communicate with other departments by way of telephone, intercom, pagers, tube systems, and computer. Patient Care Technicians give basic nursing care under the supervision of a licensed nurse. In this career, you will perform catheterizations, record vital signs and patient treatments, and perform other patient care tasks. Patient Care Technicians also perform cardiac diagnostic tests and procedures such as 12-lead EKGs and telemetry monitoring of the heart's electrical impulses.

This program consists of courses in HUC practices and clinical experiences, medical terminology, pharmacology, health concepts, information management skills, and general education. The graduate is awarded a diploma and is eligible to write the National Examination for Certification as a Health Unit Coordinator. The role of the HUC is well established in our healthcare delivery system. They are employed by hospitals, nursing homes, clinics, and other healthcare settings.

Employment opportunities for Health Unit Coordinators and Patient Care Technicians are expected to expand rapidly over the next decade. There is an expected increase of more than 25% in the number of positions for health unit coordinators through the year 2010. Starting wages in South Dakota are \$8.10 to \$12.00 per hour.

| Course No.                            | Course Title                                    | Credits   |
|---------------------------------------|---|-----------|
| <b>General Education Requirements</b> |   |           |
| CIS 100                               | INTRODUCTION TO KEYBOARDING                     | 1         |
| CIS 109                               | WORD, LEVEL I                                   | 1         |
| CIS - - -                             | CIS ELECTIVE                                    | 1         |
| CPR 100                               | CPR/FIRST RESPONDER                             | 1         |
| ENGL 102                              | CAREER COMMUNICATIONS                           | 2         |
| MATH 090                              | BASIC MATHEMATICS <i>or higher</i>              | 2         |
| ORT 010                               | ORIENTATION                                     | 1         |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE                | 3         |
|                                       | <b>Total</b>                                    | <b>12</b> |
| <b>Technical Requirements</b>         |   |           |
| HC 113                                | MEDICAL TERMINOLOGY FOR THE HEALTH PROFESSIONS  | 2         |
| HC 114                                | ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS | 3         |
| HC 140                                | CARDIAC MONITORING                              | 2         |
| HC 145                                | ELECTRONIC HEALTH RECORDS                       | 2         |
| HUC 101                               | INTRO TO HEALTH UNIT COORDINATING               | 2         |
| HUC 135                               | HEALTH UNIT COORDINATING PROCEDURES             | 2         |
| HUC 140                               | HEALTH UNIT COORDINATING LAB                    | 2         |
| HUC 298                               | HUC CLINICAL                                    | 2         |
| PCT 110                               | PATIENT CARE TECH I                             | 2         |
| PCT 111                               | PATIENT CARE TECH I LAB                         | 1         |
| PCT 120                               | PATIENT CARE TECH II                            | 2         |
| PCT 299                               | PATIENT CARE TECH CLINICAL                      | 2         |
|                                       | <b>Total</b>                                    | <b>24</b> |

### Semester Breakdown

| First Semester |                                   |           | Second Semester |                                     |           |
|----------------|-----------------------------------|-----------|-----------------|-------------------------------------|-----------|
|                |                                   | CR        |                 |                                     | CR        |
| HUC 101        | Intro to Health Unit Coordinating | 2         | HC 140          | Cardiac Monitoring                  | 2         |
| HC 113         | Medical Terminology               | 2         | HC 145          | Electronic Health Records           | 2         |
| HC 114         | Anatomy & Physiology              | 3         | HUC 135         | Health Unit Coordinating Procedures | 2         |
| PCT 110        | Patient Care Tech I               | 2         | HUC 140         | Health Unit Coordinating Lab        | 2         |
| PCT 111        | Patient Care Tech I Lab           | 1         | HUC 298         | HUC Clinical                        | 2         |
| CPR 100        | CPR/First Responder               | 1         | PCT 120         | Patient Care Tech II                | 2         |
| CIS 100        | Introduction to Keyboarding       | 1         | PCT 299         | Patient Care Tech Clinical          | 2         |
| CIS 109        | Word, Level I                     | 1         | ENGL 102        | Career Communications               | 2         |
| CIS - - -      | Elective                          | 1         | MATH 090        | Basic Mathematics <i>or higher</i>  | 2         |
| ORT 010        | Orientation                       | 1         |                 | <b>Total Credit Hours</b>           | <b>18</b> |
| PSYC 103       | Human Relations in the Workplace  | 3         |                 |                                     |           |
|                | <b>Total Credit Hours</b>         | <b>18</b> |                 |                                     |           |

# HOT ROD TECHNOLOGY

## Associate in Applied Science, 66-69 Credit Hours, 18-Month Program

The mission of Western Dakota Tech's Hot Rod Technology program is to conduct an academic, hands-on training program that provides highly qualified employees for entry-level positions in all categories of the professional auto-restoration and customization trade. This program will afford the student the opportunity to attain an associate in applied science degree or diploma. A close working relationship will be maintained with a hot rod and custom car industry advisory council to keep abreast of the needs of future employers.

| Course No.   | Course Title                      | Credits      |
|--|-----------------------------------|--------------|
| <b>General Education Requirements</b>                  |                                   |              |
| CIS 109  | WORD, LEVEL I                     | 1            |
| CIS 112  | EXCEL, LEVEL I                    | 1            |
| CIS 114  | POWERPOINT, LEVEL I               | 1            |
| CPR 100  | CPR/FIRST RESPONDER               | 1            |
| ECN 202  | PRINCIPLES OF ECONOMICS <i>or</i> | 3            |
| SOC 100  | INTRODUCTION TO SOCIOLOGY         |              |
| ENGL 101   | COMPOSITION* <i>or</i>            | 3            |
| ENGL 201   | TECHNICAL WRITING I               |              |
| ENGL 102   | CAREER COMMUNICATIONS <i>or</i>   | 2/3          |
| ENGL 202   | TECHNICAL COMMUNICATIONS          |              |
| MATH 104   | TECHNICAL MATH <i>or**</i>        | 3            |
| MATH 101   | INTERMEDIATE ALGEBRA              |              |
| ORT 010  | ORIENTATION                       | 1            |
| PSYC 103   | HUMAN RELATIONS IN THE WORKPLACE  | 3            |
| <b>Total</b>   |                                   | <b>19/20</b> |
| <b>Technical Requirements (any 3 of the following)</b> |                                   |              |
| HRT 100  | HOT ROD CHASSIS FABRICATION       | 16           |
| HRT 110  | HOT ROD BODY FABRICATION          | 16           |
| HRT 200  | HOT ROD REFINISHING               | 15           |
| HRT 210  | HOT ROD PERFORMANCE               | 18           |
| HRT 220  | HOT ROD UPHOLSTERY                | 16           |
| <b>Total</b>   |                                   | <b>47-50</b> |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Basic Math.

### Semester Breakdown

| First Semester            |                      |              | Second Semester           |                                   |              |
|---------------------------|----------------------|--------------|---------------------------|-----------------------------------|--------------|
|                           |                      | CR           |                           |                                   | CR           |
| HRT                       | ANY CLASS            | 15-18        | HRT                       | ANY CLASS                         | 15-18        |
| CPR 100                   | CPR/First Responder  | 1            |                           |                                   |              |
| ORT 010                   | Orientation          | 1            |                           |                                   |              |
| <b>Total Credit Hours</b> |                      | <b>17-20</b> | <b>Total Credit Hours</b> |                                   | <b>15-18</b> |
| Third Semester            |                      |              | Fourth Semester           |                                   |              |
|                           |                      | CR           |                           |                                   | CR           |
| HRT                       | ANY CLASS            | 15-18        | ECN 202                   | Principles of Economics <i>or</i> | 3            |
| CIS 109                   | Word, Level I        | 1            | SOC 100                   | Introduction to Sociology         |              |
| CIS 112                   | Excel, Level I       | 1            | ENGL 101                  | Composition <i>or</i>             | 3            |
| CIS 114                   | Power Point, Level I | 1            | ENGL 201                  | Technical Writing I               |              |
| <b>Total Credit Hours</b> |                      | <b>18-21</b> | ENGL 102                  | Career Communications <i>or</i>   | 2/3          |
|                           |                      |              | ENGL 202                  | Technical Communications          |              |
|                           |                      |              | MATH 104                  | Technical Math                    | 3            |
|                           |                      |              | PSYC 103                  | Human Relations in the Workplace  | 3            |
| <b>Total Credit Hours</b> |                      |              | <b>Total Credit Hours</b> |                                   | <b>14/15</b> |

## **LAW ENFORCEMENT TECHNOLOGY**

### **Associate in Applied Science, 74 Credit Hours, 18-Month Program**

The mission of the Law Enforcement Technology program is to prepare students with the knowledge and skills necessary for employment as an entry-level law enforcement officers, as assessed through student competency evaluations and employer/student satisfaction surveys.

A law enforcement officer is an official representative of government who is entrusted with a wide variety of duties. Regardless of the type and size of the organization they work for, law enforcement officers are expected to perform in a professional manner. The highly competitive nature of obtaining most law enforcement positions requires applicants to be prepared academically, be physically fit, as well as have the hands-on skills necessary to do the job. Many entry-level applicants for law enforcement positions are encouraged or required to have completed at least two years of formal postsecondary education. The WDT Law Enforcement program will help prepare students with these requirements.

To gain successful entrance to the WDT Law Enforcement program, applicants must have an acceptable criminal background and be of good moral character. Items that will definitely exclude them from consideration are felony convictions, misdemeanor convictions concerning moral turpitude, domestic violence, and recent drug usage, to name a few. Applicants must have a current valid driver's license. In addition, they must not have any medical conditions that would prevent them from engaging in the day-to-day activities a law enforcement officer may have to perform. This includes, but is not limited to, running, jumping, standing for long periods of time, driving, handling firearms, and engaging in strenuous physical activity. The training at WDT includes all of these aspects. This is not a strictly academic program. It has an extensive hands-on component to it.

From an academic viewpoint, it is important to be properly prepared in the basic English skills of grammar, spelling, and reading. In the area of math, applicants must be prepared in both basic math skills and algebra. To gain acceptance into the LET program, applicants must:

1. Make application to WDT and take the COMPASS test or have an acceptable ACT/SAT
2. Successfully pass a criminal background check
3. Undergo a personal interview which takes about one hour
4. Pass a pre-entrance drug screen

**Course requirements on next page.**

| Course No.                            | Course Title                             | Credits   |
|---------------------------------------|--|-----------|
| <b>General Education Requirements</b> |  |           |
| CIS 109                               | WORD, LEVEL I                            | 1         |
| CIS 112                               | EXCEL, LEVEL I                           | 1         |
| CIS 114                               | POWERPOINT, LEVEL I                      | 1         |
| CPR 106                               | EMERGENCY RESPONDER                      | 2         |
| SOC 100                               | INTRO TO SOCIOLOGY                       | 3         |
| ENGL 201                              | TECHNICAL WRITING I*                     | 3         |
| ENGL 202                              | TECHNICAL COMMUNICATIONS                 | 3         |
| MTH 100                               | ELEMENTARY ALGEBRA**                     | 3         |
| ORT 010                               | ORIENTATION                              | 1         |
| PSYC 101                              | GENERAL PSYCHOLOGY                       | 3         |
|                                       | <b>Total</b>                             | <b>19</b> |
| <b>Technical Requirements</b>         |  |           |
| LET 110                               | INTRO & OCCUPATIONAL SOCIOLOGY OF LE     | 3         |
| LET 112                               | CONSTITUTIONAL LAW                       | 3         |
| LET 117                               | INDUSTRY STANDARDS                       | 0         |
| LET 118                               | SPANISH FOR LAW ENFORCEMENT ABC          | 3         |
| LET 119                               | CRIMINAL LAW & PROCEDURES                | 3         |
| LET 120                               | MECHANICS OF ARREST/PHYSICAL TRAINING    | 2         |
| LET 121                               | CRIMINAL INVESTIGATIONS                  | 4         |
| LET 122                               | INTERVIEW & INTERROGATION/REPORT WRITING | 3         |
| LET 124                               | JUVENILE METHODS                         | 3         |
| LET 126                               | PHYSICAL TRAINING                        | 1         |
| LET 127                               | INDUSTRY STANDARDS                       | 0         |
| LET 212                               | ACCIDENT INVESTIGATIONS                  | 2         |
| LET 213                               | CRIMINOLOGY & ABNORMAL BEHAVIOR          | 3         |
| LET 215                               | COLLECTION/PRESERVATION OF EVIDENCE      | 3         |
| LET 216                               | PHYSICAL TRAINING                        | 1         |
| LET 217                               | INDUSTRY STANDARDS                       | 0         |
| LET 218                               | PATROL PROCEDURES I                      | 3         |
| LET 222                               | ADVANCED ISSUES IN POLICING              | 2         |
| LET 224                               | LAW ENFORCEMENT PRACTICUM                | 2         |
| LET 226                               | PHYSICAL TRAINING                        | 1         |
| LET 227                               | INDUSTRY STANDARDS                       | 0         |
| LET 228                               | CORRECTIONS/PAROLE                       | 2         |
| LET 230                               | PATROL PROCEDURES II                     | 3         |
| LET 232                               | TECHNOLOGY IN LAW ENFORCEMENT            | 2         |
| LET 251                               | FIREARMS TRAINING                        | 2         |
| LET 252                               | EMERGENCY VEHICLE OPERATION COURSE       | 2         |
|                                       | <b>Total</b>                             | <b>55</b> |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Basic Math.

**Note:** If you have been convicted, pled guilty or no contest to, or received a suspended imposition of sentence for a felony or other criminal offense (excluding minor traffic violations) you are advised that it may not be possible for you to participate in the internship or clinical portion of this program. You may also be prevented from taking required certification examinations, and you may be prevented from gaining employment in this field. Any conviction for a crime of domestic violence or any other conviction arising out of a crime of domestic violence, will automatically prohibit entry into this program. Any questions should be directed to the program lead instructor.

**Semester breakdown on next page**

## Semester Breakdown

| First Semester            |   |           | Second Semester           |   |           |
|---------------------------|---|-----------|---------------------------|---|-----------|
|                           |   | CR        |                           |   | CR        |
| LET 110                   | Intro & Occupational Sociology of Law Enforcement | 3         | LET 121                   | Criminal Investigations                   | 4         |
| LET 112                   | Constitutional Law                                | 3         | LET 122                   | Interview & Interrogation/Report Writing  | 3         |
| LET 117                   | Industry Standards                                | 0         | LET 124                   | Juvenile Methods                          | 3         |
| LET 118                   | Spanish for Law Enforcement                       | 3         | LET 126                   | Physical Training                         | 1         |
| LET 119                   | Criminal Law & Procedures                         | 3         | LET 127                   | Industry Standards                        | 0         |
| LET 120                   | Mechanics of Arrest/Physical Training             | 2         | ENGL 201                  | Technical Writing I                       | 3         |
| CPR 106                   | Emergency Responder                               | 2         | PSYC 101                  | General Psychology                        | 3         |
| CIS 109                   | Word, Level I                                     | 1         | <b>Total Credit Hours</b> |   | <b>17</b> |
| CIS 112                   | Excel, Level I                                    | 1         |                           |   |           |
| CIS 114                   | PowerPoint, Level I                               | 1         |                           |   |           |
| ORT 010                   | Orientation                                       | 1         |                           |   |           |
| <b>Total Credit Hours</b> |   | <b>20</b> |                           |   |           |
| Third Semester            |   |           | Fourth Semester           |   |           |
|                           |   | CR        |                           |   | CR        |
| LET 212                   | Accident Investigations                           | 2         | LET 222                   | Advanced Issues in Policing               | 2         |
| LET 213                   | Criminology & Abnormal Behavior/Corrections       | 3         | LET 224                   | Law Enforcement Practicum                 | 2         |
| LET 215                   | Collection/Preservation of Evidence               | 3         | LET 226                   | Physical Training                         | 1         |
| LET 216                   | Physical Training                                 | 1         | LET 227                   | Industry Standards                        | 0         |
| LET 217                   | Industry Standards                                | 0         | LET 228                   | Corrections/Paroles                       | 2         |
| LET 218                   | Patrol Procedures I                               | 3         | LET 230                   | Patrol Procedures II                      | 3         |
| SOC 100                   | Intro to Sociology                                | 3         | LET 232                   | Technology in Law Enforcement             | 2         |
| ENGL 202                  | Technical Communications                          | 3         | LET 251                   | Firearms Training                         | 2         |
| MTH 100                   | Elementary Algebra                                | 3         | LET 252                   | Emergency Vehicle Operation Course (EVOC) | 2         |
| <b>Total Credit Hours</b> |   | <b>21</b> | <b>Total Credit Hours</b> |   | <b>16</b> |

## **MEDICAL ADMINISTRATIVE SERVICES**

### **Diploma, 49 Credit Hours, 14-Month Program**

The Medical Administrative Services program prepares students for a variety of careers in the medical profession.

Medical administrative services personnel prepare correspondence and assist healthcare professionals with reports, speeches, articles, and conference proceedings. They also record simple medical histories, arrange for patients to be hospitalized, order supplies, and transcribe dictation. Opportunities for employment abound as a result of the growth in the health industry.

| <b>Course No.</b>                     | <b>Course Title</b>                             | <b>Credits</b> |
|---------------------------------------|---|----------------|
| <b>General Education Requirements</b> |   |                |
| CIS 109                               | WORD, LEVEL I                                   | 1              |
| CIS 112                               | EXCEL, LEVEL I                                  | 1              |
| CIS 113                               | EXCEL, LEVEL II                                 | 1              |
| CIS 114                               | POWERPOINT, LEVEL I                             | 1              |
| CIS 116                               | ACCESS LEVEL I                                  | 1              |
| CIS 117                               | ACCESS LEVEL II                                 | 1              |
| ENGL 010                              | BASIC ENGLISH                                   | 3              |
| MATH 112                              | BUSINESS MATHEMATICS                            | 3              |
| ORT 010                               | ORIENTATION                                     | 1              |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE                | 3              |
| <b>Total</b>                          |   | <b>16</b>      |
| <b>Technical Requirements</b>         |   |                |
| BUS 134                               | WRITTEN COMMUNICATIONS FOR BUSINESS             | 4              |
| BUS 137                               | PROFESSIONAL DEVELOPMENT                        | 1              |
| COC 110                               | KEYBOARDING I                                   | 3              |
| COC 120                               | KEYBOARDING II                                  | 3              |
| COC 132                               | RECORDS MANAGEMENT                              | 3              |
| COC 141                               | COMPUTERIZED OFFICE APPLICATIONS                | 2              |
| HC 114                                | ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS | 3              |
| HC 145                                | ELECTRONIC HEALTH RECORDS                       | 2              |
| MDS 110                               | MEDICAL TERMINOLOGY I                           | 3              |
| MDS 122                               | MEDICAL TERMINOLOGY II                          | 3              |
| MTS 102                               | MEDICAL TRANSCRIPTION I                         | 3              |
| MDS 299                               | INTERNSHIP OR ELECTIVE                          | 3              |
| <b>Total</b>                          |   | <b>33</b>      |

### **Semester Breakdown**

| <b>First Semester</b>     |   |           | <b>Second Semester</b>    |                                    |           |
|---------------------------|---|-----------|---------------------------|------------------------------------|-----------|
|                           |   | <b>CR</b> |                           |                                    | <b>CR</b> |
| COC 110                   | Keyboarding I                                   | 3         | BUS 134                   | Written Communication for Business | 4         |
| HC 114                    | Anatomy & Physiology for the Health Professions | 3         | BUS 137                   | Professional Development           | 1         |
| MDS 110                   | Medical Terminology I                           | 3         | COC 120                   | Keyboarding II                     | 3         |
| CIS 109                   | Word, Level I                                   | 1         | MDS 122                   | Medical Terminology II             | 3         |
| CIS 112                   | Excel, Level I                                  | 1         | MTS 102                   | Medical Transcription I            | 3         |
| CIS 114                   | PowerPoint, Level I                             | 1         | CIS 117                   | Access Level II                    | 1         |
| ENGL 010                  | Basic English                                   | 3         | CIS 116                   | Access, Level I                    | 1         |
| ORT 010                   | Orientation                                     | 1         | CIS 113                   | Excel, Level II                    | 1         |
| <b>Total Credit Hours</b> |   | <b>16</b> | <b>Total Credit Hours</b> |                                    | <b>17</b> |
| <hr/>                     |   |           |                           |                                    |           |
| <b>Third Semester</b>     |   |           |                           |                                    |           |
|                           |   | <b>CR</b> |                           |                                    |           |
| COC 132                   | Records Management                              | 3         |                           |                                    |           |
| COC 141                   | Computerized Office Apps                        | 2         |                           |                                    |           |
| HC 145                    | Electronic Health Records                       | 2         |                           |                                    |           |
| MATH 112                  | Business Mathematics                            | 3         |                           |                                    |           |
| PSYC 103                  | Human Relations in the Workplace                | 3         |                           |                                    |           |
| MDS 299                   | Internship or Elective                          | 3         |                           |                                    |           |
| <b>Total Credit Hours</b> |   | <b>16</b> |                           |                                    |           |

## **MEDICAL ASSISTANT**

### **Associate of Applied Science, 73 Credit Hours, 18-Month Program**

The Medical Assistant program prepares students for a variety of careers in the medical profession.

A Medical Assistant is a professional multi-skilled person who assists in all aspects of medical care and is primarily employed in a medical office setting. Medical Assistants help the physician with patient care management, execute administrative and clinical procedures, and perform managerial functions.

Administrative duties may include using computer applications, answering telephones, greeting patients, updating and filing patient medical records, coding and filling out insurance forms, scheduling appointments, arranging for hospital admissions and laboratory services, and handling correspondence, billing, and bookkeeping in a medical office setting.

Clinical duties may include taking medical histories, taking vital signs, explaining treatment procedures to patients, preparing patient for examination, assisting the physician during the exam, collecting and preparing laboratory specimens, performing basic laboratory tests, instructing patients about medication and special diets, preparing and administering medications as directed by a physician, and taking electrocardiograms.

Medical assisting is a rapidly growing and expanding career.

| <b>Course No.</b>                     | <b>Course Title</b>                             | <b>Credits</b> |
|---------------------------------------|---|----------------|
| <b>General Education Requirements</b> |   |                |
| CIS 109                               | WORD, LEVEL I                                   | 1              |
| CIS 114                               | POWERPOINT, LEVEL I                             | 1              |
| CIS xxx                               | CIS ELECTIVE                                    | 1              |
| CPR 100                               | CPR/FIRST RESPONDER                             | 1              |
| ENGL 101                              | COMPOSITION*                                    | 3              |
| ENGL xxx                              | ENGL ELECTIVE                                   | 3              |
| MTH 100                               | ELEMENTARY ALGEBRA                              | 3              |
| MATH 112                              | BUSINESS MATHEMATICS                            | 3              |
| ORT 010                               | ORIENTATION                                     | 1              |
| PSYC 101                              | INTRODUCTION TO PSYCHOLOGY <i>or</i>            | 3              |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE                |                |
| SOC 100                               | INTRODUCTION TO SOCIOLOGY                       | 3              |
|                                       | <b>Total</b>                                    | <b>23</b>      |
| <b>Technical Requirements</b>         |   |                |
| HC 113                                | MEDICAL TERMINOLOGY FOR THE HEALTH PROFESSIONAL | 2              |
| HC 114                                | ANATOMY AND PHYSIOLOGY                          | 3              |
| HC 140                                | CARDIAC MONITORING                              | 2              |
| HC 145                                | ELECTRONIC MEDICAL RECORDS                      | 2              |
| MA 110                                | MEDICAL ASSISTING I                             | 2              |
| MA 125                                | PATHOPHYSIOLOGY                                 | 3              |
| MA 130                                | MEDICAL ASSISTING II                            | 3              |
| MA 135                                | MEDICAL LAW AND ETHICS                          | 2              |
| MA 145                                | PHARMACOLOGY AND ADMINISTRATION OF MEDS         | 3              |
| MDS 210                               | HEALTH CARE CODING I                            | 4              |
| MDS 211                               | HEALTH CARE CODING II                           | 3              |
| MDS 212                               | HEALTH CARE FUND & REIMBURSEMENT                | 3              |
| PCT 110                               | PATIENT CARE TECH I LECTURE                     | 2              |
| PCT 111                               | PATIENT CARE TECH I LAB                         | 1              |
| PH 102                                | INTRO TO PHLEBOTOMY                             | 2              |
| PH 121                                | PHLEBOTOMY PRINCIPLES AND PRACTICES             | 3              |
| PH 123                                | LAB ASSISTANT TECHNIQUES                        | 3              |
| MA 299                                | MEDICAL ASSISTING CLINICAL                      | 7              |
|                                       | <b>Total</b>                                    | <b>50</b>      |

\*Prerequisite: Acceptable COMPASS score or Basic Writing

## Semester Breakdown

| <b>First Semester</b> |   |           | <b>Second Semester</b> |   |           |
|-----------------------|---|-----------|------------------------|---|-----------|
|                       |   | <b>CR</b> |                        |   | <b>CR</b> |
| HC 113                | Medical Terminology                             | 2         | HC 145                 | Electronic Medical Records                    | 2         |
| HC 114                | Anatomy & Physiology for the Health Professions | 3         | MA 110                 | Medical Assisting I                           | 2         |
| PCT 110               | Patient Care Tech I Lecture                     | 2         | PH 123                 | Lab Assistant Techniques                      | 3         |
| PCT 111               | Patient Care Tech I Lab                         | 1         | CIS109                 | Word, Level I                                 | 1         |
| PH 102                | Intro to Phlebotomy                             | 2         | CIS 114                | PowerPoint, Level I                           | 1         |
| PH121                 | Phlebotomy Principles and Practices             | 3         | CIS xxx                | CIS Elective                                  | 1         |
| MATH 112              | Business Math                                   | 3         | ENGL101                | Composition                                   | 3         |
| ORT 010               | Orientation                                     | 1         | MTH 100                | Elementary Algebra                            | 3         |
|                       | <b>Total Credit Hours</b>                       | <b>17</b> | PSYC 101               | Intro to Psychology <i>or</i>                 | 3         |
|                       |   |           | PSYC 103               | Human Relations in the Workplace              |           |
|                       |   |           |                        | <b>Total Credit Hours</b>                     | <b>19</b> |
| <b>Third Semester</b> |   |           | <b>Fourth Semester</b> |   |           |
|                       |   | <b>CR</b> |                        |   | <b>CR</b> |
| MA 125                | Pathophysiology                                 | 3         | HC 140                 | Cardiac Monitoring                            | 2         |
| MA 130                | Medical Assisting II                            | 3         | MA 135                 | Medical Law & Ethics                          | 2         |
| MDS 210               | Health Care Coding I                            | 4         | MA 145                 | Pharmacology and Administration of Medication | 3         |
| MDS 212               | Health Care Fund & Reimbursement                | 3         | MDS 211                | Health Care Coding II                         | 3         |
| ENGL xxx              | English Elective                                | 3         | CPR 100                | CPR/First Responder                           | 1         |
| SOC 100               | Intro to Soc                                    | 3         | MA 299                 | Medical Assisting Clinical                    | 7         |
|                       | <b>Total Credit Hours</b>                       | <b>19</b> |                        | <b>Total Credit Hours</b>                     | <b>18</b> |

## **MEDICAL TRANSCRIPTION**

### **Associate in Applied Science, 69 Credit Hours, 18-Month Program**

The Medical Transcription program prepares students for a variety of careers in the medical profession.

Medical transcriptionists transcribe a variety of medical reports such as emergency room visits, diagnostic imaging studies, operations, chart reviews, and discharge summaries. Medical transcriptionists must understand the medical terminology, anatomy and physiology, diagnostic procedures, and treatments to accurately transcribe reports. Opportunities for employment abound as a result of the growth in the healthcare industry.

| <b>Course No.</b>                                    | <b>Course Title</b>                             | <b>Credits</b> |
|--|---|----------------|
| <b>General Education Requirements</b>                |   |                |
| CIS 109  | WORD, LEVEL I                                   | 1              |
| CIS 112  | EXCEL, LEVEL I                                  | 1              |
| CIS 114  | POWERPOINT, LEVEL I                             | 1              |
| ENGL 010   | BASIC ENGLISH                                   | 3              |
| ENGL 101   | COMPOSITION* <i>or</i>                          | 3              |
| ENGL 203   | TECHNICAL WRITING II - online                   |                |
| MATH 112   | BUSINESS MATHEMATICS                            | 3              |
| ORT 010  | ORIENTATION                                     | 1              |
| PSYC 103   | HUMAN RELATIONS IN THE WORKPLACE                | 3              |
| SOC 100  | INTRO TO SOCIOLOGY <i>or</i>                    | 3              |
| ECN 204  | PRINCIPLES OF MACRO ECONOMICS                   |                |
|  | <b>Total</b>                                    | <b>19</b>      |
| <b>Technical Requirements</b>                        |   |                |
| BUS 134  | WRITTEN COMMUNICATIONS FOR BUSINESS             | 4              |
| COC 110  | KEYBOARDING I                                   | 3              |
| COC 120  | KEYBOARDING II                                  | 3              |
| COC 132  | RECORDS MANAGEMENT                              | 3              |
| COC 141  | COMPUTERIZED OFFICE APPLICATIONS                | 2              |
| HC 114   | ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS | 3              |
| HC 145   | ELECTRONIC HEALTH RECORDS                       | 2              |
| MDS 110  | MEDICAL TERMINOLOGY I                           | 3              |
| MDS 122  | MEDICAL TERMINOLOGY II                          | 3              |
| MTS 102  | MEDICAL TRANSCRIPTION I                         | 3              |
| MTS 124  | DISEASE PROCESSES I                             | 3              |
| MTS 212  | BASIC PHARMACOLOGY                              | 3              |
| MTS 213  | MEDICAL TRANSCRIPTION II                        | 3              |
| MTS 214  | DISEASE PROCESSES II                            | 3              |
| MTS 222  | MEDICAL TRANSCRIPTION III                       | 3              |
|  | ELECTIVES                                       | 6              |
|  | <b>Total</b>                                    | <b>50</b>      |
| <b>Advanced Optional Courses/Technical Electives</b> |   |                |
| MDS 210  | HEALTH CARE CODING I                            | 4              |
| MDS 211  | HEALTH CARE CODING II                           | 3              |
| MDS 212  | HEALTH CARE FUNDAMENTALS & REIMBURSEMENT        | 3              |
| MED 299  | MEDICAL TRANSCRIPTION PRACTICUM                 | 2-4            |
| MTS 232  | MEDICAL TRANSCRIPTION IV                        | 3              |

\*Prerequisite: Acceptable COMPASS score or Basic Writing

**Semester breakdown on next page**

## Semester Breakdown

| <b>First Semester</b> |   |           | <b>Second Semester</b> |                                     |           |
|-----------------------|---|-----------|------------------------|-------------------------------------|-----------|
|                       |   | <b>CR</b> |                        |                                     | <b>CR</b> |
| COC 110               | Keyboarding I                                   | 3         | COC 120                | Keyboarding II                      | 3         |
| HC 114                | Anatomy & Physiology for the Health Professions | 3         | MDS 122                | Medical Terminology II              | 3         |
| MDS 110               | Medical Terminology I                           | 3         | MTS 102                | Medical Transcription I             | 3         |
| CIS 109               | Word, Level I                                   | 1         | MTS 124                | Disease Processes I                 | 3         |
| ENGL 010              | Basic English                                   | 3         | MTS 212                | Basic Pharmacology                  | 3         |
| MATH 112              | Business Mathematics                            | 3         | CIS 112                | Excel, Level I                      | 1         |
| ORT 010               | Orientation                                     | 1         | CIS 114                | PowerPoint, Level I                 | 1         |
|                       | <b>Total Credit Hours</b>                       | <b>17</b> |                        | <b>Total Credit Hours</b>           | <b>17</b> |
| <b>Third Semester</b> |   |           | <b>Fourth Semester</b> |                                     |           |
|                       |   | <b>CR</b> |                        |                                     | <b>CR</b> |
| COC 132               | Records Management                              | 3         | BUS 134                | Written Communications for Business | 4         |
| COC 141               | Computerized Office Apps                        | 2         | MTS 222                | Medical Transcription III           | 3         |
| HC 145                | Electronic Health Records                       | 2         | PSYC 103               | Human Relations in the Workplace    | 3         |
| MTS 213               | Medical transcription II                        | 3         |                        | Electives                           | 6         |
| MTS 214               | Disease Processes II                            | 3         |                        | <b>Total Credit Hours</b>           | <b>16</b> |
| ENGL 101              | Composition <i>or</i>                           | 3         |                        |                                     |           |
| ENGL 203              | Technical Writing II - online                   |           |                        |                                     |           |
| SOC 100               | Intro to Sociology <i>or</i>                    | 3         |                        |                                     |           |
| ECN 204               | Principles of Macro Econ                        |           |                        |                                     |           |
|                       | <b>Total Credit Hours</b>                       | <b>19</b> |                        |                                     |           |

## **PARALEGAL/LEGAL ASSISTANT**

### **Associate in Applied Science, 72 Credit Hours, 18-Month Program**

The Paralegal/Legal Assistant program prepares students for a career in the legal field. The blending of extensive classroom instruction, on-the-job internships, and specialized projects allows students to develop skills required for employment in traditional and non-traditional legal settings as assessed through the program completion exam, program competencies, internship evaluations, graduate/student surveys, and employer surveys.

Paralegals are highly skilled professionals with well-developed communication, problem-solving, and computer skills who work closely with a team of other legal professionals. Paralegals may work in all areas of the law, including litigation, bankruptcy, corporate law, criminal law, employee benefits, patent and copyright law, and real estate. Paralegals work under the supervision of attorneys. Although prohibited by law from establishing an attorney/client relationship, offering legal advice, representing a client in court, or setting legal fees, paralegals may conduct investigations and interview witnesses, communicate with clients, carry out legal research assignments, draft legal documents, prepare a case for trial, and assist the attorney in the courtroom. Paralegalism is among the nation's 20 fastest-growing occupations. Generally, employers require formal paralegal training obtained through associate or bachelor degree programs.

A prerequisite of 30 WPM typing proficiency is required to enter this program. This program is approved by the American Bar Association.

#### **Program Goals/Student Learning Outcomes:**

Students will be able to:

- Demonstrate good judgment in etiquette and ethics in a legal environment
- Utilize time management skills
- Exhibit knowledge of a wide variety of substantive and procedural laws
- Analyze legal issues
- Demonstrate effective oral and written communication skills
- Research the law using the full range of law reference materials, including computerized legal research
- Remonstrate an understanding of the roles and relationships within a legal environment
- Demonstrate a full understanding of and appreciation for, the rules of legal ethics, with emphasis on their applicability to paralegals
- Obtain employment in the field utilizing their knowledge of legal research, writing and communicative skills

#### **Request for transfer credit shall be processed as follows:**

Transfer credit requests for general education courses and other non-legal specialty courses shall be handled by the Student Services Department. With regard to legal specialty course transfer credit requests, full credit shall be given in connection with credits earned in legal specialty courses completed at ABA approved programs, providing, however, that no transfer credit shall be given in connection with any course in which the student earned lower than a "C". Where the legal specialty course credits have been completed at a non-ABA approved program, the program director shall make a case by case decision based on an examination of the textbook, course syllabus, and assignments completed in connection with the course for which the student is seeking transfer credit, again providing, however, that no transfer credit shall be given in connection with any course in which the student earned a grade lower than "C".

Transfer credit is awarded pursuant to the general guidelines set forth in Western Dakota Technical Institute's general transfer policy (50% of a student's coursework must be completed at WDT in order to receive a diploma/degree). The program does not allow the awarding of legal specialty credit by examination.

| Course                                | No. | Course Title                              | Credits   |
|---------------------------------------|-----|---|-----------|
| <b>General Education Requirements</b> |     |   |           |
| CIS                                   | 109 | WORD, LEVEL I                             | 1         |
| CIS                                   | 112 | EXCEL, LEVEL I                            | 1         |
| CIS                                   | 114 | POWERPOINT, LEVEL I                       | 1         |
| ECN                                   | 202 | PRINCIPLES OF ECONOMICS (MACRO) <i>or</i> | 3         |
| SOC                                   | 100 | INTRO TO SOCIOLOGY                        |           |
| ENGL                                  | 101 | COMPOSITION*                              | 3         |
| MATH                                  | 101 | INTERMEDIATE ALGEBRA**                    | 3         |
| ORT                                   | 010 | ORIENTATION                               | 1         |
| PSYC                                  | 101 | GENERAL PSYCHOLOGY                        | 3         |
| SPCM                                  | 101 | FUNDAMENTALS OF SPEECH                    | 3         |
| <b>Total</b>                          |     |   | <b>19</b> |
| <b>Technical Requirements</b>         |     |   |           |
| ACCT                                  | 210 | PRINCIPLES OF ACCOUNTING I                | 4         |
| HUM                                   | 102 | CRITICAL THINKING                         | 3         |
| PLL                                   | 111 | INTRODUCTION TO PARALEGALISM              | 2         |
| PLL                                   | 123 | REAL PROPERTY                             | 2         |
| PLL                                   | 124 | CRIMINAL LAW                              | 2         |
| PLL                                   | 125 | TORTS                                     | 3         |
| PLL                                   | 126 | CONTRACTS                                 | 3         |
| PLL                                   | 132 | LEGAL RESEARCH & WRITING I***             | 4         |
| PLL                                   | 133 | LEGAL RESEARCH & WRITING II               | 4         |
| PLL                                   | 211 | AMERICAN LEGAL SYSTEM & CONST. LAW        | 3         |
| PLL                                   | 212 | LITIGATION & CIVIL PROCEDURES             | 3         |
| PLL                                   | 215 | LAW OF BUSINESS ORGANIZATIONS             | 2         |
| PLL                                   | 217 | EVIDENCE                                  | 3         |
| PLL                                   | 231 | FAMILY LAW                                | 2         |
| PLL                                   | 232 | LITIGATION CLINIC I                       | 2         |
| PLL                                   | 233 | LITIGATION CLINIC II                      | 2         |
| PLL                                   | 298 | INTERNSHIP                                | 7         |
| <b>Total</b>                          |     |   | <b>53</b> |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Elementary Algebra.

\*\*\*Prerequisite: PLL-132 is a prerequisite for all Paralegal courses.

| <b>Technical Electives (2 or more Credit Hours Required)</b> |     |                                     | <b>Credits</b> |
|--|-----|-------------------------------------|----------------|
| ACCT   | 227 | EXCEL FOR ACCOUNTING                | 3              |
| BUS  | 136 | ORAL COMMUNICATIONS FOR BUSINESS    | 2              |
| BUS  | 210 | SUPERVISORY MANAGEMENT              | 3              |
| COC  | 110 | KEYBOARDING I                       | 3              |
| COC  | 120 | KEYBOARDING II                      | 3              |
| COC  | 132 | RECORDS MANAGEMENT                  | 3              |
| HC   | 113 | MEDICAL TERMINOLOGY                 | 2              |
| PLL  | 223 | WILLS & PROBATE                     | 2              |
| PLL  | 224 | BANKRUPTCY & COMMERCIAL LAW         | 2              |
| PLL  | 225 | ADMINISTRATIVE LAW                  | 2              |
| PLL  | 226 | LAW OFFICE MANAGEMENT               | 2              |
| PLL  | 227 | INTRO TO ENVIRONMENTAL LAW          | 2              |
| PLL  | 228 | INTRO TO NATIVE AMERICAN TRIBAL LAW | 2              |

**Note:** If you have been convicted, pled guilty or no contest to, or received a suspended imposition of sentence for a felony, you are advised that you may be prevented from gaining employment in this field in South Dakota.

**Semester Breakdown on next page**

## Semester Breakdown

| First Semester |   |           | Second Semester |                               |           |
|----------------|---|-----------|-----------------|-------------------------------|-----------|
|                |   | CR        |                 |                               | CR        |
| PLL 111        | Introduction to Paralegalism                | 2         | ACCT 210        | Principles of Accounting I    | 4         |
| PLL 132        | Legal Research & Writing I                  | 4         | PLL 124         | Criminal Law                  | 2         |
| PLL 211        | American Legal Systems & Constitutional Law | 3         | PLL 212         | Litigation & Civil Procedures | 3         |
| CIS 109        | Word, Level I                               | 1         | PLL 217         | Evidence                      | 3         |
| CIS 112        | Excel, Level I                              | 1         | ENGL 101        | Composition                   | 3         |
| CIS 114        | PowerPoint, Level I                         | 1         | PSYC 101        | General Psychology            | 3         |
| HUM 102        | Critical Thinking                           | 3         |                 | <b>Total Credit Hours</b>     | <b>18</b> |
| MATH 101       | Intermediate Algebra                        | 3         |                 |                               |           |
| ORT 010        | Orientation                                 | 1         |                 |                               |           |
|                | <b>Total Credit Hours</b>                   | <b>19</b> |                 |                               |           |
| Third Semester |   |           | Fourth Semester |                               |           |
|                |   | CR        |                 |                               | CR        |
| PLL 125        | Torts                                       | 3         | PLL 123         | Real Property                 | 2         |
| PLL 126        | Contracts                                   | 3         | PLL 215         | Law of Business Organizations | 2         |
| PLL 133        | Legal Research & Writing II                 | 4         | PLL 231         | Family Law                    | 2         |
| PLL 232        | Litigation Clinic I                         | 2         | PLL 233         | Litigation Clinic II          | 2         |
| SOC 100        | Intro to Sociology <i>or</i>                | 3         | PLL 298         | Internship                    | 7         |
| ECN 202        | Princ of Econ-Macro                         |           |                 | Electives                     | 2         |
| SPCM 101       | Speech                                      | 3         |                 | <b>Total Credit Hours</b>     | <b>17</b> |
|                | <b>Total Credit Hours</b>                   | <b>18</b> |                 |                               |           |

## PARAMEDIC

### Associate in Applied Science, 68-69 Credit, 14-month Program

The Paramedic program prepares students for careers in paramedic services. The combination of classroom instruction, extensive hands on training, in-the-field experience, and internships allow the student to develop skills required for successful employment in this field. PREREQUISITE: EMT(CPR 103).

This program is designed to meet the specific needs of paramedic agencies in the Great Plains and Black Hills regions. Completion of the program will result in a paramedic well prepared to respond to medical emergencies. The successful student will achieve numerous State and National certifications.

| Course No.                            | Course Title                     | Credits      |
|---------------------------------------|----------------------------------|--------------|
| <b>General Education Requirements</b> |                                  |              |
| CIS 109                               | WORD, LEVEL I                    | 1            |
| CIS 112                               | EXCEL LEVEL I                    | 1            |
| CIS 114                               | POWERPOINT LEVEL I               | 1            |
| ENGL 101                              | COMPOSITION* <i>or</i>           | 3            |
| ENGL 201                              | TECHNICAL WRITING I              |              |
| ENGL 102                              | CAREER COMMUNICATIONS <i>or</i>  | 2/3          |
| ENGL 202                              | TECHNICAL COMMUNICATIONS         |              |
| MATH 101                              | INTERMEDIATE ALGEBRA**           | 3            |
| ORT 010                               | ORIENTATION                      | 1            |
| PSYC 101                              | GENERAL PSYCHOLOGY <i>or</i>     | 3            |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE |              |
| SOC 100                               | INTRODUCTION TO SOCIOLOGY        | 3            |
|                                       | <b>Total</b>                     | <b>18/19</b> |
| <b>Technical Requirements</b>         |                                  |              |
| FFT 102                               | RESCUE                           | 3            |
| FFT 116                               | HAZARDOUS MATERIALS              | 3            |
| FFP 100                               | PARAMEDIC PREPATORY I            | 6            |
| FFP 105                               | PARAMEDIC PREPATORY II           | 2            |
| FFP 110                               | PARAMEDIC ASSESSMENT             | 2            |
| FFP 115                               | PARAMEDIC CARDIOLOGY             | 5            |
| FFP 200                               | PARAMEDIC MEDICAL                | 5            |
| FFP 205                               | PARAMEDIC SPECIAL OPS I          | 4            |
| FFP 210                               | PARAMEDIC SPECIAL OPS II         | 7            |
| FFP 298                               | PARAMEDIC CLINICAL I             | 3            |
| FFP 299                               | PARAMEDIC CLINICAL II            | 5            |
| HC 113                                | MEDICAL TERMINOLOGY              | 2            |
| HC 114                                | ANATOMY & PHYSIOLOGY             | 3            |
|                                       | <b>Total</b>                     | <b>50</b>    |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Elementary Algebra.

### Semester Breakdown

| First Semester          |                           |           | Second Semester |                                    |              |
|-------------------------|---------------------------|-----------|-----------------|------------------------------------|--------------|
|                         |                           | CR        |                 |                                    | CR           |
| HC 113                  | Medical Terminology       | 2         | FFP 105         | Paramedic Prep II                  | 2            |
| HC 114                  | Anatomy & Physiology      | 3         | FFP 110         | Paramedic Assessment               | 2            |
| FFP 100                 | Paramedic Prep I          | 6         | FFP 115         | Paramedic Cardiology               | 5            |
| ENGL 101                | Composition <i>or</i>     | 3         | FFP 298         | Paramedic Clinical I               | 3            |
| ENGL 201                | Technical Writing I       |           | PSYC 101        | General Psychology <i>or</i>       | 3            |
| MATH 101                | Intermediate Algebra      | 3         | PSYC 103        | Human Relations in the Workplace   |              |
| ORT 010                 | Orientation               | 1         | CIS 109         | Word Level I                       | 1            |
| SOC 100                 | Intro to Sociology        | 3         | CIS 112         | Excel Level I                      | 1            |
|                         | <b>Total Credit Hours</b> | <b>21</b> | CIS 114         | PowerPoint Level I                 | 1            |
|                         |                           |           |                 | <b>Total Credit Hours</b>          | <b>18</b>    |
| Third Semester (Summer) |                           |           | Fourth Semester |                                    |              |
|                         |                           | CR        |                 |                                    | CR           |
| FFT 116                 | Hazardous Materials       | 3         | FFP 210         | Paramedic Special Ops II           | 7            |
| FFP 200                 | Paramedic Medical         | 5         | FFP 299         | Paramedic Clinical II              | 5            |
| FFP 205                 | Paramedic Spec Ops I      | 4         | FFT 102         | Rescue I                           | 3            |
|                         | <b>Total Credit Hours</b> | <b>12</b> | ENGL 202        | Technical Communications <i>or</i> | 3/2          |
|                         |                           |           | ENGL 102        | Career Communications              |              |
|                         |                           |           |                 | <b>Total Credit Hours</b>          | <b>17/18</b> |

# PHARMACY TECHNICIAN

## Diploma, 45 Credit Hours, 11-Month Program

The goal of the Pharmacy Technician Program at Western Dakota Tech is to educate and train students for positions in hospitals, retail pharmacies, and other medical facilities working as pharmacy technicians assisting registered pharmacists in all aspects of pharmaceutical care.

Pharmacy technicians fill orders for unit doses and prepackaged pharmaceuticals and perform other related duties under the supervision and direction of a pharmacy supervisor or staff pharmacist. Pharmacy technician duties include keeping records of drugs delivered to the pharmacy, storing incoming merchandise in proper locations and informing the supervisor of stock needs and shortages. Technicians may also clean equipment used in the performance of duties and assist in the care and maintenance of equipment and supplies. People entering this field will find excellent employment opportunities.

| Course No.                            | Course Title                                   | Credits   |
|---------------------------------------|--|-----------|
| <b>General Education Requirements</b> |  |           |
| CIS 109                               | WORD, LEVEL I                                  | 1         |
| CIS 112                               | EXCEL, LEVEL I                                 | 1         |
| ENGL 102                              | CAREER COMMUNICATIONS                          | 2         |
| MTH 100                               | ELEMENTARY ALGEBRA* (or higher)                | 3         |
| ORT 010                               | ORIENTATION                                    | 1         |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE               | 3         |
| <b>Total</b>                          |  | <b>11</b> |
| <b>Technical Requirements</b>         |  |           |
| HC 113                                | MEDICAL TERMINOLOGY FOR THE HEALTH PROFESSIONS | 2         |
| HC 114                                | ANATOMY/PHYSIOLOGY FOR THE HEALTH PROFESSIONS  | 3         |
| PHR 110                               | PHARMACOLOGY/PHARMACEUTICAL PRODUCTS I         | 3         |
| PHR 111                               | PHARMACY I                                     | 3         |
| PHR 120                               | PHARMACY II                                    | 3         |
| PHR 121                               | PHARMACOLOGY/PHARMACEUTICAL PRODUCTS II        | 3         |
| PHR 122                               | PHARMACY LAW & ETHICS                          | 2         |
| PHR 124                               | PHARMACY LAB                                   | 2         |
| PHR 126                               | PHARMACY SYSTEMS SOFTWARE                      | 1         |
| PHR 127                               | PHARMACY CALCULATIONS                          | 2         |
| PHR 128                               | PHARMACY OPERATIONS                            | 2         |
| PHR 131                               | CLINICAL ROTATIONS                             | 8         |
| <b>Total</b>                          |  | <b>34</b> |

\*Prerequisite: Acceptable COMPASS score or Basic Math.

## Semester Breakdown

| First Semester            |  |           | Second Semester           |   |           |
|---------------------------|--|-----------|---------------------------|---|-----------|
|                           |  | CR        |                           |   | CR        |
| HC 113                    | Medical Terminology for the Health Professions | 2         | PHR 120                   | Pharmacy II                             | 3         |
| HC 114                    | Anatomy/Physiology for the Health Professions  | 3         | PHR 121                   | Pharmacology/Pharmaceutical Products II | 3         |
| PHR 110                   | Pharmacology/Pharmaceutical Products I         | 3         | PHR 122                   | Pharmacy Law & Ethics                   | 2         |
| PHR 111                   | Pharmacy I                                     | 3         | PHR 124                   | Pharmacy Lab                            | 2         |
| PHR 128                   | Pharmacy Operations                            | 2         | PHR 126                   | Pharmacy Systems Software               | 1         |
| MTH 100                   | Elementary Algebra (or higher)                 | 3         | PHR 127                   | Pharmacy Calculations                   | 2         |
| ORT 010                   | Orientation                                    | 1         | ENGL 102                  | Career Communications                   | 2         |
| <b>Total Credit Hours</b> |  | <b>17</b> | PSYC 103                  | Human Relations in the Workplace        | 3         |
|                           |  |           | CIS 109                   | Word, Level I                           | 1         |
|                           |  |           | CIS 112                   | Excel, Level I                          | 1         |
|                           |  |           | <b>Total Credit Hours</b> |   | <b>20</b> |
| Third Semester (Summer)   |  |           |                           |   |           |
|                           |  | CR        |                           |   |           |
| PHR 131                   | Clinical Rotations                             | 8         |                           |   |           |
| <b>Total Credit Hours</b> |  | <b>8</b>  |                           |   |           |

## PHARMACY TECHNOLOGY-DIPLOMA, EVENING PROGRAM

### Diploma, 45 Credit Hours, Extended Evening Program

To educate and train students for positions in hospitals, retail pharmacies, and other medical facilities working as pharmacy technicians assisting registered pharmacists in all aspects of prescription dispensing.

Pharmacy technicians fill orders for unit doses and prepackaged pharmaceuticals and perform other related duties under the supervision and direction of a pharmacy supervisor or staff pharmacist. Pharmacy technician duties include keeping records of drugs delivered to the pharmacy, storing incoming merchandise in proper locations and informing the supervisor of stock needs and shortages. Technicians may also clean equipment used in the performance of duties and assist in the care and maintenance of equipment and supplies. People entering this field will find excellent employment opportunities.

| Course No.                            | Course Title                                   | Credits   |
|---------------------------------------|--|-----------|
| <b>General Education Requirements</b> |  |           |
| CIS 109                               | WORD LEVEL I                                   | 1         |
| CIS 112                               | EXCEL, LEVEL 1                                 | 1         |
| ENGL 102                              | CAREER COMMUNICATIONS                          | 2         |
| MTH 100                               | ELEMENTARY ALGEBRA* ( <i>or higher</i> )       | 3         |
| ORT 010                               | ORIENTATION                                    | 1         |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE               | 3         |
|                                       | <b>Total</b>                                   | <b>11</b> |
| <b>Technical Requirements</b>         |  |           |
| HC 113                                | MEDICAL TERMINOLOGY FOR THE HEALTH PROFESSIONS | 2         |
| HC 114                                | ANATOMY/PHYSIOLOGY FOR THE HEALTH PROFESSIONS  | 3         |
| PHR 110                               | PHARMACOLOGY/PHARMACEUTICAL PRODUCTS I         | 3         |
| PHR 111                               | PHARMACY I                                     | 3         |
| PHR 120                               | PHARMACY II                                    | 3         |
| PHR 121                               | PHARMACOLOGY/PHARMACEUTICAL PRODUCTS II        | 3         |
| PHR 122                               | PHARMACY LAW & ETHICS                          | 2         |
| PHR 124                               | PHARMACY LAB                                   | 2         |
| PHR 126                               | PHARMACY SYSTEMS SOFTWARE                      | 1         |
| PHR 127                               | PHARMACY CALCULATIONS                          | 2         |
| PHR 128                               | PHARMACY OPERATIONS                            | 2         |
| PHR 131                               | CLINICAL ROTATIONS                             | 8         |
|                                       | <b>Total</b>                                   | <b>34</b> |

\*Prerequisite: Acceptable COMPASS score or Basic Math.

### Semester Breakdown Extended Evening Semester Breakdown

| First Semester          |  |          | Second Semester                        |  |           |
|-------------------------|--|----------|--|--|-----------|
|                         |  | CR       |  |  | CR        |
| HC 113                  | Medical Terminology for the Health Professions | 2        | PHR 110                                | Pharmacology/Pharmaceutical Products I | 3         |
| HC 114                  | Anatomy/Physiology for the Health Professions  | 3        | PHR111                                 | Pharmacy I                             | 3         |
| MATH 100                | Elementary Algebra ( <i>or higher</i> )        | 3        | PHR128                                 | Pharmacy Operations                    | 2         |
| ORT 010                 | Orientation                                    | 1        |  | <b>Total Credit Hours</b>              | <b>8</b>  |
|                         | <b>Total Credit Hours</b>                      | <b>9</b> |  |  |           |
| Third Semester          |  |          | Fourth Semester                        |  |           |
|                         |  | CR       |  |  |           |
| PHR 120                 | Pharmacy II                                    | 3        | PHR 124                                | Pharmacy Lab*                          | 2         |
| PHR 121                 | Pharmacology/Pharmaceutical Products II        | 3        | PHR 127                                | Pharmacy Calculations                  | 2         |
| PHR 122                 | Pharmacy Law & Ethics                          | 2        | CIS 109                                | Word, Level I                          | 1         |
| PHR 126                 | Pharmacy Systems Software                      | 1        | CIS 112                                | Excel, Level I                         | 1         |
|                         | <b>Total Credit Hours</b>                      | <b>9</b> | ENGL 102                               | Career Communications                  | 2         |
|                         |  |          | PSYC 103                               | Human Relations in the Workplace       | 3         |
|                         |  |          |  | <b>Total Credit Hours</b>              | <b>11</b> |
| Fifth Semester (Summer) |  |          | <b>*Lab - Every other Saturday x 4</b> |  |           |
|                         |  | CR       |  |  |           |
| PHR 131                 | Clinical Rotations                             | 8        |  |  |           |
|                         | <b>Total Credit Hours</b>                      | <b>8</b> |  |  |           |

## **PHLEBOTOMY/LABORATORY ASSISTANT**

### **Diploma, 34 Credit Hours, 9-Month Program**

The Phlebotomy/Laboratory Assistant program prepares students for employment as entry-level phlebotomy technicians and clinical laboratory assistants.

Phlebotomists collect, transport, and process blood and other specimens for laboratory analysis. They identify and select equipment, supplies, and additives used in blood collection and understand factors that affect specimen collection procedures and test results. Recognizing the importance of specimen collection in the overall patient care system, phlebotomists adhere to infection control and safety policies and procedures. They monitor quality control within predetermined limits while demonstrating professional conduct, stress management, and communication skills with patients, peers, and other healthcare personnel as well as with the public.

Phlebotomists are employed in hospitals, physician offices and clinics, medical laboratories, and blood banks as blood procurement specialists. According to the American Society of Clinical Pathologists, the wage range for the Northern Plains region is between \$9.00 and \$12.72 per hour with WDT students earning \$9.70 on average upon graduating.

| <b>Course No.</b>                     | <b>Course Title</b>                             | <b>Credits</b> |
|---------------------------------------|---|----------------|
| <b>General Education Requirements</b> |   |                |
| CIS 100                               | INTRODUCTION TO KEYBOARDING                     | 1              |
| CIS 109                               | WORD, LEVEL I                                   | 1              |
| CIS - - -                             | ELECTIVE ( <i>see page 33</i> )                 | 1              |
| ENGL 102                              | CAREER COMMUNICATIONS                           | 2              |
| MTH 100                               | ELEMENTARY ALGEBRA*                             | 3              |
| ORT 010                               | ORIENTATION                                     | 1              |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE                | 3              |
|                                       | <b>Total</b>                                    | <b>12</b>      |
| <b>Technical Requirements</b>         |   |                |
| HC 113                                | MEDICAL TERMINOLOGY FOR THE HEALTH PROFESSIONS  | 2              |
| HC 114                                | ANATOMY/PHYSIOLOGY FOR THE HEALTH PROFESSIONS   | 3              |
| PH 102                                | INTRODUCTION TO PHLEBOTOMY                      | 2              |
| PH 121                                | PRINCIPLES AND PRACTICES                        | 3              |
| PH 123                                | LABORATORY ASSISTANT TECHNIQUES                 | 3              |
| PH 124                                | PHLEBOTOMY/LABORATORY ASSISTANT CAPSTONE COURSE | 1              |
| PH 130                                | CLINICAL PRACTICE                               | 8              |
|                                       | <b>Total</b>                                    | <b>22</b>      |

\*Prerequisite: Acceptable COMPASS score or Basic Math.

Satisfactory completion of all first semester HC and PH courses is required for progression into second semester coursework.

### **Semester Breakdown**

| <b>First Semester</b> |  |           | <b>Second Semester</b> |   |           |
|-----------------------|--|-----------|------------------------|---|-----------|
|                       |  | <b>CR</b> |                        |   | <b>CR</b> |
| HC 113                | Medical Terminology for the Health Professions | 2         | PH 123                 | Laboratory Assistant Techniques                 | 3         |
| HC 114                | Anatomy /Physiology for the Health Professions | 3         | PH 124                 | Phlebotomy/Laboratory Assistant Capstone Course | 1         |
| PH 102                | Intro to Phlebotomy                            | 2         | PH 130                 | Clinical Practice                               | 8         |
| PH 121                | Principles & Practices                         | 3         | ENGL 102               | Career Communications                           | 2         |
| MTH 100               | Elementary Algebra                             | 3         | CIS 100                | Introduction to Keyboarding                     | 1         |
| ORT 010               | Orientation                                    | 1         | CIS 109                | Word, Level I                                   | 1         |
| PSYC 103              | Human Relations in the Workplace               | 3         | CIS - -                | Elective ( <i>see page 33</i> )                 | 1         |
|                       | <b>Total Credit Hours</b>                      | <b>17</b> |                        | <b>Total Credit Hours</b>                       | <b>17</b> |

## **PRACTICAL NURSING**

### **Diploma, 52 Credit Hours, 11-Month Program**

The mission of the Practical Nursing program is to produce graduates who possess the knowledge, skills, and attitudes necessary for employment as an LPN and to prepare the graduates to successfully complete the National Counsel of Licensure Exams for Practical Nursing (NCLEX-PN).

Licensed Practical Nurses (LPNs) are an important component of the healthcare team. The program stresses the importance of clinical experience by providing 650-700 clinical hours of actual supervised clinical. LPNs work in a variety of clinical settings including acute-care, long-term care, and office/clinic environments. The role of LPNs has expanded to include IV therapy and supervision in some settings. Upon successful completion of the program, graduates take the NCLEX (National Certification Licensure Exam). Job placement is excellent for graduates.

All accepted students in the Practical Nursing program are required to fulfill the prerequisite\* requirements before beginning enrollment in the Nursing core credit courses. Courses in the Nursing Program may have prerequisite requirements. See the course descriptions in the catalog for details.

| <b>Course No.</b>                     | <b>Course Title</b>              | <b>Credits</b> |
|---------------------------------------|----------------------------------|----------------|
| <b>General Education Requirements</b> |                                  |                |
| CIS 112                               | EXCEL, LEVEL I                   | 1              |
| CIS 114                               | POWER POINT, LEVEL I             | 1              |
| ENGL 101                              | COMPOSITION** <i>or</i>          | 3              |
| ENGL 201                              | TECHNICAL WRITING I              |                |
| ORT 010                               | ORIENTATION                      | 1              |
| PSYC 101                              | GENERAL PSYCHOLOGY <i>or</i>     | 3              |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE |                |
|                                       | <b>Total</b>                     | <b>9</b>       |
| <b>Technical Requirements</b>         |                                  |                |
| NSG 114                               | PHARMACOLOGY IN NURSING          | 3              |
| NSG 115                               | FOUNDATIONS IN NURSING LAB       | 2              |
| NSG 116                               | FOUNDATIONS IN NURSING CLINIC    | 4              |
| NSG 117                               | FOUNDATIONS IN NURSING           | 5              |
| NSG 118                               | GERIATRIC CLINICAL               | 1              |
| NSG 119                               | MENTAL HEALTH NURSING            | 2              |
| NSG 125                               | MATERNAL/CHILD HEALTH NURSING    | 4              |
| NSG 129                               | ADULT HEALTH NURSING             | 6              |
| NSG 130                               | ADULT HEALTH NURSING CLINICAL    | 6              |
| NSG 128                               | ADULT HEALTH NURSING LAB         | 1              |
| NSG 135                               | PROFESSIONAL DEVELOPMENT         | 2              |
| NSG 136                               | MENTAL HEALTH PRACTICUM          | 1              |
| NSG 139                               | ADULT HEALTH PRACTICUM           | 4              |
| NSG 138                               | MATERNAL/CHILD HEALTH PRACTICUM  | 2              |
|                                       | <b>Total</b>                     | <b>43</b>      |

\*Prerequisites: HC 113 Medical Terminology for the Health Professions or equivalent is required to enter this program.  
HC 114 Anatomy/Physiology for the Health Professions or equivalent is required to enter this program.  
MTH100 Elementary Algebra is required to enter this program.  
CIS109 Word Level I is required to enter this program.

\*\*Prerequisite: Acceptable COMPASS score or Basic Writing.

Note: If you have been convicted, pled guilty or no contest to, or received a suspended imposition of sentence for a felony or other criminal offense (excluding minor traffic violations) you are advised that it may not be possible for you to participate in the internship or clinical portion of this program. You may also be prevented from taking required licensure examinations and from gaining employment in this field.

**Semester breakdown on next page**

## Semester Breakdown for Fall Cohort

| <b>First Semester</b>          |                                  |           | <b>Second Semester</b>    |                               |           |
|--------------------------------|----------------------------------|-----------|---------------------------|-------------------------------|-----------|
|                                |                                  | <b>CR</b> |                           |                               | <b>CR</b> |
| NSG 114                        | Pharmacology in Nursing          | 3         | NSG 119                   | Mental Health Nursing         | 2         |
| NSG 118                        | Geriatric Clinical               | 1         | NSG 125                   | Maternal/Child Health Nursing | 4         |
| NSG 115                        | Foundations in Nursing Lab       | 2         | NSG 129                   | Adult Health Nursing          | 6         |
| NSG 116                        | Foundations in Nursing Clinical  | 4         | NSG 130                   | Adult Health Nursing Clinical | 6         |
| NSG 117                        | Foundations in Nursing           | 5         | NSG 128                   | Adult Nursing Lab             | 1         |
| CIS 112                        | Excel, Level I                   | 1         | <b>Total Credit Hours</b> |                               | <b>19</b> |
| CIS 114                        | Power Point, Level I             | 1         |                           |                               |           |
| ENGL 101                       | Composition <i>or</i>            | 3         |                           |                               |           |
| ENGL 201                       | Technical Writing I              |           |                           |                               |           |
| ORT 010                        | Orientation                      | 1         |                           |                               |           |
| PSYC 101                       | General Psychology <i>or</i>     | 3         |                           |                               |           |
| PSYC 103                       | Human Relations in the Workplace | 24        |                           |                               |           |
| <b>Total Credit Hours</b>      |                                  |           |                           |                               |           |
| <b>Third Semester (Summer)</b> |                                  |           |                           |                               |           |
|                                |                                  | <b>CR</b> |                           |                               |           |
| NSG 135                        | Professional Development         | 2         |                           |                               |           |
| NSG 136                        | Mental Health Practicum          | 1         |                           |                               |           |
| NSG 138                        | Maternal/Child Health Practicum  | 2         |                           |                               |           |
| NSG 139                        | Adult Health Practicum           | 4         |                           |                               |           |
| <b>Total Credit Hours</b>      |                                  | <b>9</b>  |                           |                               |           |

## Semester Breakdown for Evening Spring Cohort Extended to 5 Semesters

| <b>First Semester</b>          |                                  |           | <b>Second Semester</b>    |                                    |              |
|--------------------------------|----------------------------------|-----------|---------------------------|------------------------------------|--------------|
|                                |                                  | <b>CR</b> |                           |                                    | <b>CR</b>    |
| HC 114                         | Anatomy & Physiology for HP      | 3         | NSG 114                   | Pharmacology in Nursing            | 3            |
| HC 113                         | Medical Terminology for HP       | 2         | NSG 115                   | Foundations in Nursing Lab         | 2            |
| CIS 109                        | Word, Level I                    | 1         | NSG 117                   | Foundations in Nursing             | 5            |
| CIS 112                        | Excel, Level I                   | 1         | ENGL101                   | Composition <i>or</i>              | 3            |
| CIS 114                        | Power Point, Level I             | 1         | ENGL201                   | Technical Writing I                |              |
| CPR100                         | CPR/First Responder              | 1         |                           | Microbiology (if interested in RN) | 3            |
| MTH 100                        | Elementary Algebra               | 3         | <b>Total Credit Hours</b> |                                    | <b>13/16</b> |
| ORT 010                        | Orientation                      | 1         |                           |                                    |              |
| PSYC 101                       | General Psychology <i>or</i>     | 3         |                           |                                    |              |
| PSYC 103                       | Human Relations in the Workplace |           |                           |                                    |              |
| <b>Total Credit Hours</b>      |                                  | 16        |                           |                                    |              |
| <b>Third Semester (Summer)</b> |                                  |           | <b>Fourth Semester</b>    |                                    |              |
|                                |                                  | <b>CR</b> |                           |                                    | <b>CR</b>    |
| NSG 116                        | Foundations in Nursing Clinical  | 4         | NSG 130                   | Adult Health Nursing Clinical      | 6            |
| NSG 118                        | Geriatric Clinical               | 1         | NSG 128                   | Adult Nursing Lab                  | 1            |
| NSG 119                        | Mental Health Nursing            | 2         | NSG 129                   | Adult Health Nursing               | 6            |
| NSG 136                        | Mental Health Practicum          | 1         | <b>Total Credit Hours</b> |                                    | <b>13</b>    |
| <b>Total Credit Hours</b>      |                                  | <b>8</b>  |                           |                                    |              |
| <b>Fifth Semester</b>          |                                  |           |                           |                                    |              |
|                                |                                  | <b>CR</b> |                           |                                    |              |
| NSG125                         | Maternal/Child Health Nursing    | 4         |                           |                                    |              |
| NSG 135                        | Professional Development         | 2         |                           |                                    |              |
| NSG 138                        | Maternal/Child Health Practicum  | 2         |                           |                                    |              |
| NSG 139                        | Adult Health Practicum           | 4         |                           |                                    |              |
| <b>Total Credit Hours</b>      |                                  | 12        |                           |                                    |              |

Ideally, this program is best suited to start the first semester in the fall, but the program start date could be adjusted with program administrator approval.

## **PROGRAMMING & APPLICATION DEVELOPMENT**

### **Associate in Applied Science, 70 Credit Hours, 18-Month Program**

The Programming and Application Development program trains students to develop software for many needs. Students will learn about several programming languages as well as development platforms including Java, .Net, xHTML, and SQL. The program works to ensure students understand the basics while they also get experience working with cutting edge technologies such as cloud computing and mobile applications. Students must possess strong troubleshooting and technical skills, including strong math and logic skills, and good computer literacy.

A typical job description for a computer programmer may include typically working 40 hours per week. However, the programmer may work evenings or weekends in order to meet deadlines. Telecommuting is becoming more common with some employees working from remote locations. Some work may have to be accomplished in the office due to security reasons. Programmers may work prolonged hours in front of a computer. Tasks for programmers typically include coding, testing, troubleshooting, maintaining, and modifying programs; developing detailed programming logic; and coding changes. Writing and maintaining programming documentation is required. Students will also be prepared to continue learning and advancing within the field, allowing them to work within an organization to apply programming to business strategy, tactics, and goals.

There are opportunities for two-semester diplomas in the following:

- Cisco Academy/Computer Technician
- Programming

Or, students may choose to pursue a two-year AAS degree as a Computer Network Specialist in one of the following areas:

- Computer Networking Specialist with emphasis in programming
- Programming

| <b>Course No.</b>                     | <b>Course Title</b>                         | <b>Credits</b> |
|---------------------------------------|---|----------------|
| <b>General Education Requirements</b> |   |                |
| CIS 109                               | WORD, LEVEL I                               | 1              |
| CIS 112                               | EXCEL, LEVEL I                              | 1              |
| CIS 116                               | ACCESS, LEVEL I                             | 1              |
| ENGL 101                              | COMPOSITION*                                | 3              |
| ENGL 202                              | TECHNICAL COMMUNICATIONS                    | 3              |
| ECN 202                               | PRINCIPLES OF ECONOMICS(MACRO) <i>or</i>    | 3              |
| SOC 100                               | INTRODUCTION TO SOCIOLOGY                   | 3              |
| MATH 101                              | INTERMEDIATE ALGEBRA** ( <i>or higher</i> ) | 3              |
| MATH 120                              | TRIGONOMETRY                                | 3              |
| ORT 010                               | ORIENTATION                                 | 1              |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE            | 3              |
|                                       | <b>Total</b>                                | <b>22</b>      |
| <b>Technical Requirements</b>         |   |                |
| CNS 216                               | INTRODUCTION TO PROGRAMMING                 | 3              |
| CNS 217                               | PROGRAMMING LOGIC AND DESIGN                | 3              |
| CNS 218                               | INTERMEDIATE PROGRAMMING                    | 3              |
| CNS 219                               | DATABASES                                   | 3              |
| PCN 120                               | WEB DEVELOPMENT TOOLS                       | 3              |
| PCN 125                               | WEB PROGRAMMING LANGUAGES                   | 3              |
| PCN 126                               | SYSTEM ANALYSIS & DESIGN                    | 3              |
| PCN 128                               | PROGRAMMING LANGUAGE CONCEPTS               | 3              |
| PCN 230                               | DESIGN PATTERNS                             | 3              |
| PCN 232                               | WEB APPLICATION DESIGN                      | 3              |
| PCN 235                               | DEVELOPING USER INTERFACES                  | 3              |
| PCN 239                               | ADVANCED WEB DEVELOPMENT                    | 3              |
| PCN 240                               | ADVANCED PROGRAMMING CONCEPTS               | 3              |
| PCN 242                               | PROGRAMMING WORKFLOW                        | 3              |
| PCN 245                               | SECURITY & CRYPTOGRAPHY                     | 3              |
| PCN 249                               | DEVELOPING SMARTPHONE APPLICATIONS          | 3              |
|                                       | <b>Total</b>                                | <b>48</b>      |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Elementary Algebra.

**Semester breakdown on next page**

## Semester Breakdown Programming & Application Development

| First Semester |   |           | Second Semester |                                  |           |
|----------------|---|-----------|-----------------|----------------------------------|-----------|
|                |   | CR        |                 |                                  | CR        |
| CNS 219        | Databases                                 | 3         | CNS 216         | Introduction to Programming      | 3         |
| PCN 120        | Web Development Tools                     | 3         | CNS 217         | Programming Logic and Design     | 3         |
| PCN 125        | Web Programming Languages                 | 3         | CNS 218         | Intermediate Programming         | 3         |
| PCN 126        | System Analysis & Design                  | 3         | PCN 128         | Programming language Concepts    | 3         |
| CIS 109        | Word, Level I                             | 1         | ENGL 101        | Composition                      | 3         |
| CIS 112        | Excel, Level I                            | 1         | PSYC 103        | Human Relations in the Workplace | 3         |
| CIS 116        | Access, Level I                           | 1         |                 | <b>Total Credit Hours</b>        | <b>18</b> |
| MATH 101       | Intermediate Algebra ( <i>or higher</i> ) | 3         |                 |                                  |           |
| ORT 010        | Orientation                               | 1         |                 |                                  |           |
|                | <b>Total Credit Hours</b>                 | <b>19</b> |                 |                                  |           |
| Third Semester |   |           | Fourth Semester |                                  |           |
|                |   | CR        |                 |                                  | CR        |
| PCN 230        | Design Patterns                           | 3         | PCN 240         | Advanced Programming Concepts    | 3         |
| PCN 232        | Web Application Design                    | 3         | PCN 242         | Programming Workflow             | 3         |
| PCN 235        | Developing User Interfaces                | 3         | PCN 245         | Security & Cryptography          | 3         |
| PCN 239        | Advanced Web Development                  | 3         | PCN 249         | Developing Smartphone App        | 3         |
| ECN 202        | Principles of Economics <i>or</i>         | 3         | ENGL 202        | Technical Communications         | 3         |
| SOC 100        | Introduction to Sociology                 | 3         |                 | <b>Total Credit Hours</b>        | <b>15</b> |
| MATH 120       | Trigonometry                              | 3         |                 |                                  |           |
|                | <b>Total Credit Hours</b>                 | <b>18</b> |                 |                                  |           |

CNS 299 Internship: This class may be used as a substitute for any second year 3-credit course based on location and substance of the internship opportunity. This class is available for AAS students and Programming Diploma students.

# **PROGRAMMING & COMPUTER NETWORKING WITH EMPHASIS IN NETWORK ADMINISTRATION**

## **Associate in Applied Science, 70 Credit Hours, 18-Month Program**

The Programming and Computer Networking program strikes a balance between theory and application. Students will learn about real-life networking environments, making them immediately productive upon graduation and prepared to take on a variety of information technology (IT) roles. The first year builds a solid foundation of basic hands-on computer skills and networking concepts. The second year challenges students to learn to adapt and react to the changing world of computers: Deeper networking concepts are introduced, including security, administration of complex networks, and programming skills. The emphasis of coursework will be based on preparing students for CompTIA, Cisco CCNA, and Microsoft certification testing. Students will also be prepared to continue learning and advancing within the field, allowing them to work within an organization to apply networking to business strategy, tactics, and goals.

A typical job description for a network administrator would generally include working in an office environment. The job is often performed alone, and the network administrator must possess strong troubleshooting and technical skills, including strong math skills. Conversely, the network administrator must also work with users who are not comfortable with the system or who are experiencing difficulties - thus the requirement for strong communications skills. Configuring a network can require long hours of work over a short period of time. Maintaining the network can alternate between routine tasks to install, maintain, and update programs, as well as the hectic work of troubleshooting and fixing network problems. If a network crashes, the network administrator must work quickly and purposefully, to solve problems and restore the network operation. In addition, the task of updating and maintaining network services can require late hours and work on an irregular schedule. The IT worker must also be prepared to maintain related technology within an organization, including audio-visual equipment, televisions, phones, and cabling infrastructure. Physical duties may include climbing and working using ladders, installing cabling, moving computers and related equipment, and installing equipment.

There are opportunities for two-semester diplomas in Cisco Academy/Computer Technician

| <b>Course No.</b>  | <b>Course Title</b>                         | <b>Credits</b> |
|--|---|----------------|
| <b>General Education Requirements</b>                    |   |                |
| CIS 109  | WORD, LEVEL I                               | 1              |
| CIS 112  | EXCEL, LEVEL I                              | 1              |
| CIS 116  | ACCESS, LEVEL I                             | 1              |
| ENGL 101   | COMPOSITION*                                | 3              |
| ENGL 202   | TECHNICAL COMMUNICATIONS                    | 3              |
| ECN 202  | PRINCIPLES OF ECONOMICS(MACRO) <i>or</i>    | 3              |
| SOC 100  | INTRODUCTION TO SOCIOLOGY                   |                |
| MATH 101   | INTERMEDIATE ALGEBRA** ( <i>or higher</i> ) | 3              |
| MATH 120   | TRIGONOMETRY                                | 3              |
| ORT 010  | ORIENTATION                                 | 1              |
| PSYC 103   | HUMAN RELATIONS IN THE WORKPLACE            | 3              |
|  | <b>Total</b>                                | <b>22</b>      |
| <b>Technical Requirements for Network Administration</b> |   |                |
| CNS 112  | A+ HARDWARE/SOFTWARE                        | 6              |
| CNS 114  | NETWORKING ESSENTIALS                       | 3              |
| CNS 129  | COMPUTER OPERATING SYSTEMS                  | 3              |
| CNS 211  | LINUX SERVER OPERATING SYSTEM               | 3              |
| CNS 221  | TROUBLESHOOTING II                          | 3              |
| CN 126   | CISCO ACADEMY/NETWORKING TECHNOLOGIES I     | 3              |
| CN 127   | CISCO ACADEMY/NETWORKING TECHNOLOGIES II    | 3              |
| CN 128   | CISCO ACADEMY/NETWORKING TECHNOLOGIES III   | 3              |
| CN 130   | CISCO ACADEMY/NETWORKING TECHNOLOGIES IV    | 3              |
| CN 213   | NETWORKING USING MICROSOFT WINDOWS SERVER   | 3              |
| CN 215   | NETWORK DESIGN AND VIRTUALIZATION           | 3              |
| CN 220   | DESIGNING SECURITY FOR MS WINDOWS NETWORK   | 3              |
| CN 223   | COLLABORATIVE TECHNOLOGIES                  | 3              |
| CN 227   | HETEROGENEOUS NETWORKS                      | 3              |
| CN 230   | COMPUTER FORENSICS                          | 3              |
|  | <b>Total</b>                                | <b>48</b>      |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Elementary Algebra.

CNS 299 Internship: This class may be used as a substitute for any second year 3-credit course based on location and substance of the internship opportunity. This class is available for AAS students and Programming Diploma students.

**Semester breakdown on next page**

## Semester Breakdown Network Administration

| First Semester |   |           | Second Semester |                                       |           |
|----------------|---|-----------|-----------------|---------------------------------------|-----------|
|                |   | CR        |                 |                                       | CR        |
| CNS 112        | A+ Hardware/Software                      | 6         | CNS 126         | Cisco Academy/Networking I            | 3         |
| CNS 114        | Networking Essentials                     | 3         | CNS 127         | Cisco Academy/Networking II           | 3         |
| CNS 129        | Computer Operating Systems                | 3         | CN 213          | Networking Using Microsoft Win Server | 3         |
| CIS 109        | Word, Level I                             | 1         |                 |                                       |           |
| CIS 112        | Excel, Level I                            | 1         | CN 223          | Collaborative Technologies            | 3         |
| CIS 116        | Access, Level I                           | 1         | ENGL 101        | Composition                           | 3         |
| MATH 101       | Intermediate Algebra ( <i>or higher</i> ) | 3         | PSYC 103        | Human Relations in the Workplace      | 3         |
| ORT 010        | Orientation                               | 1         |                 | <b>Total Credit Hours</b>             | <b>17</b> |
|                | <b>Total Credit Hours</b>                 | <b>19</b> |                 |                                       |           |
| Third Semester |   |           | Fourth Semester |                                       |           |
|                |   | CR        |                 |                                       | CR        |
| CN 128         | Cisco Academy/Networking III              | 3         | CN 130          | Cisco Academy/Networking IV           | 3         |
| CN 220         | Designing Security for MS Windows Network | 3         | CN 215          | Network Design & Virtualization       | 3         |
|                |   |           | CN 230          | Computer Forensics                    | 3         |
| CNS 221        | Troubleshooting II                        | 3         | CN 227          | Heterogeneous Networks                | 3         |
| CNS 211        | Linux Server                              | 3         | ENGL 202        | Technical Communications              | 3         |
| ECN 202        | Principles of Economics <i>or</i>         | 3         |                 | <b>Total Credit Hours</b>             | <b>16</b> |
| SOC 100        | Introduction to Sociology                 |           |                 |                                       |           |
| MATH 120       | Trigonometry                              | 3         |                 |                                       |           |
|                | <b>Total Credit Hours</b>                 | <b>18</b> |                 |                                       |           |

CNS 299 Internship: This class may be used as a substitute for any second year 3-credit course based on location and substance of the internship opportunity. This class is available for AAS students and Programming Diploma students.

## Two-Semester Diploma: CCNA Cisco Academy/Computer Network Technician

### Semester Breakdown

| First Semester |   |           | Second Semester |  |           |
|----------------|---|-----------|-----------------|--|-----------|
|                |   | CR        |                 |  | CR        |
| CNS 112        | A+ Hardware/Software                      | 6         | CN 126          | Cisco Academy/Networking I             | 3         |
| CNS 114        | Networking Essentials                     | 3         | CN 127          | Cisco Academy/Networking II            | 3         |
| CNS 129        | Computer Operating Systems                | 3         | CN 213          | Networking Using Microsoft Wind Server | 3         |
| CIS 109        | Word, Level I                             | 1         |                 |  |           |
| CIS 112        | Excel, Level I                            | 1         | CN 223          | Collaborative Technologies             | 3         |
| CIS 116        | Access, Level I                           | 1         | ENGL 101        | Composition                            | 3         |
| MATH 101       | Intermediate Algebra ( <i>or higher</i> ) | 3         | PSYC 103        | Human Relations in the Workplace       | 3         |
| ORT 010        | Orientation                               | 1         |                 | <b>Total Credit Hours</b>              | <b>18</b> |
|                | <b>Total Credit Hours</b>                 | <b>19</b> |                 |  |           |

## **PROGRAMMING & COMPUTER NETWORKING WITH EMPHASIS IN PROGRAMMING**

### **Associate in Applied Science, 70 Credit Hours, 18-Month Program**

The Programming and Computer Networking with Emphasis in Programming degree strikes a balance between theory and application. Students will learn about real-life networking environments, making them immediately productive upon graduation and prepared to take on a variety of information technology (IT) roles. The year of computer networking theory builds a solid foundation of basic hands-on computer skills and networking concepts. The year of programming includes a solid foundation in programming and database administration.

Employment opportunities may be available in network administration or programming or both, dependant on the interest of the graduate and the skill set required by an employer. This popular degree allows exploration and produces a well-rounded graduate with extensive roots in the broad Information Technology field. Strong math, logic, and communications skills are essential for success. More extensive descriptions of typical field-related activities may be found in the related degrees of **Programming and Application Development AND Programming and Computer Networking with Emphasis in Network Administration**. Students are also prepared to continue their learning and advancing within the IT and Programming fields.

There are opportunities for two-semester diplomas in Programming. It is acceptable to take programming coursework in year one and networking coursework in year two, if desired.

| Course No.                            | Course Title                                | Credits   |
|---------------------------------------|---|-----------|
| <b>General Education Requirements</b> |   |           |
| CIS 109                               | WORD, LEVEL I                               | 1         |
| CIS 112                               | EXCEL, LEVEL I                              | 1         |
| CIS 116                               | ACCESS, LEVEL I                             | 1         |
| ENGL 101                              | COMPOSITION*                                | 3         |
| ENGL 202                              | TECHNICAL COMMUNICATIONS                    | 3         |
| ECN 202                               | PRINCIPLES OF ECONOMICS(MACRO) <i>or</i>    | 3         |
| SOC 100                               | INTRODUCTION TO SOCIOLOGY                   | 3         |
| MATH 101                              | INTERMEDIATE ALGEBRA** ( <i>or higher</i> ) | 3         |
| MATH 120                              | TRIGONOMETRY                                | 3         |
| ORT 010                               | ORIENTATION                                 | 1         |
| PSYC 103                              | HUMAN RELATIONS IN THE WORKPLACE            | 3         |
|                                       | <b>Total</b>                                | <b>22</b> |
| <b>Technical Requirements</b>         |   |           |
| CNS 112                               | A+ HARDWARE/SOFTWARE                        | 6         |
| CNS 114                               | NETWORKING ESSENTIALS                       | 3         |
| CNS 129                               | COMPUTER OPERATING SYSTEMS                  | 3         |
| CNS 216                               | INTRODUCTION TO PROGRAMMING                 | 3         |
| CNS 217                               | PROGRAMMING LOGIC AND DESIGN                | 3         |
| CNS 218                               | INTERMEDIATE PROGRAMMING                    | 3         |
| CNS 219                               | DATABASES                                   | 3         |
| PCN 120                               | WEB DEVELOPMENT TOOLS                       | 3         |
| PCN 125                               | WEB PROGRAMMING LANGUAGES                   | 3         |
| PCN 126                               | SYSTEMS ANALYSIS AND DESIGN                 | 3         |
| PCN 128                               | PROGRAMMING LANGUAGE CONCEPTS               | 3         |
| CN 126                                | CISCO ACADEMY/NETWORKING I                  | 3         |
| CN 127                                | CISCO ACADEMY/NETWORKING II                 | 3         |
| CN 213                                | WINDOWS NETWORK INFRASTRUCTURE              | 3         |
| CN 223                                | COLLABORATIVE TECHNOLOGIES                  | 3         |
|                                       | <b>Total</b>                                | <b>48</b> |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Elementary Algebra.

CNS 299 Internship: This class may be used as a substitute for any second year 3-credit course based on location and substance of the internship opportunity. This class is available for AAS students and Programming Diploma students.

**Semester breakdown on next page**

## Semester Breakdown Programming

| First Semester |   |           | Second Semester |                                  |           |
|----------------|---|-----------|-----------------|----------------------------------|-----------|
|                |   | CR        |                 |                                  | CR        |
| CNS 112        | A+ Hardware/Software                      | 6         | CN 126          | Cisco Academy/Networking I       | 3         |
| CNS 114        | Networking Essentials                     | 3         | CN 127          | Cisco Academy/Networking II      | 3         |
| CNS 129        | Computer Operating Systems                | 3         | CN 213          | Windows Network Infrastructure   | 3         |
| CIS 109        | Word, Level I                             | 1         | CN 223          | Collaborative Technologies       | 3         |
| CIS 112        | Excel, Level I                            | 1         | ENGL 101        | Composition                      | 3         |
| CIS 116        | Access, Level I                           | 1         | PSYC 103        | Human Relations in the Workplace | 3         |
| MATH 101       | Intermediate Algebra ( <i>or higher</i> ) | 3         |                 |                                  | <b>18</b> |
| ORT 010        | Orientation                               | 1         |                 | <b>Total Credit Hours</b>        |           |
|                | <b>Total Credit Hours</b>                 | <b>19</b> |                 |                                  |           |
| Third Semester |   |           | Fourth Semester |                                  |           |
|                |   | CR        |                 |                                  | CR        |
| CNS 219        | Databases                                 | 3         | CNS 216         | Introduction to Programming      | 3         |
| PCN 120        | Web Development Tools                     | 3         | CNS 217         | Programming Logic and Design     | 3         |
| PCN 125        | Web Programming Languages                 | 3         | CNS 218         | Intermediate Programming         | 3         |
| PCN 126        | Systems Analysis & Design                 | 3         | PCN 128         | Programming Language Concepts    | 3         |
| ECN 202        | Principles of Economics <i>or</i>         | 3         | ENGL 202        | Technical Communications         | 3         |
| SOC 100        | Introduction to Sociology                 |           |                 | <b>Total Credit Hours</b>        | <b>15</b> |
| MATH 120       | Trigonometry                              | 3         |                 |                                  |           |
|                | <b>Total Credit Hours</b>                 | <b>18</b> |                 |                                  |           |

## Two-Semester Diploma: Programming

### Semester Breakdown

| First Semester |                           |           | Second Semester |                                  |           |
|----------------|---------------------------|-----------|-----------------|----------------------------------|-----------|
|                |                           | CR        |                 |                                  | CR        |
| CNS 219        | Databases                 | 3         | CNS 216         | Introduction to Programming      | 3         |
| PCN 120        | Web Development Tools     | 3         | CNS 217         | Programming Logic and Design     | 3         |
| PCN 125        | Web Programming Languages | 3         | CNS 218         | Intermediate Programming         | 3         |
| PCN 126        | Systems Analysis & Design | 3         | PCN 128         | Programming Language Concepts    | 3         |
| CIS 109        | Word Level I              | 1         | ENGL 101        | Composition                      | 3         |
| CIS 112        | Excel Level I             | 1         | PSYC 103        | Human Relations in the Workplace | 3         |
| CIS 116        | Access Level I            | 1         |                 | <b>Total Credit Hours</b>        | <b>18</b> |
| MATH 101       | Intermediate Algebra      | 3         |                 |                                  |           |
| ORT 010        | Orientation               | 1         |                 |                                  |           |
|                | <b>Total Credit Hours</b> | <b>19</b> |                 |                                  |           |

# SURGICAL TECHNOLOGY

## Diploma, 52 Credit Hours, 11-Month Program

The mission of the Surgical Technology program is to provide students with the knowledge, skills, and dedication necessary to become successful, valuable, and effective surgical technologists in the communities that they serve.

Surgical technologists are vital members of the surgical team and are involved in all aspects of a patient's care while in surgery. Surgical technologists are relied upon by surgeons, nurses, anesthesia providers, and numerous other healthcare professionals to be the technical specialists in a vast area of expertise. Surgical technologists use a wide variety of knowledge and abilities in surgical sciences, anatomy and physiology, microbiology, and patient care to provide vital support to the patient and the surgical team. The discipline of surgery is an ever-changing arena of healthcare, making considerable leaps in technology, techniques, and interventions almost daily. Surgical technologists stand at the leading edge of this revolution, using their professionalism, expertise, and abilities to make a difference.

| Course No.                            | Course Title   | Credits   |
|---------------------------------------|--|-----------|
| <b>General Education Requirements</b> |  |           |
| CIS 100                               | INTRODUCTION TO KEYBOARDING <i>or</i>                | 1         |
| CIS 114                               | POWERPOINT, LEVEL I                                  |           |
| CIS 109                               | WORD, LEVEL I  | 1         |
| CIS 112                               | EXCEL, LEVEL I                                       | 1         |
| ENGL 101                              | COMPOSITION  | 3         |
| ORT 010                               | ORIENTATION  | 1         |
| PSYC 101                              | GENERAL PSYCHOLOGY                                   | 3         |
| <b>Total</b>                          |  | <b>10</b> |
| <b>Technical Requirements</b>         |  |           |
| HC 113                                | MEDICAL TERMINOLOGY FOR THE HEALTH PROFESSIONS       | 2         |
| HC 114                                | ANATOMY/PHYSIOLOGY FOR THE HEALTH PROFESSIONS        | 3         |
| HC 117                                | MICROBIOLOGY FOR THE HEALTH SCIENCES                 | 3         |
| ST 102                                | INTRO TO SURGICAL TECHNOLOGY                         | 3         |
| ST 111                                | INTRO TO SURGICAL TECHNOLOGY LAB                     | 3         |
| ST 125                                | PRINCIPLES & PRACTICES OF SURGICAL TECHNOLOGY        | 3         |
| ST 126                                | SURGICAL PROCEDURES                                  | 7         |
| ST 127                                | SCIENCE & TECHNOLOGIES FOR THE SURGICAL TECHNOLOGIST | 1         |
| ST 128                                | SURGICAL PHARMACOLOGY                                | 2         |
| ST 135                                | CLINICAL PRACTICE                                    | 3         |
| ST 136                                | CLINICAL PRACTICE II                                 | 6         |
| ST 137                                | CLINICAL PRACTICE III                                | 6         |
| <b>Total</b>                          |  | <b>42</b> |

Prerequisite: Successful completion of first semester health courses is a prerequisite to second semester health courses.

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

## Semester Breakdown

| First Semester                 |  |           | Second Semester           |  |           |
|--------------------------------|--|-----------|---------------------------|--|-----------|
|                                |  | CR        |                           |  | CR        |
| CIS 109                        | Word, Level I                                  | 1         | ST 128                    | Surgical Pharmacology                                | 2         |
| CIS 100                        | Introduction to Keyboarding <i>or</i>          | 1         | ST 126                    | Surgical Procedures                                  | 7         |
| CIS 114                        | PowerPoint, Level I                            |           | ST 125                    | Principles & Practices of Surgical Technology        | 3         |
| ST 102                         | Introduction to Surgical Technology            | 3         | ST 127                    | Science & Technologies for the Surgical Technologist | 1         |
| ST 111                         | Introduction to Surgical Technology Lab        | 3         | ST 135                    | Clinical Practice                                    | 3         |
| HC 113                         | Medical Terminology for the Health Professions | 2         | CIS 112                   | Excel, Level I                                       | 1         |
| HC 114                         | Anatomy/Physiology for the Health Professions  | 3         | PSYC 101                  | General Psychology                                   | 3         |
| HC 117                         | Microbiology for the Health Sciences           | 3         | <b>Total Credit Hours</b> |  | <b>20</b> |
| ORT 010                        | Orientation                                    | 1         |                           |  |           |
| ENGL101                        | Composition                                    | 3         |                           |  |           |
| <b>Total Credit Hours</b>      |  | <b>20</b> |                           |  |           |
| <b>Third Semester (Summer)</b> |  |           |                           |  |           |
|                                |  | CR        |                           |  |           |
| ST 136                         | Clinical Practice II                           | 6         |                           |  |           |
| ST 137                         | Clinical Practice III                          | 6         |                           |  |           |
| <b>Total Credit Hours</b>      |  | <b>12</b> |                           |  |           |

# **TRANSPORTATION TECHNOLOGY**

## **Associate in Applied Science, 71/73 Credit Hours, 18-Month Program**

The Transportation Technology Program will provide education in most types of land transportation, vehicles, and construction equipment to include cars, trucks, tractors, construction equipment, and mining equipment. Students will have the option of selecting light vehicle or heavy equipment tracks. This program will provide a broader preparation for the mechanical occupations with separate focuses on lighter and heavy duty vehicles.

| <b>Course No.</b>                            | <b>Course Title</b>                       | <b>Credits</b> |
|--|---|----------------|
| <b>General Education Requirements</b>        |   |                |
| CIS 109                                      | WORD, LEVEL I                             | 1              |
| CIS 112                                      | EXCEL, LEVEL I                            | 1              |
| CIS 114                                      | POWERPOINT, LEVEL I                       | 1              |
| CPR 100                                      | CPR/FIRST RESPONDER                       | 1              |
| ECN 202                                      | PRINCIPLES OF ECONOMICS (MACRO) <i>or</i> | 3              |
| SOC 100                                      | INTRODUCTION TO SOCIOLOGY                 |                |
| ENGL 101                                     | COMPOSITION* <i>or</i>                    | 3              |
| ENGL 201                                     | TECHNICAL WRITING I*                      |                |
| ENGL 102                                     | CAREER COMMUNICATIONS <i>or</i>           | 2/             |
| ENGL 202                                     | TECHNICAL COMMUNICATIONS                  | 3              |
| MATH 104                                     | TECHNICAL MATH**                          | 3              |
| ORT 010                                      | ORIENTATION                               | 1              |
| PSYC 101                                     | GENERAL PSYCHOLOGY <i>or</i>              | 3              |
| PSYC 103                                     | HUMAN RELATIONS IN THE WORKPLACE          |                |
| <b>Total</b>                                 |   | <b>19/20</b>   |
| <b>Technical Requirements for Light Duty</b> |   |                |
| ATT 112                                      | CHASSIS & STEERING                        | 4              |
| ATT 113                                      | BRAKE SYSTEMS                             | 4              |
| ATT 114                                      | STANDARD TRANS & FINAL DRIVE              | 3              |
| ATT 226                                      | AIR CONDITIONING                          | 2              |
| ATT 232                                      | ENGINE OVERHAUL                           | 4              |
| ATT 233                                      | AUTOMATIC TRANSMISSIONS                   | 5              |
| TTT 100                                      | OCCUPATIONAL SKILLS                       | 2              |
| TTT 102                                      | INTRODUCTION TO ELECTRONICS               | 3              |
| TTT 103                                      | VEHICLE ELECTRONICS                       | 3              |
| TTT 104                                      | STARTING & CHARGING SYSTEMS               | 2              |
| TTT 107                                      | ENGINE PERFORMANCE & DRIVABILITY          | 4              |
| TTT 115                                      | ENGINE CONSTRUCTION & OPERATION           | 3              |
| TTT 118                                      | ELECTRONIC FUEL INJECTION                 | 6              |
| TTT 120                                      | SHOP & PARTS MANAGEMENT                   | 1              |
| TTT 121                                      | INTRO TO HYBRIDS                          | 1              |
| TTT 122                                      | CHASSIS WIRING                            | 1              |
| TTT 129                                      | WELDING & EQUIPMENT                       | 2              |
| DMS 205                                      | HYDRAULICS                                | 3              |
| <b>Total</b>                                 |   | <b>53</b>      |
| <b>Technical Requirements for Heavy Duty</b> |   |                |
| DMS 126                                      | DRIVE TRAIN                               | 3              |
| DMS 127                                      | HVAC                                      | 2              |
| DMS 203                                      | DIESEL ENGINES                            | 4              |
| DMS 205                                      | HYDRAULICS                                | 3              |
| DMS 228                                      | CDL TRAINING (CLASS B) <i>or</i>          | 3              |
| DMS 299                                      | INTERNSHIP                                |                |
| DMS 230                                      | STEERING & SUSPENSION                     | 4              |
| DMS 234                                      | BRAKES                                    | 4              |
| TTT 100                                      | OCCUPATIONAL SKILLS                       | 2              |
| TTT 102                                      | INTRODUCTION TO ELECTRONICS               | 3              |
| TTT 103                                      | VEHICLE ELECTRONICS                       | 3              |
| TTT 104                                      | STARTING & CHARGING SYSTEMS               | 2              |
| TTT 107                                      | ENGINE PERFORMANCE & DRIVABILITY          | 4              |
| TTT 115                                      | ENGINE CONSTRUCTION & OPERATION           | 3              |
| TTT 118                                      | ELECTRONIC FUEL INJECTION                 | 6              |
| TTT 129                                      | WELDING & EQUIPMENT                       | 2              |
| TTT 130                                      | PREVENTATIVE MAINTENANCE                  | 3              |
| <b>Total</b>                                 |   | <b>51</b>      |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Basic Math.

### Semester Breakdown Light Duty

| First Semester |                                 |           | Second Semester |                                  |            |
|----------------|---------------------------------|-----------|-----------------|----------------------------------|------------|
|                |                                 | CR        |                 |                                  | CR         |
| TTT 100        | Occupational Skills             | 2         | TTT 107         | Engine Performance               | 4          |
| TTT 102        | Introduction to Electronics     | 3         | TTT 118         | Electronic Fuel Injection        | 6          |
| TTT 103        | Vehicle Electronics             | 3         | TTT122          | Chassis Wiring                   | 1          |
| TTT 104        | Starting & Charging Systems     | 2         | TTT 121         | Intro to Hybrids                 | 1          |
| TTT 115        | Engine Construction & Operation | 3         | TTT 120         | Shop & Parts Management          | 1          |
| CIS 109        | Word, Level I                   | 1         | CPR 100         | CPR/First Responder              | 1          |
| CIS 112        | Excel, Level I                  | 1         | MATH 104        | Technical Mathematics            | 3          |
| CIS 114        | PowerPoint, Level I             | 1         |                 | <b>Total Credit Hours</b>        | <b>17</b>  |
| ORT 010        | Orientation                     | 1         |                 |                                  |            |
|                | <b>Total Credit Hours</b>       | <b>17</b> |                 |                                  |            |
| Third Semester |                                 |           | Fourth Semester |                                  |            |
|                |                                 | CR        |                 |                                  | CR         |
| ATT 112        | Chassis & Steering              | 4         | ATT 226         | Air Conditioning                 | 2          |
| ATT 113        | Brake Systems                   | 4         | ATT 232         | Engine Overhaul                  | 4          |
| ATT 114        | Standard Trans & Final Drive    | 3         | ATT 233         | Automatic Transmissions          | 5          |
| TTT 129        | Welding & Equipment             | 2         | DMS 205         | Hydraulics                       | 3          |
| ECN 202        | Principles of Economics-Macro   | 3         | ENGL 102        | Career Communication <i>or</i>   | 2/         |
|                | <i>or</i>                       |           | ENGL 202        | Technical Communications         | 3          |
| SOC 100        | Introduction to Sociology       |           | PSYC 101        | General Psychology <i>or</i>     | 3          |
| ENGL101        | Composition <i>or</i>           | 3         | PSYC 103        | Human Relations in the Workplace |            |
| ENGL201        | Technical Writing I             |           |                 | <b>Total Credit Hours</b>        | <b>19/</b> |
|                | <b>Total Credit Hours</b>       | <b>19</b> |                 |                                  | <b>20</b>  |

### Semester Breakdown Heavy Duty

| First Semester |                                 |           | Second Semester |                                  |            |
|----------------|---------------------------------|-----------|-----------------|----------------------------------|------------|
|                |                                 | CR        |                 |                                  | CR         |
| TTT 100        | Occupational Skills             | 2         | TTT 107         | Engine Performance               | 4          |
| TTT 102        | Introduction to Electronics     | 3         | TTT 118         | Electronic Fuel Injection        | 6          |
| TTT 103        | Vehicle Electronics             | 3         | TTT 130         | Preventative Maintenance         | 3          |
| TTT 104        | Starting & Charging Systems     | 2         | CPR 100         | CPR/First Responder              | 1          |
| TTT 115        | Engine Construction & Operation | 3         | MATH 104        | Technical Mathematics or Higher  | 3          |
| CIS 109        | Word, Level I                   | 1         |                 | <b>Total Credit Hours</b>        | <b>17</b>  |
| CIS 112        | Excel, Level I                  | 1         |                 |                                  |            |
| CIS 114        | PowerPoint, Level I             | 1         |                 |                                  |            |
| ORT 010        | Orientation                     | 1         |                 |                                  |            |
|                | <b>Total Credit Hours</b>       | <b>17</b> |                 |                                  |            |
| Third Semester |                                 |           | Fourth Semester |                                  |            |
|                |                                 | CR        |                 |                                  | CR         |
| DMS 234        | Brakes                          | 4         | DMS 127         | HVAC                             | 2          |
| DMS 126        | Drive Train                     | 3         | DMS 203         | Diesel Engines                   | 4          |
| DMS 205        | Hydraulics                      | 3         | DMS 228         | CDL Training (Class B) <i>or</i> | 3          |
| DMS 230        | Steering & Suspension           |           | DMS 299         | Internship                       |            |
| ECN 202        | Principles of Economics-Macro   | 4         | TTT 129         | Welding & Equipment              | 2          |
|                | <i>or</i>                       | 3         | ENGL 102        | Career Communications <i>or</i>  | 2/         |
| SOC 100        | Introduction to Sociology       |           | ENGL 202        | Technical Communications         | 3          |
| ENGL 101       | Composition <i>or</i>           |           | PSYC 101        | General Psychology <i>or</i>     | 3          |
| ENGL 201       | Technical Writing I             | 3         | PSYC 103        | Human Relations in the Workplace |            |
|                | <b>Total Credit Hours</b>       | <b>20</b> |                 | <b>Total Credit Hours</b>        | <b>16/</b> |
|                |                                 |           |                 |                                  | <b>17</b>  |

## **WELDING MANUFACTURING**

**Associate in Applied Science, 73 Credit Hours, 20-Month Program**

**Diploma, 49 Credit Hours, 11-Month Program**

The Welding Manufacturing program prepares students for careers in the welding/machining field. The combination of classroom theory, hands-on welding/machining skills training, and practical application in labs allows students to attain skills for entry-level employment.

Welding Manufacturing is designed to prepare students as entry-level technicians in many areas including the construction and repair of ships, automobiles, spacecraft, and thousands of other manufactured products. Welding and machining are the most common means of permanently joining and forming metal parts. Students will study welding techniques with various types of welding equipment, manual and automated machining processes and procedures, computer aided drafting (CAD), and the operation of computer numerical control (CNC). Welders require a wide variety of skills that will continue to increase due to the increase of sophisticated fabrication tasks and repair work. This program advances the student's welding and machining skills, thus increasing employment opportunities. In addition, students have the opportunity to expand their welding certifications.

| <b>Course</b>                         | <b>No.</b> | <b>Course Title</b>                             | <b>Credits</b> |
|---------------------------------------|------------|---|----------------|
| <b>General Education Requirements</b> |            |   |                |
| CIS                                   | 100        | INTRODUCTION TO KEYBOARDING                     | 1              |
| CIS                                   | 109        | WORD, LEVEL I                                   | 1              |
| CIS                                   | 112        | EXCEL, LEVEL I                                  | 1              |
| ENGL                                  | 101        | COMPOSITION* <i>or</i>                          | 3              |
| ENGL                                  | 201        | TECHNICAL WRITING I                             |                |
| ENGL                                  | 102        | CAREER COMMUNICATIONS                           | 2              |
| MATH                                  | 104        | TECHNICAL MATHEMATICS**                         | 3              |
| ORT                                   | 010        | ORIENTATION                                     | 1              |
| PSYC                                  | 101        | GENERAL PSYCHOLOGY <i>or</i>                    | 3              |
| PSYC                                  | 103        | HUMAN RELATIONS IN THE WORKPLACE                |                |
| ECN                                   | 202        | PRINCIPLES OF ECONOMICS-MACRO <i>or</i>         | 3              |
| SOC                                   | 100        | INTRO TO SOCIOLOGY                              |                |
|                                       |            | <b>Total</b>                                    | <b>18</b>      |
| <b>Technical Requirements</b>         |            |   |                |
| WDM                                   | 110        | SHIELDED METAL ARC WELDING                      | 3              |
| WDM                                   | 120        | GAS TUNGSTEN ARC WELDING AND CUTTING PROCEDURES | 4              |
| WDM                                   | 127        | MILL AND LATHE OPERATION, MANUAL I              | 3              |
| WDM                                   | 122        | GAS METAL ARC WELDING                           | 3              |
| WDM                                   | 124        | SHIELDED METAL ARC WELDING GROOVED PLATE        | 3              |
| WDM                                   | 128        | MILL AND LATHE OPERATION, MANUAL II             | 3              |
| WDM                                   | 135        | GAS METAL ARC WELDING GROOVED PLATE             | 3              |
| WDM                                   | 131        | SHIELDED METAL ARC WELDING TESTING              | 3              |
| WDM                                   | 132        | GAS METAL ARC WELDING TESTING                   | 3              |
| WDM                                   | 133        | WORK SITE INTERNSHIP                            | 3              |
| WDM                                   | 248        | ADVANCED PRODUCTION I                           | 3              |
| WDM                                   | 140        | BLUEPRINT READING AND SOLIDWORKS FUNDAMENTALS   | 3              |
| WDM                                   | 246        | ADVANCED MANUFACTURING I                        | 3              |
| WDM                                   | 247        | ADVANCED AUTOMATED MANUFACTURING I              | 3              |
| WDM                                   | 236        | PIPE WELDING I                                  | 3              |
| WDM                                   | 237        | FLUX CORE ARC WELDING                           | 3              |
| WDM                                   | 238        | ADVANCED MACHINING I                            | 3              |
| WDM                                   | 249        | ADVANCED GAS TUNGSTEN ARC WELDING               | 3              |
|                                       |            | <b>Total</b>                                    | <b>55</b>      |

\*Prerequisite: Acceptable COMPASS score or Basic Writing.

\*\*Prerequisite: Acceptable COMPASS score or Basic Math.

**Semester breakdown on next page**

### Semester Breakdown Diploma

| First Semester  |  |           | Second Semester |   |           |
|-----------------|--|-----------|-----------------|---|-----------|
|                 |  | CR        |                 |   | CR        |
| WDM 110         | Shielded Metal Arc Welding                       | 3         | WDM 124         | Shielded Metal Arc Welding                  | 3         |
| WDM 120         | Gas Tungsten Arc Welding and Cutting Procedures  | 4         | WDM 128         | Mill and Lathe Operation Manual II          | 3         |
| WDM 127         | Mill & Lathe Operation, Manual I                 | 3         | WDM 135         | Gas Metal Arc Welding Grooved Plate         | 3         |
| WDM 122         | Gas Metal Arc Welding                            | 3         | WDM 140         | Blue Print Reading/Solid Works Fundamentals | 3         |
| ORT 010         | Orientation                                      | 1         | PSYC 101        | General Psychology <i>or</i>                | 3         |
| CIS 100         | Introduction to Keyboarding                      | 1         | PSYC 103        | Human Relations in the Workplace            | 3         |
| CIS 109         | Word, Level I                                    | 1         | MATH 104        | Technical Mathematics                       | 3         |
| CIS 112         | Excel, Level I                                   | 1         |                 | <b>Total Credit Hours</b>                   | <b>18</b> |
|                 | <b>Total Credit Hours</b>                        | <b>17</b> |                 |   |           |
| Summer Semester |  |           |                 |   |           |
|                 |  | CR        |                 |   |           |
| WDM 131         | Shielded Metal Arc Welding Qualification Testing | 3         |                 |   |           |
| WDM 132         | Gas Metal Arc Welding Qualification Testing      | 3         |                 |   |           |
| WDM 236         | Pipe Welding I                                   | 3         |                 |   |           |
| WDM 237         | Flux Core Arc Welding                            | 3         |                 |   |           |
| ENGL 102        | Career Communications                            | 2         |                 |   |           |
|                 | <b>Total Credit Hours</b>                        | <b>14</b> |                 |   |           |

### Semester Breakdown AAS

| First Semester   |  |           | Second Semester |   |           |
|--|--|-----------|-----------------|---|-----------|
|  |  | CR        |                 |   | CR        |
| WDM 110  | Shielded Metal Arc Welding                       | 3         | WDM 124         | Shielded Metal Arc Welding Grooved Plate    | 3         |
| WDM 120  | Gas Tungsten Arc Welding and Cutting Procedures  | 4         | WDM 128         | Mill and Lathe Operation Manual II          | 3         |
| WDM 127  | Mill & Lathe Operation, Manual I                 | 3         | WDM 135         | Gas Metal Arc Welding Grooved Plate         | 3         |
| WDM 122  | Gas Metal Arc Welding                            | 3         | WDM 140         | Blue Print Reading/Solid Works Fundamentals | 3         |
| ORT 010  | Orientation                                      | 1         | PSYC 101        | General Psychology <b>or</b>                | 3         |
| CIS 100  | Introduction to Keyboarding                      | 1         | PSYC 103        | Human Relations in the Workplace            | 3         |
| CIS 109  | Word, Level I                                    | 1         | MATH 104        | Technical Mathematics                       | 3         |
| CIS 112  | Excel, Level I                                   | 1         | ENGL 102        | Career Communications                       | 2         |
|  | <b>Total Credit Hours</b>                        | <b>17</b> |                 | <b>Total Credit Hours</b>                   | <b>20</b> |
| Third Semester   |  |           | Fourth Semester |   |           |
|  |  | CR        |                 |   | CR        |
| WDM 131  | Shielded Metal Arc Welding Qualification Testing | 3         | WDM 133         | Worksite Internship                         | 3         |
| WDM 132  | Gas Metal Arc Welding Qualification Testing      | 3         | WDM 246         | Advanced Manufacturing I                    | 3         |
| WDM 236  | Pipe Welding I                                   | 3         | WDM 247         | Advanced Automated Manufacturing I          | 3         |
| WDM 237  | Flux Core Arc Welding                            | 3         | WDM 248         | Advanced Production I                       | 3         |
| WDM 238  | Advanced Machining I                             | 3         | WDM 249         | Advanced Gas Tungsten Arc Welding           | 3         |
| ENGL 101   | Composition <i>or</i>                            | 3         | ECN 202         | Principals of Economics Macro <i>or</i>     | 3         |
| ENGL 201   | Technical Writing I                              | 3         | SOC 100         | Introduction to Sociology                   | 3         |
|  | <b>Total Credit Hours</b>                        | <b>18</b> |                 | <b>Total Credit Hours</b>                   | <b>18</b> |
| <p>These classes will also be offered in the summer. See instructor for details.</p> |  |           |                 |   |           |

# COURSE DESCRIPTIONS

**Courses are listed in alphabetical order by course prefix.**

## **ACCT 210 PRINCIPLES OF ACCOUNTING I**

**CREDITS: 4**

This course is an introduction to fundamental accounting concepts. It focuses on understanding the steps in the accounting cycle, i.e., recording transactions, posting, preparing a trial balance, preparing the work sheet, financial statements and the adjusting and closing process. Additionally it includes the study of current and non-current assets, current and long term liabilities, payroll accounting, and partnership accounting.

## **ACCT 211 PRINCIPLES OF ACCOUNTING II**

**CREDITS: 4**

This course continues the study of fundamental accounting concepts; however, it involves the students in the world of accounting as opposed to the record keeping function. The course includes the study of Generally Accepted Accounting Principles (GAAP) and the Conceptual Framework, the corporate form as the business entity, preparation of the Statement of Cash Flows, financial statement analysis, introduction to cost accounting, responsibility accounting, cost volume profit analysis, and budgeting. **PREREQUISITE: ACCT 210 PRINCIPLES OF ACCOUNTING I**

## **ACCT 212 INTERMEDIATE ACCOUNTING I**

**CREDITS: 4**

This course is intended to develop each student's understanding of accounting by focusing on GAAP and the conceptual framework that provides the support for accounting information. It includes a review of the accounting cycle with advanced work in cash flow, inventory valuation methods, current and non-current assets and liabilities, their specific valuation, and balance sheet presentation. **PREREQUISITE: ACCT 211 PRINCIPLES OF ACCOUNTING II**

## **ACCT 213 INTERMEDIATE ACCOUNTING II**

**CREDITS: 4**

This course is intended to develop each student's understanding of accounting information related to stockholders' equity, including: earnings per share calculations, accounting for investments in securities, revenue recognition, interperiod tax allocation, pensions, leases, and financial statement analysis are topics of focus in this course. **PREREQUISITE: ACCT 212 INTERMEDIATE ACCOUNTING I**

## **ACCT 215 PAYROLL ACCOUNTING**

**CREDITS: 3**

The students will study payroll accounting, including the reporting formats for the various governments. Manual payroll applications are covered in the course to enhance the student's job skills. The governmental reporting will include monthly, quarterly, semi-annual, and year-end reports. **PREREQUISITE: ACCT 211 PRINCIPLES OF ACCOUNTING II**

## **ACCT 218 TAX ACCOUNTING I**

**CREDITS: 3**

This course is the study of federal income tax including the principles of income recognition, the principles of business and non-business expense deductions and the concept of the capital gains and losses. Emphasis is placed on the individual non-business taxpayer. Case problems involve the preparation of individual tax returns and the various supporting schedules. **PREREQUISITE: ACCT 211 PRINCIPLES OF ACCOUNTING II**

## **ACCT 223 MANAGERIAL ACCOUNTING**

**CREDITS: 3**

This course focuses on using accounting information by management as a competitive advantage in real-world situations. The student will be prepared to help management develop the internal financial reports needed for these situations. The use of basic cost accounting skills and basic communication skills to provide management with useful internal information will be stressed. **PREREQUISITE: ACCT 211 PRINCIPLES OF ACCOUNTING II**

## **ACCT 227 EXCEL FOR ACCOUNTING**

**CREDITS: 3**

This course develops the use of electronic spreadsheets using Excel in accounting applications. It encourages students to develop spreadsheet formulas for problem solving. Students will create graphs and macros. This encourages the students to develop effective accounting formats in the presentation of financial information. **PREREQUISITE: A WORKING KNOWLEDGE OF COMPUTERS, ACCOUNTING, AND COMPUTERIZED SPREADSHEET PRINCIPLES WITH APPROVAL OF INSTRUCTOR.**

**ACCT 228 QUICKBOOKS ACCOUNTING****CREDITS: 3**

This course focuses on the integration of computerized information into the basic accounting process. It provides the link between accounting in a traditional sense and its application in an automated environment. It is designed to develop a working knowledge of window-based software packages using Quick Books or Quick Books Pro commonly used by business. **PREREQUISITE: A WORKING KNOWLEDGE OF COMPUTERS AND ACCOUNTING WITH APPROVAL OF INSTRUCTOR.**

**ACCT 280 ETHICS IN ACCOUNTING AND BUSINESS****CREDITS: 3**

This course is a study of the ethical implications of accounting and managerial decisions. Topics covered include the responsibility of the organization to the individual and society, the role of the individual within the organization, and ethical systems for American business. The course provides an examination and assessment of current American accounting and business practices.

**ACCT 290 INTERNSHIP****CREDITS: 3**

The internship offers students the opportunity to gain experience in an accounting environment and apply what they have learned in the first three semesters of the accounting program. **PREREQUISITE: Must have satisfactorily completed all the required CORE courses in the first three semesters.**

**AET 240 INTRODUCTION TO ALTERNATIVE POWER SYSTEMS****CREDITS: 3**

This course is an introduction to alternative and standby power generation systems. Types of generation and transfer switching techniques will be covered. **PREREQUISITES: IEL110 DC Theory and Lab, IEL115 AC Theory and Lab, ELT206 Solid State 1 Theory and Lab.**

**AET 242 ELECTRICAL CODE STUDY FOR ALTERNATIVE ENERGY****CREDITS: 1**

This is a code course designed to familiarize students with the National Electrical Code. It deals with commercial and industrial wiring standards with heavy emphasis on the articles that deal with Solar, Wind and Communications Systems. During this course, the student will become accustomed to using the national Electrical Code and the articles that apply to Alternative Energy Systems. **PREREQUISITES: IEL122**

**AET 245 ELECTRONIC CONTROLS****CREDITS: 1**

This course is an introduction to electronic control systems that include electromechanical, control processor and feedback systems. The course will cover the basic concepts of control systems including sensors, mechanical concepts, switching devices, actuators and digital controls. **PREREQUISITES: IEL110 DC Theory and Lab, IEL115 AC Theory and Lab, ELT206 Solid State 1 Theory and Lab**

**AET 246 ELECTRONIC CONTROLS LAB****CREDITS: 1**

This course is a laboratory course to accompany the 'Introduction to Electronic Controls' course. Laboratory exercises will follow the lecture course and will provide experience in working with the components commonly found in electronic control systems. **PREREQUISITES: IEL110 DC Theory and Lab, IEL115 AC Theory and Lab and ELT206 Solid State 1 Theory and Lab.**

**AET 248 WIND AND SOLAR POWER SYSTEMS THEORY****CREDITS: 3**

An introduction to Wind and Solar Power Generation will cover installation, troubleshooting and connection to existing power systems. **PREREQUISITES: IEL110 DC Theory and Lab, IEL115 AC Theory and Lab, ELT206 Solid State 1 Theory and Lab.**

**AET 249 WIND AND SOLAR POWER SYSTEMS LAB****CREDITS: 3**

An introduction to Wind and Solar Power Generation will cover installation, troubleshooting and connection to existing power systems. **PREREQUISITES: IEL110 DC Theory and Lab, IEL115 AC Theory and Lab, ELT206 Solid State 1 Theory and Lab.**

**ALH 200 ALLIED HEALTH TECHNICAL ELECTIVES****CREDITS: 2-8**

This is an area where incoming students can place credits they have taken in health related classes from accredited institutions. These classes in most cases, are not offered by WDT but do apply to the scope of the Allied Health program.

**ALH 203 PERIOPERATIVE CONCEPTS IN ORTHOPEDIC SURGERY****CREDITS: 2**

This course is an in depth study of care of the Orthopedic patient during surgery. Concepts will include Orthopedic Trauma, Total Joint Replacement, Sports Medicine, and practices in Orthopedic Technology.

**ALH 204 INTRODUCTION TO CARE OF THE PERIOPERATIVE PATIENT****CREDITS: 2**

This course is an introduction to the concepts for care of the Perioperative Patient and the practice of basic aseptic technique. The student will learn skills and practices of both the Scrub and Circulator role in the Operating Room and apply those skills in a lab setting. **PREREQUISITES: Must be a current LPN or RN.**

**ALH 205 INTRODUCTION TO OPHTHALMIC SURGERY**

**CREDITS: 2**

This course will prepare individuals in healthcare to work successfully in the office and surgical setting in ophthalmology. In this course students will be introduced to basic concepts in ophthalmic surgical procedures and care of the ophthalmic patient.

**ATB 112 SHOP ORIENTATION, MAINTENANCE, AND SAFETY**

**CREDITS: 1**

This course teaches a student proper handling of shop chemicals, personal safety, and maintenance of equipment. Students will become familiar with shop areas and what is expected in class.

**ATB 116 PANEL REPLACEMENTS AND ADJUSTMENTS**

**CREDITS: 4**

In this course, the students will learn the process for removing and replacing bolt on panels of a vehicle and aligning panels to proper adjustments. Students will also be instructed in removing and replacing moveable glass from the doors and the lock and latch assemblies. The class also addresses removing, replacing, and adjusting headlights.

**ATB 119 BASIC SHEET METAL WORK**

**CREDITS: 5**

In this course, the students will learn the proper use of hand and power tools. Student will learn the characteristics of sheet metal repair on collision and hail damaged panels, rusted-out panels, fiberglass panels, and the methods to repair them.

**ATB 120 WELDING/EQUIPMENT**

**CREDITS: 5**

This course teaches the student safety procedures and familiarization with MIG set up operations and welding in flat, horizontal, vertical, and overhead positions. In addition, the use and care of oxyacetylene welding and the cutting torch are covered.

**ATB 125 PANEL REPLACEMENTS AND ADJUSTMENTS II**

**CREDITS: 5**

This course teaches the student the procedures of removing and installing of large weld-on panels, such as quarter panels, roof panels, door skins, and other structural and non-structural components. Safety of working with those units is emphasized. PREREQUISITE: First semester technical courses.

**ATB 137 PAINT DEFECTS/CAUSES AND CURES**

**CREDITS: 2**

This course will teach the students to visually identify and correct paint problems in the finish. Use a logical sequence of operations to repair a finish using a buffer and a sequence of different grit compounds and polishes.

**ATB 138 ESTIMATING**

**CREDITS: 3**

Students will be taught how to generate both handwritten and computer generated repair estimates.

**ATB 139 REFINISHING**

**CREDITS: 5**

This course will familiarize students with refinishing materials, refinishing equipment, vehicle surface preparation, and proper refinishing procedures and techniques. This course will also familiarize students with proper paint booth maintenance procedures.

**ATB 148 AUTO PLASTICS REPAIR**

**CREDITS: 2**

This course will teach the student how to identify different types of plastic used in the manufacture of automobiles. The student will also learn the safe procedures of prepping and repairing plastic parts using a two part plastic repair component to meet industry standards.

**ATB 149 FINAL DETAILING**

**CREDITS: 1**

This course will teach the student how to final clean and detail a vehicle prior to delivery for improved customer satisfaction. The students will learn how to apply vinyl pinstripes and decals.

**ATB 154 REFINISHING II**

**CREDITS: 5**

The student will use learned procedures and products to refinish a customer's vehicle as required. This course enables the student to repeatedly practice acquired refinishing techniques and procedures.

**ATB 155 TINTING AND BLENDING**

**CREDITS: 3**

The student will learn to tint for a blendable match and to blend so there is no noticeable color difference.

**ATB 156 UNIBODY DIAGNOSING**

**CREDITS: 5**

The student will learn to use "telltale signs" to help analyze damage and to use gauges and measuring systems to plan unibody repairs.

**ATB 157 CONVENTIONAL FRAME DIAGNOSTICS****CREDITS: 4**

The student will learn to use “telltale signs” to help analyze damage and to use gauges and measuring systems to plan conventional frame repairs.

**ATB 158 TWO-TONE AND TRI-COAT FINISHES****CREDITS: 1**

This course will teach the students the proper procedures and techniques to refinish two-tone and tri-coat vehicles.

**ATB 159 COMPETENCY PANEL****CREDITS: 2**

The student will demonstrate the correct refinishing procedures and techniques to refinish a hood panel in basecoat/clear coat.

**ATB 160 MASKING****CREDITS: 2**

This course will teach students how to properly mask vehicles for primer, color and topcoat application.

**ATT 112 CHASSIS AND STEERING****CREDITS: 4**

Suspension and steering are studied during this semester. The student is required to diagnose poor steering and handling and tire-wear problems. The student will also be required to perform alignments on the major types of suspension and steering systems. Four-wheel alignment and drive-axle service are covered in detail. The student will be required to perform at least one alignment unassisted.

**ATT 113 BRAKE SYSTEMS****CREDITS: 4**

The construction, operation, and repair of automotive brakes will be covered in the lecture portion of class using the textbook, audio visual aids, models, and handouts. Demonstrations of use of equipment and the procedures used to perform brake jobs will be performed in the laboratory.

**ATT 114 STANDARD TRANSMISSIONS AND FINAL DRIVES****CREDITS: 3**

The construction, operation, and repair of automotive standard transmissions, dry clutches, drive lines, and differentials are covered. The lab will be correlated with the class and the student is required to complete all assignments. The class presentation will be conducted in the lab using instructional units that each student will use for practice.

**ATT 226 AIR CONDITIONING****CREDITS: 2**

Air conditioning is a course designed to enable the student to understand the principles of refrigeration. The student will use modern equipment for reclamation and recharging. Modern diagnostic equipment will be used to diagnose and repair automobile air conditioning systems.

**ATT 232 ENGINE OVERHAUL****CREDITS: 4**

Engine repair is designed to instruct the students in numerous techniques for the inspecting and repairing of camshafts, timing mechanisms, blocks, cylinder heads, crank, and piston assemblies. The student will also learn proper disassembly and reassembly techniques associated with modern automobile engines. Construction and repair of automotive engines are covered in lecture class using the textbook, audio visual aids, models, and handouts. Demonstrations on use of equipment and the procedures used to perform the tasks assigned in the lab will be given during lab time. **PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS**

**ATT 233 AUTOMATIC TRANSMISSIONS****CREDITS: 5**

The construction, operation, and repair of domestic automatic transmissions will be covered using the text, audiovisual aids, models, handouts, and manuals. Lab Instruction will use classroom transmissions that will be disassembled, reassembled, and tested on the transmission dyno. If time permits, students will be able to work on their own transmission or transaxle.

**BUS 101 INTRODUCTION TO BUSINESS****CREDITS: 3**

This is an introductory business course designed to give students a broad overview of business principles and concepts. Topics included are key functions of business, ownership structures, ethics, social responsibilities, international business, and general business operations.

**BUS 120 PRINCIPLES OF MARKETING****CREDITS: 3**

This course will give students training in the study of the principles, methods, and problems of marketing. This includes markets, pricing, distribution, structure, products, and promotional activities. **PREREQUISITE: BUS 101 INTRODUCTION TO BUSINESS**

**BUS 130 BUSINESS COMMUNICATIONS****CREDITS: 4**

This course is designed to help students develop proficiency in communication skills with an emphasis in the writing skills that are needed for career success. The course will emphasize composing, proofreading, editing, grammar, punctuation, and style for writing letters. Writing memos and reports are stressed. This is a course for the Medical Administrative and Transcription students.  
PREREQUISITE: ENGL 010 BASIC ENGLISH

**BUS 134 WRITTEN COMMUNICATIONS FOR BUSINESS****CREDITS: 4**

This course will give students a comprehensive study of written business communications including the writing process, corresponding at work, reporting data, and communicating for employment.

**BUS 136 ORAL COMMUNICATIONS IN BUSINESS****CREDITS: 2**

This course is designed to provide students with communication skills to be used in the business world. The kind of results achieved in this course include work relationships that run smoothly; effective communication in demanding situations, such as hiring, firing, and business meetings; and an enhanced ability to speak up effectively when situations demand it. These goals will be accomplished with interactive learning on the part of the students.

**BUS 137 PROFESSIONAL DEVELOPMENT****CREDITS: 1**

This course will give students a variety of skills to be successful in the professional workplace. Topics will include ethics, etiquette, and social awareness including the importance of being an active member in their community.

**BUS 140 BUSINESS LAW****CREDITS: 3**

This is an introductory course in business law, encompassing contracts, sales, bailment, agency and employment, and business organizations.

**BUS 150 ADVERTISING****CREDITS: 3**

This course introduces students to advertising principles and practices that contribute to business success. Through projects, lectures, reading, and discussion, students will learn how to recognize and plan effective advertising. PREREQUISITE: BUS 120 PRINCIPLES OF MARKETING

**BUS 152 DESKTOP PUBLISHING FOR MARKETING I****CREDITS: 3**

Students will learn the art of desktop publishing including the creation of practical business documents/forms including design principles, consistency, proportion, balance, etc.

**BUS 156 WEBSITE DEVELOPMENT FOR BUSINESS****CREDITS: 3**

This intermediate-level computer course is designed to give students the ability to use the power of visual media. This course will develop each student's skills in website development. PREREQUISITE: CIS 109 WORD, LEVEL I and CIS 114 POWERPOINT, LEVEL I

**BUS 157 MULTIMEDIA FOR BUSINESS****CREDITS: 3**

This course concentrates on advanced website design features and the manipulation of various types of media including; pictures, drawings, video, and sound clips for use in business communications. PREREQUISITE: BUS156

**BUS 160 PRINCIPLES OF SELLING****CREDITS: 3**

Students will learn the art of selling. In addition, negotiation and persuasion strategies are studied and practiced. It is important to note that in business one is continually "selling" oneself, so this class can benefit anyone who is trying to succeed in business. Instructional methods include lecture, role-playing, group processing, outside guest lecturers, and films.

**BUS 210 SUPERVISORY MANAGEMENT****CREDITS: 3**

This course is designed to give students instruction in the areas of employee supervision. Students will learn to supervise production and performance. Students will also work in the area of small and large group supervision. PREREQUISITE: BUS 135 PROFESSIONAL DEVELOPMENT

**BUS 224 PERSONAL FINANCE****CREDITS: 3**

This course provides the student with the basics of financial planning: budgeting, cash flow, use of credit, and risk management. The course focuses on the information graduates will need to provide themselves with a secure personal financial environment. Many of the skills and much of the information will transfer to the business environment as knowledge of employee benefits for the individual or for employees they may supervise.

**BUS 225 RETAIL MANAGEMENT****CREDITS: 3**

This course studies retailing with emphasis on the development of retail institutions, store management, merchandising, contemporary problems, and current trends of retailers in today's business environment. **PREREQUISITES:** BUS 101 INTRODUCTION TO BUSINESS

**BUS 226 PERSONAL INVESTMENTS****CREDITS: 2**

This course is an introductory course designed to help students gain a better understanding of the basic theories, instruments, environments, and practical techniques associated with personal investment decisions. Upon completion of this course, students will be better prepared to make sound personal investment decisions.

**BUS 233 SMALL BUSINESS ENTREPRENEURSHIP****CREDITS: 3**

This course familiarizes students with the concept of entrepreneurial spirit while providing them with an understanding of the skills necessary to manage a small business. Students develop a business plan and oral presentation for starting a new business. **PREREQUISITES:** BUS 101 INTRODUCTION TO BUSINESS, BUS 120 PRINCIPLES OF MARKETING and ACCT 210 PRINCIPLES OF ACCOUNTING I.

**BUS 240 ADVANCED COMPUTER APPLICATIONS FOR BUSINESS****CREDITS: 4**

The primary focus of the class will be on expert proficiencies in word processing and spreadsheet software. The class is designed to meet all the required skills needed to take the Microsoft Office User Specialist Expert exams in word processing and spreadsheet software. The curriculum will also cover additional Windows-based programs and computer operations.

**BUS 290 INTERNSHIP****CREDITS: 2**

This course is designed to provide students an opportunity to apply the skills and knowledge acquired in the classroom through active participation in a local business. This is a supervised, volunteer, or paid internship.

**CAB 228 KITCHEN DESIGN AND LAYOUT****CREDITS: 4**

This course will give students the opportunity to learn and practice math, drafting and designing custom kitchens and custom cabinetry. Also, blueprint reading of light commercial construction and millwork will be included.

**CAD 101 DRAFTING FUNDAMENTALS****CREDITS: 3**

The student is introduced to the fundamentals of board drafting for both the mechanical and architectural fields. The course covers the principles of drafting, use of equipment, orthographic drawings, shape description, isometric drawings, and basic design concepts. The course strives to develop good drafting habits, technical abilities, and communication and teamwork skills.

**CAD 111 ARCHITECTURAL DRAFTING I****CREDITS: 3**

This course is a continuation of Drafting Fundamentals, CAD 101. Course specializes in architectural drafting. Each student will learn to draw and lay out a set of residential house plans on the computer. **PREREQUISITES:** Three credits of the CIS MICROSOFT SOFTWARE APPLICATIONS and CAD 116 COMPUTERS FOR CAD.

**CAD 116 COMPUTERS FOR CAD****CREDITS: 3**

This course is an introduction to the origin, development, and evolution to computers in today's. Students will cover the proper care of the computer and the operator and introduce the student to the basic file manipulation and storage media. This is also an introduction to the AutoCAD library of books and manuals and its basic commands including the use of the Cartesian coordinate system.

**CAD 130 INTRODUCTION TO CAD****CREDITS: 3**

This course is a hands-on introduction to CAD instructing the student on basic PC-based CAD operation principles using AutoCAD software. Course emphasis includes 2D CAD drawing techniques, understanding the "vector" drawing environment, simple and complex vector drawings and "windows" for the CAD environment, plus working within model space and using layouts for final drawing presentation. **PREREQUISITE:** Three credits of the CIS MICROSOFT SOFTWARE APPLICATIONS and CAD 116 COMPUTERS FOR CAD.

**CAD 135 ARCHITECTURAL CONSTRUCTION THEORY I****CREDITS: 3**

This course is an introduction to instructing the student of concepts and theory of architectural theory. Course emphasis includes a review of construction materials, foundations, floors, walls, roofs, and other associated topics.

**CAD 201 INTERMEDIATE CAD****CREDITS: 3**

This course is a continuation of the Introduction to CAD course instructing the student in PC-based CAD application using the AutoCAD software product. Course emphasis includes: continued training in 2D CAD drawing techniques, creating and using symbol libraries, 3D drawings, and additional OS commands for the CAD environment. PREREQUISITE: CAD 126 INTRODUCTION TO CAD.

**CAD 202 MECHANICAL DRAFTING****CREDITS: 3**

This drafting course covers drafting practices used to create engineering drawings, with a focus on drawing accuracy, drafting conventions, and readability. PREREQUISITES: CAD 232 MECHANICAL PRINCIPLES AND CAD 233 MECHANICAL PRINT READING.

**CAD 203 PRINCIPALS OF COMMERCIAL THEORY I****CREDITS: 3**

Students will study the beginning aspects of commercial construction theory. Emphasis is placed on construction methods, materials, techniques, and terminology that are used in the commercial construction industry as well as architectural and engineering firms. PREREQUISITE: CAD135 ARCHITECTURAL CONSTRUCTION THEORY I.

**CAD 214 INTRODUCTION TO CIVIL DRAFTING****CREDITS: 3**

This course introduces the student to basic drafting principles and surveying techniques needed for civil drafting work. The student will survey an area, draw a plot plan, establish existing contours for the lot layout, orientate a building on the lot, design parking and landscaping on the lot, and establish new contours. Students will be working in the field as well as in the lab to complete course objectives. PREREQUISITE: CAD126 INTRODUCTION TO CAD and CAD252 INTRODUCTION TO SURVEYING

**CAD 215 LIGHT COMMERCIAL CONSTRUCTION W/MECHANICAL AND ELECTRICAL****CREDITS: 3**

This course is designed to introduce the student to the concepts, techniques, and safety practices of mechanical and electrical systems as they apply to the drafting environment. Course emphasis includes reading and drawing prints to show M and E requirements, safe practices, introduction to the National Electrical Code (NEC), M and E symbols, and basic concepts. PREREQUISITE: CAD 201 INTERMEDIATE CAD.

**CAD 221 MECHANICAL DIMENSIONING****CREDITS: 3**

This course covers a working knowledge and application of coordinate and geometric dimensioning and tolerancing techniques for engineering drawings based on ASME V14.5 standard. PREREQUISITE: CAD 202 MECHANICAL DRAFTING.

**CAD 222 PRINCIPALS OF COMMERCIAL THEORY II****CREDITS: 3**

Students will continue to explore the aspects of commercial construction theory. Emphasis is placed on construction methods, materials, techniques, and terminology that are used in the commercial construction industry, as well as architectural and engineering firms. PREREQUISITE: CAD 203 PRINCIPALS OF COMMERCIAL THEORY I.

**CAD 232 MECHANICAL PRINCIPLES****CREDITS: 3**

This course equips the student with basic principles of mechanical operations, component interaction, and assembly procedure. Included in this course is the construction of schematic drawings for hydraulic, pneumatic, electrical, and electronic systems. PREREQUISITE: CIS105 OR CIS106 MICROCOMPUTER SOFTWARE APPLICATIONS I OR II AND CAD116 COMPUTERS FOR CAD.

**CAD 234 MECHANICAL PRINT READING****CREDITS: 2**

Students will learn to read a variety of prints from different industries and to extract important construction and design information from each drawing. PREREQUISITES: CIS105 OR CIS106 MICROCOMPUTER SOFTWARE APPLICATIONS I OR II AND CAD116 COMPUTERS FOR CAD.

**CAD 237 ARCHITECTURAL DRAFTING II****CREDITS: 3**

This course specializes in architectural residential design and drafting. The students will build on their knowledge and experience gained in previous classes to become more independent in designing and completing different architectural drawings with limited supervision from the instructor. PREREQUISITE: CAD 111 ARCHITECTURAL DRAFTING I.

**CAD 239 ARCHITECTURAL DRAFTING III****CREDITS: 3**

This course continues the study of residential construction. Students will use Autodesk Revit software to complete residential drafting projects. Students will also use Microsoft PowerPoint to create an electronic version of their CAD Program Portfolio. PREREQUISITE: CAD 237 ARCHITECTURAL DRAFTING II.

**CAD 242 COMPUTER AUTOMATED MANUFACTURING****CREDITS: 2**

This course covers a working knowledge and application of computer-automated manufacturing.

**CAD 244 3D ENGINEERING DESIGN****CREDITS: 3**

This course covers a working knowledge and application of 3D design using AutoCAD Inventor. PREREQUISITE: CAD 201 INTERMEDIATE CAD.

**CAD 250 INTRODUCTION TO MAPPING/GPS****CREDITS: 2**

This course covers principals of reading and using maps using various existing technologies. Emphasis will be on understanding proper techniques of gathering usable mapping coordinates that can later facilitate creation of GIS systems.

**CAD 251 INTRODUCTION TO GIS****CREDITS: 3**

This course covers principals and applications of geographic information systems using ArcGIS software. Students will gain a basic understanding of creating geographic information systems through class and individual projects. Research outside the classroom may be necessary. PREREQUISITE: CAD 214 INTRODUCTION TO CIVIL DRAFTING.

**CAD 252 INTRODUCTION TO SURVEYING****CREDITS: 3**

This course includes the care and use of surveying instruments, field note procedures, land surveying, topographic surveying, and mapping from field notes. PREREQUISITE: CAD 250 INTRODUCTION TO MAPPING/GPS.

**CAD 298 PROFESSIONALISM****CREDITS: 2**

A course designed to instruct students in the everyday routines, techniques, and expectations of a drafting office environment.

Note: those students who do not take CAD 299 INTERNSHIP will take this course. PREREQUISITE: CAD 126 INTRODUCTION TO CAD.

**CAD 299 INTERNSHIP****CREDITS: 2**

Work in a professional office for a minimum of 100 hours to gain office experience. The student will be responsible for finding an office that will accept them. The instructor may assist the student in finding an internship. The internship must be directly related to the drafting field and approved by the instructor. (NOTE: Students cannot be paid by the office while participating in an internship.) PREREQUISITE: CAD 126 INTRODUCTION TO CAD.

**CAR 216 BLUEPRINT READING****CREDITS: 2**

Blueprint reading will address the need to accurately interpret technical drawings and transform them into actual projects. Students will study the principles of architectural and structural details and measurements.

**CHEM 106 CHEMISTRY SURVEY****CREDITS: 3**

This course provides an introduction to the properties of matter, atomic structure, bonding, stoichiometry, kinetics, equilibrium, states of matter, solutions, and acid-base concepts. A required laboratory experience will accompany CHEM 106.

PREREQUISITE: MATH101

**CHEM 106L CHEMISTRY SURVEY LAB****CREDITS: 1**

This course is a required laboratory experience to accompany CHEM 106.

**CIS 090 INTRODUCTION TO COMPUTERS****CREDITS: 1**

This course is an introductory course into computer use for those students who have little to no computer experience. Topics covered in this course will include computer hardware, windows, file management, and word processing.

**CIS 100 INTRODUCTION TO KEYBOARDING****CREDITS: 1**

This course is a course to learn touch-typing skills on the keyboard.

**CIS 109 WORD, LEVEL I****CREDITS: 1**

This course is an introductory course in word processing which includes basic technical concepts as well as hands-on experience. The utility of the computer is demonstrated by introducing Windows and word processing to the student.

**CIS 111 WORD, LEVEL II****CREDITS: 1**

This course is an intermediate level course in word processing which includes technical concepts as well as hands-on experience. The utility of the computer is demonstrated by advanced concepts in Windows and word processing. PREREQUISITE: CIS 109 or articulated credit for a Microsoft Word class.

**CIS 112 EXCEL, LEVEL I**

**CREDITS: 1**

This course is an introductory course in spreadsheets which includes basic technical concepts as well as hands-on experience. The utility of the computer is demonstrated by introducing Windows and spreadsheets to the student.

**CIS 113 EXCEL, LEVEL II**

**CREDITS: 1**

This course is an intermediate level course in spreadsheets which includes technical concepts as well as hands-on experience. The utility of the computer is demonstrated by advanced concepts in Windows and spreadsheets. PREREQUISITES: CIS 112 or articulated credit for CIS 109, CIS 112, CIS114.

**CIS 114 POWERPOINT, LEVEL I**

**CREDITS: 1**

This course is an introductory course in presentations which includes basic technical concepts as well as hands-on experience. The utility of the computer is demonstrated by introducing Windows and presentations to the student.

**CIS 116 ACCESS, LEVEL I**

**CREDITS: 1**

This course is an introductory course in databases which includes basic technical concepts as well as hands-on experience. The utility of the computer is demonstrated by introducing Windows and databases to the student. PREREQUISITE: CIS 109 or CIS 111 or CIS 112 or CIS 113.

**CIS 117 ACCESS, LEVEL II**

**CREDITS: 1**

This course is an intermediate level course in databases which includes technical concepts as well as hands-on experience. The utility of the computer is demonstrated by advanced concepts in Windows and databases to the student. PREREQUISITE: CIS 116 and CIS 109 or CIS 111 or CIS 112 or CIS 113.

**CIS 118 PUBLISHER**

**CREDITS: 1**

This course is an introductory course in creating and editing newsletters, brochures, flyers, and websites which includes basic technical concepts as well as hands-on experience. The utility of the computer is demonstrated by introducing Windows and publishing skills to the student. PREREQUISITE: CIS 111 or BUS 138.

**CIS 130 INTRODUCTION TO 10-KEY**

**CREDITS: 1**

Ten Key Mastery is a course that is designed to teach the numeric keypad with speed and accuracy using industry standards for data entry. Proficiency on three employment tests used by three large interstate corporations helps the student meet employment standards.

**CN 126 CISCO ACADEMY/NETWORKING TECHNOLOGIES I**

**CREDITS: 3**

CN 126 (CCNA 1 Networking Basics) introduces Cisco Networking Academy Program students to the networking field. The course focuses on network terminology and protocols, Open System Interconnection (OSI) models, cabling, cabling tools, routers, Ethernet, Internet Protocol (IP) addressing and network standards and design. Basic small office/home office networks will be addressed, including wireless and security configurations. Prerequisite: CNS 112 and CNS 114 or NO prerequisite if approved by the instructor.

**CN 127 CISCO ACADEMY/NETWORKING TECHNOLOGIES II**

**CREDITS: 3**

CN 127 (CCNA2 Routers & Routing Basics) is the second of the four courses leading to the Cisco Certified Network Associate (CCNA) certification. Students will develop skills on initial router configuration, Cisco IOS Software management, routing protocol configuration, TCP/IP, and security and disaster recovery. Prerequisite: CN 126 Cisco Academy/Networking Technologies 1.

**CN 128 CISCO ACADEMY/NETWORKING TECHNOLOGIES III**

**CREDITS: 3**

CN 128 (CCNA3 Switching Basics and Intermediate Routing) is the third of the four courses leading to the Cisco Certified network Associate (CCNA) certification. This course will develop an understanding of how switches are interconnected and configured to provide network access to LAN users. This course also teaches how to integrate various network devices into a LAN.. Prerequisite: CN 127 Cisco Academy/Networking Technologies 2.

**CN 130 CISCO ACADEMY/NETWORKING TECHNOLOGIES IV**

**CREDITS: 3**

CN 130 (CCNA 4 WAN Technologies) focuses on WAN Technologies and is the last of four courses leading to the Cisco Certified Network Associate (CCNA) certification. The course focuses on advanced IP addressing on the LAN/WAN, Network design, Cisco device upgrades, and supporting converged networks with proper hardware and configurations. There is also content to assist the student to prepare for the CCNA certification exam. Prerequisite: CN 128 Cisco Academy/Networking Technologies 3.

**CN 213 NETWORKING USING WINDOWS SERVER****CREDITS: 3**

This course features WINDOWS Server as the local area network operating system and provides hands-on tutorials for the student to plan and implement Windows Server. The study includes an introduction to configuring protocols such as TCP/IP, continues with how to configure name resolution as well as vital services such as DNS, WINS, DHCP, and IPSec and emphasizes ActiveDirectory configuration. PREREQUISITE: Students must have completed CNS 129

**CN 215 NETWORK DESIGN AND VIRTUALIZATION****CREDITS: 3**

This course offers students a background in network virtualization technology needed to advance in today's workplace. It provides an overview of virtualization technology and using virtualization software in networked environments. It includes designing and building virtual networks, enhancing performance and security, and centralizing management. The student will work with virtual computing concepts, using real-world situations to build the skills necessary for a successful career in a computer industry increasingly focused on virtualization. PREREQUISITES: CN126 AND CN213.

**CN 220 DESIGNING SECURITY FOR MS WINDOWS NETWORK****CREDITS: 3**

This course provides in-depth study of configuring, administering, and troubleshooting security services available within a Microsoft Windows Server network. It provides detailed hands-on activities that let you experience firsthand the process involved in securing and managing a Microsoft Windows Server network. The course will help the student prepare for Microsoft certification exams related to security. PREREQUISITES: Students must have completed CNS 213 NETWORKING USING MS WINDOWS SERVER or documentation of having passed an equivalent Microsoft certification exam.

**CN 223 COLLABORATIVE TECHNOLOGIES****CREDITS: 3**

This course is designed to introduce the student to the concepts of Microsoft messaging services; and the installation, setup, and maintenance of a Microsoft Exchange Server. Prerequisite: CN 213 (May be taken concurrently)

**CN 227 HETEROGENEOUS NETWORKS****CREDITS: 3**

This course is an Omnibus survey of technologies used to connect various networks utilizing a range of tools including: Websites, Wireless technologies and Operating System Independent programs will be explored. PREREQUISITE: Students must have completed CNS 211

**CN 230 COMPUTER FORENSICS****CREDITS: 3**

This course offers students a background necessary to launch and complete a successful computer investigation. Students will learn about acquiring digital evidence to reporting its findings. Students will learn how to set up a forensics lab, how to acquire the proper and necessary tools, and how to conduct the investigation and subsequent digital analysis. PREREQUISITS: CN126 AND CN213.

**CNS 100 INTRODUCTION TO ELECTRICITY AND DIGITAL LOGIC****CREDITS: 2**

This course is a general introduction to electricity and digital logic, providing a broad base for entry into a general study of microprocessor-based computer systems and computer networking. The class is designed to cover the theoretical and practical applications of electricity and number systems as applied to digital and computer electronics. It is also designed to cover the theoretical and practical applications of electricity and number systems as applied to Environmental Engineering Technicians. The course begins with an introduction to voltage, current, and resistance as they apply to both direct and alternating currents, number systems, and continues through the basic logic gates. Hands-on demonstration circuits and application number systems exercises are an integral part of the course.

**CNS 112 A+ HARDWARE/SOFTWARE****CREDITS: 6**

A+ Hardware/Software lays a foundation of the basic information required to assemble a computer and troubleshoot problems that occur. You learn how to properly install, configure, upgrade, troubleshoot, and repair PC hardware and software. The course will help prepare the student to pass the CompTIA A+ certification exam to become a certified computer service technician and pursue a future career in IT technology or simply be equipped with the knowledge of how a computer works.

**CNS 114 NETWORKING ESSENTIALS****CREDITS: 3**

This course will prepare students for the CompTIA Server+ certification exam and introduces students to basic networking concepts, Network Operating System management and administration, and network security. It also includes an overview of Windows NT/2000, Windows XP, Linux, and Novell Netware. This class prepares students to become server system specialists who can perform basic installation, operation, administration, and troubleshooting services. PREREQUISITE: A general understanding of digital logic, and the operation of IBM compatible desktop computers. This course includes installation and configuration of peripheral/adaptor cards; installation and configuration of peripheral devices to include hard drives, CD drives, and backup devices; assigning computer resources; and resolving computer resource conflicts.

**CNS 129 COMPUTER OPERATING SYSTEMS****CREDITS: 3**

This course covers the Windows operating system. Subject areas include installation, configuration, administration, and network setup.

**CNS 211 LINUX SERVER OPERATING SYSTEM****CREDITS: 3**

This course is designed to give the student the knowledge and experience to use Linux in a server role. The student will be able to configure the Linux environment and provide network services such as authentication, mail, time, file, and directory services.

**PREREQUISITE:** CNS 114**CNS 216 INTRODUCTION TO PROGRAMMING****CREDITS: 3**

This course is designed to provide the student with a solid foundation in both programming concepts and Microsoft Visual C#. Topics covered include compilation and execution of a Visual C# application and understanding data types, methods, behaviors, and expressions. Additionally the student learns to program in a visual environment. **PREREQUISITE:** MATH 101 (grade B or higher) or completion of any higher level math course (grade C or higher).

**CNS 217 PROGRAMMING LOGIC AND DESIGN****CREDITS: 3**

This course is designed to provide the student an introduction to object-oriented programming and logic concepts. While not based in a specific language, the student will gain a good foundation for later courses in the programming curriculum. Concepts covered include the following: object-oriented programming concepts, methods and parameters, structure, loops, arrays, and advanced arrays. **PREREQUISITE:** MATH 101 (grade B or higher) or completion of any higher level math course (grade C or higher).

**CNS 218 INTERMEDIATE PROGRAMMING****CREDITS: 3**

This course is designed to provide the student with a solid foundation in Microsoft Visual Basic 2005. The student, upon completion, should be able to setup a visual based application with the use of variables, selection and repetition structures, string manipulation, arrays, classes, and objects. **PREREQUISITES:** CNS 216 INTRODUCTION TO PROGRAMMING.

**CNS 219 DATABASES****CREDITS: 3**

This course is intended to familiarize students with databases and the Structured Query Language (SQL) using MS SQL Server, Oracle and MS SQL. It will teach concepts of database design and maintenance and the differences and similarities among database engines.

**CNS 221 TROUBLESHOOTING II****CREDITS: 3**

This course is designed to provide the student with advanced network troubleshooting skills. The student will use network analysis tools to determine network health and to help identify problems. The student will learn to analyze packet level information and to address system settings (i.e. registry) that influence performance, security, replication, and data transfer. **PREREQUISITE:** Students must have completed CNS 112 A+ Hardware/Software.

**CNS 299 INTERNSHIP****CREDITS: 3**

This course is designed to provide the student an opportunity to apply the learned skills and knowledge he/she has acquired in the classroom through active participation in a work environment in a local business. This is a supervised position which may be a volunteer or paid status. This class may be used as a substitute for any second year 3-credit course based on location and substance of the internship opportunity. This class is available for AAS students and Programming diploma students. **PREREQUISITE:** The student must be a third or fourth-semester student enrolled in the Computer Networking Specialist program and be in good standing with Western Dakota Tech at the time the internship begins. Exceptions may be made on a case-by-case basis and must be approved by all members of the CNS faculty.

**COC 110 KEYBOARDING I****CREDITS: 3**

The student will develop proper keyboarding speeds and touch keyboarding speed of at least 35 NWAM. Document formatting techniques including tables, correspondence and reports are all covered in the course.

**COC 120 KEYBOARDING II****CREDITS: 3**

This course enables students to further develop keyboarding accuracy and speed. The student will produce tables, letters, memos, and reports involving advanced document formatting techniques using Microsoft Word.

**COC 132 RECORDS MANAGEMENT****CREDITS: 3**

The student will learn and apply alphabetic, numeric, and subject filing according to the rules established by the Association of Records Managers and Administrators. This class also covers record storage and retrieval systems, equipment, file maintenance, and improvement of record control.

**COC 141 COMPUTERIZED OFFICE APPLICATIONS****CREDITS: 2**

This course is designed to teach the student how to manage the medical office in a computerized setting. The student will learn to build databases and use them in many different ways. Once the databases are set up, the student will learn other office management skills such as entering patient data, arranging appointments, keeping track of charges and payments, filing insurance electronically, etc.

**CPR 100 CPR/FIRST RESPONDER****CREDITS: 1**

Students will be instructed in Cardiopulmonary Resuscitation (CPR) and Emergency Cardiac Care in accordance with the American Heart Association and First Aid. Also covered is what to do in the first five minutes. The information will enable the first responder to manage almost any emergency until professional help arrives.

**CPR 103 INTRODUCTION TO EMERGENCY MEDICAL TECHNOLOGY (EMT)****CREDITS: 6**

Students will be instructed on all aspects of emergency medical care at the emergency medical technician/basic level in accordance with the National Registry of the Department of Transportation curriculum.

**CPR 105 CPR****CREDITS: 1/2**

Students will be instructed in Cardiopulmonary Resuscitation (CPR) and Emergency Cardiac Care in accordance with the American Heart Association and First Aid. This course will be used for students in the Pharmacy and Phlebotomy programs.

**CPR 106 EMERGENCY RESPONDER****CREDITS: 2**

Students will be instructed on all aspects of CPR/First Responder-Medical consistent with the National Registry Certification as set by Department of Transportation curriculum.

**CPR 106L EMERGENCY RESPONDER LAB****CREDITS: 1**

Students work on practicums in preparation of the national written exams.

**DMS 126 DRIVE TRAIN****CREDITS: 3**

This course introduces the basic principles of transmissions, differentials, and drive trains. Students will understand the operation of all drive train components, as well as the procedure for disassembly, repair, and the reassembling of each component. Included are how to perform failure analysis and how to trouble shoot drive train problems. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**DMS 127 HVAC****CREDITS: 2**

This course is designed to teach students basic heating and air conditioning principles. Through a series of job sheets and troubleshooting schematics, they will learn to identify, diagnose, and repair heating and air conditioning systems. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**DMS 203 DIESEL ENGINES****CREDITS: 4**

This course teaches the diagnostic and repair skills necessary for diesel engine work. All of the following areas are covered: diesel engine design, overhaul, tune-up, troubleshooting, and repair. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**DMS 205 HYDRAULICS****CREDITS: 3**

This course teaches fluids and how they are utilized to transmit energy and force. The maintenance and repair of pumps, actuators, valves, accumulators, cylinders, and motors are included. Students will learn how to maintain and service reservoirs, coolers, and filters. In addition to maintaining a hydraulic system, they will learn to read hydraulic schematics and troubleshoot hydraulic problems. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**DMS 228 CDL TRAINING (CLASS B)****CREDITS: 3**

This course enables students to obtain a Class "B" commercial driver's license (CDL). They will learn to drive, back up, and inspect a Class "B" vehicle (26,001+ lbs.). PREREQUISITES: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**DMS 230 STEERING & SUSPENSION****CREDITS: 4**

This course covers the diagnostic and repair skills necessary for suspension and steering systems. Included are heavy-duty steering systems, air and spring ride suspension systems, and truck alignment. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**DMS 234 BRAKES****CREDITS: 4**

This course covers the diagnostic and repair skills necessary for hydraulic and heavy-duty air brake systems, along with various components that make up the air system on heavy-duty trucks. The course will be taught using a combination of classroom lectures, demonstrations, and class/lab assignments. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**DMS 299 INTERNSHIP****CREDITS: 3**

Students will be placed throughout the area in truck and diesel shops. They will work with different mechanics learning the various methods of repairing engines, drive trains, suspension systems, break systems, hydraulic systems, and electrical systems.

**PREREQUISITE: ALL PREVIOUS COURSE REQUIREMENTS MUST BE MET.**

**ECN 201 PRINCIPLES OF MICROECONOMICS****CREDITS: 3**

Principles of microeconomics studies basic economic concepts as they relate to consumer, worker, and business decisions.

Emphasis is given to satisfaction maximizing behavior by individuals and profit maximization by firms. Market structures are thoroughly analyzed regarding their effect on price, output, and competitiveness.

**ECN 202 PRINCIPLES OF ECONOMICS (MACRO)****CREDITS: 3**

The course is designed to provide students with a better understanding of macroeconomic issues that affect their daily lives.

Economics is about making choices, i.e., how we use our limited "means" to satisfy our unlimited wants. Macroeconomics considers how the economy as a whole makes those decisions, both domestically and on the global scene.

**ECN 204 PRINCIPLES OF MACROECONOMICS (ONLINE)****CREDITS: 3**

This course will satisfy the online economics requirement for Ag and Business. This class will be open to any student that wants to take economics online. Principles of Macro Economics considers the economy as a whole, how its sectors interact, and how monetary and fiscal policy can influence output, inflation, interest rates, unemployment, poverty, debt, and other factors. This course is non-transferrable.

**ENGL 010 BASIC ENGLISH****CREDITS: 3**

ENGL 010 is a comprehensive, yet easy-to-learn, presentation of English grammar that helps the student to deal effectively with the communication process to become a better communicator.

**ENGL 091 BASIC WRITING****CREDITS: 2**

This course will provide the basic elements of grammar and the writing process. Students will learn to communicate effectively by clarifying messages, analyzing a reader's needs, and identifying different writing types.

**ENGL 101 COMPOSITION****CREDITS: 3**

This course instructs students in reading critically and writing clearly, correctly, and persuasively. Students will study principles of grammar, rhetoric, and logic in order to analyze and compose text effectively. This includes work on personal, expository, and research essays.

**ENGL 102 CAREER COMMUNICATIONS****CREDITS: 2**

This course covers the communication skills required for success during the job hunt and on the job.

**ENGL 201 TECHNICAL WRITING I****CREDITS: 3**

This course presents the basic principles and forms of written and oral communication in the . Instruction leads students through planning tasks, identifying audiences, and gathering information. Major emphasis is on writing reports.

**ENGL 202 TECHNICAL COMMUNICATIONS****CREDITS: 3**

Students will prepare oral and written communications required in the workplace. **PREREQUISITE: ENGL 101 or ENGL 201.**

**ENGL 203 TECHNICAL WRITING II (online)****CREDITS: 3**

This is an online course. This course is writing and research based. This course is non-transferrable.

**FET 102 ENVIRONMENTAL INSTRUMENTATION****CREDITS: 4**

This course exposes the student to a variety of analytical techniques and instruments utilized in environmental chemical analysis. It is designed to couple theory of equipment operation with a basic understanding of the chemical principles involved. The laboratory time is divided between practical hands-on bench work and field experiences.

**FET 105 INTRODUCTION TO ENVIRONMENTAL SCIENCES****CREDITS: 4**

This course is a study of environmental interactions, including population and cultural problems, resource utilization, and impacts upon biotic systems. Presented to enable students to better understand and evaluate contemporary environmental problems and the application of science to their solution. The corresponding laboratory component provides students with the practical experience of measuring, recording and interpreting environmental data. Interdisciplinary knowledge is used to solve environmental problems. Some field trips may be required.

**FET 106 INTRODUCTORY FIELD METHODS****CREDITS: 3**

This course introduces the field techniques used in environmental site assessment, ground water monitoring, and ground water testing and includes soil water sampling, ground water sampling, water quality testing, and water level recording. Students will explore topics of geophysical surveying, water well installation, piezometer installation and techniques to determine the direction of ground water flow.

**FET 110 SOILS TESTING****CREDITS: 3**

This course covers the actual hands-on performance of laboratory and field tests on soils used for the construction of civil engineering projects. Most of the course is devoted to the lab and field procedures along with the necessary measurements, calculations and reports required for an accurate soil analysis. PREREQUISITE: FET100

**FET 111 ENVIRONMENTAL GEOLOGY****CREDITS: 3**

Introduces geology as it relates to human activities, and is designed for both non-science majors and students interested in an environmental career. Emphasizes geologic hazards, including earthquakes, volcanic eruptions, flooding, mass movements, and pollution of water and soil resources. This course examines waste disposal along with related topics in medical geology and environmental law. This course may include optional field trip(s) to waste disposal sites and/or remediation sites.

**FET 298 TECHNICAL COOPERATIVE WORK EXPERIENCE****CREDITS: 3**

The Cooperative Work Experience involves an individually developed, contracted work experience under the guidance of an approved employer, combined with a structured series of on-campus meetings with a program coordinator. Students have an opportunity to develop and pursue challenging work experiences which relate directly to their individual career plan. Credit will be commensurate with the work experience.

**FET 299 FIELD INTERNSHIP****CREDITS: 2**

Environmental or Geo-Technical work experience in business, industry or government. 80 hours of designated work. PREREQUISITE: DEPARTMENTAL APPROVAL.

**FETE 202 WATER QUALITY****CREDITS: 3**

Chemical and physical factors involved in evaluating water quality are examined with emphasis on water quality deterioration from landfills, underground storage tanks, and hazardous waste. Sampling techniques of groundwater, soil, surface water, quality assurance, quality control, and data processing techniques are included. Field exercises to acquire water quality data and service data gathering equipment will be conducted. Safety procedures are stressed. PREREQUISITES: FET 100 INTRO TO ENVIRONMENTAL SCIENCES or FET 101 INTRODUCTORY FIELD METHODS and FET 110 SOILS TESTING, CHEM 130 BASIC CHEMISTRY, CEHM 131 BASIC CHEMISTRY LAB, MATH 101 INTERMEDIATE ALGEBRA or equivalent.

**FETE 204 ENVIRONMENTAL REGULATION****CREDITS: 2**

This course presents an overview of the regulations that are related to environmental protection, including OSHA regulations, Clean Air Act, SARA, RCRA and similar regulations. This course also provides an awareness of why the regulations exist, how they are enforced, penalties for noncompliance, and practical experience in interpretation of the regulations.

**FETE 205 PRINCIPLES OF HYDROLOGY****CREDITS: 3**

This course will provide students a basic knowledge of the underlying principles of hydrology. In addition to an introduction to surface water hydrology, this course also introduces students to the basic concepts of ground water hydrology. Other topics explored in some detail include the hydrologic cycle, dams, Federal water agencies and their responsibilities, an introduction to drinking water and waste water treatment, water use conflicts, and emerging water issues. PREREQUISITES: FET 100 INTRO TO ENVIRONMENTAL SCIENCES, FET 102 ENVIRONMENTAL INSTRUMENTATION, and MATH 101 INTERMEDIATE ALGEBRA or equivalent.

**FETE 222 INTRODUCTION TO WASTEWATER TECHNOLOGIES****CREDITS: 3**

This course provides an introduction to the causes of water pollution, the reasons for treating polluted waters and the fundamentals of wastewater treatment. Students will study the basic principles of treatment plant operation and the processes commonly used in pollution control facilities. Investigation of terms, mathematics and problem-solving techniques commonly used by wastewater treatment personnel will be included.

**FETG 235 CONSTRUCTION MATERIALS SAMPLING & TESTING****CREDITS: 4**

This course will cover the materials, proportioning, mixing, placing, finishing, curing, sampling and laboratory/field testing techniques commonly used for Portland cement concrete. It will cover the testing and properties of asphalt cement and asphalt concrete. The course also will cover gradation, moisture control and density of gravels. Students will evaluate the capacity of cement and concrete to withstand stress and strain. This course will prepare students for the certification exam from the American Concrete Institute.

**FFP 100 PARAMEDIC PREPARATORY I****CREDITS: 6**

This course consists of Introduction to Pre-hospital Care, Well-Being of the Paramedic, EMS Systems, Role and Responsibilities of the Paramedic, Illness and Injury Prevention, Ethic in Pre-hospital Care, General Pathophysiology, General Principles of Pharmacology, and Medication Administration. PREREQUISITES: EMT-BASIC

**FFP 105 PARAMEDIC PREPARATORY II****CREDITS: 2**

This course consists of Therapeutic Communications, Life Span Development, Airway Management and Ventilation. PREREQUISITES: CPR100 EMT-BASIC, FFP100 PARAMEDIC PREPARATORY I

**FFP 110 PARAMEDIC ASSESSMENT****CREDITS: 2**

This course consists of Research in EMS, History Taking, Techniques of Physical Exam, Patient Assessment, Communications, and Clinical Decision Making. PREREQUISITES: CPR 100 EMT-BASIC, FFP100 PARAMEDIC PREPARATORY I

**FFP 115 PARAMEDIC CARDIOLOGY****CREDITS: 5**

This course consists of Pulmonology, Cardiology, 12-Lead EKG, and Advanced Cardiac Life Support. PREREQUISITES: CPR100 EMT-BASIC, FFP100 PARAMEDIC PREPARATORY I, FFP105 PARAMEDIC PREPARATORY II, PARAMEDIC ASSESSMENT

**FFP 200 PARAMEDIC MEDICAL****CREDITS: 5**

This course consists of Neurology, Endocrinology, Allergies and Anaphylaxis, Gastroenterology, Urology, Environmental, Toxicology, Infectious and Communicable Diseases, Hematology, Gynecology, Obstetrics, Behavioral/Psychiatric Emergencies, and Advanced Medical Life Support. PREREQUISITES: CPR100 EMT-BASIC, FFP100 PARAMEDIC PREPARATORY I, FFP105 PARAMEDIC PREPARATORY II, FFP110 PARAMEDIC ASSESSMENT, AND CARDIOLOGY

**FFP 205 PARAMEDIC SPECIAL OPERATIONS I****CREDITS: 4**

This course consists of Neonatology, Pediatrics, Pediatric Life Support, and Neonatal Resuscitation Program. PREREQUISITES: CPR100 EMT-BASIC, FFP100 PARAMEDIC PREPARATORY I, FFP105 PARAMEDIC PREPARATORY II, FFP110 PARAMEDIC ASSESSMENT, AND FFP115 CARDIOLOGY, FFP200 PARAMEDIC MEDICAL

**FFP 210 PARAMEDIC SPECIAL OPERATIONS II****CREDITS: 7**

This course consists of Pre-hospital Trauma Life Support, Geriatrics, Abuse, Assault, Patients with special Challenges, Acute Interventions, in Chronic Care, Assessment Based Management, Emergency Vehicle Operations, Ambulance Operations and NREMT Skill Practice. PREREQUISITES: CPR100 EMT-BASIC, FFP100 PARAMEDIC PREPARATORY I, FFP105 PARAMEDIC PREPARATORY II, FFP110 PARAMEDIC ASSESSMENT, AND FFP115 CARDIOLOGY, FFP200 PARAMEDIC MEDICAL and FFP205 SPECIAL OPERATIONS I

**FFP 298 PARAMEDIC CLINICAL****CREDITS: 3**

The student will start with the clinical observation hours to include rotations in the operating room to become proficient with airway techniques to include basic oral and nasal airways, oxygen administration, endotracheal intubation and other related airway related topics. The rotation also includes observation in the laboratory in drawing blood samples, processing the samples, BSI techniques to include sterile techniques. The next observation will be at the emergency department where the student will use patient assessment, history taking, clinical decision making, triage techniques, IV insertion and maintenance, medication administration, documentation techniques and other related techniques. PREREQUISITES: CPR100 EMT-BASIC, FFP100 PARAMEDIC PREPARATORY I, FFP105 PARAMEDIC PREPARATORY II, FFP110 PARAMEDIC ASSESSMENT

**FFP 299 PARAMEDIC CLINICAL II****CREDITS: 5**

The student will start with the clinical observation hours to include rotations in the Neonatal Intensive Care Unit, OB Department, Pediatric Department, intensive Care Unit, Behavioral Unit, Morgue and Ambulance Field Internship. PREREQUISITES: CPR100 EMT-BASIC, FFP100 PARAMEDIC PREPARATORY I, FFP105 PARAMEDIC PREPARATORY II, FFP110 PARAMEDIC ASSESSMENT, FFP298 PARAMEDIC CLINICAL, FFP115 CARDIOLOGY, FFP200 PARAMEDIC MEDICAL, FFP205 & FFP210 SPECIAL OP I & II

**FFT 100 WILDLAND FIREFIGHTER I****CREDITS: 3**

An introduction to the principles of fire suppression in the wildland setting: NWCG courses S-130, S-190, and Standards of Survival will be presented.

**FFT 102 RESCUE I****CREDITS: 3**

In addition to a basic working knowledge of ropes and knots, the student will attain knowledge in and learn techniques for accomplishing high angle rescue, motor vehicle extrication, trench rescue, and confined space rescue.

**FFT 105 PHYSICAL EDUCATION I****CREDITS: 2**

Health, physical conditioning, and nutrition will be covered as they relate to general fitness for meeting the physical requirements and demands for the job of firefighter; strength, stamina, and agility will be measured, and the student will train until measured goals are achieved, including the "Red Card Pack Test".

**FFT 106 STRUCTURE FIREFIGHTER****CREDITS: 6**

This course is an introduction to the history, organization, and operation of a fire department; fire science and basic fire suppression techniques will be covered; the proper use of firefighter protective clothing and breathing apparatus will be taught; minimum standards for Structural Firefighter I will be met.

**FFT 110 BUILDING CONSTRUCTION****CREDITS: 3**

The student will study various construction methods, as well as building materials and systems; the effect fire will have on given structures will be emphasized. PREREQUISITE: FFT106 STRUCTURE FIREFIGHTER

**FFT 111 FORESTRY****CREDITS: 3**

This course will focus on the wildland ecosystems of the Great Plains and Black Hills. It will provide a foundation for further study of management for fire protection and wild land fire behavior.

**FFT 112 PUBLIC FIRE EDUCATION****CREDITS: 3**

The student will meet basic criteria for public speaking and instruction as they relate to fire safety and related program delivery.

**FFT 116 HAZARDOUS MATERIALS OPERATIONS****CREDITS: 3**

Hazardous materials recognition; operations at incidents involving the release of hazardous materials and the role of emergency response agencies will be covered. This course will meet the EPA/OSHA requirements for operations level certification.

PREREQUISITES: FFT 106 STRUCTURE FIREFIGHTER and/or FFT 100 WILDLAND FIREFIGHTER I.

**FFT 117 FIRE CODES & INSPECTION PROCEDURES****CREDITS: 3 (classroom or WEB)**

The International Fire Code will be covered, as well as basic fire inspection procedures with emphasis on code enforcement.

**FFT 118 40 HOUR HAZWOPPER CERTIFICATION****CREDITS: 2**

Hazardous materials recognition; operations at incidents involving the release of hazardous materials and the role of emergency response agencies will be covered. This course will meet the EPA/OSHA requirements for operations level certification.

PREREQUISITES: FFT 106 STRUCTURE FIREFIGHTER and/or FFT 100 WILDLAND FIREFIGHTER I.

**FFT 202 RESCUE II****CREDITS: 3**

A continuation and expansion of Rescue I, this course covers ice rescue, rapid intervention, farm machinery extrication and rescue, and swift water rescue. PREREQUISITE: FFT 102 RESCUE I.

**FFT 203 FIREFIGHTER FITNESS TESTING****CREDITS: 1**

The student will train until measured goals are achieved, including the "Red Card Pack Test," the "Firefighter Combat Challenge Test" and the "CPAT" test for meeting the hiring requirements of Municipal and Wild land Fire Departments.

**FFT 204 DRIVER OPERATOR****CREDITS: 3**

This course contains the knowledge and skills required of drivers to safely and efficiently operate fire apparatus and vehicles in the fire environment. Students will be able to apply basic maintenance procedures and operate various types and complexities of pumps and engines. Students will be able to ensure vehicle readiness and act in a professional manner when operating a fire apparatus. PREREQUISITES: FFT 100 WILDLAND FIREFIGHTER I and FFT 106 STRUCTURE FIREFIGHTER.

**FFT 205 STRUCTURE FIRE ORIGIN & CAUSE****CREDITS: 2**

Procedures for determining fire origin and cause will be presented for structure and wild land fires, along with scene and evidence protection and arson detection. The motivations and behavior patterns of arsonists and fire setters will be presented. NWCG course, FI-110 will be presented. PREREQUISITES: FFT 100 WILDLAND FIREFIGHTER I and FFT 106 STRUCTURE FIREFIGHTER.

**FFT 206 WILDLAND FIRE SERVICE DRIVING****CREDITS: 1**

Presentation of the NWCG course S-216; basic knowledge and skills required of fire vehicle drivers to safely and efficiently operate fire vehicles in the fire wild land environment. PREREQUISITES: FFT 100 WILDLAND FIREFIGHTER I.

**FFT 207 WILDLAND FIRE ORIGIN & CAUSE****CREDITS: 1**

NWCG course, FI-110 will be presented. Procedures for determining fire origin and cause will be presented for wild land fires, along with scene and evidence protection and arson detection. PREREQUISITE: FFT 100 WILDLAND FIREFIGHTER.

**FFT 209 EMERGENCY VEHICLE OPERATIONS****CREDITS: 1**

This class covers basic knowledge and skills required of emergency response vehicle drivers to safely and efficiently operate emergency response vehicles on public and private roadways. Emergency Response Vehicle Laws and Standards will be presented. Skills will be assessed with emergency response vehicles on an EVOC course. PREREQUISITE: VALID DRIVERS LICENSE

**FFT 210 WILDLAND FIREFIGHTER II****CREDITS: 2**

Instruction continues from Wild land Firefighter I with the presentation of NWCG courses S-211 (Portable Pumps) and S-212 (Saws). PREREQUISITE: FFT 100 WILDLAND FIREFIGHTER I.

**FFT 212 ARFF (AIRCRAFT RESCUE FIREFIGHTING)****CREDITS: 3**

This course is focused primarily on the duties of a Rescue Firefighter; common aircraft designs and systems will be explored as well as specialized Aircraft Rescue Firefighting equipment. PREREQUISITES: FFT 106 STRUCTURE FIREFIGHTER.

**FFT 215 WILDLAND/URBAN INTERFACE FIRE SUPPRESSION & PREVENTION****CREDITS: 3**

Presentation of the NWCG course S-215 and methodology of preventing fires in the urban interface through education, fuels treatment, and prescribed burns will be covered. PREREQUISITES: FFT100 WILDLAND FIREFIGHTER I.

**FFT 218 STRATEGY & TACTICS****CREDITS: 3**

This course covers basic fire suppression attack strategies and tactics; incident management systems will be explored; emphasis will be on fire fighter safety and risk reduction. PREREQUISITE: FFT100 WILDLAND FIREFIGHTER I or FFT106 STRUCTURE FIREFIGHTER,

**FFT 221 FIRE OFFICER I****CREDITS: 3**

Minimum standards for NFPA Fire Officer I will be met. PREREQUISITE: FFT222 ADVANCED WILDLAND FIREFIGHTER OR FFT106 STRUCTURE FIREFIGHTER

**FFT 222    ADVANCED WILDLAND FIREFIGHTER**

**CREDITS:   3**

The NWCG course S-290 (Intermediate Fire Behavior), S-270 (Air Operations) and S-131 (Advanced Firefighter/Squad Boss) will be presented. PREREQUISITE: FFT100 WILDLAND FIREFIGHTER I.

**FFT 223    PROTECTIVE SYSTEMS - STRUCTURE**

**CREDITS:   2 (CLASSROOM OR WEB)**

This course covers basic automatic fire detection and suppression systems; emphasis will be on Code requirements, safety and risk reduction. PREREQUISITE: FFT106 STRUCTURE FIREFIGHTER.

**FFT 224    FIRE SERVICE INSTRUCTOR**

**CREDITS:   1**

This course is designed to meet the Standards for NFPA 1041, Fire Service Instructor Professional Qualifications, 2002 version, which covers basic aspects of adult instructional methodology, safety, legal issues, record keeping and evaluations.

PREREQUISITE: FFT 106 STRUCTURE FIREFIGHTER or FFT100 WILDLAND FIREFIGHTER I.

**FFT 227    HAZARDOUS MATERIALS TECHNICIAN**

**CREDITS:   3**

This course is designed to prepare responders for offensive operations at incidents involving release of hazardous materials. This course will meet the EPA/OSHA requirements for technician level certification. REREQUISITE: FFT 116 HAZARDOUS MATERIAL OPERATIONS.

**FFT 228    URBAN SEARCH & RESCUE (STRUCTURE COLLAPSE TRAINING)**

**CREDITS:   3**

This course is designed to prepare responders for dealing with structure collapse due to a variety of natural and man - made causes. This course is designed to provide participants with the knowledge, skills and abilities to perform rescue at structural collapse scene. Recent terminology and technology will also be covered. PREREQUISITE: FFT102 RESCUE I.

**FFT 229    INDUSTRY STANDARDS FIRE SCIENCE**

**CREDITS:   3**

Student will be instructed in the responsibilities and demeanor expected of them upon being employed by a Municipal Fire Department or Wildland Fire Service Agency. This instruction shall include the proper wearing of the uniform and basic entry level firefighter roles and responsibilities PREREQUISITE: FFT100 and FFT106 or equivalent.

**FFT 231    FIRE OFFICER II**

**CREDITS:   3**

Minimum standards for NFPA Fire Officer II will be met. PREREQUISITE: FFT221 FIRE OFFICER I.

**FFT 299    INTERNSHIP**

**CREDITS:   2-6**

This course is designed to give students the opportunity to apply their skills while working with trained professional firefighters assigned to shift work at a staffed Fire Station. Students will learn the daily duties and responsibilities of working as a professional firefighter at stations and/or other divisions. Students will be expected to perform the daily duties of a firefighter for all assignments. Students may respond to emergencies and incidents as a crew member assigned to an apparatus. Students will be expected to work an 8 to 12 hour shift that may include some evenings and weekends. Internship opportunities are divided into the following sections:

Operations (Suppression) Division (STRUCTURE AND/OR WILDLAND)

STRUCTURE - 2 CREDITS

WILDLAND - 2 CREDITS

Prevention Division - 1 CREDIT

Education Division (STRUCTURE AND/OR WILDLAND)

STRUCTURE - 1 CREDIT

WILDLAND - 1 CREDIT

PREREQUISITES: FFT106 STRUCTURE FIREFIGHTER and/or FFT100 WILDLAND FIREFIGHTER.

**HC 113    MEDICAL TERMINOLOGY FOR THE HEALTH PROFESSIONS**

**CREDITS:   2**

Students will be taught the basic techniques of medical word building. These techniques will be applied to acquire an extensive medical vocabulary. The course introduces students to medical terms relating to the anatomy and physiology of body systems, pathology, diagnosis, medical treatments and procedures.

**HC 114    ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS**

**CREDITS:   3**

Students will gain an introductory understanding of the structure and function of the human body. This course emphasizes concepts essential for student success in health program curriculum as well as in practical, work-related environments.

**HC 117 MICROBIOLOGY FOR THE HEALTH SCIENCES****CREDITS: 3**

This course is an introduction to microbiology. Students learn the history of microbiology, characteristics of microorganisms and the process of infection.

**HC 140 CARDIAC MONITORING****CREDITS: 2**

This course will teach the skills to be employed as an ECG technician or a telemetry technician in a hospital, clinic, or outpatient setting.

**HC 145 ELECTRONIC HEALTH RECORDS****CREDITS: 2**

This course will give students the foundation of knowledge and skill to utilize electronic health records in various health care settings.

**HRT 100 HOT ROD CHASSIS FABRICATION****CREDITS: 16**

This class is comprised of both theory and lab experiences in automotive custom car fabrication. Students will learn the types of metal, tubing and sheet metal used in custom car construction. The students will use metal working tools and equipment, and learn measuring and pattern development. MIG, TIG and Oxy-acetylene welding will be covered. Students will be trained in custom automotive frame fabrication and design. Students will examine cross members, roll cages and automotive front and rear suspension setups including straight axle, independent, and air spring suspensions design and installations. The students will be required to document their work and create a portfolio of their accomplishments while at school and have a resume' to present for employment.

**HRT 110 HOT ROD BODY FABRICATION****CREDITS: 16**

This course provides an in-depth knowledge of automotive construction and custom vehicle and motorcycle fabrication. This gives students additional knowledge and skill, giving them additional opportunities for employment.

**HRT 200 HOT ROD REFINISHING****CREDITS: 15**

This course provides advanced training in Specialty Automotive finishes. It also offers continued development in refinishing preparation procedures and final assembly of custom cars. This gives students additional knowledge and skill, giving them additional opportunities for employment.

**HRT 210 HOT ROD PERFORMANCE****CREDITS: 18**

This course provides an in-depth knowledge of automotive mechanical and electrical systems. This gives students general knowledge and skill, giving them additional opportunities for employment in the Custom Hot Rod Industry.

**HRT 220 HOT ROD UPHOLSTRY****CREDITS: 16**

This course provides an in-depth knowledge of automotive upholstery industry, construction and custom vehicle trim and upholstery fabrication. This course completes the entry preparation of an entry-level automotive upholstery person. With the completion of this course the student can possibly open an upholstery business or use it to bring business into a custom shop. The main goal is to supply the HRI student the opportunities for employment in the automotive industry.

**HUC 101 INTRODUCTION TO HEALTH UNIT COORDINATING****CREDITS: 2**

This course introduces the student to the basic responsibilities of health unit coordinators and the health care environment in which they work.

**HUC 135 HEALTH UNIT COORDINATING PROCEDURES****CREDITS: 2**

This course teaches the fundamentals and knowledge needed to be employed as a Health Unit Coordinator. PREREQUISITE: HUC101 INTRODUCTION TO HEALTH UNIT COORDINATING

**HUC 140 HEALTH UNIT COORDINATING LAB****CREDITS: 2**

A laboratory course during which the student practices health unit coordinating skills and procedures in a simulated work environment and applies knowledge acquired in the *Health Unit Coordinating Procedures* course. PREREQUISITES: HUC 101 INTRODUCTION TO HEALTH UNIT COORDINATING.

**HUC 298 HUC CLINICAL****CREDITS: 2**

This course provides the HUC/PCT students the opportunity to apply the skills and knowledge obtained from the classroom environment to the clinical setting while under the guidance of a preceptor and the course instructor. PREREQUISITE: HUC101 INTRODUCTION TO HEALTH UNIT COORDINATING , HUC135 HEALTH UNIT COORDINATING PROCEDURES, HUC140 HEALTH UNIT COORDINATING LAB, CPR100

**HUM 102 CRITICAL THINKING****CREDITS: 3**

A comprehensive and systematic approach to critical thinking, this course introduces the student to a process that results in decisions regarding what to believe and what to do. Critical thinking is careful reasoning. A critical thinker is committed to clarity, accuracy, and precision. The student will develop the skills necessary to solve legal problems.

**IEL 110 DIRECT CURRENT CIRCUITS – THEORY AND LAB****CREDITS: 3**

This course introduces the fundamental concepts of basic electricity and Ohms Law. It includes basic circuit analysis of series circuits, parallel circuits, series-parallel circuits, and network theorems. A study of electrical quantities including cells, batteries, magnetism, electromagnetism and DC measuring instruments are included.

**IEL 115 ALTERNATING CURRENT CIRCUITS – THEORY AND LAB****CREDITS: 3**

This course is a study of basic AC quantities and measurements using the oscilloscope. The course also addresses theory and lab study of inductance and capacitance and their relationship with resistance in RLC circuits analysis. Series and parallel resonant circuits are used in the lab experiments. To round out the course, a study of basic transformer characteristics is covered.

**IEL 123 INDUSTRIAL DATA COMMUNICATION****CREDITS: 2**

The course will cover the operation and installation of data communication systems. Students will be introduced to telephone and video system operation and cable installation. In addition, an introduction to networking is given with special emphasis on Category IV cables and fiber optics. This course is designed to prepare the industrial electrician for the ever increasing demand that electricians install cabling systems in residential, commercial and industrial projects. PREREQUISITE: IEL 124 SOLID STATE DEVICES.

**IEL 124 SOLID STATE DEVICES****CREDITS: 3**

This course covers the physical make up and characteristics of diodes, rectifiers, SCR's, Triacs, Transistors, and Digital Logic devices. Methods of biasing, circuit operation, and trouble-shooting are covered in detail. Laboratory experiments reinforce learning and allow students to see actual circuit applications.

**IEL 127 BLUEPRINT READING****CREDITS: 3**

This course will teach the basics of blueprint reading. A great part of the course is devoted to construction topics other than the electrical trade. It is important that the electrician be able to read a blueprint for structural information and other mechanical and plumbing information. This is imperative for proper coordination of the electrical installation. PREREQUISITE: IEL 128 INTRO TO ELECTRICAL WIRING.

**IEL 129 INTRODUCTION TO ELECTRICAL WIRING LAB****CREDITS: 1**

This is a lab course intended to accompany the Introduction to Electrical Wiring Class. Through actual hands on experiments on developed trainers in the lab, the student will be able to reinforce the concepts learned in Introduction to Electrical Wiring. This course will be taken concurrently with Introduction to Electrical Wiring. PREREQUISITE: IEL 130 INTRODUCTION TO ELECTRICAL WIRING.

**IEL 130 INTRODUCTION TO ELECTRICAL WIRING****CREDITS: 2**

This course is designed to emphasize the importance of safety and to provide a foundation for practical electrical wiring. Information included begins with a general introduction of the National Electrical Code and laws pertaining to electrical licensing and installation. Theory and lab experience is used in the study of residential wiring principles and common residential circuit hookups. This class will be one hour lecture followed by a one hour lab.

**IEL 135 BASIC ELECTRICAL MATERIALS AND DEVICES****CREDITS: 1**

This course is designed to cover essential electrical materials, identify the industry's commonly used materials and understand its terminology.

**IEL 140 WELDING & FABRICATION FOR LIGHT COMMERCIAL APPLICATIONS****CREDITS: 2**

This course is designed to teach students welding skills to cut, fabricate and weld brackets, hangers for conduits and panels, stands and hanging platforms for transformers using oxyacetylene cutting and wire feed (GMAC) welding procedures.

**IEL 201 ELECTRICAL CODE STUDY I****CREDITS: 3**

This is a wiring course designed to familiarize students with residential and light commercial wiring with an emphasis on electrical safety. During this course, the student will become accustomed to using the National Electrical Code along with good design techniques to develop wiring systems. PREREQUISITE: IEL 130 INTRODUCTION TO ELECTRICAL WIRING.

**IEL 211 ELECTRICAL MOTOR CONTROL****CREDITS: 3**

This course is intended to familiarize the student with motor control theory from basic concepts to much more complicated circuits. This course should be taken concurrently with motor control lab. PREREQUISITES: IEL 128 INTRODUCTION TO ELECTRICAL WIRING and IEL122 ELECTRICAL CODE STUDY I.

**IEL 213 ELECTRICAL HEATING AND APPLIANCES****CREDITS: 2**

This course is intended to provide the student with an understanding of electrical heat and electrical heating control circuits. Installing, maintaining and troubleshooting electrical heating systems are an important part of the industrial electrician's career. This course will also introduce the student to air conditioning and heat pump operation .

**IEL 214 ELECTRICAL CODE STUDY II****CREDITS: 2**

This course deals with commercial and industrial wiring standards with heavy emphasis on the National Electrical Code. Electrical services are studied in more depth; grounding and bonding are emphasized, and wiring methods for several types of specific locations are studied. PREREQUISITES: IEL 201 ELECTRICAL CODE STUDY I.

**IEL 216 MOTOR CONTROL LAB****CREDITS: 2**

This course utilizes a hands-on approach to learning motor-control circuit wiring. The student will complete the control wiring of sample circuits using the developed trainers in the lab. This hands-on experience greatly helps the student in retaining the information that is presented in the Electrical Motor Control course. PREREQUISITES: IEL 128 INTRODUCTION TO ELECTRICAL WIRING, IEL 122 ELECTRICAL CODE STUDY I and IEL 211 ELECTRICAL MOTOR CONTROL (OR CONCURRENTLY).

**IEL 218 WIRING LAB I****CREDITS: 3**

The purpose of this course is to provide the student with the basic skills and technical knowledge required to enter the electrical construction field as an inside wire person. The course activities provide varied applications of practical job and shop practices and experience in the use of an electrician's tools and equipment. Actual on the job training is obtained through the rough in wiring of the WDTI project house. PREREQUISITES: IEL 128 INTRODUCTION TO ELECTRICAL WIRING and IEL 122 ELECTRICAL CODE STUDY I (OR CONCURRENTLY).

**IEL 219 ELECTRICAL PLANNING AND ESTIMATING****CREDITS: 2**

This course is used as an introduction to the wiring of the WDTI project house. The job site instructor will lead the students in planning the electrical installation that will be made as part of the wiring lab. The students will obtain experience in making their own blueprint drawings of an actual electrical installation. PREREQUISITES: IEL 128 INTRODUCTION TO ELECTRICAL WIRING.

**IEL 220 WIRING LAB II****CREDITS: 3**

This course is a study of the National Electrical Code in relation to commercial and industrial electrical installations. Actual electrical installations, compiling pertinent facts for bidding purposes and on the job training through the wiring of the WDTI project house are included in this course. PREREQUISITE: IEL 128 INTRODUCTION TO ELECTRICAL WIRING and IEL 214 CODE STUDY II (OR CONCURRENTLY).

**IEL 221 PROGRAMMABLE LOGIC CONTROLLERS****CREDITS: 2**

This course introduces programmable logic controllers and the concepts and structure of programmable controllers and provides beginning programming skills. The student will have the basic knowledge to be able to do limited maintenance, programming and installation of programmable controller systems in the industrial environment. The student will also have the background for more advanced training in programmable control. PREREQUISITE: IEL 211 ELECTRICAL MOTOR CONTROL and IEL 216 MOTOR CONTROL LAB.

**IEL 222 PLC LABS****CREDITS: 3**

This course will give the student hands-on experience in programming Programmable Controllers. The theory learned in previous course work will be put into practice in a laboratory environment that includes simulated industrial applications. Programmable control is an area of ever-increasing industrial importance today. PREREQUISITES: IEL 211 ELECTRICAL MOTOR CONTROL, IEL 216 MOTOR CONTROL LAB and IEL 221 PROGRAMMABLE LOGIC CONTROLLERS (OR CONCURRENTLY).

**IEL 223 ELECTRICAL MOTOR LAB****CREDITS: 1**

This is a laboratory course intended to accompany the motor study course. Through actual hands-on experiments on developed trainers in the lab, the student will be able to reinforce the concepts learned in motor study. This course should be taken concurrently with Electric Motor Fundamentals and Maintenance. PREREQUISITES: IEL226 ELECTRIC MOTOR FUNDAMENTALS & MAINTENANCE.

**IEL 224 POWER DISTRIBUTION****CREDITS: 2**

Transformers are considered the single most important type of equipment in the process of distribution of electrical power. Transformer study is therefore a large portion of this course. Included in this course are transformer theory, code and actual transformer connections. PREREQUISITES: IEL 128 INTRODUCTION TO ELECTRICAL WIRING and IEL 122 ELECTRICAL CODE STUDY I.

**IEL 226 ELECTRICAL MOTOR FUNDAMENTALS AND MAINTENANCE****CREDITS: 2**

This course involves a study of the operational theory and construction of AC and DC motors. It is important for the electrician to have an understanding of motor principles and motor construction in order to facilitate proper motor installation and trouble shooting. This course should be taken concurrently with Electric Motor Lab. PREREQUISITE: IEL 211 ELECTRICAL MOTOR CONTROL and IEL 216 MOTOR CONTROL LAB.

**IEL 299 ELECTRICIAN INTERNSHIP/CO-OP****CREDITS: 6**

This course will give the students in the Industrial Electronics program an opportunity to experience the electrical industry in areas such as construction, industrial, mining, or maintenance. They will work in the field for a minimum of 5 months and be required to provide weekly reports on their experience and how this experience is helping them become an electrician.

**LET 110 INTRODUCTION AND OCCUPATIONAL SOCIOLOGY OF LAW ENFORCEMENT****CREDITS: 3**

The history and social significance of the law enforcement profession is studied along with the role, responsibilities and demands upon law enforcement officers in today's society. The role of a law enforcement officer as it relates to the philosophy of community policing as well as the history of community policing are explored. Also included are topics concerning motivation, civil liability, job stress, sociological concepts that are applicable in the practice of law enforcement. The student will learn about culture, socialization, social deviance, social stratification, gender and minority inequalities, marriage and family relationships, education and social change in collective behavior.

**LET 112 CONSTITUTIONAL LAW****CREDITS: 3**

This course presents the Constitution, Bill of Rights and other amendments from a Criminal Justice perspective. Practical examples and court decisions will be used to illustrate how law enforcement officers and other members of the Criminal Justice system apply constitutional concepts in the course of their duties. Special emphasis is placed on the search and seizure requirements of the Fourth Amendment.

**LET 117 INDUSTRY STANDARDS****LET 127****LET 217****LET 227****CREDITS: 0**

Students will be instructed in the responsibilities and demeanor expected of them upon being employed by a law enforcement agency. This instruction shall also include the proper wearing of uniform and basic facing movements as they relate to dismounted drill.

**LET 118 SPANISH FOR LAW ENFORCEMENT ABC****CREDITS: 3**

This course is designed to provide non-Spanish speaking students with the opportunity to learn work-specific Spanish language. Students learn basic phrases and questions necessary to carry out their law enforcement duties. Cross-cultural issues will also be discussed regarding the law enforcement and Hispanic communities.

**LET 119 CRIMINAL LAW AND PROCEDURES****CREDITS: 3**

Students will be taught the differences between the criminal and civil law process. They will understand how to interpret criminal statutes and apply those statutes to violations in a law enforcement application. The study of federal, state and local governments and their respective courts will be covered. The criminal code, pre trial and post trial procedures, from a constitutional basis as well as that found in South Dakota Codified Law Titles 22, 23 and 23A will be covered. Students will become familiar with proper trial preparation, conduct and demeanor as it relates to the law enforcement officer.

**LET 120 MECHANICS OF ARREST/PHYSICAL TRAINING****CREDITS: 2**

This course is intended to create the ability and confidence in the student to successfully cope with physical situation confronted by law enforcement officers and to eliminate excessive use of force by officers and respond appropriately with swift and efficient solutions, whether physical or verbal. This course of instruction will cover proper search and handcuffing techniques, proper use and deployment of OC aerosol and impact weapons. Students will also be introduced to methods of body-muscle warming and stretching to prevent muscle strain and injury.

**LET 121 CRIMINAL INVESTIGATIONS****CREDITS: 4**

Students will be taught the fundamentals of the crime scene and post crime investigation as they relate to property crimes such as burglary, robbery, theft, arson, narcotics and explosives. In addition, fundamentals of crime scene and post crime investigation as it relates to personal crimes such as crimes of violence to include child abuse, sex crimes and murder. Students will analyze methods of handling crime scenes, use of specific evidence and preparation of the case for prosecution. Specific study of South Dakota Codified Law is covered. **PREREQUISITES:** LET 112 CONSTITUTIONAL LAW and LET 119 CRIMINAL LAW & PROCEDURES or approval from the LET Lead Instructor.

**LET 122 INTERVIEW AND INTERROGATION/REPORT WRITING****CREDITS: 3**

This course will distinguish between interrogation and interviewing and includes instruction in the preparation and planning for interviews, effective questioning techniques as well as constitutional constraints. Students will also receive lecture and engage in practical exercises concerning proper report/statement writing skills. Emphasis is placed on the gathering and documentation of pertinent information and construction of report narratives, using clear concise language.

**LET 124 JUVENILE METHODS****CREDITS: 3**

The studies of juvenile delinquency use of juvenile investigation procedure and community resources available to deal with juvenile problems are included in this course. This course will explain the theory of juvenile crime and offenders, as well as specific South Dakota Codified Law. The court process and types of juvenile correctional institutions will be covered.

**LET 126 PHYSICAL TRAINING (SECOND SEMESTER)****LET 216 PHYSICAL TRAINING (THIRD SEMESTER)****LET 226 PHYSICAL TRAINING (FOURTH SEMESTER)****CREDITS: 1**

Students will periodically review previous defensive tactics and mechanics of arrest techniques. Students will continue to engage in physical fitness training to enhance muscle strength, tone and flexibility.

**LET 212 ACCIDENT INVESTIGATIONS****CREDITS: 2**

Course is designed to create the ability within each student to understand the basics of proper accident investigation techniques. This will include the human element, physical evidence, speed estimates, some measurements and diagramming (field/scale). The content of this course is equivalent to that of an Intermediate Level Accident Investigation course.

**LET 213 CRIMINOLOGY AND ABNORMAL BEHAVIOR****CREDITS: 3**

Course is a basic study of crime and criminal behavior. The nature and causes of crime and theories dealing with criminal behavior and delinquency are covered. Students will be taught maladaptive behavior patterns with emphasis on classification and symptom recognition. Major areas of study include general theoretical perspectives, anxiety disorders, sexual variations, dysfunctional personality disorders, and substance use disorders.

**LET 215 COLLECTION/PRESERVATION OF EVIDENCE****CREDITS: 3**

This course deals with the accepted techniques and methods of crime scene preservation, management and the collection of evidence. This includes locating evidence, packaging, and transmittal of evidence to the proper forensic laboratory. Students will also receive instruction in the proper methods of obtaining fingerprints, both latent and rolled.

**LET 218 PATROL PROCEDURES I****CREDITS: 3**

Students will receive lecture on various patrol procedures. The history of the police patrol will be covered, leading to modern day patrol tactics and duties. Pre shift preparation, safe vehicle stops, highway interdiction techniques, alarm response, building search techniques, intoxicated drivers and domestic violence will be covered. Instruction through lecture and hands-on application will be the primary focus. The specific study of Title 32 of the South Dakota Codified Law will be required. **This course requires a valid driver's license.**

**LET 222 ADVANCED ISSUES IN POLICING****CREDITS: 2**

This course will provide a survey of relevant contemporary issues affecting the law enforcement career field and public safety. The format will be interactive, focusing on current events and trends, court decisions, new technologies, and subjects not addressed in any of the students' previous course offerings. An historical perspective will be presented allowing students to build a foundation for the purpose of problem and topic analysis.

**LET 224 LAW ENFORCEMENT PRACTICUM****CREDITS: 2**

This course is designed to give each student an opportunity to participate in hands-on experience with several different types of law enforcement experiences and agencies. Each student will report to and work one shift per day, two days a week for eight weeks. Students will be assigned to specific and different law enforcement tasks working with the actual officers during their duty shifts. **PREREQUISITES:** Completion of the LET Semesters 1, 2, and 3 or approval from the LET Lead Instructor.

**LET 228 CORRECTIONS AND PAROLES****CREDITS: 2**

Students will be furnished information regarding the system in the U.S. of corrections, parole and probation. Also furnished is information on how these three parts of the criminal justice system interface with each other and with the law enforcement officer on the street. Students will be exposed to the duties and responsibilities of the personnel involved in each of these areas.

**LET 230 PATROL PROCEDURES II****CREDITS: 3**

This course is designed to build on the foundation established by Patrol Procedures I. The student will receive further study of South Dakota Codified Law: Title 32 and Title 41. The concepts of Patrol Procedures I as well as other technical courses in this program will be applied in hands-on scenarios. This will include the initial response of the patrol officer, report writing, preliminary investigation and testifying in court. At times students will be required to attend actual court trials that may be occurring within the local judicial system. **This course requires a valid driver's license.**

**LET 231 LAW ENFORCEMENT ACADEMY PREPARATORY/ASSESSMENT****CREDITS: 3**

This course is designed to meet standards of preparation for students who are seeking South Dakota State Reciprocity Certification. This course will serve as a comprehensive knowledge and skills assessment.

**LET 232 TECHNOLOGY IN LAW ENFORCEMENT****CREDITS: 2**

This course is designed to introduce students to and when appropriate to certify in the use of various pieces of equipment/tools that are available to law enforcement officers in today's society. The technology on which the students will train with (but not limited to) will be GPS/GIS, TASER, RADAR, LIDAR, and Forensic Mapping utilizing a Total Station data collection and Map Scenes software. Additional technology will be integrated into the class as science provides updated and innovative equipment to the world of law enforcement.

**LET 251 FIREARMS TRAINING****CREDITS: 2**

The emphasis of this course will be safety, proper handling, proficiency and care of firearms. Information regarding the proper methods of using and time to use firearms will be covered in depth. Instruction in the proper sighting, trigger pull and all other elements to safe and proper weapon use will be given. There will be extensive live fire training with the 9mm semi automatic and 12 gauge shotgun. Course will include combat and stationary-type shooting techniques. This course cannot be taken by anyone who has sustained a criminal conviction, meeting the guidelines of Title 18 USC Sec. 922, or who is currently under the requirements of a Protection Order. **PREREQUISITES:** Completion of the LET Semesters 1, 2, and 3 or approval from the LET Lead Instructor.

**LET 252 EMERGENCY VEHICLE OPERATION COURSE (EVOC)****CREDITS: 2**

The course is a study of legal aspects as they pertain to law enforcement driving. Instruction in emergency, non emergency and pursuit driving will be given. Students will demonstrate driving proficiency by successfully completing specific driving tasks. This course requires a valid driver's license.

**MA 110 MEDICAL ASSISTING I****CREDITS: 2**

This course is designed to give the basic knowledge and understanding of the career of Medical Assisting and the administrative skills required to be employed as an entry level Medical Assistant.

**MA 125 PATHOPHYSIOLOGY****CREDITS: 3**

This course will teach the entry level Medical Assistant about various diseases, causes, and treatments.

**MA 130 MEDICAL ASSISTING II****CREDITS: 3**

This course will teach students the knowledge and clinical skills needed for an entry level Medical Assistant.

**MA135 MEDICAL LAW AND ETHICS****CREDITS: 2**

This course will teach students the principles and knowledge of medical law and ethics.

**MA145 PHARMACOLOGY AND ADMINISTRATION OF MEDICATIONS****CREDITS: 3**

This course will cover the knowledge of common medications, usage, and safety associated with them. Lab time will include the proper administration of medications.

**MA 299 MEDICAL ASSISTING CLINICAL****CREDITS: 7**

This course provides the medical assisting students the opportunity to apply their skills and knowledge in the clinical setting.

**MATH 090 BASIC MATHEMATICS****CREDITS: 2**

This course provides a mathematically sound and comprehensive coverage of basic computational skills and their applications. Certain topics from algebra are also included. The content and level of rigor of the text form the basis of a course that would properly serve as preparation for a traditional algebra course. The text has been specifically developed to meet, not only the needs of the traditional post secondary student, but also the needs of the mature student whose mathematical proficiency may have declined during years away from formal schooling. PREREQUISITES: High School Math and a COMPASS Score in Pre-Algebra Domain of 33 or higher.

**MATH 101 INTERMEDIATE ALGEBRA****CREDITS: 3**

This course includes real numbers and variable expressions, first-degree equations, polynomials, factoring, rational expressions, rational exponents and radicals, and quadratic equations. Other areas covered will be linear equations, systems of linear equations, linear, exponential and logarithmic functions, and an introduction to conic sections. PREREQUISITES: High School Math and a COMPASS Score in Algebra Domain of 30 or higher.

**MATH 102 COLLEGE ALGEBRA****CREDITS: 3**

This course involves equations and inequalities; polynomial functions and graphs; exponents, radicals, binomial theorem, zeros of polynomials; systems of equations; exponential, logarithmic, and inverse functions, applications and graphs. Other topics selected from sequences, series, and complex numbers will be covered. PREREQUISITES: High School Math and a COMPASS Score in Algebra Domain of 42 or above, or passing grade in MATH 101.

**MATH 104 TECHNICAL MATHEMATICS****CREDITS: 3**

This course includes real numbers and variable expressions, first-degree equations, polynomials, factoring, rational expressions, rational exponents and radicals, geometry, quadratic equations and trigonometry. This course is designed for students who are preparing for technical careers. It stresses a working knowledge of applied mathematical concepts. The practice problems are applications from various technical fields but do not require prior knowledge of the technical applications. Problems are selected to help develop an understanding of where and how mathematics is used in the various fields of employment. PREREQUISITES: High School Math and a COMPASS Score in Pre-Algebra Domain of 40 or higher.

**MATH 112 BUSINESS MATHEMATICS****CREDITS: 3**

A practical, working knowledge of relevant mathematical ideas and computations is developed for preparation in many careers, as well as in daily and consumer life. Topics include: arithmetic operations with: whole and decimal numbers; common fractions; ratio, rate, proportion, percent; statistics and graph interpretation; discounts, markup/markdown; and many uses of formulas, including payroll, simple and compound interest, credit, mortgage, and annuities calculations. Each unit refreshes essential computation skills, builds with calculator and data practices, graphic and geometric descriptions, and then leads to related problem-solving skills. Computer, consumer, and many business applications are provided. Pencil-paper, calculator, and estimating methods are all stressed.

**MATH 120 TRIGONOMETRY****CREDITS: 3**

Topics include: trigonometric functions, equations, and identities; inverse trigonometric functions; exponential and logarithmic functions, and applications of these functions. PREREQUISITE: High School Math and a COMPASS Score in Algebra Domain of 42 or above, or passing grade in MATH 101.

**MTH 100 ELEMENTARY ALGEBRA****CREDITS: 3**

This course prepares students for college level mathematics. Topics generally include: Basic properties of real numbers, exponents and radicals, rectangular coordinate geometry, solutions to linear and quadratic equations, inequalities, polynomials and factoring. Students may also be introduced to functions and systems of equations. PREREQUISITES: High School Math and a COMPASS Score in Algebra Domain of 0-29.

**MDS 110 MEDICAL TERMINOLOGY I****CREDITS: 3**

This course will provide students with a foundation for the study of medical terminology. Students will be taught to divide words into component parts, to recognize basic combining forms, suffixes and prefixes as well as learn their meanings. Students will also gain understanding of the organization and complexity of the body and become familiar with the location and function of major body organs and body systems.

**MDS 122 MEDICAL TERMINOLOGY II****CREDITS: 3**

This course is a continuation of Medical Terminology I. Medical terminology is a special vocabulary that is needed in order to communicate with other health care professionals. PREREQUISITE: MDS 110 MEDICAL TERMINOLOGY I.

**MDS 210 HEALTH CARE CODING I****CREDITS: 4**

This is an introductory course to the statistical classification system of the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), the system in use in hospitals and private medical practices for the classification and reporting of morbidity and mortality in the United States. Many third party payment systems are based on the ICD-9-CM classification and coding system. PREREQUISITES: MDS 110 MEDICAL TERMINOLOGY I and MDS 122 MEDICAL TERMINOLOGY II.

**MDS 211 HEALTH CARE CODING II****CREDITS: 3**

This course is an introduction to CPT Evaluation and management, radiology and laboratory codes. HCPCS coding system will be investigated. Additionally, this course includes an overview and education of electronic coding systems. It is a continuation of coding from Health Care Coding I objectives with the introduction of DRG and APC systems of reimbursement. ICD-9, CPT and HCPCS manuals will be utilized.

**MDS 212 HEALTH CARE FUNDAMENTALS AND REIMBURSEMENT****CREDITS: 3**

This course will cover financial reimbursement, third party payers, including the government program. HIPAA regulations and clinical and hospital corporate compliance issues will be reviewed.

**MDS 299 INTERNSHIP****CREDITS: 3**

This course is designed to place the student in an actual work situation for which they have been trained. It is designed to give them experience in the medical administration field.

**MED 299 MEDICAL TRANSCRIPTION PRACTICUM****CREDITS: 2-4**

This course is designed to place the student in an actual work situation for which they have been trained. It is designed to give them experience in the medical transcription field. PREREQUISITE: The student must have maintained a cumulative 2.5 GPA or higher, and must be enrolled in the final semester of their program.

**MTS 102 MEDICAL TRANSCRIPTION I****CREDITS: 3**

This course introduces students to the medical transcription profession through hands-on practical applications. Students will transcribe simulated dictation from the field of general medicine while honing their English and medical terminology skills. PREREQUISITES: CIS105 MICROCOMPUTER SOFTWARE APPLICATIONS, COC 110 KEYBOARDING I, MD S110 MEDICAL TERMINOLOGY I, and HC 114 ANATOMY AND PHYSIOLOGY FOR THE HEALTH PROFESSIONS.

**MTS 124 DISEASE PROCESSES I****CREDITS: 3**

This course is offered for students entering allied health careers and for students interested in learning the fundamentals of human disease. This course also introduces important terminology, the study of disease, inflammation and allergy, neoplasia, heredity and disease, and dietary factors and disease, as well as the major diseases associated with each body system and the role stress and aging play in health and disease. Students are also introduced to the concept of wellness. PREREQUISITES: HC114 ANATOMY & PHYSIOLOGY, MDS 110 MEDICAL TERMINOLOGY I, and MDS 122 MEDICAL TERMINOLOGY II.

**MTS 212 BASIC PHARMACOLOGY****CREDITS: 3**

This course is not to instruct in the prescribing or administration of medication. Rather, its purpose is to provide a framework of knowledge to help the student recognize drug names and drug classes; understand drug actions and the rationale for treatment; discern between sound-alike drugs; understand why side effects, allergic effects, and other effects of drugs occur; and address various current healthcare issues relating to pharmacology and drugs.

**MTS 213 MEDICAL TRANSCRIPTION II****CREDITS: 3**

This course incorporates skills in information processing, medical terminology, and machine transcription in order to produce medical reports for health care facilities. Students transcribe dictation from several specialty areas including Obstetrics, Gastroenterology, Urology, Orthopedics, Hematology, and Immunology. Proper format, punctuation, and increased accuracy are emphasized. PREREQUISITE: MTS 102 MEDICAL TRANSCRIPTION I.

**MTS 214 DISEASE PROCESSES II****CREDITS: 3**

This course will center on "Special Pathology." Emphasis will be placed on diseases of individual organs and organ systems. The objective is to describe important pathological mechanisms in considerable detail, while exposing the language of medicine. PREREQUISITE: MTS 124 DISEASE PROCESSES I.

**MTS 222 MEDICAL TRANSCRIPTION III****CREDITS: 3**

This course introduces students to advanced medical transcription material from medical specialties including Cardiology, Orthopedics, Gastroenterology, Radiology, and Surgery. Student transcriptionists will be exposed to the broad scope of medicine and the continuing need for accurate documentation. Emphasis is on increased accuracy and independence with decreased assistance. PREREQUISITE: MTS 213 MEDICAL TRANSCRIPTION II.

**MTS 232 MEDICAL TRANSCRIPTION IV****CREDITS: 3**

In this course students transcribe over 100 surgery reports. The surgery unit is divided into eight body systems: Cardiovascular/Thoracic Surgery, Gastrointestinal Surgery, Genitourinary Surgery, Head and Neck Surgery, Neurosurgery, Obstetrics and Gynecology Surgery, Orthopedic Surgery, and Plastic Surgery. **PREREQUISITE:** MTS 213 MEDICAL TRANSCRIPTION II.

**NSG 114 PHARMACOLOGY IN NURSING****CREDITS: 3**

This course is designed to present material on the administration of medications in a safe and responsible way. Information on medications is presented according to body systems. The nursing process is incorporated into drug information; drugs are discussed according to their classification, side effects and nursing implications for administration. Dosage calculations are covered.

**NSG 115 FOUNDATIONS IN NURSING LAB****CREDITS: 2**

This is the lab component of Foundations in Nursing. This lab course offers a thorough introduction to the Fundamental Skills required of the 21<sup>st</sup> Century Nurse. Emphasis is placed on the development of the myriad of basic nursing skills, including the cornerstone of nursing physical assessment. Skills offered range from basic (such as bed-making, hygiene and skin care) through complex (airway management, oxygenation, and fluid/chemical balance).

**NSG 116 FOUNDATIONS IN NURSING CLINICAL****CREDITS: 4**

This is the clinical component of Foundations in Nursing. These beginning nursing students provide direct patient care in a variety of adult health and long-term care settings. The students are supervised by RN instructors at all times. This course allows for application of knowledge obtained from NSG 115 and NSG 117 with an emphasis on Physical Assessment, Therapeutic Communication, and Application of the Nursing Process.

**NSG 117 FOUNDATIONS IN NURSING****CREDITS: 5**

This course establishes the foundation for nursing practice by providing the fundamental concepts and skills needed to meet basic human physiological needs. An introduction to the nursing process and critical thinking is presented. **PREREQUISITES:** HC 114 ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS, HC 113 MEDICAL TERMINOLOGY FOR THE HEALTH PROFESSIONS and three credits of the CIS MICROSOFT SOFTWARE APPLICATIONS.

**NSG 118 GERIATRIC CLINICAL****CREDITS: 1**

Laboratory and clinical experiences are incorporated into this course to enhance the learning process. The clinical component includes direct care of the older adult with focus on assessment skills

**NSG 119 MENTAL HEALTH NURSING****CREDITS: 2**

This course presents basic concepts of mental health/illness and offering care to clients. Categories of mental illness are discussed along with common therapies used to treat them. The course also addresses issues that nurses will face as they work with clients with special mental and emotional needs. There is a clinical component included in this course.

**NSG 125 MATERNAL/CHILD HEALTH NURSING****CREDITS: 4**

This course introduces the student to comprehensive family centered care, wellness, health promotion and illness prevention. The course focuses on growth and development of the child from conception to adolescence and incorporates family dynamics. **PREREQUISITE:** COMPLETION OF ALL FIRST SEMESTER COURSES.

**NSG 128 ADULT HEALTH NURSING LAB****CREDITS: 1**

This is the lab component of the Adult Health Nursing Course. This lab course includes offers a thorough introduction of advanced nursing skills utilized by the Practical Nurse. Skills taught in this course range in complexity from simple to advanced. Skills taught include: Tracheotomy Care, Central Line Care, Advanced Neurological Assessment, and Intravenous insertion and care.

**NSG 129 ADULT HEALTH NURSING****CREDITS: 6**

This course includes theory with emphasis on care of patients with diseases/disorders of the following systems: Nervous, Sensory, Respiratory, Circulatory, Urinary, Gastrointestinal, Endocrine, Reproductive, Musculoskeletal, Immune, Integumentary, and Hematological. Nursing assessment and evaluation is integrated into the study of disease process. **PREREQUISITE:** COMPLETION OF ALL FIRST SEMESTER COURSES.

**NSG 130 ADULT HEALTH NURSING CLINICAL****CREDITS: 6**

This is the clinical component of Adult Nursing. The students provide direct care to clients in a variety of acute, inpatient settings and in physician offices and outpatient care centers. They are supervised by RN Instructors at all times. They utilize the various components of the nursing process to design and provide appropriate care. **PREREQUISITE:** COMPLETION OF ALL FIRST SEMESTER CLASSES AND SUCCESSFUL PROGRESSION IN NSG 126 ADULT HEALTH NURSING.

**NSG 135 PROFESSIONAL DEVELOPMENT****CREDITS: 2**

This is designed to prepare the student for successful transition into the workforce. NCLEX (National Certification Licensure Exam) review is included to prepare the student for licensure exam. This course also incorporates skills to assist the student in developing a portfolio (resume and overview of clinical experience) to assist in job placement.

**NSG 136 MENTAL HEALTH PRACTICUM****CREDITS: 1**

In this course, the student will apply the nursing process and mental health nursing theory in the care of clients with mental illnesses. The student will also gain knowledge of the importance of milieu in the treatment of mental illnesses and the various contributions of the mental health team members. PREREQUISITE: NSG 119 MENTAL HEALTH NURSING.

**NSG 138 MATERNAL/CHILD HEALTH PRACTICUM****CREDITS: 2**

This course is the clinical component of maternity and pediatric nursing. The clinical settings are varied and include but are not limited to hospitals, clinics, out-patient facilities, and physicians' offices. PREREQUISITES: NSG 125 MATERNAL/CHILD HEALTH NURSING.

**NSG 139 ADULT HEALTH PRACTICUM****CREDITS: 4**

This course emphasizes the specific nursing care for clients with disorders of each body system. The nursing process and critical thinking are utilized to identify symptoms, provide care, set goals and evaluate nursing care for each of the identified disorders. Clinical experiences are a fundamental component of this course. Students are paired with a practicing LPN or RN in an adult health clinical setting. PREREQUISITES: NSG 117 FOUNDATIONS IN NURSING, NSG 129 ADULT HEALTH NURSING, AND NSG 114 PHARMACOLOGY IN NURSING.

**ORT 010 ORIENTATION****CREDITS: 1**

The course is designed to increase the student's success in school by assisting the student in obtaining skills necessary to complete his/her education objectives. Topics include: study skills, communications skills, and problem solving skills.

**PCN 120 WEB APPLICATIONS TOOLS****CREDITS: 3**

This course introduces a variety of applications and tools for web development. The student will learn how to create and manipulate web pages using these tools.

**PCN 125 WEB PROGRAMMING LANGUAGES****CREDITS: 3**

This course is intended to give students a complete understanding of web programming languages such as Hypertext Markup Language, Cascading Style Sheets and Javascript. Students will further their understanding of object oriented programming as well as learn new markup languages. Students will learn how to use these languages to make web applications more interactive and friendly.

**PCN 126 SYSTEMS ANALYSIS AND DESIGN****CREDITS: 3**

This course is intended to give students the ability to manage projects and develop project plans using object modeling. It will enable students to learn to solve problems on large projects much like the ones they will encounter on the job. PREREQUISITE: ADVANCED PROGRAMMING, PROGRAMMING LOGIC & DESIGN.

**PCN 128 PROGRAMMING LANGUAGE CONCEPTS****CREDITS: 3**

This course is intended to give students the understanding of various programming language syntax and for what type of applications these languages are designed to be used.

**PCN 230 DESIGN PATTERNS****CREDITS: 3**

This course is intended to give students a solid foundation in object oriented design using many common software development patterns. PREREQUISITE: INTERMEDIATE PROGRAMMING, PROGRAMMING LOGIC & DESIGN.

**PCN 232 WEB APPLICATION DESIGN WITH ASP.Net****CREDITS: 3**

This course will give students the understanding of developing web applications using Web-Forms and the Net framework. It will solidify the web language concepts as well as object oriented programming. PREREQUISITE: ADVANCED PROGRAMMING, DATABASES, WEB DEVELOPMENT TOOLS.

**PCN 235 DEVELOPING APPLICATION USER INTERFACES****CREDITS: 3**

This course is intended to expand on the students programming experience by introducing Windows Presentation Foundation (WPF) and elements of good user interface design. It will reinforce programming concepts learned to this point. PREREQUISITE: ADVANCED PROGRAMMING

**PCN 239    ADVANCED WEB DEVELOPMENT****CREDITS: 3**

This course is intended to expand on the students' programming experience by introducing cutting edge concepts and techniques for developing web applications like those employed by Google and Microsoft in their latest software releases. Topics covered will include service oriented architecture and software + services. It will also give a better understanding in XML as many advanced techniques employ the use of XML. PREREQUISITE: ADVANCED PROGRAMMING, DATABASES, DESIGN PATTERNS.

**PCN 240    ADVANCED PROGRAMMING CONCEPTS****CREDITS: 3**

This course will give students an understanding of advanced programming concepts such as threading, delegates, raw communications and lambdas. PREREQUISITES: ADVANCED PROGRAMMING, PROGRAMMING LOGIC & DESIGN, DESIGN PATTERNS.

**PCN 242    PROGRAMMING WORKFLOW****CREDITS: 3**

This course will teach students to define human and system interactions as a series of workflows that can be mapped and implemented. PREREQUISITES: PROGRAMMING LANGUAGE CONCEPTS, INTERMEDIATE PROGRAMMING.

**PCN 245    SECURITY AND CRYPTOGRAPHY****CREDITS: 3**

This course is intended to give students a comprehensive look at modern cryptography. It will give them an understanding on how programmers and electronics communications professionals can use cryptography for ciphering and deciphering messages and to secure private data. It will give them the ability to implement cryptography in their applications. PREREQUISITES: A LAPTOP COMPUTER IS REQUIRED FOR COURSEWORK. YOU MAY PURCHASE ONE THROUGH WDT OR YOU MAY BRING YOUR OWN. CONSULT YOUR INSTRUCTOR OR THE WDT IT DEPARTMENT FOR SPECIFICATIONS. ADVANCED PROGRAMMING, DATABASES, PROGRAMMING LANGUAGE CONCEPTS, PROGRAMMING LOGIC & DESIGN, DESIGN PATTERNS

**PCN 249    DEVELOPING SMARTPHONE APPLICATIONS****CREDITS: 3**

This course will teach students the essentials for developing applications for mobile devices. It will address real world needs for businesses for custom mobile applications.

**PCT 110    PATIENT CARE TECH I****CREDITS: 2**

This course is designed to provide the student with the knowledge and basic health care skills necessary to become a nursing assistant or a patient care tech in the acute care setting.

**PCT 111    PATIENT CARE TECH I LAB****CREDITS: 1**

Lab for PCT110.

**PCT 120    PATIENT CARE TECH II****CREDITS: 2**

This course is designed to provide the student with advanced knowledge and advanced patient care skills necessary to become a patient care tech in the acute care setting. PREREQUISITE: PCT110

**PCT 299    PATIENT CARE TECH CLINICAL****CREDITS: 2**

This course provides the HUC/PCT students the opportunity to apply the skills and knowledge obtained from the classroom environment to the clinical setting. Basic nursing skills and upper level skills will be utilized to care for the hospitalized patient while under the guidance of a preceptor and the course instructor. PREREQUISITES: PCT110, PCT120, CPR100

**PH 102    INTRODUCTION TO PHLEBOTOMY****CREDITS: 2**

This course introduces students to the practice of phlebotomy and the role of the phlebotomist as part of the health care team. Students will become familiar with phlebotomy equipment and learn about basic blood collection procedures. Special blood collection procedures, safety procedures, quality management and legal issues are discussed. The importance of professionalism and good communication skills in the patient care environment is stressed.

**PH 121    PRINCIPLES AND PRACTICES****CREDITS: 3**

This course provides the student with active learning experiences and hands-on training necessary to develop the skills of an entry-level phlebotomist. The student will learn the procedures performed by a phlebotomist and will become familiar with different types of equipment and techniques applied. Emphasis will be placed on professional behavior, communication skills, personal and patient safety and technical skill development.

**PH 123      LABORATORY ASSISTANT TECHNIQUES****CREDITS: 3**

This course provides training for the clinical laboratory assistant including laboratory safety, equipment and instrumentation, basic laboratory mathematics, regulations and standards, quality assurance practices, record keeping and billing, specimen processing, CLIA waived and point-of-care laboratory testing.. The course combines theory and hands-on practice of laboratory procedures with an emphasis on the necessity for accuracy and attention to detail. PREREQUISITES: HC 114 ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS, HC 113 MEDICAL TERMINOLOGY FOR THE HEALTH PROFESSIONS, AND PH 121 PRINCIPLES AND PRACTICES.

**PH 124      PHLEBOTOMY/LABORATORY ASSISTANT CAPSTONE****CREDITS: 1**

This capstone course provides opportunity for an integration of program coursework, knowledge, skills, and experiential learning enabling the student to demonstrate achievement of the program goals. The course will focus on problem analysis, critical and creative thinking, and effective communication. Students will also complete a program of study post-test.

**PH 130      CLINICAL PRACTICE****CREDITS: 8**

This course consists of clinical practice in phlebotomy and laboratory assistant training at various affiliated health care institutions and laboratories. The program director will coordinate clinical schedules and evaluations. PREREQUISITE: PH 102 INTRO TO PHLEBOTOMY AND PH 121 PRINCIPLES AND PRACTICES.

**PHR 110      PHARMACOLOGY/PHARMACEUTICAL PRODUCTS I****CREDITS: 3**

This course is designed to present material to the pharmacy technician as it applies to the preparation and dispensing of pharmacologic agents. Drugs are discussed according to their classification, trade and generic name, drug action (mechanism), side effects, toxicity, and contraindications.

**PHR 111      PHARMACY I****CREDITS: 3**

This course is designed to present material to the pharmacy technician as an introduction to the field of pharmacy. The course will introduce the student to all aspects of the pharmacy from the relationship between the pharmacist and the pharmacy technician to the details necessary to be a successful pharmacy technician.

**PHR 120      PHARMACY II****CREDITS: 3**

This course is designed to present material to the pharmacy technician as an introduction to the field of pharmacy. The course will continue to introduce the student to all aspects of pharmacy to include pharmacy manufacturing, pharmacy repackaging, purchasing and inventory control, drug categories, medication errors, and drug interactions.

**PHR 121      PHARMACOLOGY/PHARMACEUTICAL PRODUCTS II****CREDITS: 3**

This course is designed to present material to the pharmacy technician as it applies to the preparation and dispensing of pharmacologic agents. Drugs are discussed according to their classification, trade and generic name, drug action (mechanism), side effects, toxicity and contraindications. Drugs will include review of prescriptions as well as non prescription (over the counter) products.

**PHR 122      PHARMACY LAW AND ETHICS****CREDITS: 2**

This course is designed to present material to the pharmacy technician on professional ethics and the philosophy, requirements, administration and enforcement of local, state and federal laws related to the practice of the profession of pharmacy.

**PHR 124      PHARMACY LAB****CREDITS: 2**

The course is designed to provide the pharmacy technician with the practical hands-on experience with all aspects of pharmacy preparation and dispensing of sterile and non sterile pharmaceuticals.

**PHR 126      PHARMACY SYSTEMS SOFTWARE****CREDITS: 1**

This course is designed to present material to the pharmacy technician as an introduction to pharmacy management software. Aspects of retail prescription filling, various pharmacy reports, and medication orders will be covered including adding patient and insurance information to the database, filling and refilling tasks, running the daily prescription report, and entering new medication orders.

**PHR 127      PHARMACY CALCULATIONS****CREDITS: 2**

This course is designed to present material to the pharmacy technician in the areas of pharmacy math. All aspects of pharmacy math will be covered including metric and household measurements, special calculations for compounding, understanding the apothecary system, pharmacy business math, and preparing injectable medications.

**PHR 128 PHARMACY OPERATIONS****CREDITS: 2**

This course is designed to present material to the pharmacy technician as an introduction to institutional pharmacy and retail pharmacy. All aspects of institutional pharmacy and retail pharmacy will be covered to include organization and function of pharmacists and technicians in this setting. Also included are the institutional medication distribution systems and prescription filling in retail pharmacy.

**PHR 131 CLINICAL ROTATIONS****CREDITS: 8**

This course emphasizes the basics of pharmacy practice and exposes the student to the practical aspects of dispensing, compounding and inventory control at an "on the job" training site in an institutional, retail or alternative pharmacy practice setting.

**PLL 111 INTRODUCTION TO PARALEGALISM****CREDITS: 2**

This course provides the student with an introduction to the fundamental concepts techniques essential to the practicing paralegal. Lecture topics include an overview of the American legal system and a survey of such legal sub-fields as torts, criminal law, litigation, contract law, and real property. Several weeks of the course are devoted to the study of professional ethics for the paralegal.

**PLL 123 REAL PROPERTY****CREDITS: 2**

This course offers the paralegal student a practical introduction to the basics of real property law and real estate law. During the course, the student examines legal forms, checklists, and problems that a paralegal would encounter in a law firm involved in handling real estate transactions and litigating real property cases.

**PLL 124 CRIMINAL LAW****CREDITS: 2**

This course is designed to provide the student with an introduction to the basic concepts of criminal law and criminal procedure and the terminology associated with the practice of criminal law.

**PLL 125 TORTS****CREDITS: 3**

This course introduces the student to substantive tort law in the context of trial preparation. The focus of the course is on the skills needed by a paralegal to be an effective litigation assistant.

**PLL 126 CONTRACTS****CREDITS: 3**

This is an introduction to the law of contracts. The course includes instruction in the elements of a contract, the formation of a contract, drafting a contract, mistakes, conditions and the discharge of legal obligations, assignments, delegations, and third-party beneficiaries and contract remedies.

**PLL 132 LEGAL RESEARCH AND WRITING I****CREDITS: 4**

This course provides the student with an introduction to the basic tools of legal research and writing as used in the modern law office. The course includes an overview of our system of government and law, methods of legal research, research resources, and an introduction to computerized research and the drafting of legal documents.

**PLL 133 LEGAL RESEARCH AND WRITING II****CREDITS: 4**

This course is designed to further refine the research and writing skills acquired in the prerequisite course, Legal Research and Writing I. The emphasis in this course is placed on successful completion of more difficult research assignments and further refinement of the student's legal writing skills. **PREREQUISITE: PLL 132 LEGAL RESEARCH & WRITING I.**

**PLL 211 AMERICAN LEGAL SYSTEM AND CONSTITUTIONAL LAW****CREDITS: 3**

This course concentrates on instructing the student concerning the function of the United States legal system and a broad overview of constitutional law. The course also instructs students in the interaction of the legal system with other branches of government.

**PLL 212 LITIGATION AND CIVIL PROCEDURE****CREDITS: 3**

This course uses the casebook method, supplemented by the Federal Rules of Civil Procedure and the South Dakota Rules of Civil Procedure, to instruct students in the basic requirements of jurisdiction, service of process, joinder, discovery, depositions, motions, trial, and appeal.

**PLL 215 LAW OF BUSINESS ORGANIZATIONS****CREDITS: 2**

This course introduces the student to the basic concepts, terminology and doctrines involved in business law. The student is instructed in the procedures necessary for the formation of sole proprietorships, limited and general partnerships and corporations and is introduced to the essential case opinions in business and corporate litigation.

**PLL 217 EVIDENCE****CREDITS: 3**

This course focuses on an introduction to the Federal Rules of Evidence, includes a study of pretrial, trial, and post-trial evidentiary motions preparation. The course also explores how such preparation impacts the outcome of litigation at both trial and administrative hearings.

**PLL 223 WILLS AND PROBATE****CREDITS: 2**

This course is designed to instruct the student as to procedures, techniques, and substantive law involved in the administration of estates and trusts. The student is required to draft a will and a simple trust as well as to prepare pleadings and other documents necessary for probate administration.

**PLL 224 BANKRUPTCY AND COMMERCIAL LAW****CREDITS: 2**

This course provides the student with instruction in the essentials of basic bankruptcy and commercial law. It also instructs the student in proper document filing under Chapters 7, 11, 12 and 13 of the Bankruptcy Code.

**PLL 225 ADMINISTRATIVE LAW****CREDITS: 2**

This course is designed to convey to students the role administrative law plays in the American political system and its role in shaping, guiding, and restricting actions of Administrative agencies.

**PLL 226 OFFICE MANAGEMENT****CREDITS: 2**

This course introduces the student to the theory and practical aspects of law office management, including the functions of management, administrative procedures, basic principles of finance, facilities management, personnel management, and leadership skills.

**PLL 227 INTRODUCTION TO ENVIRONMENTAL LAW****CREDITS: 2**

This course is designed to provide the student with a background in the basic issues pervading environmental laws, regulations, and disputes. The course will introduce the procedures utilized to integrate environmental policies into the social system and insight into how to accommodate environmental concerns with economic realities, property rights, and national policy in such other areas as energy, transportation, and public health.

**PLL 228 INTRODUCTION TO NATIVE AMERICAN TRIBAL LAW, TREATIES, & POLICIES****CREDITS: 2**

This course is designed to acquaint the student with the basic principles underlying federal decisions in Native American law and the interrelationship between these decisions and tribal codes, constitutions, and treaties. The student is instructed in historical perspectives relative to Native American legal issues, as well as modern theories regarding tribal sovereignty and jurisdiction, both civil and criminal.

**PLL 231 FAMILY LAW****CREDITS: 2**

This course teaches students about the various legal and social issues involved in the practice of family law. Students are taught techniques for the drafting of pleadings necessary in a family law case. Students also receive instruction in client interviewing techniques and trial preparation in the areas of divorce, legal separation, adoption, and child custody.

**PLL 232 LITIGATION CLINIC I****CREDITS: 2**

This course introduces the student to the proper methods of conducting an investigation through interviewing techniques, record investigation, the taking of statements, and reporting of obtained information. The bulk of the course is based on a single fact pattern exercise, allowing the student to follow the progress of one case from beginning to the early stages of the discovery process.

**PLL 233 LITIGATION CLINIC II****CREDITS: 2**

This course effectively ties together the operation of the rules of civil procedure, rules of evidence, and common law principles. The student will be instructed regarding proper preparation of a case file for trial. The foundation of the course is the fact pattern exercise introduced to the student in Litigation Clinic I. Picking up from where that course concluded, the student follows the progress of the case from the early discovery stages through the trial and post trial stages. PREREQUISITE: PLL 232 LITIGATION CLINIC I.

**PLL 298 INTERNSHIP****CREDITS: 7**

The internship is an on the job training work experience. The student works at a law firm, governmental agency, or other appropriate office in the final semester of study for 280 hours of documented work experience. During this internship the student is under the direct supervision of an attorney or other qualified person. The requirements and responsibilities for the paralegal student must be agreed upon in advance. The students are also required to meet with the instructor of the course to prepare their resumes. PREREQUISITE: Registration in final semester of study only, unless approved by the lead instructor of the program.

**PSYC 101 GENERAL PSYCHOLOGY****CREDITS: 3**

General Psychology 101 is a course designed to help the student become aware of the field of psychology and its applications. The student will learn the major behavior of organisms, the origins and important contributors to the field, an understanding of the scientific method of research employed in psychology, how to report basic research findings, and the basic concepts and terminology of psychology.

**PSYC 103 HUMAN RELATIONS IN THE WORKPLACE****CREDITS: 3**

Success in the world of work requires not only the ability to perform according to the requirements of the position, but also the ability to adjust and get along with others. The purpose of this course is to help students grasp the importance of human relations skills in both their personal and career lives. It will introduce students to the skills necessary to create and maintain positive relationships and interactions in the workplace.

**PSYC 113 HUMAN RELATIONS FOR HEALTH CARE PROFESSIONALS****CREDITS: 2**

This course is designed for students enrolled in allied health care programs. The student in health care must understand the importance of professionalism. This course introduces the student to the professional standards necessary to all health care workers and to assist the student in developing the traits and behaviors that are required to successfully and effectively interact with coworkers, patients, and visitors.

**SOC 100 INTRODUCTION TO SOCIOLOGY****CREDITS: 3**

This course is designed to develop the sociological thinking of students. The multifaceted nature and depth of sociology will be presented in such areas as culture, socialization, ethnicity, and political systems.

**SPCM 101 FUNDAMENTALS OF SPEECH****CREDITS: 3**

This course covers the basic principles of effective public speaking with emphasis on preparation of speeches.

**ST 102 INTRODUCTION TO SURGICAL TECHNOLOGY****CREDITS: 3**

This course is an introduction to concepts and practices of Surgical Technology. It encompasses the role of the surgical technologist, a basic history of surgery, the surgical patient, medical-legal issues, safety, infection control, disinfection and sterilization, and concepts of wound closure and wound healing.

**ST 111 INTRODUCTION TO SURGICAL TECHNOLOGY LAB****CREDITS: 3**

This course is an introduction to Surgical Technology in a lab setting and clinical setting. Students will learn and apply the principles of aseptic technique, care of the perioperative patient, duties of the circulator, and principles of safety as they apply to the perioperative environment. Students will learn basic surgical instrumentation, equipment, and supplies. Students will be required to either pass BLS Healthcare Provider or present a current Healthcare level CPR certification that does not expire before the following September.

**ST 125 PRINCIPLES AND PRACTICE OF SURGICAL TECHNOLOGY****CREDITS: 3**

Student will apply techniques and concepts mastered in the first semester. Students will continue to learn surgical instrumentation, basic, instrument setups, patient draping, safe handling/handling of surgical instrumentation, sharps, and medications, and the proper performance of surgical counts. Students will also participate and demonstrate competence in a variety of simulated procedure based scenarios and interventions in the lab performing both the scrub and circulator role. **PREREQUISITES:** All first semester health courses.

**ST 126 SURGICAL PROCEDURES****CREDITS: 7**

This course is designed to introduce the students to diagnostic procedures and minor and major procedures in all surgical areas. **PREREQUISITES:** All first semester health courses.

**ST 127 SCIENCE AND TECHNOLOGIES FOR THE SURGICAL TECHNOLOGIST****CREDITS: 1**

This course introduces the Surgical Technology student to the applications of a wide variety of specialty equipment used in the operating room. The students will also be able to relate the concepts of electricity and physics as they apply to the surgical environment. The impact and uses of robotics in surgery will also be discussed. **PREREQUISITES:** All first semester health courses.

**ST 128 SURGICAL PHARMACOLOGY****CREDITS: 2**

In this course, students will learn the concepts and practices of pharmacology and anesthesia care in the perioperative environment. **PREREQUISITES:** All first semester health courses.

**ST 135 CLINICAL PRACTICE****CREDITS: 3**

This course provides clinical practice at local healthcare facilities for the surgical technology student. The student will progressively apply concepts of both the scrub and circulator role, continually building on experiences gained in the clinical setting and the classroom. Students will be under the direction of the clinical instructor and mentored by clinical preceptors provided by the facility. PREREQUISITE: ST 111

**ST 136 CLINICAL PRACTICE II****CREDITS: 6**

Clinical practice takes place at a hospital setting in the regional area. It consists of 240 hours of practice in the OR with a rotation to other departments. With a preceptor, students will apply their knowledge and skills and perform as a surgical technologist. PREREQUISITES: All first and second semester health courses.

**ST 137 CLINICAL PRACTICE III****CREDITS: 6**

This is a continuation of ST-136. Clinical Practice III takes place at a healthcare facility. It consists of 240 hours of practice in the perioperative environment. Students will participate in a minimum of 80 surgical procedures in the scrub role. At least 25 of these procedures will be performed independently without assistance from a preceptor. Students will continue to develop skills to an entry level or better for employment as a Surgical Technologist. Students will also be required to sit for the Certifying Exam in Surgical Technology at WDT on a date determined at the beginning of the semester. PREREQUISITES: All first and second semester health courses.

**TTT 100 OCCUPATIONAL SKILLS****CREDITS: 2**

This course is designed to enable the student to understand the safety aspects of the trade as well as common skills required for successful completion of other areas of the automotive program. This class is a prerequisite for all classes in the automotive program.

**TTT 102 INTRODUCTION TO ELECTRONICS****CREDITS: 3**

This course is designed to enable the student to understand electrical principles and how they apply to the automobile.

**TTT 103 VEHICLE ELECTRONICS****CREDITS: 3**

This class is designed to provide the students with the electronics background necessary to understand and diagnose the sophisticated electronic systems of the modern automobile. The student will also learn to use state-of-the-art test equipment, used by automotive technicians to solve complex electrical problems. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**TTT 104 STARTING & CHARGING SYSTEMS****CREDITS: 2**

Starting and charging systems is a two-semester hour course designed to enable the student to understand the operation and function of automotive starting and charging systems. Students will diagnose and service automotive batteries, alternators, and starters using state-of-the-art test equipment and techniques. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**TTT 107 ENGINE PERFORMANCE & DRIVABILITY****CREDITS: 4**

Engine Performance and Drivability is a four semester-hour course designed to provide the student with the necessary instruction to diagnose and repair ignition-, fuel-, and emissions-related drivability problems. The student will use mock-ups, school vehicles, and customer-related issues to complete the instruction. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**TTT 115 ENGINE CONSTRUCTION & OPERATION****CREDITS: 3**

This course is designed to instruct the student on the operation and diagnosis of a four-cycle gasoline automobile engine. Particular attention will be paid to the techniques of analyzing internal failures of the compression lubrication and cooling systems. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**TTT 118 ELECTRONIC FUEL INJECTION****CREDITS: 6**

Electronic Fuel Injection and Computerized Engine Controls is a course designed to instruct the student on the components of fuel and timing management, fuel delivery, and the diagnostic techniques for solving emission and drivability related problems. Attention will be paid to both OBD I and OBD II diagnostic strategies and scan tool usage. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**TTT 120 SHOP & PARTS MANAGEMENT****CREDITS: 1**

The course is designed to instruct the student in the wholesale and retail automobile parts industry to assess the knowledge and the skills necessary to work competently as a parts specialist. The course will enable the student to possess knowledge about a wide range of vehicle component systems for all makes and models, as well as customer relations, sales, merchandising, vehicle identification, cataloging, and inventory management skills. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**TTT 121 INTRO TO HYBRIDS****CREDITS: 1**

In this class, the students will learn the different types of Hybrids, how Hybrids work, precautions and maintenance. PREREQUISITE: TTT 103 VEHICLE ELECTRONICS

**TTT 122 CHASSIS WIRING****CREDITS: 1**

This course is designed to instruct the student on the diagnosis and repair of common chassis wiring problems. Instruction will include how numerous automobile accessories common to all automobiles function as well as the diagnosis and repair of these systems. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**TTT 129 WELDING/EQUIPMENT****CREDITS: 2**

This course teaches the student safety procedures and familiarization with MIG set-up operations and welding in flat, horizontal, vertical, and overhead positions. In addition, the use and care of oxyacetylene welding and the cutting torch are covered. PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS and TTT 102 INTRODUCTION TO ELECTRONICS.

**TTT 130 PREVENTATIVE MAINTENANCE****CREDITS: 3**

This course encompasses the characteristics and benefits of a well-planned maintenance program. This course will cover the tools and procedures needed to perform a proper preventive maintenance inspection (PMI). PREREQUISITE: TTT 100 OCCUPATIONAL SKILLS.

**WDM 110 SHIELDED METAL ARC WELDING****CREDITS: 3**

Shielded Metal Arc Welding classroom theory and skills training in the lab will allow the student to attain an acceptable level of welding skills. Equipment safety, setup, operation and maintenances, electrode identification, application and metallurgy are covered for the welding of ferrous metals. Surface and fillet welds in all positions along with carbon arc gouging and cutting will be the main focus in this course.

**WDM 120 GAS TUNGSTEN ARC WELDING AND CUTTING PROCEDURES****CREDITS: 4**

Gas Tungsten Arc Welding and Cutting Procedures safety, welding theory, setup and skills training in the welding operations of this process. Students will fusion weld and weld adding filler metal on metal coupons in position. In addition to GTAW welding, students will learn the fundamentals of OFW/C (Oxy Fuel welding/Cutting), CAC (Carbon Arc Cutting), and PAC (Plasma Arc Cutting).

**WDM 122 GAS METAL ARC WELDING, FILLET AND SURFACE WELDS****CREDITS: 3**

Gas Metal Arc Welding classroom theory and skills training in the lab will allow the student to attain an acceptable level of welding skills. This course is designed to provide the student with a technical understanding of wire welding processes, equipment set up, metal transfers and shielding gases. The development of welding procedures to successfully weld various types and thickness of structural steels are stressed. Students will weld fillet welds in all position.

**WDM 124 SHIELDED METAL ARC WELDING GROOVED PLATE****CREDITS: 3**

Shielded Metal Arc Welding classroom theory and skills training in the lab enables the student to attain an acceptable level of welding skills. Students will weld on grooved plate with backing and open root, in and out of position. These welds will be completed on 3/8"-1" thickness metal using E7018 and E6010 electrodes. This may also include some work site internships. PREREQUISITE: WDM110 Shielded Metal Arc Welding

**WDM 127 MILL AND LATHE OPERATION, MANUAL I****CREDITS: 3**

Manual mill and manual lathe safety, setup, and operation will be taught in the classroom theory along with lab assignments that will be given to be completed. Students will learn the use of micrometers and calipers to assist the measuring of assigned projects. After safe use and setup instruction students will be assigned projects to complete in both the mill and lathe. This may also include some work site internships.

**WDM 128 MILL AND LATHE OPERATION, MANUAL II****CREDITS: 3**

This is a continuation of WDM-118 with additional classroom theory and lab assignments that will be given to be completed and graded on the quality of workmanship and acceptable tolerance allowance.

**WDM 131 SHIELDED METAL ARC WELDING TESTING****CREDITS: 3**

This course includes welding qualification testing in the SMAW process in all positions up to ¾" and unlimited thickness grooved plate, with and without backing. The AWS D1.1 Structural Steel Welding Code is used as the welding and inspection criteria.

**WDM 132 GAS METAL ARC WELDING TESTING****CREDITS: 3**

Welder qualification testing in the GMAW process, in all positions, solid wire and dual shield, up to ¾" and unlimited thickness grooved plate without backing. The AWS D1.1 Structural Steel Welding Code is used as the welding and inspection criteria.

**WDM 133 WORK SITE INTERNSHIP****CREDITS: 3**

After completion of the testing processes in WDM 131 and/or WDM 132, students will complete an internship within the welding or machining industry. Student evaluation will be completed by instructor and worksite employer.

**WDM 140 BLUEPRINT READING AND SOLIDWORKS FUNDAMENTALS****CREDITS: 3**

This course begins by introducing the student to the components, layout, and interpretation of blueprints and progresses through the fundamentals of using SolidWorks as a platform for the solid modeling method of creating digital models and engineering drawings for the manufacturing environment.

**WDM 236 PIPE WELDING I****CREDITS: 3**

The student will be produce quality grooved welds on schedule 40 pipe, 2"-6" diameter utilizing Shielded Metal Arc Welding and Gas Tungsten Arc Welding processes 2G and 5G positions. They will construct pipe joint designs and layouts. Work site internships may be included as part of the training. PREREQUISITES: WDM I or demonstrate by testing to have equivalent welding and machining skills and knowledge.

**WDM 237 FLUX CORE ARC WELDING I****CREDITS: 3**

Flux Core Arc Welding classroom theory and skills training in the lab will allow the student to attain an acceptable level of welding skills. Equipment safety, setup, operation and maintenances, electrode identification, application and metallurgy are covered for the welding of ferrous metals. Surface and fillet welds in all positions along with carbon arc gouging and cutting will be the main focus in this course.

**WDM 238 ADVANCED MACHINING I****CREDITS: 3**

Developing the students' machining skills through the use of projects designed to introduce more advanced techniques and procedures that build on their basic skills. They will have the opportunity to learn basic CNC concepts and operational procedures in the use of vertical machining centers and horizontal turning centers and to explore some of their own project ideas. Work site internships may be included as part of the training. PREREQUISITE: WDM I or demonstrate by testing to have equivalent welding and machining skills and knowledge.

**WDM 246 ADVANCED MANUFACTURING I****CREDITS: 3**

Advanced Manufacturing I is based on project design and manufacture by students. Projects may be assigned by the instructor and student projects that the instructor approves. Students will work as team members on some projects and as an individual on other projects. Every project will have CAD drawing, material list, and cost estimating prior to the manufacturing. Students will apply welding and machining skill to complete the manufacturing projects. Worksite internships may be included as part of the training. PREREQUISITES: WDM I

**WDM 247 ADVANCED AUTOMATED MANUFACTURING I****CREDITS: 3**

Students will learn safe robotic and plasma programming, maintenance and setup to complete the welding or cutting project assignments that will be given. PREREQUISITES: WDM I or demonstrate by testing to have equivalent welding and machining skills and knowledge..

**WDM 248 ADVANCED PRODUCTION I****CREDITS: 3**

This course is a lab class that lets the student create skills learning activities in the welding and or machining areas that best suit their career paths. Students under the supervision of an instructor must submit a weekly production plan that includes a time line for each of their production activities. They will be expected to complete a summery report of these weekly activities for comparison goals achieved to planned goals. PREREQUISITES: WDM I or demonstrate by testing to have equivalent welding and machining skills and knowledge.

**WDM 249 ADVANCED GAS TUNGSTEN ARC WELDING****CREDITS: 3**

Students will continue to advance their skills learned in WDM120. Ferrous and non ferrous coupons and tube joints will be welded in and out of position. PREREQUISITES: WDM120 or demonstrate by testing to have equivalent welding and machining skills and knowledge.

# PROFESSIONAL STAFF & FACULTY

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## Administrative Board

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|--------------------------|--|
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