

# **WESTERN DAKOTA TECH**

## **COURSE CATALOG**

**2013-2014**

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**800 MICKELSON DRIVE  
RAPID CITY, SD 57703**

**(605) 394-4034**

**(800) 544-8765**

**[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**

**OBJECTIVES**

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**CERTIFICATIONS/ACCREDITATIONS**

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**PROGRAM & COURSE INFORMATION**

**CORPORATE EDUCATION CENTER**

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## **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, create 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 30 educational programs granting diplomas and Associate of Applied Science degrees. In addition, a wide variety of non-credit classes, workshops, professional programs, and seminars are available through the Corporate Education Center.

## **MISSION**

Western Dakota Tech is a public institution of higher learning that embraces quality programs, expert faculty and staff, and commitment to academic excellence to teach the knowledge, skills, and behaviors students need to be successful.

## **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.

WDT will:

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

## **VISION STATEMENT**

Western Dakota Tech will be a leader in career and technical education that creates student, institutional, and community success through its practices, policies, and activities. WDT will embrace all students and provide the education they need to be successful. WDT will build a campus culture that inspires faculty and staff to reach their potential and ensures the future of the institution. WDT will build partnerships and undertake projects that strengthen the institution and the communities it serves. Finally, WDT will be a model for postsecondary education in our region and nation.

## **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.

## **PROGRAM CERTIFICATIONS/ACCREDITATIONS**

Various professional organizations approve or certify all or part of the following programs. These include:

- Collision Repair Technology: National Automobile Technicians Education Foundation
- Fire Science: ProBoard COA
- Law Enforcement Technology: Seasonal Law Enforcement Training Program and State of South Dakota Law Enforcement Standards and Training Commission
- Paralegal: American Bar Association
- Paramedic: CoAEMSP (LOR)
- 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

## **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, and 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 WDT.

## **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. WDT 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. WDT reserves the right to make changes in courses and regulations published in this catalog and other publications without obligation or prior notice.

## **CORPORATE EDUCATION CENTER**

Today's constantly changing world 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 authorized by the South Dakota Department of Public Safety to conduct Third Party Skill Testing for Commercial Driver's License in Class A/B/PS 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.

## **POST-SECONDARY CAREER INFORMATION**

South Dakota's Post-Secondary Career Coordinators' mission is to promote the benefits of CTE and the correlation to specific technical institute programs and careers. During the next year, the four technical institutes will be hosting career camps at each of the Institutes, offering professional development to school counselors and providing opportunities for secondary CTE instructors to visit the campuses and meet with their postsecondary counterparts.

The Post-Secondary Career Coordinators also will serve as a point of contact for SDMyLife, providing assistance to districts, students, and instructors with day-to-day context and relevant information regarding careers and programs of study. Professional development activities will be available at various campuses. Promotion and facilitation of articulation agreements will continue to run through their offices. Schools interested in articulating a course with one of the four institutes are encouraged to contact the Coordinators directly.

The technical institutes are pleased to announce dual credit options for South Dakota students. Information on these is located on the South Dakota Virtual School website <http://sdvs.k12.sd.us>. Career coordinators will continue to inform districts as dual credit options become available.

Contact enrollment services for more information.

# 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.

**APPLICATION PROCEDURE**

**PRE-ENROLLMENT ASSESSMENT**

**HOME-SCHOOLED STUDENTS**

**SPECIAL ADMISSIONS PROCEDURES**

**ACCEPTANCE**

**ACADEMIC ADVISING**

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**TRANSFER CREDITS**

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**REGISTRATION**

**WITHDRAWAL REFUNDS**

**TEXTBOOKS & TOOLS**

**LAPTOP COMPUTERS**

**ACADEMIC RECORDS**

**GRADUATION**

**GRADING SYSTEM**

## **APPLICATION PROCEDURE**

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

1. Submit a completed application for admissions online at [www.wdt.edu](http://www.wdt.edu).
2. Schedule to take the ACCUPLACER test. The ACCUPLACER test is a placement exam over Math, English, and Reading. There is a \$15.00 testing fee. The ACCUPLACER test will be waived if you have an ACT sub score of 18 or better in English, Math, and Reading, or a SAT sub score of at least 440 in Verbal and Math. The scores must be no more than five years old.
3. Request an official High School transcript or GED scores be sent to the Admissions office. An official transcript from a postsecondary institution must be submitted if students want transfer credits to be considered.
4. Submit a certification from a licensed 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, schedule a time to register for classes.

## **PRE-ENROLLMENT ASSESSMENT**

A pre-enrollment assessment is required of all individuals seeking admission into a program at WDT. The ACCUPLACER is administered during the initial stages of the application process. The ACCUPLACER test will be waived if you have an ACT sub score of 18 or better in English, Math, and Reading, or a SAT sub score of at least 440 in Verbal and Math. The scores must be no more than five years old.

The information from this assessment is used as a counseling tool to determine 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 ACCUPLACER test may require the individual to complete remedial coursework.

## **HOME-SCHOOLED STUDENTS**

Western Dakota Tech welcomes applications from home-schooled students wishing to pursue a technical education. Home-schooled students must submit one of the following items:

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 coursework.

Additionally, applicants must satisfactorily complete the standard admissions steps.

## **SPECIAL ADMISSIONS PROCEDURES**

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

Practical Nursing program requires all applicants to successfully pass the Test of Essential Academic Skills (TEAS) prior to taking any technical nursing courses.

Surgical Technology program requires all applicants to successfully pass the Health Occupants Basic Entrance Test (HOBET) prior to taking any technical surgical technology courses.

## **ACCEPTANCE**

Students who successfully complete the admissions process will receive a letter of acceptance. 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 ADVISING**

Academic 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.

## **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.

## **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**

Students wishing to challenge coursework for credit are required to successfully complete an examination. Approval must be requested through the Dean of Enrollment Service 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 day or online programs on a full- or part-time basis. A full-time student is someone registered for 12 or more credit hours.

A part-time student is one enrolled in fewer than 12 credit hours per semester for fall and spring or fewer than 6 credits for the summer session for academic purposes. 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 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 Accounts Office and are published in the Financial Aid Handbook.

## **TEXTBOOKS & TOOLS**

Students are required to purchase their own textbooks, tools, software, 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. WDT 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**

All students are required to have a wireless laptop computer. Please refer to the spec sheets on the WDT website.

## **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. 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 Dean of Enrollment Service 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 coursework at WDT in order to receive a diploma or degree. 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 - Incomplete	No points
IP - In Progress	No points
CE - Credit by Exam	No points
W - Withdraw	No points
AU - Audit	No points
TC - Transfer Credit	No points
AC - Articulated Credit	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.

# 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 it online to [www.fafsa.gov](http://www.fafsa.gov).

## STEPS TO APPLY

## STUDENT CONSUMER INFORMATION

## FEDERAL STUDENT FINANCIAL AID FUNDING SOURCES

## OTHER STUDENT FINANCIAL AID

## ONLINE FINANCIAL AID INFORMATION

## **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.gov](http://www.fafsa.gov))**

Items needed include:

- 4-digit PIN ([www.pin.ed.gov](http://www.pin.ed.gov)) to e-sign FAFSA
- Federal TAX TRANSCRIPT (Call the IRS at (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 and Loan Entrance Counseling ([www.studentloans.gov](http://www.studentloans.gov))**

Items needed include:

- 4-digit PIN ([www.pin.ed.gov](http://www.pin.ed.gov)) to e-sign MPN
- 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):

- Financial Aid Information Sheet
- Verification Form (Student and parent)

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

You will receive an official financial aid award notice. Review and Accept the funds requested.

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

Financial aid is disbursed at the beginning of the term. However, the student must have attended classes. Contact the Student Accounts Office to inquire about how your aid is 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, FWS, and Direct Student 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.

### **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 Direct 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. 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 WDT Student Accounts Coordinator releases the loan checks after the student has attended classes. Enrollment for less than a full academic year may result in prorating loan amounts.

### **Federal Direct 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.

## **FUNDING SOURCES**

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

The Employment Assistance Program of the Bureau of Indian Affairs assists 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.

### **Veterans' 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 Veterans' Administration. Since the regulations regarding eligibility are quite extensive and many times need interpretation, the student is referred to the Veterans' Administration Center, Box 5046, Sioux Falls, SD 57117, (800) 827-1000, or contact your local County Veteran's Service Office for more information. The Rapid City Veterans' Service Office is located in the Public Service Building, 725 North LaCrosse 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.

# SERVICES TO STUDENTS

Services to the students occur prior to, during, and after a 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**

**BOOKSTORE**

**FOOD SERVICE**

**CAREER SERVICES**

**ACADEMIC PREPARATION**

**STUDENT SUCCESS CENTER**

**DISABILITY SERVICES**

**SPECIAL SERVICES PROGRAM**

**COUNSELING SERVICES**

## **LIBRARY**

The campus library at Western Dakota Tech is located in Dakota Hall on the main WDT campus. Both general and specialized guidance and instruction are available for students and staff when conducting research. Services include helping students locate relevant print materials; selecting credible and timely information from both the Internet and the library's collection of online databases of magazines, journals, and e-books; and creating works cited pages.

Library staff is also available to assist students in transferring files, scanning, and printing in the library along with providing basic technology troubleshooting. For the convenience of students, there are computers in the library, study tables with power outlets, collaboration stations, study rooms, and an academic conference room for small groups to study or work together on projects.

In addition, students are able to use their student ID numbers to remotely access the resources on the library's webpage at <http://library.wdt.edu/>, and library staff is always available for questions and suggestions.

## **LEGAL RESOURCE CENTER**

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.

## **BOOKSTORE**

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.

## **FOOD SERVICE**

Food service is available to WDT students and staff with a daily menu including breakfast and lunch. Catering services will also be provided as requested and approved. Vending machines, a microwave, and refrigerator are available in both the Mickelson and Rushmore commons areas.

## **CAREER SERVICES**

Western Dakota Tech's Career Services office is committed to serving our students, alumni, and the employers who hire our graduates. WDT 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**

Western Dakota Tech is dedicated to helping students succeed in their chosen academic field. Upon completion and review of the ACCUPLACER exam, students may be required to enroll in classes designed to upgrade their skills in Math, Writing, and Reading. Academic preparation classes do not count toward the program graduation requirements. Please contact the Admissions Office for specific information.

## **STUDENT SUCCESS CENTER/STUDY SKILLS**

The Student Success 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**

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**

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**

Counseling services are available on an as-needed basis through a third party. Please see Student Services for more information.

# **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. 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 Registrar's Office.

## **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. WDT 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 <http://www.wdt.edu/student-life/student-handbook/>.

## **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 some 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 WDT 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: <http://www.wdt.edu/student-life/student-handbook/>.

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**

The use of tobacco products is 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.

## **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.

# GENERAL EDUCATION

## GENERAL EDUCATION PHILOSOPHY

The General Education program at WDT 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 WDT include life skills, analytic techniques, communication skills, technology skills, teamwork techniques, social values, and employability.

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

- Apply the principles of 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, graduates of WDT will be able to:

- Demonstrate responsibility for own behavior.
- Analyze problems using sound inferences from data and critical thinking.
- Produce effective communication in both oral and written media.
- Integrate technology in performing tasks.
- Demonstrate interpersonal skills by working productively and cooperatively.
- Appreciate diversity.
- Demonstrate the skills to obtain and maintain employment.

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

## **DIPLOMA PROGRAM REQUIREMENTS**

Students pursuing diploma programs 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 credits)
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Computer courses available include:

CIS 105	Microcomputer Software Applications I	(3 credits)
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Mathematics courses available include:

MATH 090	Basic Mathematics	(2 credits)
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MATH 100	Elementary Algebra	(3 credits)
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MATH 104	Technical Mathematics	(3 credits)
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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 cannot be front-loaded.

## **AAS DEGREE REQUIREMENTS**

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	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>
MATH	100	Elementary Algebra	3
MATH	101	Intermediate Algebra	3
MATH	102	College Algebra	3
MATH	104	Technical Mathematics	3
MATH	112	Business Mathematics	3
MATH	120	Trigonometry	3
<b>Computer Literacy</b>			<b>3 Credits Required*</b>
CIS	105	Microcomputer Software Applications I	3
<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>
ECON	202	Principles of Macroeconomics	3
SOC	100	Introduction to Sociology	3

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

\*\* 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 MATH 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.
  - MATH 100 Elementary Algebra (3 credits) *before* entering MATH 101 Intermediate Algebra or MATH 104 Technical Mathematics. Students must complete MATH 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 I, or ENGL 202 Technical Communications.

# 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 with today's job requirements and 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 WDT programs and their requirements. Program and general education course descriptions are located under Course Descriptions.

## **ACCOUNTING**

## **ALLIED HEALTH**

## **BOOKKEEPING**

## **BUSINESS**

### **ENTREPRENEURSHIP**

### **OFFICE PROFESSIONAL**

### **BUSINESS MANAGEMENT & MARKETING**

### **SOCIAL MEDIA MARKETING**

## **COLLISION REPAIR TECHNOLOGY**

## **COMPUTER-AIDED DRAFTING TECHNICIAN**

## **COMPUTER SCIENCE**

### **NETWORK ADMINISTRATION & SECURITY**

## **DRAFTING AND MACHINING TECHNOLOGY**

## **ELECTRICAL TRADES**

## **ENVIRONMENTAL ENGINEERING TECHNICIAN**

## **FIRE SCIENCE**

## **HEALTH INFORMATION MANAGEMENT-CODING**

## **HEALTHCARE TECHNICIAN**

## **HVAC TECHNOLOGY**

## **HVAC AND PLUMBING TECHNOLOGY**

## **LAW ENFORCEMENT TECHNOLOGY**

## **LIBRARY TECHNICIAN**

## **MEDICAL ASSISTING**

## **PARALEGAL/LEGAL ASSISTANT**

## **PARAMEDIC**

## **PHARMACY TECHNICIAN**

## **PHLEBOTOMY/LABORATORY ASSISTANT**

## **PLUMBING TECHNOLOGY**

## **PRACTICAL NURSING**

## **PRECISION MACHINING TECHNOLOGY**

## **SURGICAL TECHNOLOGY**

## **TRANSPORTATION TECHNOLOGY**

### **HEAVY DUTY**

### **LIGHT DUTY**

## **WELDING**

## ACCOUNTING

### Associate in Applied Science, 70/71/72 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 program 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	105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ECON	202	PRINCIPLES OF MACROECONOMICS	3
ENGL	101	COMPOSITION* <i>or</i>	3
ENGL	203	TECHNICAL WRITING II	
MATH	101	INTERMEDIATE ALGEBRA**	3
MATH	112	BUSINESS MATHEMATICS**	3
PSYC	101	GENERAL PSYCHOLOGY <i>or</i>	3
PSYC	103	HUMAN RELATIONS IN THE WORKPLACE	
		<b>Total</b>	<b>18</b>
<b>Technical Requirements</b>			
ACCT	120	PRINCIPLES OF ACCOUNTING I	3
ACCT	121	PRINCIPLES OF ACCOUNTING II	3
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	230	TOPICS AND ISSUES IN ACCOUNTING	3
ACCT	281	ETHICS IN ACCOUNTING AND BUSINESS <i>or</i>	2
ACCT	290	INTERNSHIP	2/3
ACCT	285	OPTIONAL INTERNSHIP	0/1
BUS	141	WRITTEN COMMUNICATIONS FOR BUSINESS	3
BUS	129	ORAL COMMUNICATIONS IN BUSINESS	3
BUS	140	BUSINESS LAW	3
BUS	210	SUPERVISORY MANAGEMENT	3
BUS	224	PERSONAL FINANCE	3
BUS	228	PERSONAL INVESTMENTS	3
		<b>Total</b>	<b>52/53/54</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

\*\*Prerequisite: Acceptable ACCUPLACER score or Basic Math/Elem Algebra.

**Semester breakdown on next page**

## Semester Breakdown

<b>First Semester</b>			<b>Second Semester</b>		
		<b>CR</b>			<b>CR</b>
ACCT 120	Principles of Accounting I	3	ACCT 121	Principles of Accounting II	3
BUS 129	Oral Communications in Business	3	ACCT 215	Payroll Accounting	3
BUS 224	Personal Finance	3	ACCT 228	QuickBooks Accounting	3
CIS 105	Microcomputer Software Applications I	3	ACCT 230	Topics and Issues in Accounting	3
MATH 112	Business Mathematics	3	BUS 141	Written Communications for Business	3
PSYC 101	General Psychology <i>or</i>	3	BUS 228	Personal Investments	3
PSYC 103	Human Relations in the Workplace				
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</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 281	Ethics in Accounting & Business <i>or</i>	2
ACCT 285	Optional Internship	0/1	ACCT 290	Internship (2-3 Credits Possible)	2/3
BUS 210	Supervisory Management	3	BUS 140	Business Law	3
ECON 202	Principles of Macroeconomics	3	ENGL 101	Composition <i>or</i>	3
			ENGL 203	Technical Writing II	
			MATH 101	Intermediate Algebra	3
<b>Total Credit Hours</b>		<b>16/17</b>	<b>Total Credit Hours</b>		<b>18/19</b>

Other Accounting Program options are available including online and a five- or six-semester plan. Contact Admissions or your advisor for information.

## ALLIED HEALTH

### **Associate in Applied Science, 60-65 Credit Hours, 18- to 21-Month Program**

Students entering the Allied Health AAS degree will also enter the Phlebotomy/Laboratory Assistant or the Surgical Technology diploma program. 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. ACCUPLACER test scores may also inform students they could succeed in a higher-level course than the required course when available.

The technical requirements in a given health program may not fulfill the total technical requirements for this AAS degree. Students in these programs will supplement the technical elective courses with health courses. This will add to their skills in health occupations.

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>General Education Requirements</b>		
CHEM 106	CHEMISTRY SURVEY	3
CHEM 106L	CHEMISTRY SURVEY LAB	1
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
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 higher</i>	3
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>25</b>
HC 213	MEDICAL TERMINOLOGY I	3
HC 114	ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS	3
TECHNICAL REQUIREMENTS/ELECTIVES Students must complete the technical requirements in their program plus additional health electives if needed. See the Registrar to determine the appropriate technical courses.		29-34
<b>Total Technical Requirements (minimum)</b>		<b>35-40</b>
<b>Total Requirements for AAS (minimum)</b>		<b>60-65</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

## BOOKKEEPING

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

The Bookkeeping program will provide students with technical understanding and skills development by integrating theory with practical experience. Through the program, students will develop skills in accounting principles, finance, payroll accounting, Quickbooks, and more. Students will learn how to complete the typical duties of someone working in the bookkeeping field.

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
MATH 112	BUSINESS MATHEMATICS*	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
<b>Total</b>		<b>9</b>
<b>Technical Requirements</b>		
ACCT 120	PRINCIPLES OF ACCOUNTING I	3
ACCT 121	PRINCIPLES OF ACCOUNTING II	3
ACCT 215	PAYROLL ACCOUNTING	3
ACCT 228	QUICKBOOKS ACCOUNTING	3
ACCT 230	TOPICS AND ISSUES IN ACCOUNTING	3
BUS 129	ORAL COMMUNICATIONS IN BUSINESS	3
BUS 141	WRITTEN COMMUNICATIONS FOR BUSINESS	3
BUS 224	PERSONAL FINANCE	3
BUS 228	PERSONAL INVESTMENTS	3
<b>Total</b>		<b>27</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Math.

### Semester Breakdown

First Semester			Second Semester		
		CR			CR
ACCT 120	Principles of Accounting I	3	ACCT 121	Principles of Accounting II	3
BUS 224	Personal Finance	3	ACCT 215	Payroll Accounting	3
BUS 129	Oral Communications in Business	3	ACCT 228	QuickBooks Accounting	3
CIS 105	Microcomputer Software Applications I	3	ACCT 230	Topics and Issues in Accounting	3
MATH 112	Business Mathematics	3	BUS 141	Written Communications for Business	3
PSYC 103	Human Relations in the Workplace	3	BUS 228	Personal Investments	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

**All remedial coursework must be completed in the first semester.**

## **BUSINESS - BUSINESS MANAGEMENT & MARKETING**

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

Learn the principles and applications of accounting, marketing, sales, desktop publishing, management, website development, and more so you can set yourself apart from the crowd when you begin your business career. Available on-campus and 100% online!

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ECON 202	PRINCIPLES OF MACROECONOMICS	3
ENGL 101	COMPOSITION* <i>or</i>	3
ENGL 203	TECHNICAL WRITING II	
MATH 112	BUSINESS MATHEMATICS**	3
PSYC 101	GENERAL PSYCHOLOGY <i>or</i>	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	
	<b>Total</b>	<b>15</b>
<b>Technical Requirements</b>		
ACCT 120	PRINCIPLES OF ACCOUNTING I	3
ACCT 228	QUICKBOOKS ACCOUNTING	3
BUS 101	INTRODUCTION TO BUSINESS	3
BUS 120	PRINCIPLES OF MARKETING	3
BUS 141	WRITTEN COMMUNICATIONS FOR BUSINESS	3
BUS 129	ORAL COMMUNICATIONS IN BUSINESS	3
BUS 137	PROFESSIONAL DEVELOPMENT	1
BUS 140	BUSINESS LAW	3
BUS 142	PROJECT MANAGEMENT	2
BUS 150	ADVERTISING	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 218	DESIGN ESSENTIALS****	3
BUS 224	PERSONAL FINANCE	3
BUS 225	RETAIL MANAGEMENT	3
BUS 233	SMALL BUSINESS ENTREPRENEURSHIP	3
BUS 241	ADVANCED COMPUTER APPLICATIONS FOR BUSINESS	3
BUS 291	INTERNSHIP <i>or</i>	3
BUS 228	PERSONAL INVESTMENTS	
	<b>Total</b>	<b>57</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

\*\*\*In order to meet the software requirements, students need to take the following courses in sequential order without skipping semesters:

(1) BUS156 Website Development, (2) BUS218 Design Essentials, (3) BUS157 Multimedia for Business.

**Semester breakdown on next page**

### Semester Breakdown – Fall Starts

First Semester (Fall and Spring On-Campus; Fall Online)			Second Semester (Fall and Spring On-Campus; Spring Online)		
		<b>CR</b>			<b>CR</b>
ACCT 120	Principles of Accounting I	3	ACCT 228	QuickBooks Accounting	3
BUS 101	Introduction to Business	3	BUS 120	Principles of Marketing	3
BUS 129	Oral Communications in Business	3	BUS 156	Website Development for Business	3
CIS 105	Microcomputer Software Applications I	3	BUS 141	Written Communications for Business	3
MATH 112	Business Mathematics	3	BUS 137	Professional Development	1
PSYC 101	General Psychology <i>or</i>	3	BUS 140	Business Law	3
PSYC 103	Human Relations in the Workplace		BUS 142	Project Management	2
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>
Third Semester (Fall On-Campus and Fall Online)			Fourth Semester (Spring On-Campus and Spring Online)		
		<b>CR</b>			<b>CR</b>
BUS 218	Design Essentials	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 241	Advanced Computer Applications for Business	3	ECON 202	Principles of Macroeconomics	3
ENGL 101	Composition <i>or</i>	3	BUS 291	Internship <i>or</i>	3
ENGL 203	Technical Writing II		BUS 228	Personal Investments	
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

### Semester Breakdown – Spring Starts

First Semester (Fall and Spring On-Campus; Fall Online)			Second Semester (Fall and Spring On-Campus; Spring Online)		
		<b>CR</b>			<b>CR</b>
ACCT 120	Principles of Accounting I	3	ACCT228	QuickBooks Accounting	3
BUS 101	Introduction to Business	3	BUS 120	Principles of Marketing	3
BUS 129	Oral Communications in Business	3	BUS 156	Website Development for Business	3
CIS 105	Microcomputer Software Applications I	3	BUS 141	Written Communications for Business	3
MATH 112	Business Mathematics	3	BUS 137	Professional Development	1
PSYC 101	General Psychology <i>or</i>	3	BUS 140	Business Law	3
PSYC 103	Human Relations in the Workplace		BUS 142	Project Management	2
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>
Third Semester (Spring On-Campus and Spring Online)			Fourth Semester (Fall On-Campus and Fall Online)		
		<b>CR</b>			<b>CR</b>
BUS 150	Advertising	3	BUS 218	Design Essentials	3
BUS 157	Multimedia for Business	3	BUS 160	Principles of Selling	3
BUS 225	Retail Management	3	BUS 210	Supervisory Management	3
BUS 233	Small Business Entrepreneurship	3	BUS 224	Personal Finance	3
ECON 202	Principles of Macroeconomics	3	BUS 241	Advanced Computer Applications for Business	3
BUS 291	Internship <i>or</i>	3	ENGL 101	Composition <i>or</i>	3
BUS 228	Personal Investments		ENGL 203	Technical Writing II	
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

Other Business Marketing & Management Program options are available, including online and a five- or six-semester plan. Contact Admissions or your advisor for information.

## **BUSINESS – SOCIAL MEDIA MARKETING**

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

Learn skills to work in marketing and advertising while specializing in social media. Take coursework in social media/interactive marketing and e-commerce, search engine marketing, writing skills for social media, social media marketing campaigns, and more! Available 100% online!

The primary objective of the Social Media program is to prepare students with the necessary skills to work in marketing and advertising while specializing in social media.

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ECON 202	PRINCIPLES OF MACROECONOMICS	3
ENGL 101	COMPOSITION* <i>or</i>	3
ENGL 203	TECHNICAL WRITING II	
MATH 112	BUSINESS MATHEMATICS**	3
PSYC 101	GENERAL PSYCHOLOGY <i>or</i>	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	
<b>Total</b>		<b>15</b>
<b>Technical Requirements</b>		
ACCT 120	PRINCIPLES OF ACCOUNTING I	3
BUS 101	INTRODUCTION TO BUSINESS	3
BUS 120	PRINCIPLES OF MARKETING	3
BUS 141	WRITTEN COMMUNICATIONS FOR BUSINESS	3
BUS 129	ORAL COMMUNICATIONS IN BUSINESS	3
BUS 137	PROFESSIONAL DEVELOPMENT	1
BUS 140	BUSINESS LAW	3
BUS 142	PROJECT MANAGEMENT	2
BUS 150	ADVERTISING	3
BUS 156	WEBSITE DEVELOPMENT FOR BUSINESS ***	3
BUS 157	MULTIMEDIA FOR BUSINESS ***	3
BUS 160	PRINCIPLES OF SELLING	3
BUS 205	SOCIAL MEDIA MARKETING	3
BUS 215	SEARCH ENGINE MARKETING	3
BUS 218	DESIGN ESSENTIALS***	3
BUS 224	PERSONAL FINANCE	3
BUS 227	WRITING FOR SOCIAL MEDIA MARKETING	3
BUS 241	ADVANCED COMPUTER APPLICATIONS FOR BUSINESS	3
BUS 250	SOCIAL MEDIA MARKETING CAMPAIGN	3
BUS 291	INTERNSHIP <i>or</i>	3
BUS 228	PERSONAL INVESTMENTS	
<b>Total</b>		<b>57</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

\*\*\*In order to meet the software requirements, students need to take the following courses in sequential order without skipping semesters:  
 (1) BUS156 Website Development, (2) BUS218 Design Essentials,  
 (3) BUS157 Multimedia for Business.

**Semester breakdown on next page**

## Semester Breakdown

First Semester			Second Semester		
		CR			CR
ACCT 120	Principles of Accounting I	3	BUS 120	Principles of Marketing	3
BUS 101	Introduction to Business	3	BUS 137	Professional Development	1
BUS 129	Oral Communications in Business	3	BUS 140	Business Law	3
BUS 205	Social Media Marketing	3	BUS 141	Written Communications for Business	3
CIS 105	Microcomputer Software Applications I	3	BUS 142	Project Management	2
MATH 112	Business Mathematics	3	BUS 156	Website Development for Business	3
			BUS 215	Search Engine Marketing	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>
Third Semester			Fourth Semester		
		CR			CR
BUS 218	Design Essentials	3	BUS 150	Advertising	3
BUS 160	Principles of Selling	3	BUS 157	Multimedia for Business	3
BUS 224	Personal Finance	3	BUS 250	Social Media Marketing Campaign	3
BUS 227	Writing for Social Media Marketing	3	ECON 202	Principles of Macroeconomics	3
BUS 241	Advanced Computer Apps for Business	3	PSYC 101	General Psychology <i>or</i>	3
ENGL 101	Composition <i>or</i>	3	PSYC 103	Human Relations in the Workplace	3
ENGL 203	Technical Writing II	3	BUS 291	Internship <i>or</i>	3
			BUS 228	Personal Investments	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

## **BUSINESS – ENTREPRENEURSHIP**

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

Want to run a successful business? This program will give you the skills you need to successfully open a small business and become your own boss. Learn accounting, supervision, small business entrepreneurship, business law, and more!

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
MATH 112	BUSINESS MATHEMATICS*	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
	<b>Total</b>	<b>9</b>
<b>Technical Requirements</b>		
ACCT 120	PRINCIPLES OF ACCOUNTING I	3
ACCT 228	QUICKBOOKS ACCOUNTING	3
BUS 101	INTRODUCTION TO BUSINESS	3
BUS 129	ORAL COMMUNICATIONS IN BUSINESS	3
BUS 137	PROFESSIONAL DEVELOPMENT	1
BUS 140	BUSINESS LAW	3
BUS 141	WRITTEN COMMUNICATIONS FOR BUSINESS	3
BUS 142	PROJECT MANAGEMENT	2
BUS 210	SUPERVISORY MANAGEMENT	3
BUS 233	SMALL BUSINESS ENTREPRENEURSHIP	3
	<b>Total</b>	<b>27</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Math.

### **Semester Breakdown**

<b>First Semester</b>			<b>Second Semester</b>		
		<b>CR</b>			<b>CR</b>
ACCT 120	Principles of Accounting I	3	ACCT 228	QuickBooks Accounting	3
BUS 101	Introduction to Business	3	BUS 137	Professional Development	1
BUS 129	Oral Communications in Business	3	BUS 140	Business Law	3
BUS 210	Supervisory Management	3	BUS 141	Written Communications for Business	3
CIS 105	Microcomputer Software Applications I	3	BUS 142	Project Management	2
MATH 112	Business Mathematics	3	BUS 233	Small Business Entrepreneurship	3
			PSYC 103	Human Relations in the Workplace	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

**All remedial coursework must be completed in the first semester.**

## BUSINESS – OFFICE PROFESSIONAL

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

Learn everything you need to be an office manager or executive assistant that helps run an office. Complete courses in writing, speaking, professional development, records management, and more!

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
MATH 112	BUSINESS MATHEMATICS*	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
	<b>Total</b>	<b>9</b>
<b>Technical Requirements</b>		
ACCT 120	PRINCIPLES OF ACCOUNTING I	3
BUS 115	KEYBOARDING	3
BUS 137	PROFESSIONAL DEVELOPMENT	1
BUS 141	WRITTEN COMMUNICATIONS FOR BUSINESS	3
BUS 142	PROJECT MANAGEMENT	2
BUS 200	OFFICE PROCEDURES	3
BUS 241	ADVANCED COMPUTER APPLICATIONS FOR BUSINESS	3
COC 132	RECORDS MANAGEMENT	3
	ELECTIVES	6
	<b>Total</b>	<b>27</b>
<b>Elective Options</b>		
ACCT 228	QUICKBOOKS ACCOUNTING (Spring only)	3
ACCT 215	PAYROLL ACCOUNTING (Spring only)	3
BUS 156	WEBSITE DEVELOPMENT FOR BUSINESS	3
BUS 101	INTRODUCTION TO BUSINESS	3
BUS 129	ORAL COMMUNICATIONS IN BUSINESS	3
BUS 210	SUPERVISORY MANAGEMENT	3

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Math.

### Semester Breakdown

First Semester			Second Semester		
		CR			CR
ACCT 120	Principles of Accounting I	3	BUS 137	Professional Development	1
BUS 115	Keyboarding	3	BUS 141	Written Communications for Business	3
BUS 200	Office Procedures	3	BUS 142	Project Management	2
CIS 105	Microcomputer Software Applications I	3	BUS 241	Advanced Computer Applications for Business	3
MATH 112	Business Mathematics	3	COC 132	Records Management	3
PSYC 103	Human Relations in the Workplace	3		Electives	6
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

**All remedial coursework must be completed in the first semester.**

## **COLLISION REPAIR TECHNOLOGY**

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

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

The mission of WDT'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 collision repair trade. This program will afford the student the opportunity to attain an Associate in Applied Science degree or a diploma in this field. 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</b>	<b>No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>General Education Requirements</b>			
CIS	105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL	201	TECHNICAL WRITING I*	3
ENGL	102	CAREER COMMUNICATIONS	2
MATH	104	TECHNICAL MATHEMATICS**	3
SOC	100	INTRODUCTION TO SOCIOLOGY	3
PSYC	103	HUMAN RELATIONS IN THE WORKPLACE	3
<b>Total</b>			<b>17</b>
<b>Technical Requirements</b>			
CRT	110	NONSTRUCTURAL PANEL ALIGNMENT	4
CRT	112	SHOP ORIENTATION, MAINTENANCE & SAFETY	1
CRT	115	BASIC SHEET METAL WORK	4
CRT	113	COLLISION REPAIR WELDING	4
CRT	123	REFINISHING PROCEDURES AND APPLICATION	4
CRT	125	PAINT DEFECTS-CAUSES & CURES W/FINAL DETAILING	4
CRT	129	PANEL PREPARATION	4
CRT	148	AUTO PLASTICS REPAIR	1
CRT	211	ESTIMATING AND WORK ORDER COMPREHENSION	2
CRT	215	ADVANCED PANEL PREPARATION	4
CRT	218	ADVANCED REFINISHING	5
CRT	220	STRUCTURAL PANEL REPAIR	4
CRT	225	FRAME & BODY REALIGNMENT	4
CRT	227	FRAME SET UP AND MEASURE	4
<b>Total</b>			<b>49</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

**Semester breakdown on next page**

### Semester Breakdown AAS

First Semester			Second Semester		
		CR			CR
CRT 110	Nonstructural Panel Alignment	4	CRT 123	Refinishing Procedures & Applications	4
CRT 112	Shop Orientation, Maintenance & Safety	1	CRT 125	Paint Defects-Causes & Cures w/Final Detailing	4
CRT 113	Collision Repair Welding	4	CRT 129	Panel Preparation	4
CRT 115	Basic Sheet Metal Work	4	PSYC 103	Human Relations in the Workplace	3
CIS 105	Microcomputer Software Applications I	3	ENGL 201	Technical Writing I	3
MATH 104	Technical Mathematics	3			
<b>Total Credit Hours</b>		<b>19</b>	<b>Total Credit Hours</b>		<b>18</b>
Third Semester			Fourth Semester		
		CR			CR
CRT 148	Auto Plastics Repair	1	CRT 220	Structural Panel Repair	4
CRT 211	Estimating & Work Order Comprehension	2	CRT 225	Frame & Body Realignment	4
CRT 215	Advanced Panel Preparation	4	CRT 227	Frame Setup and Measure	4
CRT 218	Advanced Refinishing	5	ENGL 102	Career Communications	2
SOC 100	Introduction to Sociology	3			
<b>Total Credit Hours</b>		<b>15</b>	<b>Total Credit Hours</b>		<b>14</b>

### Semester Breakdown Diploma

First Semester			Second Semester		
		CR			CR
CRT 110	Nonstructural Panel Alignment	4	CRT 123	Refinishing Procedures and Applications	4
CRT 112	Shop Orientation, Maintenance & Safety	1	CRT 125	Paint Defects-Causes & Cures w/Final Detailing	4
CRT 113	Collision Repair Welding	4	CRT 129	Panel Preparation	4
CRT 115	Basic Sheet Metal Work	4	ENGL 102	Career Communications	2
CIS 105	Microcomputer Software Applications I	3	PSYC 103	Human Relations in the Workplace	3
MATH 090	Basic Mathematics <i>or</i>	2/3			
MATH 104	Technical Mathematics				
<b>Total Credit Hours</b>		<b>18/19</b>	<b>Total Credit Hours</b>		<b>17</b>

# COMPUTER-AIDED DRAFTING TECHNICIAN

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

Diploma (online only), 36 Credit Hours, 9-Month Program

The Computer-Aided Drafting Technician program at WDT equips students with the skills and knowledge necessary to produce accurate technical drawings using industry standard CAD systems. Graduates will be prepared for entry-level positions in the architectural, civil, and mechanical CAD fields.

Architectural drafters assist architects by preparing technical plans and details showing the dimensions, construction materials, and processes used for residential and commercial 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 create drawings that detail the construction related to land, roads, bridges, and other infrastructure. The Computer-Aided Drafting Technician program at WDT provides students with a solid base of knowledge in all three of these fields and allows them to emphasize a particular field during their final semester.

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ECON 202	PRINCIPLES OF MACROECONOMICS <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 104	TECHNICAL MATHEMATICS**	3
PSYC 101	GENERAL PSYCHOLOGY <i>or</i>	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	
<b>Total</b>		<b>18</b>
<b>Technical Requirements</b>		
CAD 101	DRAFTING FUNDAMENTALS	3
CAD 111	ARCHITECTURAL DRAFTING I	3
CAD 132	INTRODUCTION TO 2D CAD	3
CAD 140	ADVANCED 2D CAD	3
CAD 135	ARCHITECTURAL CONSTRUCTION THEORY I	3
CAD 150	BLUEPRINT READING	1
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
CAD 255	INTRODUCTION TO 3D CAD	3
ELECTIVES		12
<b>Total</b>		<b>53</b>
<b>Technical Electives-Choose minimum 12 credits</b>		
CAD 215	LIGHT COMMERCIAL CONSTRUCTION WITH MECHANICAL AND ELECTRICAL	3
CAD 221	MECHANICAL DIMENSIONING	3
CAD 222	PRINCIPLES OF COMMERCIAL THEORY II	3
CAD 240	3D ARCHITECTURAL DESIGN	3
CAD 244	3D ENGINEERING DESIGN	3
CAD 247	COMPUTER AUTOMATED MANUFACTURING	3
CAD 251	INTRODUCTION TO GIS	3
CAD 297	INTERNSHIP	3

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

Semester breakdown on next page

### Semester Breakdown AAS

First Semester			Second Semester		
		CR			CR
CAD 101	Drafting Fundamentals	3	CAD 111	Architectural Drafting I	3
CAD 132	Introduction to 2D CAD	3	CAD 140	Advanced 2D CAD	3
CAD 135	Architectural Construction Theory I	3	CAD 150	Blueprint Reading	1
CAD 250	Introduction to Mapping/GPS	2	CAD 232	Mechanical Principles	3
CIS 105	Microcomputer Software Applications I	3	CAD 234	Mechanical Print Reading	2
MATH 104	Technical Mathematics	3	CAD 252	Introduction to Surveying	3
			ENGL 101	Composition <i>or</i>	3
			ENGL 201	Technical Writing I	3
<b>Total Credit Hours</b>		<b>17</b>	<b>Total Credit Hours</b>		<b>18</b>
Third Semester			Fourth Semester		
		CR			CR
CAD 202	Mechanical Drafting	3	ECON 202	Principles of Macroeconomics <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	
CAD 255	Introduction to 3D CAD	3		Electives	12
ENGL 202	Technical Communications	3			
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

### Semester Breakdown Diploma (online only)

First Semester			Second Semester		
		CR			CR
CAD 101	Drafting Fundamentals	3	CAD 111	Architectural Drafting I	3
CAD 132	Introduction to 2D CAD	3	CAD 140	Advanced 2D CAD	3
CAD 255	Introduction to 3D CAD	3	CAD 214	Introduction to Civil Drafting	3
CIS 105	Microcomputer Software Applications I	3	CAD 232	Mechanical Principles	3
MATH 104	Technical Mathematics	3	CAD 240	3D Architectural Design <i>or</i>	3
PSYC 103	Human Relations in the Workplace	3	CAD 244	3D Engineering Design	
			ENGL 201	Technical Writing I	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

# COMPUTER SCIENCE – NETWORK ADMINISTRATION & SECURITY

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

Diploma, 36 Credit Hours, 9-Month Program

The Network Administration & Security program strikes a balance between theory and application. Students will learn about real-life networking and security 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 also will 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 in 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.

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 101	COMPOSITION*	3
ENGL 202	TECHNICAL COMMUNICATIONS	3
ECON 202	PRINCIPLES OF MACROECONOMICS	3
MATH 101	INTERMEDIATE ALGEBRA <sup>1**</sup> <i>or</i>	3
MATH 102	COLLEGE ALGEBRA <sup>1***</sup>	3
MATH 120	TRIGONOMETRY <sup>1****</sup>	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
	<b>Total</b>	<b>21</b>
<b>Technical Requirements</b>		
CIS 125	A+ HARDWARE/SOFTWARE	6
CIS 129	WINDOWS OPERATING SYSTEMS	3
CIS 211	LINUX OPERATING SYSTEMS	3
CIS 216	INTRODUCTION TO PROGRAMMING	3
CIS 218	LINUX SERVER	3
CIS 225	DATABASES	3
CIS 126	CISCO ACADEMY/NETWORKING TECHNOLOGIES I	3
CIS 127	CISCO ACADEMY/NETWORKING TECHNOLOGIES II	3
CIS 128	CISCO ACADEMY/NETWORKING TECHNOLOGIES III	3
CIS 135	CISCO ACADEMY/NETWORKING TECHNOLOGIES IV	3
CIS 213	NETWORKING USING WINDOWS SERVER	3
CIS 215	NETWORK DESIGN AND VIRTUALIZATION	3
CIS 220	NETWORK SECURITY I	3
CIS 230	COMPUTER FORENSICS	3
CIS 240	COMPUTER SCIENCE CAPSTONE	3
CIS 235	NETWORK SECURITY II	3
	<b>Total</b>	<b>51</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

\*\*\*Prerequisite: Acceptable ACCUPLACER score or Intermediate Algebra.

\*\*\*\*Prerequisite: Acceptable ACCUPLACER score, Intermediate Algebra, or College Algebra.

<sup>1</sup>Choose two of the three math classes (taken in 1<sup>st</sup> and 3<sup>rd</sup> semester)

**Semester breakdown on next page**

### Semester Breakdown AAS

First Semester			Second Semester		
		CR			CR
CIS 125	A+ Hardware/Software	6	CIS 225	Databases	3
CIS 126	Cisco Academy/Networking Technologies I	3	CIS 127	Cisco Academy/Networking Technologies II	3
CIS 129	Windows Operating Systems	3	CIS 213	Networking Using Windows Server	3
CIS 105	Microcomputer Software Applications I	3	CIS 211	Linux Operating Systems	3
MATH 101	Intermediate Algebra <i>or</i>	3	ENGL 101	Composition	3
MATH 102	College Algebra		PSYC 103	Human Relations in the Workplace	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>
Third Semester			Fourth Semester		
		CR			CR
CIS 128	Cisco Academy/Networking Technologies III	3	CIS 135	Cisco Academy/Networking Technologies IV	3
CIS 220	Network Security I	3	CIS 215	Network Design & Virtualization	3
CIS 216	Introduction to Programming	3	CIS 230	Computer Forensics	3
CIS 218	Linux Server	3	CIS 235	Network Security II	3
ECON 202	Principles of Macroeconomics	3	CIS 240	Computer Science Capstone	3
MATH 102	College Algebra <i>or</i>	3	ENGL 202	Technical Communications	3
MATH 120	Trigonometry				
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

### Semester Breakdown Diploma

First Semester			Second Semester		
		CR			CR
CIS 126	Cisco Academy/Networking Technologies I	3	CIS 127	Cisco Academy/Networking Technologies II	3
CIS 125	A+ Hardware/Software	6	CIS 213	Networking Using Windows Server	3
CIS 129	Windows Operating Systems	3	CIS 211	Linux Operating Systems	3
CIS 105	Microcomputer Software Applications I	3	CIS 225	Databases	3
MATH 101	Intermediate Algebra <i>or</i>	3	ENGL 101	Composition	3
MATH 102	College Algebra		PSYC 103	Human Relations in the Workplace	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

## **DRAFTING AND MACHINING TECHNOLOGY**

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

This program will graduate skilled technicians who are able to bring value to those employers in multiple ways because they will be skilled enough to participate in multiple areas of the business. These workers will be flexible and will be seen as a valuable asset by any of these employers.

In the drafting area, graduates will be able to meet the growing demand from industry for skilled technicians who can demonstrate skill and knowledge in 2D and 3D computer-aided drafting. In addition, graduates will leave the program prepared to apply the basic fundamentals of drafting and blueprint reading.

In the machining area, graduates will be able to set up and operate a variety of machine tools to produce precision metal parts, instruments, and tools. Machinists use machine tools that are either conventionally controlled or computer numerically controlled, such as lathes, milling machines, and grinders, to produce precision metal parts. Although they may produce large quantities of one part, precision machinists often produce small batches or one-of-a-kind items. The parts that machinists make range from simple bolts of steel or brass to titanium bone screws for orthopedic implants. Hydraulic parts, anti-lock brakes and automobile pistons are other widely known products that machinists make.

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ECON 202	PRINCIPLES OF MACROECONOMICS	3
ENGL 201	TECHNICAL WRITING I*	3
MATH 100	ELEMENTARY ALGEBRA**	3
MATH 104	TECHNICAL MATHEMATICS**	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
	<b>Total</b>	<b>18</b>
<b>Technical Requirements</b>		
CAD 101	DRAFTING FUNDAMENTALS	3
CAD 111	ARCHITECTURAL DRAFTING I	3
CAD 132	INTRODUCTION TO 2D CAD	3
CAD 140	ADVANCED 2D CAD	3
CAD 214	INTRODUCTION TO CIVIL DRAFTING	3
CAD 232	MECHANICAL PRINCIPLES	3
CAD 240	3D ARCHITECTURAL DESIGN <i>or</i>	3
CAD 244	3D ENGINEERING DESIGN	
CAD 255	INTRODUCTION TO 3D CAD	3
MACH 110	MACHINE SHOP OPERATIONS	3
MACH 115	TURNING THEORY AND OPERATIONS I	3
MACH 120	MILLING THEORY AND OPERATIONS I	3
MACH 125	MECHANICAL BLUEPRINT READING	3
MACH 130	MATERIALS APPLICATIONS	3
MACH 135	TURNING THEORY AND OPERATIONS II	3
MACH 140	MILLING THEORY AND OPERATIONS II	3
MACH 145	APPLIED COMPUTER AIDED DRAFTING FUNDAMENTALS	3
	<b>Total</b>	<b>48</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

**Semester breakdown on next page**

### Semester Breakdown

<b>First Semester</b>			<b>Second Semester</b>		
		<b>CR</b>			<b>CR</b>
CIS 105	Microcomputer Software Applications I	3	ENGL 201	Technical Writing I	3
MACH 110	Machine Shop Operations	3	MACH 130	Materials Applications	3
MACH 115	Turning Theory & Operations I	3	MACH 135	Turning Theory & Operations II	3
MACH 120	Milling Theory & Operations I	3	MACH 140	Milling Theory & Operations II	3
MACH 125	Mechanical Blueprint Reading	3	MACH 145	Applied Computer Aided Drafting Fundamentals	3
MATH 104	Technical Mathematics	3	PSYC 103	Human Relations in the Workplace	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>
<b>Third Semester</b>			<b>Fourth Semester</b>		
		<b>CR</b>			<b>CR</b>
CAD 101	Drafting Fundamentals	3	CAD 111	Architectural Drafting I	3
CAD 132	Introduction to 2D CAD	3	CAD 140	Advanced 2D CAD	3
CAD 255	Introduction to 3D CAD	3	CAD 214	Introduction to Civil Drafting	3
ECON 202	Principles of Macroeconomics	3	CAD 232	Mechanical Principles	3
MATH 100	Elementary Algebra	3	CAD 240	3D Architectural Design <i>or</i>	3
			CAD 244	3D Engineering Design	
<b>Total Credit Hours</b>		<b>15</b>	<b>Total Credit Hours</b>		<b>15</b>

## **ELECTRICAL TRADES**

### **Associate in Applied Science, 71 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 and ladder work. Electricians must be physically capable of climbing and working at heights and outside. Other physical work may be required.

Students will study and learn to interpret and apply the requirements of the National Electrical Code. A solid background in the theory and technology of the electrical field will give the knowledge and ability to install, maintain, troubleshoot, and repair electrical circuits and equipment. The training gives students the flexibility to pursue different areas of employment as entry-level electricians. Most lab time is spent at actual work sites where students gain real-life work experience. The Electrical Trades Program prepares students for employment as an apprentice electrician in the construction, mining, and industrial manufacturing sectors of the Trades and Construction Industry.

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ECON 202	PRINCIPLES OF MACROECONOMICS <i>or</i>	3
SOC 100	INTRODUCTION TO SOCIOLOGY	
ENGL 201	TECHNICAL WRITING I*	3
MATH 104	TECHNICAL MATHEMATICS**	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
	<b>Total</b>	<b>15</b>
<b>Technical Requirements***</b>		
ELT 217	COMPUTER HARDWARE INSTALLATION & TROUBLESHOOTING	4
IEL 122	ELECTRICAL CODE STUDY I	3
IEL 123	INDUSTRIAL DATA COMMUNICATIONS	2
IEL 129	INTRODUCTION TO ELECTRICAL WIRING LAB	1
IEL 130	INTRODUCTION TO ELECTRICAL WIRING	2
IEL 132	ELECTRICAL FUNDAMENTALS	5
IEL 133	ELECTRICAL FUNDAMENTALS LAB	7
IEL 135	BASIC ELECTRICAL MATERIALS AND DEVICES	1
IEL 140	WELDING & FABRICATION FOR LIGHT COMMERCIAL APPLICATIONS	2
IEL 211	ELECTRICAL MOTOR CONTROL	3
IEL 213	ELECTRICAL HEATING AND APPLIANCES	2
IEL 214	ELECTRICAL CODE STUDY II	2
IEL 216	ELECTRICAL MOTOR CONTROL LAB	2
IEL 218	WIRING LAB I	3
IEL 220	WIRING LAB II	3
IEL 221	PROGRAMMABLE LOGIC CONTROLLERS	2
IEL 222	PROGRAMMABLE LOGIC CONTROLLERS LAB	3
IEL 223	ELECTRICAL MOTOR LAB	1
IEL 224	POWER DISTRIBUTION	2
IEL 226	ELECTRICAL MOTOR FUNDAMENTALS AND MAINTENANCE	2
IEL 230	BLUEPRINT READING, ELECTRICAL PLANNING AND ESTIMATING	4
	<b>Total</b>	<b>56</b>
<b>Optional Technical Electives</b>		
IEL 299	ELECTRICIAN INTERNSHIP/CO-OP	6

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

\*\*\*CPR/First Responder must be completed before graduation.

## Semester Breakdown

<b>First Semester</b>			<b>Second Semester</b>		
		<b>CR</b>			<b>CR</b>
IEL 132	Electrical Fundamentals	5	ELT 217	Computer Hardware Installation/Troubleshooting	4
IEL 133	Electrical Fundamentals Lab	7	IEL 123	Industrial Data Communication	2
CIS 105	Microcomputer Software Applications I	3	IEL 129	Introduction to Electrical Wiring Lab	1
MATH 104	Technical Mathematics	3	IEL 130	Introduction to Electrical Wiring	2
			IEL 135	Basic Electrical Materials and Devices	1
			IEL 140	Welding & Fabrication for Light Commercial Application	2
			IEL 223	Electrical Motor Lab	1
			IEL 226	Electrical Motor Fundamentals and Maintenance	2
			ENGL 201	Technical Writing I	3
<b>Total Credit Hours</b>			<b>Total Credit Hours</b>		
<b>18</b>			<b>18</b>		
<b>Third Semester</b>			<b>Fourth Semester</b>		
		<b>CR</b>			<b>CR</b>
IEL 122	Electrical Code Study I	3	IEL 213	Electrical Heating & Appliances	2
IEL 211	Electrical Motor Control	3	IEL 214	Electrical Code Study II	2
IEL 216	Motor Control Lab	2	IEL 220	Wiring Lab II	3
IEL 218	Wiring Lab I	3	IEL 221	Programmable Logic Controllers	2
IEL 230	Blueprint Reading, Electrical Planning, and Estimating	4	IEL 222	PLC Lab	3
ECON 202	Principles of Macroeconomics <i>or</i>	3	IEL 224	Power Distribution	2
SOC 100	Introduction to Sociology		PSYC 103	Human Relations in the Workplace	3
<b>Total Credit Hours</b>			<b>Total Credit Hours</b>		
<b>18</b>			<b>17</b>		
<b>Optional Summer Semester</b>					
		<b>CR</b>			
IEL 299	Electrician Internship/CO-OP	6			
<b>Total Credit Hours</b>					
<b>6</b>					

# **ENVIRONMENTAL ENGINEERING TECHNICIAN**

## **Associate in Applied Science, 70-72 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. Program 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 on 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 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
CHEM 106	CHEMISTRY SURVEY	3
CHEM 106L	CHEMISTRY SURVEY LAB	1
ECON 202	PRINCIPLES OF MACROECONOMICS	3
ENGL 101	COMPOSITION* <i>or</i>	3
ENGL 201	TECHNICAL WRITING I	
ENGL 202	TECHNICAL COMMUNICATIONS	3
MATH 101	INTERMEDIATE ALGEBRA <sup>1**</sup> <i>or</i>	3
MATH 102	COLLEGE ALGEBRA <sup>1***</sup>	
MATH 120	TRIGONOMETRY <sup>1****</sup>	3
PSYC 101	GENERAL PSYCHOLOGY	3
	<b>Total</b>	<b>25</b>
<b>Technical Requirements</b>		
CAD 250	INTRODUCTION TO MAPPING/GPS	2
CAD 251	INTRODUCTION TO GIS	3
CAD 252	INTRODUCTION TO SURVEYING	3
EET 125	RECORDS COMPUTATION	2
EET 102	INTRODUCTION TO ENVIRONMENTAL SCIENCES	4
EET 103	ENVIRONMENTAL INSTRUMENTATION	4
EET 106	INTRODUCTORY FIELD METHODS	3
EET 202	WATER QUALITY	3
EET 204	ENVIRONMENTAL REGULATIONS	2
EET 235	CONSTRUCTION MATERIALS SAMPLING & TESTING	3
EET 222	INTRODUCTION TO WASTEWATER TECHNOLOGIES	3
	<i>or</i>	
EET 298	TECHNICAL COOPERATIVE WORK EXPERIENCE	
EET 225	AIR QUALITY	2
EET 250	SOILS TESTING	3
EET 251	ENVIRONMENTAL GEOLOGY	3
EET 253	PRINCIPLES OF WATER RESOURCES	3
FFT 118	HAZWOPER CERTIFICATION	2
	<b>Total</b>	<b>45</b>
<b>Optional Technical Electives</b>		
EET 299	FIELD INTERNSHIP (OPTIONAL)	2

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

\*\*\*Prerequisite: Acceptable ACCUPLACER score or Intermediate Algebra.

\*\*\*\*Prerequisite: Acceptable ACCUPLACER score, Intermediate Algebra, or College Algebra.

<sup>1</sup>Choose two of the three math classes (taken in 1<sup>st</sup> and 2<sup>nd</sup> semester)

**Semester Breakdown on next page**

## Semester Breakdown

<b>First Semester</b>			<b>Second Semester</b>		
		<b>CR</b>			<b>CR</b>
CAD 250	Introduction to Mapping/GPS	2	CAD 251	Introduction to GIS	3
CIS 105	Microcomputer Software Applications I	3	CAD 252	Introduction to Surveying	3
EET 102	Introduction to Environmental Sciences	4	ECON 202	Principles of Macroeconomics	3
EET 106	Introductory Field Methods	3	EET 103	Environmental Instrumentation	4
MATH 101	Intermediate Algebra <i>or</i>	3	EET 225	Air Quality	2
MATH 102	College Algebra	3	MATH 102	College Algebra <i>or</i>	3
PSYC 101	General Psychology	3	MATH 120	Trigonometry	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>
<b>Third Semester</b>			<b>Fourth Semester</b>		
		<b>CR</b>			<b>CR</b>
CHEM 106	Chemistry Survey	3	EET 125	Records Computation	2
CHEM 106L	Chemistry Survey Lab	1	EET 222	Introduction to Wastewater Technologies <i>or</i>	3
EET 202	Water Quality	3	EET 298	Technical Cooperative Work Experience	3
EET 204	Environmental Regulations	2	EET 235	Construction Materials Sampling & Testing	3
EET 253	Principles of Water Resources	3	EET 250	Soils Testing	3
ENGL 101	Composition <i>or</i>	3	EET 251	Environmental Geology	3
ENGL 201	Technical Writing I	2	ENGL 202	Technical Communications	3
FFT 118	Hazwoper Certification	2			
<b>Total Credit Hours</b>		<b>17</b>	<b>Total Credit Hours</b>		<b>17</b>
<b>Optional Summer Semester</b>					
		<b>CR</b>			
EET 299	Internship	2			
<b>Total Credit Hours</b>		<b>2</b>			

## **FIRE SCIENCE**

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

The Fire Science program at Western Dakota Tech is demanding, but we know that as a prospective Emergency Responder, you would expect nothing less. The program prepares students for careers in Wildland and Structural firefighting. The program requires that the prospective student be physically fit and capable of strenuous activity during all aspects of training and testing along with a vigorous physical conditioning program. Training at WDT is delivered in a comprehensive and professional manner with clearly defined goals and objectives. The combination of classroom, hands-on field experience, physical conditioning, and internship opportunities greatly enhances the level of continuous training offered.

All programs are intended to be challenging and the work involved is strenuous, so the final result is that our graduates are prepared to work and contribute effectively with any emergency response organization. The opportunity to acquire Certification for National Wildland Coordinating Group (NWCG) and NFPA Firefighter I & II, and HAZ MAT Operations with PRO BOARD certifications are granted upon successful completion. WDT Fire Science certifications are not just given; it is something that students who rise to the challenge will earn and can be proud of accomplishing. Fire Science graduates will enter the workforce with the knowledge, skills, and certifications to make them excellent employment prospects. The program has been designed to meet the specific needs of municipal and wildland firefighting agencies. The advanced levels of experience of our staff who have worked, or are still working, in this profession throughout the region can be one factor in student success and satisfaction in the program. Student safety is paramount in all that we do. Fire Science students will be required to submit to and pay for a criminal background check along with initial and random drug tests.

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTERS SOFTWARE APPLICATIONS I	3
ENGL 101	COMPOSITION <i>*or</i>	3
ENGL 201	TECHNICAL WRITING I	
ENGL 202	TECHNICAL COMMUNICATIONS	3
MATH 100	ELEMENTARY ALGEBRA** <i>or higher</i>	3
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</b>
<b>Technical Requirements</b>		
EMT 105	EMERGENCY MEDICAL TECHNICIAN	6
FFT 110	BUILDING CONSTRUCTION	3
FFT 116	HAZARDOUS MATERIALS OPERATIONS	3
FFT 121	STRUCTURAL FIREFIGHTER I	3
FFT 122	STRUCTURAL FIREFIGHTER I LAB	3
FFT 123	INTRODUCTION TO WILDLAND FIREFIGHTER	3
FFT 140	PHYSICAL FITNESS I	1
FFT 150	PUMPING APPARATUS DRIVER-OPERATOR	3
FFT 151	WILDLAND PUMPS AND SAWS	2
FFT 190	PHYSICAL FITNESS II	1
FFT 215	WILDLAND/URBAN INTERFACE FIRE SUPPRESSION & PREVENTION	3
FFT 218	STRATEGY & TACTICS	3
FFT 230	RESCUE PRACTICES FOR THE FIRE SERVICE	3
FFT 232	STRUCTURAL FIREFIGHTER II	3
FFT 233	FIRE CAUSES & INVESTIGATIONS	3
FFT 240	PHYSICAL FITNESS III	1
FFT 290	PHYSICAL FITNESS IV	1
FFT 298	INTERNSHIP	3
	<b>Total</b>	<b>48</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

## Semester Breakdown

First Semester			Second Semester		
		CR			CR
CIS 105	Microcomputer Software Applications I	3	EMT 105	Emergency Medical Technician	6
FFT 121	Structural Firefighter I	3	FFT 150	Pumping Apparatus Driver-Operator	3
FFT 122	Structural Firefighter I Lab	3	FFT 151	Wildland Pumps and Saws	2
FFT 123	Introduction to Wildland Firefighter	3	FFT 190	Physical Fitness II	1
FFT 140	Physical Fitness I	1	MATH100	Elementary Algebra <i>or higher</i>	3
SOC100	Introduction to Sociology	3	PSYC 101	General Psychology <i>or</i>	3
			PSYC 103	Human Relations in the Workplace	
<b>Total Credit Hours</b>		<b>16</b>	<b>Total Credit Hours</b>		<b>18</b>
Third Semester			Fourth Semester		
		CR			CR
ENGL 101	Composition <i>or</i>	3	ENGL 202	Technical Communications	3
ENGL 201	Technical Writing I		FFT 110	Building Construction	3
FFT 215	Wildland/Urban Interface Fire Suppression & Prevention	3	FFT 116	Hazardous Materials Operations	3
FFT 230	Rescue Practices for the Fire Service	3	FFT 218	Strategy & Tactics	3
FFT 232	Structural Firefighter II	3	FFT 290	Physical Fitness IV	1
FFT 233	Fire Causes & Investigations	3	FFT 298	Internship	3
FFT 240	Physical Fitness III	1			
<b>Total Credit Hours</b>		<b>16</b>	<b>Total Credit Hours</b>		<b>16</b>

## HEALTH INFORMATION MANAGEMENT

### Associate in Applied Science, 67 Credit Hours, 18-Month Program Coding Specialty Diploma, 49 Credit Hours, 13-Month Program

The primary objective of the Health Information Management program is to prepare students with the necessary skills to work in the medical field maintaining a patient's health information. Students in both the diploma option and the degree option will take coursework in anatomy & physiology, medical terminology, medical office software, records management, electronic health records, billing/reimbursement, and level one transcription. Students who choose to continue with the degree option will either specialize in Transcription/Editor or in Coding. This program will also provide education and training in soft skills such as communication, teamwork, interpersonal skills, and attention to detail.

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 101	COMPOSITION* <i>or</i>	3
ENGL 203	TECHNICAL WRITING II	
MATH 112	BUSINESS MATHEMATICS**	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
SOC 100	INTRODUCTION TO SOCIOLOGY <i>or</i>	3
ECON 202	PRINCIPLES OF MACROECONOMICS	
	<b>Total</b>	<b>15</b>
<b>Technical Requirements</b>		
BUS 115	KEYBOARDING	3
BUS 137	PROFESSIONAL DEVELOPMENT	1
BUS 141	WRITTEN COMMUNICATIONS FOR BUSINESS	3
BUS 241	ADVANCED COMPUTER APPLICATIONS FOR BUSINESS	3
COC 132	RECORDS MANAGEMENT	3
HC 114	ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS	3
HC 130	MEDICAL COMPUTERIZED OFFICE APPLICATIONS	2
HC 135	MEDICAL LAW AND ETHICS	2
HC 145	ELECTRONIC HEALTH RECORDS	2
HC 200	PHARMACOLOGY FOR HEALTHCARE	3
HC 213	MEDICAL TERMINOLOGY I	3
HC 215	MEDICAL TERMINOLOGY II	3
MDS 210	HEALTHCARE CODING I	4
MDS 211	HEALTHCARE CODING II	3
MDS 212	HEALTHCARE FUNDAMENTALS & REIMBURSEMENT	3
MDS 250	ADVANCED CODING	2
MTS 102	MEDICAL TRANSCRIPTION I	3
MTS 124	DISEASE PROCESSES I	3
MTS 214	DISEASE PROCESSES II	3
	<b>Total</b>	<b>52</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing

\*\*Prerequisite: Acceptable ACCUPLACER score or Basic Math

Semester breakdown on next page

### Semester Breakdown AAS Coding Specialty

First Semester			Second Semester		
		CR			CR
BUS 115	Keyboarding	3	HC 200	Pharmacology for Healthcare	3
CIS 105	Microcomputer Software Applications I	3	BUS 241	Advanced Computer Applications for Business	3
HC 114	Anatomy & Physiology for the Health Professions	3	COC 132	Records Management	3
HC 130	Medical Computerized Office Applications	2	HC 145	Electronic Health Records	2
HC 135	Medical Law & Ethics	2	HC 215	Medical Terminology II	3
HC 213	Medical Terminology I	3	MTS 102	Medical Transcription I	3
<b>Total Credit Hours</b>		<b>16</b>	<b>Total Credit Hours</b>		<b>17</b>
Third Semester			Fourth Semester		
		CR			CR
BUS 137	Professional Development	1	BUS 141	Written Communications for Business	3
MATH112	Business Mathematics	3	ENGL101	Composition <i>or</i>	3
MDS 210	Healthcare Coding I	4	ENGL203	Technical Writing II	
MDS 212	Healthcare Fundamentals & Reimbursement	3	ECON202	Principles of Macroeconomics <i>or</i>	3
MTS 124	Disease Processes I	3	SOC 100	Introduction to Sociology	
PSYC 103	Human Relations in the Workplace	3	MDS 211	Healthcare Coding II	3
			MDS 250	Advanced Coding	2
			MTS 214	Disease Processes II	3
<b>Total Credit Hours</b>		<b>17</b>	<b>Total Credit Hours</b>		<b>17</b>

### Semester Breakdown Diploma

First Semester			Second Semester		
		CR			CR
BUS 115	Keyboarding	3	BUS 141	Written Communications for Business	3
CIS 105	Microcomputer Software Applications I	3	BUS 241	Advanced Computer Applications for Business	3
HC 114	Anatomy & Physiology for the Health Professions	3	COC132	Records Management	3
HC 130	Medical Computerized Office Applications	2	HC 145	Electronic Health Records	2
HC 135	Medical Law & Ethics	2	HC 215	Medical Terminology II	3
HC 213	Medical Terminology I	3	MTS 102	Medical Transcription I	3
<b>Total Credit Hours</b>		<b>16</b>	<b>Total Credit Hours</b>		<b>17</b>
Third Semester					
		CR			
BUS 137	Professional Development	1			
MATH 112	Business Mathematics	3			
MDS 212	Healthcare Fundamentals & Reimbursement	3			
PSYC103	Human Relations in the Workplace	3			
	Electives	6			
<b>Total Credit Hours</b>		<b>16</b>			

## HEALTHCARE TECHNICIAN

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

Healthcare Technician is a two-semester, nine-month program designed to give students the skills they need for the growing number of direct patient care positions available. Program graduates will be able to help provide basic care for patients in hospitals and residents of long-term care facilities, such as nursing homes. They also will be able to provide medical office support in clinics, physician's offices, and other healthcare providers. The program also prepares students to take the certified nursing assistant exam.

Job opportunities in all these areas are growing, and that growth is expected to continue. Labor market information shows the demand for workers in these fields is strong now and in the future. Through 2020, the number of nursing aides, orderlies, and attendants is expected to grow by 12.9 percent. In addition to training students for these important positions, the program allows graduates to transfer courses into WDT's program in Medical Assisting, another growing healthcare field.

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 101	COMPOSITION*	3
MATH 100	ELEMENTARY ALGEBRA** <i>or</i>	3
MATH 112	BUSINESS MATHEMATICS	
PSYC 101	GENERAL PSYCHOLOGY <i>or</i>	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	
<b>Total</b>		<b>12</b>
<b>Technical Requirements</b>		
HC 114	ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS	3
HC 125	INTRODUCTION TO PATIENT CARE	2
HC 126	INTRODUCTION TO PATIENT CARE LAB AND CLINICAL	2
HC 130	MEDICAL COMPUTERIZED OFFICE APPLICATIONS	2
HC 135	MEDICAL LAW AND ETHICS	2
HC 145	ELECTRONIC HEALTH RECORDS	2
HC 213	MEDICAL TERMINOLOGY I	3
MDS 210	HEALTHCARE CODING I	4
MDS 212	HEALTHCARE FUNDAMENTALS & REIMBURSEMENT	3
<b>Total</b>		<b>23</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing

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

### Semester Breakdown

First Semester			Second Semester		
Course No.	Course Title	CR	Course No.	Course Title	CR
CIS 105	Microcomputer Software Applications I	3	HC 145	Electronic Health Records	2
HC 114	Anatomy & Physiology for the Health Professions	3	ENGL 101	Composition	3
HC 125	Introduction to Patient Care	2	MATH 100	Elementary Algebra <i>or</i>	3
HC 126	Introduction to Patient Care Lab and Clinical	2	MATH 112	Business Mathematics	
HC 130	Medical Computerized Office Applications	2	MDS 210	Healthcare Coding I	4
HC 135	Medical Law & Ethics	2	MDS 212	Healthcare Fund/Reimbursement	3
HC 213	Medical Terminology I	3	PSYC 101	General Psychology <i>or</i>	3
			PSYC 103	Human Relations in the Workplace	
<b>Total Credit Hours</b>		<b>17</b>	<b>Total Credit Hours</b>		<b>18</b>

# HVAC TECHNOLOGY

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

The Heating, Ventilating, Air-Conditioning (HVAC) program prepares students with the necessary skills to be successful in the heating, air conditioning, and refrigeration field. Students will take coursework in HVAC theory, HVAC installation, plan and print reading, and other technical skills. This program also will provide education and training in soft skills such as communication and math.

The Heating, Ventilation and Air Conditioning graduate will be able to design residential and light commercial central heating and air conditioning systems according to load requirements. Graduates will be able to install, troubleshoot and repair residential and light commercial heating and air conditioning equipment; design, fabricate and install forced air and hot water distribution systems using sheet metal, duct board, copper tubing, Wirsbo tubing, Pex tubing, PVC and other accepted materials; install a wide range of oil and gas boilers and forced-air furnaces; and design, fabricate and install home and light commercial ventilation systems, including both exhaust and fresh air make-up exchangers. Students also will prepare for and take the universal HVAC certification exam so they are qualified to handle all types of refrigerant upon graduation.

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 102	CAREER COMMUNICATIONS	2
MATH 104	TECHNICAL MATHEMATICS **	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
	<b>Total</b>	<b>11</b>
<b>Technical Requirements</b>		
HVAC 120	ELECTRICAL APPLICATIONS FOR HVAC I	3
HVAC 125	HVAC INSTALLATION I	3
HVAC 126	HVAC INSTALLATION I LAB	4
HVAC 130	HVAC PLAN AND PRINT READING	2
HVAC 135	ELECTRICAL APPLICATIONS FOR HVAC II	3
HVAC 140	PIPE JOINING METHODS	3
HVAC 145	HVAC INSTALLATION II	3
HVAC 146	HVAC INSTALLATION II LAB	4
	<b>Total</b>	<b>25</b>

**All remedial coursework must be completed in the first semester.**

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

## Semester Breakdown

First Semester			Second Semester		
		CR			CR
CIS 105	Microcomputer Software Applications I	3	ENGL 102	Career Communications	2
HVAC 120	Electrical Applications for HVAC I	3	HVAC 135	Electrical Applications for HVAC II	3
HVAC 125	HVAC Installation I	3	HVAC 140	Pipe Joining Methods	3
HVAC 126	HVAC Installation I Lab	4	HVAC 145	HVAC Installation II	3
HVAC 130	HVAC Plan & Print Reading	2	HVAC 146	HVAC Installation II Lab	4
PSYC 103	Human Relations in the Workplace	3	MATH 104	Technical Mathematics	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

## **HVAC AND PLUMBING TECHNOLOGY**

### **Associate in Applied Science, 68 Credit Hours, 18-Month Program**

In the HVAC field, graduates will be able to design residential and light commercial central heating and air conditioning systems according to load requirements. Graduates will be able to install, troubleshoot and repair residential and light commercial heating and air conditioning equipment; design, fabricate and install forced air and hot water distribution systems using sheet metal, duct board, copper tubing, Wirsbo tubing, Pex tubing, PVC and other accepted materials; install a wide range of oil and gas boilers and forced-air furnaces; and design, fabricate and install home and light commercial ventilation systems, including both exhaust and fresh air make-up exchangers. Students also will prepare for and take the universal HVAC certification exam so they are qualified to handle all types of refrigerant upon graduation.

In the Plumbing field, the program will provide students with technical understanding and skills development and integrates theory with practical experience. Through the program, the student develops skills in piping techniques and procedures, plumbing and piping systems, residential and commercial system installations, blueprint reading and isometric interpretation. The successful graduate is eligible for 800 hours on his or her apprenticeship card and employment at an advanced apprenticeship level in a variety of businesses found in rural and metropolitan areas.

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ECON 202	PRINCIPLES OF MACROECONOMICS	3
ENGL 201	TECHNICAL WRITING I*	3
MATH 100	ELEMENTARY ALGEBRA	3
MATH 104	TECHNICAL MATHEMATICS**	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
<b>Total</b>		<b>18</b>
<b>Technical Requirements</b>		
HVAC 120	ELECTRICAL APPLICATIONS FOR HVAC I	3
HVAC 125	HVAC INSTALLATION I	3
HVAC 126	HVAC INSTALLATION I LAB	4
HVAC 130	HVAC PLAN AND PRINT READING	2
HVAC 135	ELECTRICAL APPLICATIONS FOR HVAC II	3
HVAC 140	PIPE JOINING METHODS	3
HVAC 145	HVAC INSTALLATION II	3
HVAC 146	HVAC INSTALLATION II LAB	4
PLU 120	PLUMBING THEORY I	3
PLU 121	PLUMBING THEORY I LAB	3
PLU 125	PLUMBING PRACTICES I	4
PLU 130	PLUMBING PLAN AND PRINT READING	2
PLU 135	PLUMBING THEORY II	3
PLU 136	PLUMBING THEORY II LAB	4
PLU 140	PLUMBING PRACTICES II	4
PLU 145	ADVANCED PLUMBING PLAN AND PRINT READING	2
<b>Total</b>		<b>50</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic English.

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

**Semester breakdown on next page**

## Semester Breakdown

<b>First Semester</b>			<b>Second Semester</b>		
		<b>CR</b>			<b>CR</b>
CIS 105	Microcomputer Software Applications I	3	HVAC 135	Electrical Applications for HVAC II	3
HVAC 120	Electrical Applications for HVAC I	3	HVAC 140	Pipe Joining Methods	3
HVAC 125	HVAC Installation I	3	HVAC 145	HVAC Installation II	3
HVAC 126	HVAC Installation I Lab	4	HVAC 146	HVAC Installation II Lab	4
HVAC 130	HVAC Plan and Print Reading	2	MATH 104	Technical Mathematics	3
PSYC 103	Human Relations in the Workplace	3			
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>16</b>
<b>Third Semester</b>			<b>Fourth Semester</b>		
		<b>CR</b>			<b>CR</b>
ENGL 201	Technical Writing I	3	ECON 202	Principles of Macroeconomics	3
MATH 100	Elementary Algebra	3	PLU 135	Plumbing Theory II	3
PLU 120	Plumbing Theory I	3	PLU 136	Plumbing Theory II Lab	4
PLU 121	Plumbing Theory I Lab	3	PLU 140	Plumbing Practices II	4
PLU 125	Plumbing Practices I	4	PLU 145	Advanced Plumbing Plan and Print Reading	2
PLU 130	Plumbing Plan and Print Reading	2			
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>16</b>

## **LAW ENFORCEMENT TECHNOLOGY**

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### **Associate in Applied Science, 70 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 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, and 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 applicants 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 and 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:

- Make application to WDT and take the ACCUPLACER test or have an acceptable ACT/SAT
- Successfully pass a criminal background check
- Pass a pre-entrance drug screen

**Course requirements on next page.**

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTERS SOFTWARE APPLICATIONS I	3
EMR 106	EMERGENCY MEDICAL RESPONDER	3
SOC 100	INTRODUCTION TO SOCIOLOGY	3
ENGL 201	TECHNICAL WRITING I*	3
MATH 100	ELEMENTARY ALGEBRA** <i>or higher</i>	3
PSYC 101	GENERAL PSYCHOLOGY	3
	<b>Total</b>	<b>18</b>
<b>Technical Requirements</b>		
LET 117	INDUSTRY STANDARDS	0
LET 119	CRIMINAL LAW & PROCEDURES	3
LET 120	MECHANICS OF ARREST AND PHYSICAL TRAINING	2
LET 121	CRIMINAL INVESTIGATIONS	4
LET 122	INTERVIEW AND INTERROGATION AND REPORT WRITING	3
LET 124	JUVENILE METHODS	3
LET 126	PHYSICAL TRAINING	1
LET 127	INDUSTRY STANDARDS	0
LET 210	INTRODUCTION TO CRIMINAL JUSTICE	3
LET 212	ACCIDENT INVESTIGATIONS	2
LET 213	CRIMINOLOGY & ABNORMAL BEHAVIOR	3
LET 215	COLLECTION AND 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 229	CORRECTIONS	3
LET 230	PATROL PROCEDURES II	3
LET 232	TECHNOLOGY IN LAW ENFORCEMENT	2
LET 240	CONSTITUTIONAL LAW FOR LAW ENFORCEMENT	3
LET 251	FIREARMS TRAINING	2
LET 255	EMERGENCY VEHICLE OPERATION COURSE	3
	<b>Total</b>	<b>52</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

\*\*Prerequisite: Acceptable ACCUPLACER 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
EMR 106	Emergency Medical Responder	3	LET 121	Criminal Investigations	4
CIS 105	Microcomputer Software Applications I	3	LET 122	Interview and Interrogation and Report Writing	3
LET 117	Industry Standards	0	LET 124	Juvenile Methods	3
LET 119	Criminal Law & Procedures	3	LET 126	Physical Training	1
LET 120	Mechanics of Arrest and Physical Training	2	LET 127	Industry Standards	0
LET 210	Introduction to Criminal Justice	3	ENGL 201	Technical Writing I	3
LET 240	Constitutional Law for Law Enforcement	3	PSYC 101	General Psychology	3
<b>Total Credit Hours</b>		<b>17</b>	<b>Total Credit Hours</b>		<b>17</b>
Third Semester			Fourth Semester		
		CR			CR
LET 212	Accident Investigations	2	LET 222	Advanced Issues in Policing	2
LET 213	Criminology and Abnormal Behavior	3	LET 224	Law Enforcement Practicum	2
LET 215	Collection and 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 229	Corrections	3
LET 218	Patrol Procedures I	3	LET 230	Patrol Procedures II	3
MATH 100	Elementary Algebra <i>or higher</i>	3	LET 232	Technology in Law Enforcement	2
SOC 100	Introduction to Sociology	3	LET 251	Firearms Training	2
			LET 255	Emergency Vehicle Operation Course	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

## **LIBRARY TECHNICIAN**

### **Associate in Applied Science, 63 Credit Hours, 18-Month Program Diploma, 30 Credit Hours, 10-Month Program**

The primary objective of the Library Technician program is to prepare students with the necessary skills to work in a supportive capacity to librarians and patrons. The aim of this program is to provide a solid foundation in core library technical skills, and provide students with the skills and knowledge of new trends in technology. Graduates will gain the skills to manage library software. Through their education and experience in this program, students will learn how to catalogue, maintain, and retrieve print, digital, and audiovisual resources, and specialized media. They will also be introduced to research strategies for library catalogues, databases, and the World Wide Web and learn skills in website development. This program also will provide education and training in soft skills such as communication, teamwork, interpersonal skills, and attention to detail.

The Library Technician program is designed for students who are interested in working in a library and assisting patrons, supporting librarians, maintaining library databases, cataloguing and researching materials, and serving as a team member in a library setting. Library technicians are employed in settings such as public libraries, higher education libraries, K-12 libraries, and special libraries such as medical, law, corporate, and government facilities.

There are opportunities for a two-semester diploma in Library Technician.

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ECON 202	PRINCIPLES OF MACROECONOMICS	3
ENGL 101	COMPOSITION* <i>or</i>	3
ENGL 203	TECHNICAL WRITING II	
MATH 112	BUSINESS MATHEMATICS**	3
PSYC 101	GENERAL PSYCHOLOGY <i>or</i>	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	
	<b>Total</b>	<b>15</b>
<b>Technical Requirements</b>		
BUS 120	PRINCIPLES OF MARKETING	3
BUS 218	DESIGN ESSENTIALS	3
BUS 156	WEBSITE DEVELOPMENT FOR BUSINESS	3
BUS 210	SUPERVISORY MANAGEMENT	3
LIBR 100	INTRODUCTION TO LIBRARY SERVICES	3
LIBR 102	INTRODUCTION TO LIBRARY CIRCULATION AND CUSTOMER SERVICE	3
LIBR 104	PUBLIC SERVICES FOR LIBRARY TECHNICIANS	3
LIBR 120	PROGRAMMING AND SERVICES FOR ALL AGES	3
LIBR 122	CHILDREN'S AND YOUNG ADULT LITERATURE	3
LIBR 200	INTRODUCTION TO TECHNICAL SERVICES: ACQUISITIONS, SERIALS, AND PROCESSING	3
LIBR 202	CONTENT CREATION AND MOBILE LIBRARY SERVICES	3
LIBR 204	SELECTION AND ACCESS RESOURCES	3
LIBR 220	INTRODUCTION TO CATALOGING AND CLASSIFICATION	3
LIBR 222	REFERENCE RESOURCES	3
LIBR 224	TECHNOLOGY INFORMATION RESOURCES AND ONLINE SOCIAL NETWORKING	3
LIBR 299	INTERNSHIP	3
	<b>Total</b>	<b>48</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

\*\*Prerequisite: Acceptable ACCUPLACER score or Basic Math

**Semester breakdown on next page**

### Semester Breakdown AAS

First Semester			Second Semester		
		CR			CR
CIS 105	Microcomputer Software Applications I	3	LIBR 104	Public Services for Library Technicians	3
LIBR 100	Introduction to Library Services	3	LIBR 120	Programming and Services for All Ages	3
LIBR 102	Introduction to Library Circulation and Customer Service	3	LIBR 122	Children's and Young Adult Literature	3
ENGL101	Composition <i>or</i>	3	BUS 156	Website Development for Business	3
ENGL 203	Technical Writing II	3	PSYC 101	General Psychology <i>or</i>	3
MATH 112	Business Mathematics	3	PSYC 103	Human Relations in the Workplace	3
<b>Total Credit Hours</b>		<b>15</b>	<b>Total Credit Hours</b>		<b>15</b>

  

Third Semester			Fourth Semester		
		CR			CR
LIBR 200	Introduction to Technical Services: Acquisitions, Serials, and Processing	3	LIBR 220	Introduction to Cataloging and Classification	3
LIBR 202	Content Creation and Mobile Library Services	3	LIBR 222	Reference Resources	3
LIBR 204	Selection and Access Resources	3	LIBR 224	Technology Information Resources & Online Social Networking	3
BUS 218	Design Essentials	3	BUS 120	Principles of Marketing	3
BUS 210	Supervisory Management	3	LIBR 299	Internship	3
ECON 202	Principles of Macroeconomics	3			
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>15</b>

### Semester Breakdown Diploma

First Semester			Second Semester		
		CR			CR
CIS 105	Microcomputer Software Applications I	3	LIBR 104	Public Services for Library Technicians	3
LIBR100	Introduction to Library Services	3	LIBR 120	Programming and Services for All Ages	3
LIBR 102	Introduction to Library Circulation and Customer Service	3	LIBR 122	Children's and Young Adult Literature	3
ENGL101	Composition <i>or</i>	3	BUS 156	Website Development for Business	3
ENGL 203	Technical Writing II	3	PSYC 101	General Psychology <i>or</i>	3
MATH 112	Business Mathematics	3	PSYC 103	Human Relations in the Workplace	3
<b>Total Credit Hours</b>		<b>15</b>	<b>Total Credit Hours</b>		<b>15</b>

## MEDICAL ASSISTING

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

The Medical Assisting 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 physicians with patient care management. They also 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.

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 101	COMPOSITION*	3
ENGL 202	TECHNICAL COMMUNICATIONS	3
MATH 100	ELEMENTARY ALGEBRA** <i>or</i>	3
MATH 112	BUSINESS MATHEMATICS	
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</b>
<b>Technical Requirements</b>		
HC 114	ANATOMY AND PHYSIOLOGY FOR THE HEALTH PROFESSIONS	3
HC 125	INTRODUCTION TO PATIENT CARE	2
HC 126	INTRODUCTION TO PATIENT CARE LAB & CLINICAL	2
HC 130	MEDICAL COMPUTERIZED OFFICE APPLICATIONS	2
HC 135	MEDICAL LAW AND ETHICS	2
HC 145	ELECTRONIC HEALTH RECORDS	2
HC 200	PHARMACOLOGY FOR HEALTHCARE	3
HC 205	PROFESSIONALISM IN HEALTHCARE	1
HC 213	MEDICAL TERMINOLOGY I	3
HC 225	PATHOPHYSIOLOGY	3
MA 210	MEDICAL ASSISTING I	3
MA 211	MEDICAL ASSISTING I LAB & CLINICAL	4
MA 215	PHLEBOTOMY AND LAB TECHNIQUES FOR THE MEDICAL ASSISTANT	4
MA 250	MEDICAL ASSISTING II	3
MA 251	MEDICAL ASSISTING II LAB & CLINICAL	4
MDS 210	HEALTHCARE CODING I	4
MDS 212	HEALTHCARE FUNDAMENTALS AND REIMBURSEMENT	3
	ELECTIVES	3
	<b>Total</b>	<b>51</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

## Semester Breakdown

First Semester			Second Semester		
		CR			CR
CIS 105	Microcomputer Software Applications I	3	HC 145	Electronic Health Records	2
HC 114	Anatomy & Physiology for the Health Professions	3	ENGL 101	Composition	3
HC 125	Introduction to Patient Care	2	MATH 100	Elementary Algebra <i>or</i>	3
HC 126	Introduction to Patient Care Lab and Clinical	2	MATH 112	Business Mathematics	
HC 130	Medical Computerized Office Applications	2	MDS 210	Healthcare Coding I	4
HC 135	Medical Law and Ethics	2	MDS 212	Healthcare Fundamentals and Reimbursement	3
HC 213	Medical Terminology I	3	PSYC 101	General Psychology <i>or</i>	3
			PSYC 103	Human Relations in the Workplace	
<b>Total Credit Hours</b>		<b>17</b>	<b>Total Credit Hours</b>		<b>18</b>
Third Semester			Fourth Semester		
		CR			CR
HC 200	Pharmacology for Healthcare	3	ENGL 202	Technical Communications	3
HC 225	Pathophysiology	3	HC 205	Professionalism in Healthcare	1
MA 210	Medical Assisting I	3	MA 250	Medical Assisting II	3
MA 211	Medical Assisting I Lab & Clinical	4	MA 251	Medical Assisting II Lab & Clinical	4
MA 215	Phlebotomy and Lab Techniques for the Medical Assistant	4	SOC 100	Introduction to Sociology	3
				Electives	3
<b>Total Credit Hours</b>		<b>17</b>	<b>Total Credit Hours</b>		<b>17</b>

## **PARALEGAL/LEGAL ASSISTANT**

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### **Associate in Applied Science, 70 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 allow students to develop skills required for employment in traditional and non-traditional legal settings as assessed through the 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
- Demonstrate 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.

**Semester breakdown on next page**

Course	No.	Course Title	Credits
<b>General Education Requirements</b>			
CIS	105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ECON	202	PRINCIPLES OF MACROECONOMICS <i>or</i>	3
SOC	100	INTRODUCTION TO SOCIOLOGY	
ENGL	101	COMPOSITION*	3
MATH	101	INTERMEDIATE ALGEBRA** <i>or higher</i>	3
PSYC	101	GENERAL PSYCHOLOGY <i>or</i>	3
PSYC	103	HUMAN RELATIONS IN THE WORKPLACE	
SPCM	101	FUNDAMENTALS OF SPEECH	3
<b>Total</b>			<b>18</b>
<b>Technical Requirements</b>			
ACCT	120	PRINCIPLES OF ACCOUNTING I	3
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 AND WRITING I	4
PLL	133	LEGAL RESEARCH AND WRITING II	4
PLL	150	WILLS, TRUSTS, AND ESTATES	2
PLL	211	AMERICAN LEGAL SYSTEM AND CONSTITUTIONAL LAW	3
PLL	212	LITIGATION AND CIVIL PROCEDURE	3
PLL	215	LAW OF BUSINESS ORGANIZATIONS	2
PLL	220	LAW OFFICE PROCEDURE	2
PLL	232	LITIGATION CLINIC I	2
PLL	233	LITIGATION CLINIC II	2
PLL	235	FAMILY LAW	3
PLL	298	INTERNSHIP	7
<b>Total</b>			<b>52</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

**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

First Semester			Second Semester		
		CR			CR
ACCT 120	Principles of Accounting I	3	PLL 124	Criminal Law	2
CIS 105	Microcomputer Software Applications I	3	PLL 132	Legal Research and Writing I	4
HUM 102	Critical Thinking	3	PLL 150	Wills, Trusts, and Estates	2
MATH 101	Intermediate Algebra <i>or higher</i>	3	PLL 212	Litigation and Civil Procedure	3
PLL 111	Introduction to Paralegalism	2	ENGL 101	Composition	3
PLL 211	American Legal System and Constitutional Law	3	PSYC 101	General Psychology <i>or</i>	3
			PSYC 103	Human Relations in the Workplace	
<b>Total Credit Hours</b>		<b>17</b>	<b>Total Credit Hours</b>		<b>17</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 and Writing II	4	PLL 220	Law Office Procedure	2
PLL 232	Litigation Clinic I	2	PLL 233	Litigation Clinic II	2
SOC 100	Introduction to Sociology <i>or</i>	3	PLL 235	Family Law	3
ECON 202	Principles of Macroeconomics		PLL 298	Internship	7
SPCM 101	Fundamentals of Speech	3			
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

## PARAMEDIC

### Associate in Applied Science, 69 Credits, 21-Month Program\*\*\*

Responding to medical emergencies is not an easy task. Extraordinary circumstances call for extraordinary people to take the first step to lead others to safety. The paramedic program at Western Dakota Tech produces this caliber of individual. These select few that answer the calling to help others will experience over one thousand hours of training here at Western Dakota Tech, and that training entails didactic experience as well as a vigorous and stringent internship program that will produce a pre-hospital caregiver that will meet the demands of the society today as well as the future.

Delivering high caliber medical care is taught to our student candidates from an instructor group with over 40 years of experience providing pre-hospital care. Beyond paramedicine, emphasis is also placed on critical thinking skills, written and oral communication and basic concepts in biology, mathematics, psychology, and sociology as well. A mandatory course average 85% raises the standards of the field of paramedicine and by acknowledging this standard assures that the individual that earns the title of paramedic is indeed prepared to face any emergency they are placed in.

At the end of the paramedic program the successful candidate will have the following: American Heart Association (AHA) – Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS); National Association of Emergency Medical Technicians (NAEMT) – Pre-Hospital Trauma Life Support (PHTLS) as well as Advanced Medical Life Support (AMLS). These courses aid in the successful candidate’s approach to the national certification exam that will allow them to obtain the title of Paramedic.

If you are up to the challenge, welcome. Now it is time to work.

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 101	COMPOSITION* <i>or</i>	3
ENGL 201	TECHNICAL WRITING I	
ENGL 202	TECHNICAL COMMUNICATIONS	3
MATH 101	INTERMEDIATE ALGEBRA** <i>or higher</i>	3
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</b>
<b>Technical Requirements</b>		
EMT 105	EMERGENCY MEDICAL TECHNICIAN	6
FFP 105	PARAMEDIC PREPARATORY II	2
FFP 110	PARAMEDIC ASSESSMENT	2
FFP 115	PARAMEDIC CARDIOLOGY	5
FFP 120	PARAMEDIC PREPARATORY I	4
FFP 125	PARAMEDIC MEDICAL	3
FFP 130	PARAMEDIC SPECIAL OPERATIONS I	2
FFP 215	PARAMEDIC SPECIAL OPERATIONS II	5
FFP 294	PARAMEDIC CLINICAL I	3
FFP 295	PARAMEDIC CLINICAL II	3
FFP 296	PARAMEDIC CLINICAL III	10
HC 114	ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS	3
HC 213	MEDICAL TERMINOLOGY I	3
	<b>Total</b>	<b>51</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

\*\*\*Students must successfully complete the program to sit for the National Registry Exam to become a Certified Paramedic.

**Note:** All students will undergo a background check by the South Dakota Medical and Osteopathic Examiners in order to receive the required ‘student status’. If you have been convicted, pled guilty or no contest to, or received a suspended imposition of sentence for a felony, misdemeanor, or other criminal offense, you are advised that it may not be possible for you to participate in the clinical portions of this program, which are required for graduation. You may also be prevented from taking required certification examinations, and you may be prevented from gaining employment in this field. Any questions should be directed to the Paramedic Program Director.

**Semester breakdown on next page**

## Semester Breakdown

<b>First Semester</b>			<b>CR</b>	<b>Second Semester</b>			<b>CR</b>
EMT 105	Emergency Medical Technician	6		ENGL 202	Technical Communications	3	
HC 213	Medical Terminology I	3		HC 114	Anatomy & Physiology for the Health Professions	3	
ENGL 101	Composition <i>or</i>	3		MATH 101	Intermediate Algebra <i>or higher</i>	3	
ENGL 201	Technical Writing I			PSYC 101	General Psychology <i>or</i>	3	
CIS 105	Microcomputer Software Applications I	3		PSYC 103	Human Relations in the Workplace		
				SOC 100	Introduction to Sociology	3	
<b>Total Credit Hours</b>			<b>15</b>	<b>Total Credit Hours</b>			<b>15</b>
<b>Third Semester</b>			<b>CR</b>	<b>Fourth Semester</b>			<b>CR</b>
FFP 120	Paramedic Preparatory I	4		FFP 105	Paramedic Preparatory II	2	
FFP 110	Paramedic Assessment	2		FFP 115	Paramedic Cardiology	5	
FFP 125	Paramedic Medical	3		FFP 215	Paramedic Special Operations II	5	
FFP 130	Paramedic Special Operations I	2		FFP 295	Paramedic Clinical II	3	
FFP 294	Paramedic Clinical I	3					
<b>Total Credit Hours</b>			<b>14</b>	<b>Total Credit Hours</b>			<b>15</b>
<b>Fifth Semester (Summer)</b>			<b>CR</b>				
FFP 296	Paramedic Clinical III	10					
<b>Total Credit Hours</b>			<b>10</b>				

# PHARMACY TECHNICIAN

## Associate in Applied Science, 70 Credit Hours, 20-Month Program

### Diploma, 44/45 Credit Hours, 11-Month Program

The goal of the Pharmacy Technician Program at WDT 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 processing new orders and prescriptions, IV preparation, ordering, inventory, customer service, insurance billing, record retention, compounding, and storing incoming merchandise in proper locations. 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>		
CHEM 106	CHEMISTRY SURVEY	3
CHEM 106L	CHEMISTRY SURVEY LAB	1
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 101	COMPOSITION*	3
ENGL 201	TECHNICAL WRITING I* <i>or</i>	3
SPCM 101	FUNDAMENTALS OF SPEECH	
ENGL 202	TECHNICAL COMMUNICATIONS	3
MATH 100	ELEMENTARY ALGEBRA** <i>or higher</i>	3
MATH 101	INTERMEDIATE ALGEBRA <i>or higher</i>	3
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>28</b>
<b>Technical Requirements</b>		
HC 205	PROFESSIONALISM IN HEALTHCARE	1
HC 213	MEDICAL TERMINOLOGY I	3
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 127	PHARMACY CALCULATIONS	2
PHR 128	PHARMACY OPERATIONS	2
PHR 130	PHARMACY PRACTICAL LAB	1
PHR 131	CLINICAL ROTATIONS	8
PHR 205	PHARMACOKINETICS/PHARMACODYNAMICS	3
PHR 200	RX ABBREVIATIONS/SIG DECODING	2
PHR 210	U.S. HEALTHCARE AND MEDICAL INSURANCE	3
	<b>Total</b>	<b>42</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

Semester breakdown on next page

## Semester Breakdown AAS

<b>First Semester</b>			<b>Second Semester</b>		
		<b>CR</b>			<b>CR</b>
CIS 105	Microcomputer Software Applications I	3	PHR 120	Pharmacy II	3
HC 213	Medical Terminology I	3	PHR 121	Pharmacology/Pharmaceutical Products II	3
HC 114	Anatomy & Physiology for the Health Professions	3	PHR 122	Pharmacy Law & Ethics	2
PHR 110	Pharmacology/Pharmaceutical Products I	3	PHR 127	Pharmacy Calculations	2
PHR 111	Pharmacy I	3	PHR 128	Pharmacy Operations	2
MATH 100	Elementary Algebra <i>or higher</i>	3	PHR 130	Pharmacy Practical Lab	1
			PSYC 101	General Psychology <i>or</i>	3
			PSYC 103	Human Relations in the Workplace	
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>16</b>
<b>Third Semester (Summer)</b>			<b>Fourth Semester</b>		
		<b>CR</b>			<b>CR</b>
PHR 131	Clinical Rotations	8	ENGL 101	Composition	3
			ENGL 201	Technical Writing I <i>or</i>	3
			SPCM 101	Fundamentals of Speech	
			HC 205	Professionalism in Healthcare	1
			MATH 101	Intermediate Algebra <i>or higher</i>	3
			PHR 200	Rx Abbreviations/Sig Decoding	2
			SOC 100	Introduction to Sociology	3
<b>Total Credit Hours</b>		<b>8</b>	<b>Total Credit Hours</b>		<b>15</b>
<b>Fifth Semester</b>					
		<b>CR</b>			
CHEM 106	Chemistry Survey	3			
CHEM 106L	Chemistry Survey Lab	1			
ENGL 202	Technical Communications	3			
PHR 205	Pharmacokinetics/ Pharmacodynamics	3			
PHR 210	U.S. Healthcare & Medical Insurance	3			
<b>Total Credit Hours</b>		<b>13</b>			

## Semester Breakdown Diploma

<b>First Semester</b>			<b>Second Semester</b>		
		<b>CR</b>			<b>CR</b>
CIS 105	Microcomputer Software Applications I	3	ENGL 102	Career Communications <i>or</i>	2/3
HC 213	Medical Terminology I	3	ENGL 202	Technical Communications	
HC 114	Anatomy & Physiology for the Health Professions	3	PHR 120	Pharmacy II	3
PHR 110	Pharmacology/Pharmaceutical Products I	3	PHR 121	Pharmacology/Pharmaceutical Products II	3
PHR 111	Pharmacy I	3	PHR 122	Pharmacy Law & Ethics	2
MATH 100	Elementary Algebra <i>or higher</i>	3	PHR 127	Pharmacy Calculations	2
			PHR 128	Pharmacy Operations	2
			PHR 130	Pharmacy Practical Lab	1
			PSYC 101	General Psychology <i>or</i>	3
			PSYC 103	Human Relations in the Workplace	
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18/19</b>
<b>Third Semester (Summer)</b>					
		<b>CR</b>			
PHR 131	Clinical Rotations	8			
<b>Total Credit Hours</b>		<b>8</b>			

## **PHLEBOTOMY/LABORATORY ASSISTANT**

### **Diploma, 32 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.

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 102	CAREER COMMUNICATIONS	2
MATH 100	ELEMENTARY ALGEBRA* <i>or higher</i>	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
<b>Total</b>		<b>11</b>
<b>Technical Requirements</b>		
HC 213	MEDICAL TERMINOLOGY I	3
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 150	CLINICAL PRACTICE AND CAPSTONE	7
<b>Total</b>		<b>21</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER 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 213	Medical Terminology I	3	PH 123	Laboratory Assistant Techniques	3
HC 114	Anatomy & Physiology for the Health Professions	3	PH 150	Clinical Practice and Capstone	7
PH 102	Introduction to Phlebotomy	2	ENGL 102	Career Communications	2
PH 121	Principles and Practices	3	CIS 105	Microcomputer Software Applications I	3
MATH 100	Elementary Algebra <i>or higher</i>	3			
PSYC 103	Human Relations in the Workplace	3			
<b>Total Credit Hours</b>		<b>17</b>	<b>Total Credit Hours</b>		<b>15</b>

## PLUMBING TECHNOLOGY

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

The Plumbing Technology program prepares the student to begin a career in plumbing and pipe fitting. Coursework provides the student with technical understanding and skills development and integrates theory with practical experience. Through the program, the student develops skills in piping techniques and procedures, plumbing and piping systems, residential and commercial system installations, blueprint reading and isometric interpretation. The successful graduate is eligible for 800 hours on his or her apprenticeship card and employment at an advanced apprenticeship level in a variety of businesses found in rural and metropolitan areas.

There are a variety of career opportunities for graduates of the plumbing program. Graduates have the option of working for a commercial or residential plumbing contractor as they complete their apprenticeship training. The plumbing trade offers challenging and interesting work for those with the desire to work as designers, installers, and troubleshooters. The opportunity for advancement to master plumber status and business owner also exists.

The primary objective of the Plumbing Technology program is to prepare students with the necessary skills to be successful in the plumbing field. Students will take coursework in plumbing theory, plumbing practices, plan and print reading, and other technical skills. This program also will provide education and training in soft skills such as communication and math. The aim of this program is to provide students a solid foundation in plumbing technology. According to the Occupational Outlook Handbook graduates of this program may do the following: Plumbers install and repair water, drainage, and gas pipes in homes, businesses, and factories. They install and repair large water lines, such as those that supply water to buildings, and smaller ones, including ones that supply water to refrigerators. Plumbers also install plumbing fixtures—bathtubs, showers, sinks, and toilets—and appliances such as dishwashers, garbage disposals, and water heaters. They also fix plumbing problems. For example, when a pipe is clogged or leaking, plumbers remove the clog or replace the pipe. Some plumbers maintain septic systems, the large, underground holding tanks that collect waste from houses not connected to a city or county's sewer system.

Course	No.	Course Title	Credits
<b>General Education Requirements</b>			
CIS	105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL	102	CAREER COMMUNICATIONS	2
MATH	104	TECHNICAL MATHEMATICS **	3
PSYC	103	HUMAN RELATIONS IN THE WORKPLACE	3
<b>Total</b>			<b>11</b>
<b>Technical Requirements</b>			
PLU	120	PLUMBING THEORY I	3
PLU	121	PLUMBING THEORY I LAB	3
PLU	125	PLUMBING PRACTICES I	4
PLU	130	PLUMBING PLAN AND PRINT READING	2
PLU	135	PLUMBING THEORY II	3
PLU	136	PLUMBING THEORY II LAB	4
PLU	140	PLUMBING PRACTICES II	4
PLU	145	ADVANCED PLUMBING PLAN AND PRINT READING	2
<b>Total</b>			<b>25</b>

**All remedial coursework must be completed in the first semester.**

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

### Semester Breakdown

First Semester			Second Semester		
		CR			CR
CIS 105	Microcomputer Software Applications I	3	ENGL 102	Career Communications	2
MATH 104	Technical Mathematics	3	PLU 135	Plumbing Theory II	3
PLU 120	Plumbing Theory I	3	PLU 136	Plumbing Theory II Lab	4
PLU 121	Plumbing Theory I Lab	3	PLU 140	Plumbing Practices II	4
PLU 125	Plumbing Practices I	4	PLU 145	Advanced Plumbing Plan and Print Reading	2
PLU 130	Plumbing Plan and Print Reading	2	PSYC 103	Human Relations in the Workplace	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

## PRACTICAL NURSING

### Associate in Applied Science, 72 Credit Hours, 20-Month Program

The mission of the Practical Nursing program is to develop graduates who possess the knowledge, skills, attitudes, integrity to provide safe, prudent, and patient-centered care 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 (LPN's) are an important component of the healthcare team. The program stresses the importance of clinical experience by providing 600 clinical hours of actual supervised clinical. LPN's work in a variety of clinical settings including acute-care, long-term care, and office/clinic environments. The role of LPN's has expanded to include IV therapy and supervision in many settings. Upon successful completion of the program, graduates take the National Counsel of Licensure Exams (NCLEX). Job placement is excellent for graduates.

All students in the Practical Nursing program are required to fulfill the general education requirements and have a satisfactory TEAS score before acceptance into nursing courses.

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CHEM 106	CHEMISTRY SURVEY***	3
CHEM 106L	CHEMISTRY SURVEY LAB***	1
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 101	COMPOSITION*	3
MATH 101	INTERMEDIATE ALGEBRA** <i>or higher</i>	3
PHGY 220	HUMAN ANATOMY & PHYSIOLOGY I W/LAB***	4
PHGY 230	HUMAN ANATOMY & PHYSIOLOGY II W/LAB***	4
PSYC 101	GENERAL PSYCHOLOGY	3
SOC 100	INTRODUCTION TO SOCIOLOGY	3
	<b>Total</b>	<b>27</b>
<b>Technical Requirements</b>		
HC 213	MEDICAL TERMINOLOGY I***	3
NSG 116	FOUNDATIONS IN NURSING CLINICAL****	4
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 135	PROFESSIONAL DEVELOPMENT	2
NSG 136	MENTAL HEALTH NURSING PRACTICUM	1
NSG 140	MATERNAL/CHILD HEALTH PRACTICUM****	1
NSG 139	ADULT HEALTH PRACTICUM***	4
NSG 200	FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS	6
NSG 201	FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS LAB****	1
NSG 205	PHARMACOLOGY IN NURSING	4
NSG 212	ADULT HEALTH NURSING LAB/CLINICAL****	6
	<b>Total</b>	<b>45</b>

**All remedial coursework must be completed in the first semester.**

\* Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

\*\* Prerequisite: Acceptable ACCUPLACER score or Basic Math/Elem Algebra.

\*\*\* This course to be completed with a 'C' or better prior to enrolling in any NSG courses. (exception to be granted only with approval from the Nursing Program Director and the Registrar)

\*\*\*\* Clinicals, practicums, and internships may include, but are not limited to differential shifts (evenings, nights, weekends, and holidays) to meet industry expectations.

**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 for Fall Cohort

First Semester*			Second Semester*		
		CR			CR
CIS 105	Microcomputer Software Applications I	3	CHEM 106	Chemistry Survey	3
HC 213	Medical Terminology I	3	CHEM 106L	Chemistry Survey Lab	1
MATH 101	Intermediate Algebra <i>or higher</i>	3	ENGL 101	Composition	3
SOC 100	Introduction to Sociology	3	PHGY 230	Human Anatomy & Physiology II w/Lab	4
PHGY 220	Human Anatomy & Physiology I with Lab	4	PSYC 101	General Psychology	3
<b>Total Credit Hours</b>		<b>16</b>	<b>Total Credit Hours</b>		<b>14</b>
Third Semester			Fourth Semester		
		CR			CR
NSG 116	Foundations in Nursing Clinical	4	NSG 119	Mental Health Nursing	2
NSG 118	Geriatric Clinical	1	NSG 125	Maternal/Child Health Nursing	4
NSG 200	Foundations in Nursing with Geriatric Considerations	6	NSG 129	Adult Health Nursing	6
NSG 201	Foundations in Nursing with Geriatric Considerations Lab	1	NSG 212	Adult Health Nursing Lab/Clinical	6
NSG 205	Pharmacology in Nursing	4			
<b>Total Credit Hours</b>		<b>16</b>	<b>Total Credit Hours</b>		<b>18</b>
Fifth Semester (Summer)					
		CR			
NSG 135	Professional Development	2			
NSG 136	Mental Health Nursing Practicum	1			
NSG 140	Maternal/Child Health Practicum	1			
NSG 139	Adult Health Practicum	4			
<b>Total Credit Hours</b>		<b>8</b>			

### Semester Breakdown for Spring Cohort

First Semester*			Second Semester*		
		CR			CR
CIS 105	Microcomputer Software Applications I	3	CHEM 106	Chemistry Survey	3
HC 213	Medical Terminology I	3	CHEM 106L	Chemistry Survey Lab	1
MATH 101	Intermediate Algebra <i>or higher</i>	3	ENGL 101	Composition	3
PSYC 101	General Psychology	3	PHGY 230	Human Anatomy & Physiology II w/Lab	4
PHGY 220	Human Anatomy & Physiology I with Lab	4	SOC 100	Introduction to Sociology	3
<b>Total Credit Hours</b>		<b>16</b>	<b>Total Credit Hours</b>		<b>14</b>
Third Semester			Fourth Semester (Summer)		
		CR			CR
NSG 118	Geriatric Clinical	1	NSG 116	Foundations in Nursing Clinical	4
NSG 200	Foundations in Nursing with Geriatric Considerations	6	NSG 119	Mental Health Nursing	2
NSG 201	Foundations in Nursing with Geriatric Considerations Lab	1	NSG 136	Mental Health Nursing Practicum	1
NSG 205	Pharmacology in Nursing	4			
<b>Total Credit Hours</b>		<b>12</b>	<b>Total Credit Hours</b>		<b>7</b>
Fifth Semester			Sixth Semester		
		CR			CR
NSG 129	Adult Health Nursing	6	NSG 125	Maternal/Child Health Nursing	4
NSG 212	Adult Health Nursing Lab/Clinical	6	NSG 135	Professional Development	2
			NSG 140	Maternal/Child Health Practicum	1
			NSG 139	Adult Health Practicum	4
<b>Total Credit Hours</b>		<b>12</b>	<b>Total Credit Hours</b>		<b>11</b>

\*All General Education Courses for Nursing are to be completed prior to enrolling in any NSG courses.

## PRECISION MACHINING TECHNOLOGY

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

The Precision Machining Technology graduate will be able to set up and operate a variety of machine tools to produce precision metal parts, instruments, and tools. Machinists use machine tools, such as lathes, milling machines, and grinders, to produce precision metal parts. Although they may produce large quantities of one part, precision machinists often produce small batches or one-of-a-kind items. The parts that machinists make range from simple bolts of steel or brass to titanium bone screws for orthopedic implants. Hydraulic parts, anti-lock brakes and automobile pistons are other widely known products that machinists make.

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 201	TECHNICAL WRITING I*	3
MATH 104	TECHNICAL MATHEMATICS **	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
	<b>Total</b>	<b>12</b>
<b>Technical Requirements</b>		
MACH 110	MACHINE SHOP OPERATIONS	3
MACH 115	TURNING THEORY AND OPERATIONS I	3
MACH 120	MILLING THEORY AND OPERATIONS I	3
MACH 125	MECHANICAL BLUEPRINT READING	3
MACH 130	MATERIALS APPLICATIONS	3
MACH 135	TURNING THEORY AND OPERATIONS II	3
MACH 140	MILLING THEORY AND OPERATIONS II	3
MACH 145	APPLIED COMPUTER AIDED DRAFTING FUNDAMENTALS	3
	<b>Total</b>	<b>24</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

### Semester Breakdown

First Semester			Second Semester		
		CR			CR
CIS 105	Microcomputer Software Applications I	3	ENGL 201	Technical Writing I	3
MACH 110	Machine Shop Operations	3	MACH 130	Materials Applications	3
MACH 115	Turning Theory and Operations I	3	MACH 135	Turning Theory and Operations II	3
MACH 120	Milling Theory and Operations I	3	MACH 140	Milling Theory and Operations II	3
MACH 125	Mechanical Blueprint Reading	3	MACH 145	Applied Computer Aided Drafting Fundamentals	3
MATH 104	Technical Mathematics	3	PSYC 103	Human Relations in the Workplace	3
<b>Total Credit Hours</b>			<b>Total Credit Hours</b>		
<b>18</b>			<b>18</b>		

# SURGICAL TECHNOLOGY

## Diploma, 50 Credit Hours, 12-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, 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 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 102	CAREER COMMUNICATIONS	2
MATH 090	BASIC MATHEMATICS	2
PSYC 101	GENERAL PSYCHOLOGY	3
<b>Total</b>		<b>10</b>
<b>Technical Requirements</b>		
HC 213	MEDICAL TERMINOLOGY I	3
HC 114	ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS	3
ST 102	INTRODUCTION TO SURGICAL TECHNOLOGY	3
ST 111	INTRODUCTION TO SURGICAL TECHNOLOGY LAB	3
ST 125	PRINCIPLES AND PRACTICE OF SURGICAL TECHNOLOGY	3
ST 126	SURGICAL PROCEDURES	7
ST 127	SCIENCE AND TECHNOLOGIES FOR THE SURGICAL TECHNOLOGIST	1
ST 128	SURGICAL PHARMACOLOGY	2
ST 135	CLINICAL PRACTICE I	3
ST 136	CLINICAL PRACTICE II	6
ST 137	CLINICAL PRACTICE III	6
<b>Total</b>		<b>40</b>

**All remedial coursework must be completed in the first semester.**

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

### Semester Breakdown

First Semester			Second Semester		
		CR			CR
CIS 105	Microcomputer Software Applications I	3	ST 128	Surgical Pharmacology	2
ST 102	Introduction to Surgical Technology	3	ST 126	Surgical Procedures	7
ST 111	Introduction to Surgical Technology Lab	3	ST 125	Principles and Practice of Surgical Technology	3
HC 213	Medical Terminology I	3	ST 127	Science and Technologies for the Surgical Technologist	1
HC 114	Anatomy & Physiology for the Health Professions	3	ST 135	Clinical Practice I	3
MATH090	Basic Mathematics	2	PSYC 101	General Psychology	3
ENGL102	Career Communications	2			
<b>Total Credit Hours</b>		<b>19</b>	<b>Total Credit Hours</b>		<b>19</b>
Third Semester (Summer)					
		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, 69/71 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 light and heavy duty vehicles.

Course No.	Course Title	Credits
<b>General Education Requirements</b>		
CIS 105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL 201	TECHNICAL WRITING I*	3
ENGL 202	TECHNICAL COMMUNICATIONS	3
MATH 104	TECHNICAL MATHEMATICS**	3
PSYC 103	HUMAN RELATIONS IN THE WORKPLACE	3
SOC 100	INTRODUCTION TO SOCIOLOGY	3
<b>Total</b>		<b>18</b>
<b>Technical Requirements for Light Duty</b>		
TTT 110	VEHICLE ELECTRICITY AND ELECTRONICS	4
TTT 112	VEHICLE ELECTRICITY AND ELECTRONICS LAB	6
TTT 115	ENGINE CONSTRUCTION AND OPERATION	3
TTT 120	SHOP AND PARTS MANAGEMENT	1
TTT 121	INTRODUCTION TO HYBRIDS	1
TTT 122	CHASSIS WIRING	1
TTT 125	ENGINE PERFORMANCE	4
TTT 126	ENGINE PERFORMANCE LAB	6
TTT 129	WELDING AND EQUIPMENT	2
TTT 201	UNDER-CAR DIAGNOSIS	3
TTT 203	HVAC-LIGHT DUTY	3
TTT 204	ENGINE OVERHAUL	4
TTT 205	UNDER-CAR DIAGNOSIS LAB	5
TTT 222	LIGHT DUTY DRIVETRAINS	4
TTT 223	LIGHT DUTY DRIVETRAINS LAB	6
TTT 299	OPTIONAL INTERNSHIP	3
<b>Total</b>		<b>53/56</b>
<b>Technical Requirements for Heavy Duty</b>		
TTT 110	VEHICLE ELECTRICITY AND ELECTRONICS	4
TTT 112	VEHICLE ELECTRICITY AND ELECTRONICS LAB	6
TTT 115	ENGINE CONSTRUCTION AND OPERATION	3
TTT 125	ENGINE PERFORMANCE	4
TTT 126	ENGINE PERFORMANCE LAB	6
TTT 129	WELDING AND EQUIPMENT	2
TTT 130	PREVENTATIVE MAINTENANCE	3
TTT 210	UNDER-TRUCK DIAGNOSIS	3
TTT 211	HEAVY DUTY DRIVETRAINS	4
TTT 212	DIESEL ENGINES	5
TTT 213	HVAC-HEAVY DUTY	3
TTT 215	HYDRAULICS	3
TTT 240	UNDER-TRUCK DIAGNOSIS LAB	5
TTT 299	OPTIONAL INTERNSHIP	3
<b>Total</b>		<b>51/54</b>

**All remedial coursework must be completed in the first semester.**

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

Internship is optional-see advisor

**Semester breakdown on next page**

### Semester Breakdown Light Duty

First Semester			Second Semester		
		CR			CR
CIS 105	Microcomputer Software Applications I	3	TTT 125	Engine Performance	4
PSYC 103	Human Relations in the Workplace	3	TTT 126	Engine Performance Lab	6
TTT 110	Vehicle Electricity and Electronics	4	TTT 115	Engine Construction and Operation	3
TTT 112	Vehicle Electricity and Electronics Lab	6	TTT 129	Welding and Equipment	2
TTT 120	Shop and Parts Management	1	MATH 104	Technical Mathematics	3
TTT 121	Introduction to Hybrids	1			
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>
Third Semester			Fourth Semester		
		CR			CR
TTT 201	Under-Car Diagnosis	3	TTT 122	Chassis Wiring	1
TTT 204	Engine Overhaul	4	TTT 203	HVAC-Light Duty	3
TTT 205	Under-Car Diagnosis Lab	5	TTT 222	Light Duty Drivetrains	4
SOC 100	Introduction to Sociology	3	TTT 223	Light Duty Drivetrains Lab	6
ENGL 201	Technical Writing I	3	ENGL 202	Technical Communications	3
			TTT 299	Internship (available with advisor's approval)	
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>17</b>

### Semester Breakdown Heavy Duty

First Semester			Second Semester		
		CR			CR
TTT 110	Vehicle Electricity and Electronics	4	TTT 115	Engine Construction and Operation	3
TTT 112	Vehicle Electricity and Electronics Lab	6	TTT 125	Engine Performance	4
TTT 129	Welding and Equipment	2	TTT 126	Engine Performance Lab	6
TTT 130	Preventative Maintenance	3	MATH 104	Technical Mathematics	3
CIS 105	Microcomputer Software Applications I	3			
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>16</b>
Third Semester			Fourth Semester		
		CR			CR
TTT 210	Under-Truck Diagnosis	3	TTT 212	Diesel Engines	5
TTT 240	Under-Truck Diagnosis Lab	5	TTT 213	HVAC-Heavy Duty	3
TTT 211	Heavy Duty Drivetrains	4	TTT 215	Hydraulics	3
SOC 100	Introduction to Sociology	3	ENGL 202	Technical Communications	3
ENGL 201	Technical Writing I	3	PSYC 103	Human Relations in the Workplace	3
			TTT 299	Internship (available with advisor's approval)	
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>17</b>

## WELDING

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

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

The Welding program prepares students for the growing number of career opportunities in the welding field. The combination of classroom theory, hands-on welding skills training, and practical application in labs allows students to attain skills for entry-level employment.

The Welding program is designed to prepare students as entry-level technicians in many areas including the construction and repair of ships, automobiles, and thousands of other manufactured products. Students will study multiple welding techniques with various types of welding equipment. Welders require a wide variety of skills that will continue to increase due to the increase of sophisticated fabrication and repair work demanded by industry. This program advances the student's welding skills and increases their employment opportunities.

Course	No.	Course Title	Credits
<b>General Education Requirements</b>			
CIS	105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL	201	TECHNICAL WRITING I*	3
MATH	104	TECHNICAL MATHEMATICS**	3
PSYC	103	HUMAN RELATIONS IN THE WORKPLACE	3
SOC	100	INTRODUCTION TO SOCIOLOGY	3
		<b>Total</b>	<b>15</b>
<b>Technical Requirements</b>			
WDM	102	SHIELDED METAL ARC WELDING I	3
WDM	103	GAS METAL ARC WELDING I	3
WDM	104	FABRICATION I	3
WDM	105	OXY FUEL WELDING/CUTTING	3
WDM	150	SHIELDED METAL ARC WELDING II	3
WDM	151	GAS METAL ARC WELDING II	3
WDM	152	FABRICATION II	3
WDM	153	GAS TUNGSTEN ARC WELDING I	3
WDM	201	GAS TUNGSTEN ARC WELDING II	3
WDM	202	FABRICATION III	3
WDM	203	GAS METAL ARC WELDING III	3
WDM	204	SHIELDED METAL ARC WELDING III	3
WDM	252	FABRICATION IV	3
WDM	253	GAS METAL ARC WELDING IV	3
WDM	254	SHIELDED METAL ARC WELDING IV	3
WDM	255	WELDING CAPSTONE	3
		ELECTIVE	3
		<b>Total</b>	<b>51</b>

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

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

Semester breakdown on next page

### Semester Breakdown AAS

<b>First Semester</b>			<b>Second Semester</b>		
		<b>CR</b>			<b>CR</b>
CIS 105	Microcomputer Software Applications I	3	ENGL 201	Technical Writing I	3
MATH 104	Technical Mathematics	3	PSYC 103	Human Relations in the Workplace	3
WDM 102	Shielded Metal Arc Welding I	3	WDM 150	Shielded Metal Arc Welding II	3
WDM 103	Gas Metal Arc Welding I	3	WDM 151	Gas Metal Arc Welding II	3
WDM 104	Fabrication I	3	WDM 152	Fabrication II	3
WDM 105	Oxy Fuel Welding/Cutting	3	WDM 153	Gas Tungsten Arc Welding I	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>
<b>Third Semester</b>			<b>Fourth Semester</b>		
		<b>CR</b>			<b>CR</b>
SOC 100	Introduction to Sociology	3	WDM 254	Shielded Metal Arc Welding IV	3
WDM 201	Gas Tungsten Arc Welding II	3	WDM 252	Fabrication IV	3
WDM 202	Fabrication III	3	WDM 253	Gas Metal Arc Welding IV	3
WDM 203	Gas Metal Arc Welding III	3	WDM 255	Welding Capstone	3
WDM 204	Shielded Metal Arc Welding III	3		Elective	3
<b>Total Credit Hours</b>		<b>15</b>	<b>Total Credit Hours</b>		<b>15</b>

### Semester Breakdown Diploma

<b>First Semester</b>			<b>Second Semester</b>		
		<b>CR</b>			<b>CR</b>
CIS 105	Microcomputer Software Applications I	3	ENGL 201	Technical Writing I	3
MATH 104	Technical Mathematics	3	PSYC 103	Human Relations in the Workplace	3
WDM 102	Shielded Metal Arc Welding I	3	WDM 150	Shielded Metal Arc Welding II	3
WDM 103	Gas Metal Arc Welding I	3	WDM 151	Gas Metal Arc Welding II	3
WDM 104	Fabrication I	3	WDM 152	Fabrication II	3
WDM 105	Oxy Fuel Welding/Cutting	3	WDM 153	Gas Tungsten Arc Welding I	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>

# COURSE DESCRIPTIONS

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

## **ACCT 120 PRINCIPLES OF ACCOUNTING I**

**CREDITS: 3**

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 121 PRINCIPLES OF ACCOUNTING II**

**CREDITS: 3**

This course continues the study of fundamental accounting concepts; however, it involves the students in the world of accounting as opposed to the recordkeeping 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: ACCT120 PRINCIPLES OF ACCOUNTING I.**

## **ACCT 122 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: ACCT121 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. **PREREQUISITE: ACCT212 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: ACCT120 PRINCIPLES OF ACCOUNTING I.**

## **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 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: ACCT120 PRINCIPLES OF ACCOUNTING I.**

## **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: ACCT121 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. **PREREQUISITES: ACCT120 PRINCIPLES OF ACCOUNTING I AND CIS105 MICROCOMPUTER SOFTWARE APPLICATIONS I.**

## **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 Windows-based software packages using QuickBooks or QuickBooks Pro commonly used by business. **PREREQUISITE: SUCCESSFUL COMPLETION OF ACCT120 OR APPROVAL OF INSTRUCTOR.**

**ACCT 230 TOPICS AND ISSUES IN ACCOUNTING****CREDITS: 3**

This course includes many topics and issues in the accounting and bookkeeping fields: mastery of 10-key machines, South Dakota Sales Tax, South Dakota Use Tax, South Dakota Excise Tax, South Dakota Unemployment Tax (SUTA), Federal Unemployment Tax (FUTA), Workers' Compensation guidelines, and other common bookkeeping and accounting topics.

**ACCT 281 ETHICS IN ACCOUNTING AND BUSINESS****CREDITS: 2**

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 285 OPTIONAL INTERNSHIP****CREDITS: 1**

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. **PREREQUISITES: MUST HAVE SATISFACTORILY COMPLETED ALL THE REQUIRED CORE COURSES IN THE FIRST TWO SEMESTERS AND HAVE A GPA OF 3.0.**

**ACCT 290 INTERNSHIP****CREDITS: 2 - 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 AND HAVE A GPA OF 3.0.**

**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 in the course are business ethics, international business, ownership structures, and general business operations.

**BUS 115 KEYBOARDING****CREDITS: 3**

The student will develop proper keyboarding speeds and touch keyboarding speed of at least 40 NWAM. Document formatting techniques including tables, correspondence, and reports are all covered in the course.

**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.

**BUS 129 ORAL COMMUNICATIONS IN BUSINESS****CREDITS: 3**

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. **PREREQUISITE: CIS105 MICROCOMPUTER SOFTWARE APPLICATIONS I.**

**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 141 WRITTEN COMMUNICATIONS FOR BUSINESS****CREDITS: 3**

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. **PREREQUISITE: CIS105 MICROCOMPUTER SOFTWARE APPLICATIONS I.**

**BUS 142 PROJECT MANAGEMENT****CREDITS: 2**

Students will learn how to manage a project from start to finish. **PREREQUISITE: CIS105 MICROCOMPUTER SOFTWARE APPLICATIONS I.**

**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: BUS120 PRINCIPLES OF MARKETING.**

**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: CIS105 MICROCOMPUTER SOFTWARE APPLICATIONS 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 WEBSITE DEVELOPMENT FOR BUSINESS.**

**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 200 OFFICE PROCEDURES****CREDITS: 3**

This course will give students seeking entry-level office professional positions or students who are transitioning to a higher level career a comprehensive study in the dynamics of the modern day workplace. Instruction and activities target new technology and build communication and human relation skills. Emphasis on critical thinking, creative problem solving, and professional development will prepare students for challenges they will face in today's global marketplace.

**BUS 205 SOCIAL MEDIA MARKETING****CREDITS: 3**

Social media has revolutionized the marketing landscape and how businesses connect and interact with customers. Explore the ever-changing world of social media marketing through case studies, discussions, and exercises. Learn the history of social media, how it has grown into the phenomenon it is today, and what that means for businesses and marketing. Identify and discover various social media marketing tools and learn how to effectively integrate them into the marketing mix.

**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.

**BUS 215 SEARCH ENGINE MARKETING****CREDITS: 3**

Explore and apply search engine marketing fundamentals such as search engine optimization, pay-per-click, link development, and other tactics that can improve the search engine performance of any website. Create webpages that are search engine friendly and meet the needs of customers. Learn how to evaluate search engine marketing efforts and make tactical adjustments to improve results.

**BUS 218 DESIGN ESSENTIALS****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. **PREREQUISITE: CIS105 MICROCOMPUTER SOFTWARE APPLICATIONS I.**

**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.

**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. **PREREQUISITE: BUS101 INTRODUCTION TO BUSINESS.**

**BUS 227 WRITING FOR SOCIAL MEDIA MARKETING****CREDITS: 3**

Effective social media marketing efforts require a unique copywriting approach. Discover why social media writing needs to be different and how effective writing changes how customers interact with businesses. Learn about appropriate writing tone and how to achieve a writing style that increases engagement and return traffic. Use case studies, examples, and hands-on writing projects to understand and apply effective social media writing techniques.

**BUS 228 PERSONAL INVESTMENTS****CREDITS: 3**

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 a new business.

**PREREQUISITES:** BUS101 INTRODUCTION TO BUSINESS and ACCT120 PRINCIPLES OF ACCOUNTING I.

**BUS 241 ADVANCED COMPUTER APPLICATIONS FOR BUSINESS****CREDITS: 3**

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.

**PREREQUISITE:** CIS105 MICROCOMPUTER SOFTWARE APPLICATIONS I.

**BUS 250 SOCIAL MEDIA MARKETING CAMPAIGN****CREDITS: 3**

In this capstone course, create and implement a social media marketing campaign for an actual business or organization. Use business, marketing, and social media principles and tactics to select a client, assess the client's needs, evaluate the market, and construct a sound social media campaign. During the campaign, use available metrics and data to evaluate the effectiveness of the campaign.

**BUS 291 INTERNSHIP****CREDITS: 3**

This course is designed to provide the student an opportunity to apply the skills and knowledge acquired in the classroom through active participation in a local business. This is a volunteer or paid supervised internship. **PREREQUISITE:** ADVISOR APPROVAL.

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

The student is introduced to the fundamentals of drafting for the architectural, civil, and mechanical fields. The course covers the principles of board 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 an introduction to architectural drafting and design. Students will build on their knowledge of residential construction and learn to apply that knowledge toward the development of residential construction documents which conform to code requirements, industry standards, and proper drafting techniques. **PREREQUISITES:** CAD132 INTRODUCTION TO 2D CAD and CAD135 ARCHITECTURAL CONSTRUCTION THEORY I.

**CAD 132 INTRODUCTION TO 2D CAD****CREDITS: 3**

This course introduces the latest release of AutoCAD and its commands. Basic Draw, Modify, Layer, Layout, and Plot concepts will be studied. Students will also learn proper computer care and file manipulation and storage.

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

This course is an introduction to the concepts of architectural construction theory. The student is introduced to the fundamentals of construction practices and materials used in building foundations, floors, walls, roofs, and associated components.

**CAD 140 ADVANCED 2D CAD****CREDITS: 3**

This course is a continuation of Introduction to 2D CAD and covers advanced concepts of the latest AutoCAD release. Advanced Draw, Modify, Text, Block, Data Linking, Dimensioning, and Layout concepts will be studied. **PREREQUISITE:** CAD132 INTRODUCTION TO 2D CAD or PERMISSION FROM THE INSTRUCTOR.

**CAD 150 BLUEPRINT READING****CREDITS: 1**

This course addresses the need to accurately read and interpret technical drawings. Students will become familiar with the various symbols, abbreviations and terms associated with a standard set of construction documents and learn to navigate these drawings to accurately determine design intent.

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

This course covers mechanical drafting practices used to create engineering drawings with a focus on drawing accuracy, drafting conventions, dimensioning, and readability. PREREQUISITES: CAD232 MECHANICAL PRINCIPLES and CAD234 MECHANICAL PRINT READING.

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

This course is an introduction to the concepts of commercial construction theory. Emphasis is placed on methods, materials, and terms that are used in the commercial construction industry including advanced concepts of foundation, wall, floor, and roof construction.

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

This course introduces students to practical concepts and drafting principles associated with civil engineering and design. Students learn to interpret maps and symbols, calculate surveying data, and develop drawings for common civil drafting functions. PREREQUISITE: CAD132 INTRODUCTION TO 2D CAD.

**CAD 215 LIGHT COMMERCIAL CONSTRUCTION WITH 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 mechanical and electrical requirements, safe practices, introduction to the National Electrical Code (NEC), mechanical and electrical symbols, and basic concepts. PREREQUISITE: CAD140 ADVANCED 2D CAD.

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

This course covers a working knowledge and application of proper dimensioning techniques for engineering drawings following the ASME Y14.5 dimensioning standards. PREREQUISITE: CAD202 MECHANICAL DRAFTING.

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

This course continues the exploration into concepts of commercial construction theory. Emphasis is placed on methods, materials, and terms that are used in the commercial construction industry including advanced concepts in door, window, cladding, floor, and ceiling construction. PREREQUISITE: CAD203 PRINCIPLES 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. PREREQUISITE: CAD132 INTRODUCTION TO 2D 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.

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

This course continues exploration into the concepts of architectural drafting and design. Students will become more proficient in designing and completing architectural drawings with increased independence from the instructor. Advanced techniques are introduced which make use of the student's growing skill with CAD software. PREREQUISITE: CAD111 ARCHITECTURAL DRAFTING I.

**CAD 240 3D ARCHITECTURAL DESIGN****CREDITS: 3**

This course continues the application of architectural design concepts and adapts them to the use of 3D Building Information Modeling (BIM). Students will apply their acquired skills and knowledge toward the development of functional designs and construction documents using the latest version of the appropriate 3D applications. PREREQUISITES: CAD255 INTRODUCTION TO 3D CAD and CAD237 ARCHITECTURAL DRAFTING II.

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

This course covers advanced features of parametric solid modeling including the concepts of parts, assemblies, drawings, sheet metal design, and animation. PREREQUISITE: CAD202 MECHANICAL DRAFTING and CAD255 INTRODUCTION TO 3D CAD.

**CAD 247 COMPUTER AUTOMATED MANUFACTURING****CREDITS: 3**

This course covers a working knowledge and application of computer automated manufacturing. PREREQUISITE: CAD255 INTRODUCTION TO 3D CAD.

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

This course covers principles of reading and using maps with industry standard technologies including Global Positioning Systems (GPS). Proper techniques of gathering usable mapping coordinates for Geographical Information Systems (GIS) will be emphasized.

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

This course introduces principles and applications of Geographic Information Systems (GIS) using ArcGIS software. Students will develop skills in manipulating geographic data and representing this data through various informational mapping techniques. PREREQUISITE: CAD250 INTRODUCTION TO MAPPING/GPS.

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

This course exposes students to basic field surveying techniques and related office procedures. COREQUISITE: CAD 250 INTRODUCTION TO MAPPING/GPS.

**CAD 255 INTRODUCTION TO 3D CAD****CREDITS: 3**

This course introduces industry standard 3D CAD applications in both the architectural and mechanical fields. The architectural portion of the course covers the basics of parametric modeling with BIM (Building Information Modeling) software. The mechanical portion of the course covers the basics of parametric 3D modeling including the concepts of parts, assemblies, and drawings. PREREQUISITE: CAD140 ADVANCED 2D CAD.

**CAD 297 INTERNSHIP****CREDITS: 3**

Work in a professional office for a minimum of 120 hours to gain computer aided drafting experience. The internship will be directly related to the drafting field and approved by the instructor. PREREQUISITE: CAD140 ADVANCED 2D CAD.

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

A one-semester survey of chemistry. Not intended for those needing an extensive chemistry background. Introduction to the properties of matter, atomic structure, bonding, stoichiometry, kinetics, equilibrium, states of matter, solutions, and acid-base concepts. PREREQUISITE: MATH101 OR HIGHER.

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

Laboratory designed to accompany CHEM 106.

**CIS 105 MICROCOMPUTER SOFTWARE APPLICATIONS I****CREDITS: 3**

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

**CIS 125 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. Students will 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.

**CIS 126 CISCO ACADEMY/NETWORKING TECHNOLOGIES I****CREDITS: 3**

This course is the first of the four courses leading to the Cisco Certified Network (CCNA) certification. 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 networks will be addressed, including wireless and security configurations.

**CIS 127 CISCO ACADEMY/NETWORKING TECHNOLOGIES II****CREDITS: 3**

This course is the second of the four courses leading to the Cisco Certified Network (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: CIS126 CISCO ACADEMY/NETWORKING TECHNOLOGIES I.

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

**CREDITS: 3**

This course is the third of the four courses leading to the Cisco Certified Network (CCNA) certification. In this course the student will assemble switching devices while using switching technology on the LAN side of a network. Students will also produce a wireless network using wireless technology points. **PREREQUISITE:** CIS127 CISCO ACADEMY/NETWORKING TECHNOLOGIES II.

**CIS 129 WINDOWS OPERATING SYSTEMS**

**CREDITS: 3**

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

**CIS 135 CISCO ACADEMY/NETWORKING TECHNOLOGIES IV**

**CREDITS: 3**

This course is the last of the four courses leading to the Cisco Certified Network (CCNA) certification. In this course the student will evaluate current WAN technologies and network services that are required by enterprise networks. **PREREQUISITE:** CIS128 CISCO ACADEMY/NETWORKING TECHNOLOGIES III.

**CIS 211 LINUX OPERATING SYSTEMS**

**CREDITS: 3**

In this course, the student will learn about the Linux file system and use a Linux operating system as a standalone system.

**CIS 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 and continues with how to configure name resolution and vital services such as DNS, WINS, DHCP, and IP Sec. The course also emphasizes Active Directory configuration. **PREREQUISITE:** CIS129 WINDOWS OPERATING SYSTEMS.

**CIS 215 NETWORK DESIGN AND VIRTUALIZATION**

**CREDITS: 3**

Students will design a virtualized computer network to be integrated into a networked environment. **PREREQUISITES:** CIS127 CISCO ACADEMY/NETWORKING TECHNOLOGIES II, CIS211 LINUX OPERATING SYSTEMS, and CIS213 NETWORKING USING WINDOWS SERVER.

**CIS 216 INTRODUCTION TO PROGRAMMING**

**CREDITS: 3**

This course is intended to give students with no previous programming experience the tools needed to create real-world procedural applications.

**CIS 218 LINUX SERVER**

**CREDITS: 3**

In this course, the student will integrate a Linux-based operating system as a standalone server or as a domain server within a MS Windows-based network. **PREREQUISITE:** CIS211 LINUX OPERATING SYSTEMS.

**CIS 220 NETWORK SECURITY I**

**CREDITS: 3**

In this course, the student will analyze the security risks of a network and be able to design options to mitigate those vulnerabilities. **PREREQUISITES:** CIS211 LINUX OPERATING SYSTEMS and CIS213 NETWORKING USING WINDOWS SERVER OR APPROVAL OF INSTRUCTOR.

**CIS 225 DATABASES**

**CREDITS: 3**

This course introduces students to database creation, manipulation, and the Structured Query Language (SQL). **PREREQUISITE:** CIS213 NETWORKING USING WINDOWS SERVER (May be taken concurrently.)

**CIS 230 COMPUTER FORENSICS**

**CREDITS: 3**

Students will inspect digital evidence, analyze the data, and validate the analysis. **PREREQUISITES:** CIS128 CISCO ACADEMY/NETWORKING TECHNOLOGIES III, CIS211 LINUX OPERATING SYSTEMS and CIS213 NETWORKING USING WINDOWS SERVER.

**CIS 235 NETWORK SECURITY II**

**CREDITS: 3**

Students will assemble switching devices while using switching technology on the LAN side of a network. Students will also produce a wireless network using wireless technology points. **PREREQUISITE:** CIS220 NETWORK SECURITY I

**CIS 240     COMPUTER SCIENCE CAPSTONE**

**CREDITS: 3**

A project and research-oriented course that emphasizes synthesis through collaborative learning. Students integrate and apply previous knowledge, skills, and experiences they have learned in their core and other academic courses to complete a team-oriented project. The course emphasizes communication skills, critical thinking, problem solving, computer/networking knowledge, and teamwork. **PREREQUISITES: SUCCESSFUL COMPLETION OF THE FIRST THREE SEMESTERS OF COMPUTER SCIENCE COURSES, and ENROLLMENT IN FOURTH SEMESTER COURSES FOR COMPLETION OF THE PROGRAM REQUIREMENTS.**

**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.

**CRT 110     NONSTRUCTURAL PANEL ALIGNMENT**

**CREDITS: 4**

In this course, the student will learn how to properly remove and replace nonstructural parts of a vehicle with proper alignment.

**CRT 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.

**CRT 113     COLLISION REPAIR WELDING**

**CREDITS: 4**

This course teaches the safety precautions and proper set-up and use of MIG welders to weld on light sheet metal. In addition, the course will teach safe oxy-fuel usage.

**CRT 115     BASIC SHEET METAL WORK**

**CREDITS: 4**

In the course, the students will learn the proper use of hand and power tools used to repair sheet metal on today's vehicles.

**CRT 123     REFINISHING PROCEDURES AND APPLICATION**

**CREDITS: 4**

This course will teach students the proper entry-level procedures for paint gun setup and control along with paint application on vehicle surfaces.

**CRT 125     PAINT DEFECTS-CAUSES AND CURES WITH FINAL DETAILING**

**CREDITS: 4**

This course will teach the students to visually identify and correct paint problems in the finish of a vehicle and teach students how to inspect and detail a vehicle for delivery to customer after repairs. The students will also learn how to apply vinyl pinstripes and decals.

**CRT 129     PANEL PREPARATION**

**CREDITS: 4**

This course will teach students basic panel preparation for refinishing process along with teaching students proper masking techniques for primer color and topcoat applications.

**CRT 148     AUTO PLASTICS REPAIR**

**CREDITS: 1**

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.

**CRT 211     ESTIMATING AND WORK ORDER COMPREHENSION**

**CREDITS: 2**

This course will teach students basic work order comprehension and estimating skills.

**CRT 215     ADVANCED PANEL PREPARATION**

**CREDITS: 4**

This course will teach students advanced panel preparation for refinishing processes. **PREREQUISITE: CRT129 PANEL PREPARATION.**

**CRT 218     ADVANCED REFINISHING**

**CREDITS: 5**

This course will teach the students blending, tinting, two-tone, and tri-coat application techniques. **PREREQUISITES: CRT123 REFINISHING PROCEDURES AND APPLICATION, CRT125 PAINT DEFECTS-CAUSES AND CURES, and CRT129 PANEL PREPARATION.**

**CRT220 STRUCTURAL PANEL REPAIR****CREDITS: 4**

In this course the student will learn how to properly straighten, remove, and replace structural parts of a vehicle with proper alignment. PREREQUISITES: CRT 110 NONSTRUCTURAL PANEL ALIGNMENTS and CRT 113 COLLISION REPAIR WELDING.

**CRT 225 FRAME AND BODY REALIGNMENT****CREDITS: 4**

In this course, the students will learn how to assess the frame and body damage and determine the correct procedure for the repair while following safety precautions around the frame equipment.

**CRT 227 FRAME SETUP AND MEASURE****CREDITS: 4**

The student will learn how to put a vehicle on a frame rack, anchor it using proper attaching devices, and measure reference points to a dimension and specification chart.

**ECON 202 PRINCIPLES OF MACROECONOMICS****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.

**ED 105 MENTORSHIP****CREDITS: 1**

Mentorship is intended for Western Dakota Technical Institute faculty who are working toward their first post-secondary credential with the State of South Dakota through the Office of Career and Technical Education. The course will include various topics such as advising, exam writing, managing difficult students, assessment, et cetera to help the faculty member to be a successful instructor.

**ED 106 SUCCESSFUL TEACHING APPROACHES FOR DISTANCE LEARNING****CREDITS: 1**

This class will explore learning theory and the application of adult learning practices as used in e-learning environments.

**ED 107 ONLINE LEARNING PLATFORM****CREDITS: 1**

Students will design an online course using WDT's current online learning platform.

**ED 108 ONLINE TEACHING BASICS****CREDITS: 1**

This class will cover online teaching basics for instructors who wish to teach online courses at WDT but who do not want to create the course.

**EET 102 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. Material is presented to enable students to better understand and evaluate contemporary environmental problems and the application of science to their solutions.

**EET 103 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.

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

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

**EET 125 RECORDS COMPUTATION****CREDITS: 2**

This course will expose students to basic water resources record computation techniques and office procedures. The course will focus on the compilation of data into a viable format to meet objectives. Students will be involved in exercises both in the classroom and the field using various water resource record keeping parameters while being introduced to the problems and challenges encountered in this profession. Students will be exposed to numerous Internet and specific computer software programs related to both professional and public access to complete documentation.

**EET 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 to service data gathering equipment will be conducted. Safety procedures are stressed. **PREREQUISITES:** EET102 INTRODUCTION TO ENVIRONMENTAL SCIENCES or EET106 INTRODUCTORY FIELD METHODS and EET250 SOILS TESTING, CHEM106 CHEMISTRY SURVEY, CHEM106L CHEMISTRY SURVEY LAB, MATH101 INTERMEDIATE ALGEBRA or EQUIVALENT.

**EET 204 ENVIRONMENTAL REGULATIONS****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.

**EET 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.

**EET 225 AIR QUALITY****CREDITS: 2**

This course will introduce the student to the concepts and terms essential to understanding the major issues surrounding air pollution. Basic atmospheric processes will be presented as they affect delivery and dispersion of pollutants. Sampling and analysis methods will be discussed. The health effects of various pollutants and air toxics will be presented in order to understand the purpose of air pollution regulations. The increasing concerns regarding indoor air quality will be presented along with approaches to investigation and control. **PREREQUISITES:** EET102 INTRODUCTION TO ENVIRONMENTAL SCIENCES and CHEM106 CHEMISTRY SURVEY.

**EET 235 CONSTRUCTION MATERIALS SAMPLING & TESTING****CREDITS: 3**

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.

**EET 250 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:** EET102 INTRODUCTION TO ENVIRONMENTAL SCIENCES.

**EET 251 ENVIRONMENTAL GEOLOGY****CREDITS: 3**

This course introduces geology as it relates to human activities and is designed for both non-science majors and students interested in environmental careers. The course emphasizes geologic hazards including earthquakes, volcanic eruptions, flooding, mass movements, and pollution of water and soil resources. It also examines waste disposal along with related topics in medical geology and environmental law.

**EET 253 PRINCIPLES OF WATER RESOURCES****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 groundwater 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:** EET102 INTRODUCTION TO ENVIRONMENTAL SCIENCES, EET103 ENVIRONMENTAL INSTRUMENTATION, and MATH101 INTERMEDIATE ALGEBRA or EQUIVALENT.

**EET 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.

**EET 299 FIELD INTERNSHIP****CREDITS: 2**

Environmental or geotechnical work experience in business, industry, or government. **PREREQUISITE:** ADVISOR APPROVAL.

**ELT 217 COMPUTER HARDWARE INSTALLATION & TROUBLESHOOTING****CREDITS: 4**

This course will provide a basic understanding of how personal computers work and provide an opportunity for students to obtain the knowledge and skills necessary to service PC hardware and supported peripherals. Upon conclusion of this course, students will be able to understand basic components of computer hardware systems, as well as upgrading and troubleshooting computers. **PREREQUISITES:** IEL132 ELECTRICAL FUNDAMENTALS and IEL133 ELECTRICAL FUNDAMENTALS LAB.

**EMR 106 EMERGENCY MEDICAL RESPONDER****CREDITS: 3**

Students will be instructed in cardiopulmonary resuscitation and emergency cardiac care in accordance with the American Heart Association and Emergency Medical Responder which is consistent with the National Registry Certification set by the Department of Transportation guidelines.

**EMT 105 EMERGENCY MEDICAL TECHNICIAN****CREDITS: 6**

Students will be instructed on all aspects of emergency medical care at the Emergency Medical Technician level in accordance with the National Registry and the Department of Transportation guidelines.

**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 communication in the workplace. Instruction leads students through the planning tasks, identifying audiences, and gathering information. More emphasis is on reports.

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

Students will prepare and deliver professional oral and written communications required in the workplace. **PREREQUISITE:** ENGL101 COMPOSITION or ENGL201 TECHNICAL WRITING I.

**ENGL 203 TECHNICAL WRITING II****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.

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

This course consists of therapeutic communications, life span development, airway management, and ventilation. **PREREQUISITES:** CURRENT CURRENT CPR CARD and FFP120 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:** CURRENT CPR CARD and FFP120 PARAMEDIC PREPARATORY I.

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

This course consists of pulmonology, cardiology, 12-lead EKG, and advanced cardiac life support. **PREREQUISITES:** CURRENT CPR CARD and FFP110 PARAMEDIC ASSESSMENT.

**FFP 120 PARAMEDIC PREPARATORY I****CREDITS: 4**

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, ethics in pre-hospital care, general pathophysiology, general principles of pharmacology, medication administration, anatomy and physiology, and medical terminology. PREREQUISITE: EMT105 EMERGENCY MEDICAL TECHNICIAN or CURRENT EMT CERTIFICATION.

**FFP 125 PARAMEDIC MEDICAL****CREDITS: 3**

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. PREREQUISITE: CURRENT CPR CARD.

**FFP 130 PARAMEDIC SPECIAL OPERATIONS I****CREDITS: 2**

This course consists of neonatology, pediatric life support, and neonatal resuscitation. PREREQUISITE: CURRENT CPR CARD.

**FFP 215 PARAMEDIC SPECIAL OPERATIONS II****CREDITS: 5**

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: CURRENT CPR CARD and FFP130 PARAMEDIC SPECIAL OPERATIONS I.

**FFP 294 PARAMEDIC CLINICAL I****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 airway-related topics. The rotation also includes observation in the laboratory in drawing blood samples, processing the samples, and 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: CURRENT CPR CARD and NEED TO BE ENROLLED IN 1st SEMESTER OF PARAMEDIC PROGRAM COURSES.

**FFP 295 PARAMEDIC CLINICAL II****CREDITS: 3**

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: CURRENT CPR CARD, FFP125 PARAMEDIC MEDICAL, FFP130 PARAMEDIC SPECIAL OPERATIONS I and FFP294 PARAMEDIC CLINICAL I.

**FFP 296 PARAMEDIC CLINICAL III****CREDITS: 10**

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, and ambulance field internship. PREREQUISITES: CURRENT CPR CARD and FFP295 PARAMEDIC CLINICAL II.

**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: FFT121 STRUCTURAL FIREFIGHTER I.

**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 and NFPA requirements for operations level certification. PREREQUISITES: FFT121 STRUCTURAL FIREFIGHTER I and/or FFT 123 INTRODUCTION TO WILDLAND FIREFIGHTER.

**FFT 118 HAZWOPER 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.

**FFT 121 STRUCTURAL FIREFIGHTER I****CREDITS: 3**

This course is an introduction to the history, organization, and operation of a fire department. Fire science and the basic fire suppression techniques will be covered. The proper use of firefighter protective clothing and breathing apparatus will be taught to the current standards of NFPA 1001 Firefighter I.

**FFT 122 STRUCTURAL FIREFIGHTER I LAB****CREDITS: 3**

This lab-based course will prepare students in developing skill proficiency identified in NFPA 1001, Standard for Fire Fighter Professional Qualifications, and the Job Performance Requirements (JPR's) at the awareness level of the NFPA 472, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents.

**FFT 123 INTRODUCTION TO WILDLAND FIREFIGHTER****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 140 PHYSICAL FITNESS I****CREDITS: 1**

This course is the first course in a series of four courses preparing students for the Red Card Pack Test, the Firefighter Combat Challenge Test, and the CPAT test to meet the hiring requirements of municipal and wildland fire departments. 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 emphasized.

**FFT 150 PUMPING APPARATUS DRIVER-OPERATOR****CREDITS: 3**

This course details the important responsibilities of firefighters who are assigned to drive and operate a fire department vehicle that is equipped with a fire pump. It acquaints the student with the evolution of fire apparatus and provides an understanding of the uses for different pieces of fire-fighting vehicles and their characteristics. The various types of fire pumps and the ability to perform fireground hydraulic calculations will be emphasized.

**FFT 151 WILDLAND PUMPS AND SAWS****CREDITS: 2**

Instruction continues from Wildland Firefighter I with the presentation of NWCG courses S-211 (Portable Pumps) and S-212 (Saws). PREREQUISITE: FFT123 INTRODUCTION TO WILDLAND FIREFIGHTER.

**FFT 190 PHYSICAL FITNESS II****CREDITS: 1**

This course is the second course in a series of four courses preparing students for the Red Card Pack Test, the Firefighter Combat Challenge Test, and the CPAT test to meet the hiring requirements of municipal and wildland fire departments. 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 emphasized.

**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. PREREQUISITE: FFT123 INTRODUCTION TO WILDLAND FIREFIGHTER.

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

This course covers basic fire suppression attack strategies and tactics and incident management systems. Emphasis will be on firefighter safety and risk reduction. PREREQUISITE: FFT123 INTRODUCTION TO WILDLAND FIREFIGHTER or FFT121 STRUCTURAL FIREFIGHTER I.

**FFT 230 RESCUE PRACTICES FOR THE FIRE SERVICE****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 232 STRUCTURAL FIREFIGHTER II****CREDITS: 3**

The course is designed to expand on the knowledge and skills learned in FFT121/FFT122. It will prepare students in developing knowledge and skill proficiency identified in NFPA 1001, Standard for Fire Fighter Professional Qualifications, and the Job Performance Requirements (JPR's) at the operations level of NFPA 472, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. **PREREQUISITES:** FFT121 STRUCTURAL FIREFIGHTER I, FFT122 STRUCTURAL FIREFIGHTER I LAB, and FFT123 INTRODUCTION TO WILDLAND FIREFIGHTER.

**FFT 233 FIRE CAUSES & INVESTIGATIONS****CREDITS: 3**

This course will assist the firefighter in determining the origin and cause of a fire, identifying and preserving evidence, and determining when the assistance of a more highly trained investigator is needed.

**FFT 240 PHYSICAL FITNESS III****CREDITS: 1**

This course is the third course in a series of four courses preparing students for the Red Card Pack Test, the Firefighter Combat Challenge Test, and the CPAT test to meet the hiring requirements of municipal and wildland fire departments. 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 emphasized.

**FFT 290 PHYSICAL FITNESS IV****CREDITS: 1**

This course is the final course in a series of four courses preparing students for the Red Card Pack Test, the Firefighter Combat Challenge Test, and the CPAT test to meet the hiring requirements of municipal and wildland fire departments. 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 emphasized.

**FFT 298 INTERNSHIP****CREDITS: 3**

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 and to apply their skills while working in structure, wildland, and fire prevention settings. Students will learn the daily duties and responsibilities of working at a professional fire station. Students will be expected to perform the daily duties of a firefighter. Students may respond to emergencies and incidents as a crew member assigned to an apparatus. **PREREQUISITES:** FFT123 INTRODUCTION TO WILDLAND FIREFIGHTER and FFT121 STRUCTURAL FIREFIGHTER I.

**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 125 INTRODUCTION TO PATIENT CARE****CREDITS: 2**

This course is designed to provide the student with the knowledge necessary to provide safe patient care at an introductory level. This course is approved by the South Dakota Board of Nursing pursuant to ARSD 44:04:18:15 as part of a nurse aide training program.

**HC 126 INTRODUCTION TO PATIENT CARE LAB AND CLINICAL****CREDITS: 2**

This course is designed to provide the student with the skills and clinical experience necessary to provide safe patient care at an introductory level. This course is approved by the South Dakota Board of Nursing pursuant to ARSD 44:04:18:15 as part of a nurse aide training program. **CO-REQUISITE:** HC125 INTRODUCTION TO PATIENT CARE.

**HC 130 MEDICAL 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.

**HC 135 MEDICAL LAW AND ETHICS****CREDITS: 2**

This course introduces the student to the legal principles and ethical issues affecting all healthcare professionals today.

**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 healthcare settings.

**HC 200 PHARMACOLOGY FOR HEALTHCARE****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.

**HC 205 PROFESSIONALISM IN HEALTHCARE****CREDITS: 1**

Although hands-on technical skills remain a high priority in the healthcare field, good character, a strong work ethic, and personal/professional traits and behaviors are increasingly important. This course covers the professional standards that apply to all healthcare workers and the shared responsibility to provide the highest quality of healthcare services. Emphasis is placed on professionalism, communication, attitude, behaviors, expectations, and appearance. **PREREQUISITE: REGISTRATION IN FINAL SEMESTER OF STUDY ONLY UNLESS APPROVED BY THE LEAD INSTRUCTOR OF THE PROGRAM.**

**HC 213 MEDICAL TERMINOLOGY I****CREDITS: 3**

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 215 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 healthcare professionals. **PREREQUISITE: HC213 MEDICAL TERMINOLOGY I.**

**HC 225 PATHOPHYSIOLOGY****CREDITS: 3**

This course includes the study of various diseases and disorders of each of the body systems. **PREREQUISITES: HC213 MEDICAL TERMINOLOGY I and HC114 ANATOMY AND PHYSIOLOGY FOR THE HEALTH PROFESSIONS.**

**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.

**HVAC 120 ELECTRICAL APPLICATIONS FOR HVAC I****CREDITS: 3**

This course covers general knowledge of basic electrical applications used by industry. Use of basic electrical equipment including multimeters is stressed. Topics include current, voltage, resistance, symbols and basic AC and DC circuits.

**HVAC 125 HVAC INSTALLATION I****CREDITS: 3**

This course provides a comprehensive introduction to designing and installing heating, ventilating, air-conditioning systems. Students learn sheet metal fabrication and installation, basic principles of heat transfer, and the basic refrigeration cycle applied to air conditioning.

**HVAC 126 HVAC INSTALLATION I LAB****CREDITS: 4**

Laboratory designed to accompany HVAC 125.

**HVAC 130 HVAC PLAN AND PRINT READING****CREDITS: 2**

This course covers the fundamentals of blueprints and floor plans used for common layouts. Includes dimensions, specifications and interpretation of details found on typical sets of plans.

**HVAC 135 ELECTRICAL APPLICATIONS FOR HVAC II****CREDITS: 3**

This course continues the coverage of electrical applications used by heating, ventilating, air-conditioning installers. Students learn a more thorough explanation of voltage and current, including basic measuring techniques and safety concerns. Motors and transformers in their typical applications are also included.

**HVAC 140 PIPE JOINING METHODS****CREDITS: 3**

This course covers the correct techniques to use when joining pipes. Students learn correct techniques for making a solder joint, a brazed joint and a threaded joint. Alternative techniques are also taught, including flare, crimp and compression.

**HVAC 145 HVAC INSTALLATION II****CREDITS: 3**

This course provides advanced instruction on designing and installing heating, ventilating, air-conditioning systems. Students also will go into more depth on topics such as refrigerant handling procedures, gas piping and sizing, chimney and vent calculations, and the uniform mechanical code. This course also includes preparation for and completion of the universal heating, ventilating, air-conditioning certification exam. The examination requires an additional fee.

**HVAC 146 HVAC INSTALLATION II LAB****CREDITS: 4**

Laboratory designed to accompany HVAC 145.

**IEL 122 ELECTRICAL CODE STUDY I****CREDITS: 3**

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 locations are studied. PREREQUISITE: IEL130 INTRODUCTION TO ELECTRICAL WIRING.

**IEL 123 INDUSTRIAL DATA COMMUNICATION****CREDITS: 2**

This course will cover the operation and installation of data communication cabling 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 cabling and fiber optics. This course is designed to prepare the industrial electrician for the ever-increasing demand for installation of cabling systems in residential, commercial, and industrial projects. PREREQUISITES: IEL132 ELECTRICAL FUNDAMENTALS and IEL133 ELECTRICAL FUNDAMENTALS LAB.

**IEL 129 INTRODUCTION TO ELECTRICAL WIRING LAB****CREDITS: 1**

This is a lab course intended to accompany the IEL 130 – Introduction to Electrical Wiring course. Through actual hands-on experiments on developed trainers in the lab, the student will be able to reinforce the concepts learned in IEL130.

PREREQUISITES: CURRENT CPR CARD, IEL132 ELECTRICAL FUNDAMENTALS and IEL133 ELECTRICAL FUNDAMENTALS LAB.

**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 are used in the study of residential wiring principles and common residential circuit hookups. PREREQUISITES: CURRENT CPR CARD, IEL132 ELECTRICAL FUNDAMENTALS and IEL133 ELECTRICAL FUNDAMENTALS LAB.

**IEL 132 ELECTRICAL FUNDAMENTALS****CREDITS: 5**

This course introduces the fundamental concepts of basic electricity-AC, DC, and solid state. It includes basic circuit analysis of series circuits, parallel circuits, series-parallel circuits, and OHMS law. A study of electrical quantities and measuring basic quantities using a VOM and the oscilloscope are included. This course covers the physical make up and characteristics of electrical components and how to analyze and troubleshoot circuits.

**IEL 133 ELECTRICAL FUNDAMENTALS LAB****CREDITS: 7**

This course addresses the lab study of AC, DC, solid state, series, parallel, series-parallel, inductance, and capacitance. Measuring basic quantities using a VOM and the oscilloscope and analyzing and troubleshooting circuits are included. Voltages and currents are measured to demonstrate circuit characteristics.

**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. PREREQUISITES: IEL132 ELECTRICAL FUNDAMENTALS and IEL133 ELECTRICAL FUNDAMENTALS LAB.

**IEL 140 WELDING & FABRICATION FOR LIGHT COMMERCIAL APPLICATIONS****CREDITS: 2**

This course is designed to teach students 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 211 ELECTRICAL MOTOR CONTROL****CREDITS: 3**

This course is intended to familiarize the student with motor control theory from very basic concepts to much more complicated circuits. This course is intended to be taken concurrently with IEL 216 – Motor Control Lab. PREREQUISITES: IEL223 ELECTRICAL MOTOR LAB and IEL226 ELECTRICAL MOTOR FUNDAMENTALS AND MAINTENANCE.

**IEL 213 ELECTRICAL HEATING AND APPLIANCES****CREDITS: 2**

This course will provide the student with an understanding of electrical heat and electrical heating control circuits. Installation, maintenance, and troubleshooting of electrical heating systems are an important component of an industrial electrician's career. This course will also introduce the student to air conditioning and heat pump operation as well as the essentials needed to understand control systems on gas and oil heating systems. PREREQUISITES: IEL132 ELECTRICAL FUNDAMENTALS and IEL133 ELECTRICAL FUNDAMENTALS LAB.

**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: IEL122 ELECTRICAL CODE STUDY I.

**IEL 216 ELECTRICAL 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 IEL211-Electrical Motor Control course. PREREQUISITES: IEL130 INTRODUCTION TO ELECTRICAL WIRING, IEL226 ELECTRICAL MOTOR FUNDAMENTALS AND MAINTENANCE, and IEL223 ELECTRICAL MOTOR FUNDAMENTALS AND MAINTENANCE LAB. CO-REQUISITE: IEL211 ELECTRICAL MOTOR CONTROL.

**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 WDT projects. PREREQUISITES: IEL129 INTRO TO ELECTRICAL WIRING LAB AND IEL130 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 WDT projects are included in this course. PREREQUISITE: IEL218 WIRING LAB I

**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. PREREQUISITES: IEL211 ELECTRICAL MOTOR CONTROL and IEL216 MOTOR CONTROL LAB.

**IEL 222 PLC LAB****CREDITS: 3**

This course will give the student hands-on experience in programming programmable controllers. The theory learned in previous coursework 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: IEL211 ELECTRICAL MOTOR CONTROL and IEL216 ELECTRICAL MOTOR CONTROL LAB. CO-REQUISITE: IEL221 PROGRAMMABLE LOGIC CONTROLLERS.

**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 IEL223-Electric Motor Lab. PREREQUISITES: IEL132 ELECTRICAL FUNDAMENTALS, IEL133 ELECTRICAL FUNDAMENTALS LAB, and CURRENT CPR CARD.

**IEL 224 POWER DISTRIBUTION****CREDITS: 2**

Transformers are considered the most important type of equipment in the process of distribution of electrical power. Included in this course are transformer theory, code, and actual transformer connections. PREREQUISITES: IEL132 ELECTRICAL FUNDAMENTALS, IEL133 ELECTRICAL FUNDAMENTALS LAB, and CURRENT CPR CARD.

**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 troubleshooting. This course should be taken concurrently with IEL 223 Electric Motor Lab. **PREREQUISITES:** IEL132 ELECTRICAL FUNDAMENTALS, IEL133 ELECTRICAL FUNDAMENTALS LAB, and CURRENT CPR CARD.

**IEL 230 BLUEPRINT READING, ELECTRICAL PLANNING, AND ESTIMATING****CREDITS: 4**

This course will teach the basics of blueprint reading, planning, and estimating. A part of the course is devoted to construction topics other than that of the electrical trade. The students will plan and draw the actual electrical diagram on a blueprint and estimate the cost of the job. **PREREQUISITES:** IEL129 INTRODUCTION TO ELECTRICAL WIRING LAB and IEL 130 INTRODUCTION TO ELECTRICAL WIRING.

**IEL 299 ELECTRICIAN INTERNSHIP/CO-OP****CREDITS: 6**

The Electrician Internship/CO-OP course is a hands-on course where students gain experience with an employer through on-the-job electrical related work at an approved job site. **PREREQUISITE:** ADVISOR APPROVAL REQUIRED.

**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 include the proper wearing of uniform and basic facing movements as they relate to dismounted drill.

**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 and pretrial 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 AND PHYSICAL TRAINING****CREDITS: 2**

This course is designed to familiarize the student in the escalation of force model and in basic offender confrontation concepts. Students will gain the ability and confidence to successfully cope with physical situations and the ability to respond with swift and efficient solutions whether physical or verbal. Students must properly arrest, handcuff, control, and conduct a safe and thorough search incident to arrest of compliant and non-compliant suspects. Techniques covered will be the proper use of handcuffs, police baton, and oleoresin capsicum (OC) spray. Students will be taught the methods for body muscle warming and methods used to prevent muscle strain and injury. Students will perform certain physical exercises for fitness purposes.

**LET 121 CRIMINAL INVESTIGATIONS****CREDITS: 4**

Students will be taught the fundamentals of the crime scene and post-crime investigation as it relates to property crimes, crimes against persons, and white-collar crime. Specific instruction as it relates to South Dakota Codified Law will be covered as it relates to these crimes. Crimes committed in relation to cults, hate groups, explosives, and drugs and the culture that promotes them will be covered. **PREREQUISITES:** LET 119 CRIMINAL LAW AND PROCEDURES and LET 240 CONSTITUTIONAL LAW FOR LAW ENFORCEMENT or PERMISSION FROM LEAD LET INSTRUCTOR.

**LET 122 INTERVIEW AND INTERROGATION AND 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, and 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 course is designed to introduce students to the basics of the juvenile justice system. The course will begin with a history of juvenile crime and the social significance of trends being observed by professionals. Although a focus will be placed upon the role of law enforcement in dealing with juvenile issues from a preventative and enforcement aspect, several areas of the system will also be examined. Among these are terminologies pertaining to this area of the criminal justice system and the causes of delinquency, gangs, and child abuse. The workings of the schools, social services, detention facilities, prosecutors, diversion programs, the court, and correctional institutions (as they relate to the juvenile justice system) will be touched upon as well. All of the information will be presented in a manner such that the students will not only be able to become familiar with theory but also see how it applies to everyday law enforcement workings.

**LET 126 PHYSICAL TRAINING****CREDITS: 1**

Students will periodically review previous defensive tactics and skills as instructed in LET 120. Students will maintain the ability and confidence to successfully cope with the physical situations which confront law enforcement officers. Students will be instructed in the methods of stretching and warming of muscles to prevent strain and injury. Students will perform certain physical exercises for fitness purposes.

**LET 210 INTRODUCTION TO CRIMINAL JUSTICE****CREDITS: 3**

The history and social significance of the law enforcement profession will be studied along with the role, responsibilities, and demands upon law enforcement officers in our 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 will be explored. Topics concerning motivation, civil liability, job stress, and sociological concepts which are applicable in the practice of law enforcement will be covered. 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 212 ACCIDENT INVESTIGATIONS****CREDITS: 2**

This course is designed to create the ability within each student to understand the basics of proper and lawful investigations of accidents. This will include the students being taught the applicable laws that pertain to accidents of a general nature and specifically as it relates to the laws of the State of South Dakota. This course will include a segment on accident reconstruction. **PREREQUISITES: ENROLLED STUDENT IN THE LAW ENFORCEMENT PROGRAM or BE A LAW ENFORCEMENT OFFICER WITH A RECOGNIZED DEPARTMENT.**

**LET 213 CRIMINOLOGY AND ABNORMAL BEHAVIOR****CREDITS: 3**

Criminology is the systematic inquiry into the causes of crime. Students will become familiar with the nature and causes of crime and various aspects and theories dealing with criminal behavior.

**LET 215 COLLECTION AND PRESERVATION OF EVIDENCE****CREDITS: 3**

This course deals with the accepted techniques and methods of crime scene preservation and management and the collection of evidence. This includes locating evidence, packaging, and transmittal of evidence to the proper forensic laboratory. **PREREQUISITES: ACCEPTANCE INTO THE LAW ENFORCEMENT TECHNOLOGY PROGRAM or PRIOR APPROVAL FROM THE LET INSTRUCTOR.**

**LET 216 PHYSICAL TRAINING****CREDITS: 1**

Students will periodically review previous defensive tactics and skills as instructed in LET 120. Students will maintain the ability and confidence to successfully cope with the physical situations which confront law enforcement officers. Students will be instructed in the methods of stretching and warming of muscles to prevent strain and injury. Students will participate and perform certain physical exercises for fitness purposes.

**LET 218 PATROL PROCEDURES I****CREDITS: 3**

Students will receive lecture on various patrol procedures. 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. A 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 allow students the opportunity to participate in hands-on experiences with various law enforcement/criminal justice agencies covering a variety of duties. Each student will attend two shifts per week for a period of seven weeks. Students may be assigned a variety of law enforcement tasks working with officers during their duty shifts. **PREREQUISITES: SUCCESSFUL COMPLETION OF PRIOR SEMESTER LET COURSES or PERMISSION FROM THE LEAD INSTRUCTOR OF THE LAW ENFORCEMENT TECHNOLOGY PROGRAM.**

**LET 226 PHYSICAL TRAINING**  
**CREDITS: 1**

Students will periodically review previous defensive tactics and skills as instructed in LET 120. Students will maintain the ability and confidence to successfully cope with the physical situations which confront law enforcement officers. Students will be instructed in the methods of stretching and warming of muscles to prevent strain and injury. Students will perform certain physical exercises for fitness purposes.

**LET 229 CORRECTIONS**  
**CREDITS: 3**

Students will understand the U.S. system of corrections, parole, and probation. Students will also learn 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, Code of Federal Regulations Title 36, and United States Code 16 and 18. The concepts of Patrol Procedure I 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. **PREREQUISITES: COMPLETION OF LET SEMESTERS 1, 2, 3 or PERMISSION OF THE LAW ENFORCEMENT TECHNOLOGY INSTRUCTOR.**

**LET 232 TECHNOLOGY IN LAW ENFORCEMENT**  
**CREDITS: 2**

This course is designed to introduce students to the use of various pieces of equipment and tools that are available to law enforcement officers in today's society. When appropriate, students will certify in the use of the equipment and tools. Students will learn GPS/GIS, TASER, RADAR, LIDAR, and forensic mapping utilizing a total station data collection and associated software. Additional technology will be integrated into the class as science provides updated and innovative equipment to the world of law enforcement. **PREREQUISITES: COMPLETION OF LET SEMESTERS 1, 2, 3 or PERMISSION OF THE LAW ENFORCEMENT TECHNOLOGY INSTRUCTOR.**

**LET 240 CONSTITUTIONAL LAW FOR LAW ENFORCEMENT**  
**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 251 FIREARMS TRAINING**  
**CREDITS: 2**

The emphasis of this course will be firearms safety, proficiency in use of firearms, and the proper handling and care of firearms. Information regarding the proper methods of using and when to use firearms will be covered in depth. Instruction in the proper sighting, trigger pull, and all other elements of 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. **TITLE 18 USC Sec. 922 COMPLIANCE:** Any student who has been convicted of a misdemeanor crime of domestic violence (or any crime which could be classified as a domestic violence violation but was not) and/or any student who is subject to a restraining order cannot participate in this class. Any student who acquires this particular status during firearms training will be terminated immediately from the firearms class. **PREREQUISITES: COMPLETION OF LET SEMESTERS 1, 2, 3 or PERMISSION OF THE LAW ENFORCEMENT TECHNOLOGY INSTRUCTOR.**

**LET 255 EMERGENCY VEHICLE OPERATION COURSE**  
**CREDITS: 3**

This 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 the required course driving maneuvers. **PREREQUISITES:** Students must have successfully completed the three previous semesters of the LET program, or receive LET instructor's permission to attend. Students must have a valid driver's license.

**LIBR 100 INTRODUCTION TO LIBRARY SERVICES**  
**CREDITS: 3**

Overview of the variety of roles performed by library technicians in all types of libraries and information centers. Emphasis is on the library technician's role in the delivery of services, the tools and terminology of library relationships to the communities they serve, and monitoring and implementation of new service trends.

**LIBR 102 INTRODUCTION TO LIBRARY CIRCULATION AND CUSTOMER SERVICE**  
**CREDITS: 3**

This course covers research into and development of circulation policies, review of self-service technologies, readers' advisory, notification systems, and materials handling. The course also includes the investigation of integrated library systems and their impacts to user-friendly customer service, and discussion of current issues that impact library services.

**LIBR 104 PUBLIC SERVICES FOR LIBRARY TECHNICIANS****CREDITS: 3**

This course is an introduction to public catalogs, bibliographic instruction, inter-library loan practices, handling of problem patrons, and development of library behavior policies. Also reviewed is basic marketing of library services.

**LIBR 120 PROGRAMMING AND SERVICES FOR ALL AGES****CREDITS: 3**

This course is an introduction to programming for multicultural and multi-aged populations (youth, teens, working adults, and seniors); resource awareness including cost-benefit analysis with program evaluations, planning and management; and basic marketing of library programming.

**LIBR 122 CHILDREN'S AND YOUNG ADULT LITERATURE****CREDITS: 3**

This is an introductory course for both children's and young adult literature. Content will emphasize selection and evaluation of books according to levels, interest, special needs, and educational objectives. Readers' advisory for youth is also reviewed.

**LIBR 200 INTRODUCTION TO TECHNICAL SERVICES: ACQUISITIONS, SERIALS, AND PROCESSING****CREDITS: 3**

Principles of acquiring and processing library materials, including vendor selection, ordering, receiving, processing and outsourcing, and budget accounting will be covered in this course.

**LIBR 202 CONTENT CREATION AND MOBILE LIBRARY SERVICES****CREDITS: 3**

Principles of online content creation for customization and user-friendly access to library resources will be covered in this course. The course will also review and assess mobile library applications and tools that deliver library services to mobile devices.

**LIBR 204 SELECTION AND ACCESS RESOURCES****CREDITS: 3**

Principles of collection development in all formats, including selection and evaluation of print and virtual resources will be covered in this course. Research into and development of collection development policies and assessment and weeding of collections will also be studied.

**LIBR 220 INTRODUCTION TO CATALOGING AND CLASSIFICATION****CREDITS: 3**

This course includes principles of cataloging systems to facilitate user-friendly patron access. It also discusses the implications of organization including subject headings and tagging and indexing practice upon patrons' information access.

**LIBR 222 REFERENCE RESOURCES****CREDITS: 3**

This course includes selection and use of e-formats, databases, and print resources appropriate for reference and information services. It presents an introduction to effective search strategies and critical analysis of reference tools.

**LIBR 224 TECHNOLOGY INFORMATION RESOURCES & ONLINE SOCIAL NETWORKING****CREDITS: 3**

This course introduces a variety of social media and social networking platforms and their use in providing library information and communications. It discusses trend-watching and implementation of new resources for evolving library services.

**LIBR 299 INTERNSHIP****CREDITS: 3**

This course is designed to provide students an opportunity to apply the skills and knowledge acquired in the classroom through active participation in a library. This is a supervised experience that may be volunteer-based or paid.

**MA 210 MEDICAL ASSISTING I****CREDITS: 3**

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 211 MEDICAL ASSISTING I LAB AND CLINICAL****CREDITS: 4**

This course provides the medical assisting students the opportunity to apply their skills and knowledge in the medical office setting after completing their lab hours. Students are placed in medical facilities of Rapid City and surrounding areas to gain hands-on experience in the administrative skills required of an entry-level medical assistant. Students are under the supervision of the facility and are periodically evaluated by the preceptor. **PREREQUISITES: CPR CERTIFICATION and ADVISOR APPROVAL.**

**MA 215 PHLEBOTOMY AND LAB TECHNIQUES FOR THE MEDICAL ASSISTANT****CREDITS: 4**

This course introduces students to the phlebotomy skills and lab techniques necessary for entry-level medical assistants. The course includes theory, active learning experiences, and hands-on training. Students will become familiar with phlebotomy and lab equipment, blood collection procedures, laboratory safety, basic laboratory mathematics, regulations and standards, quality assurance practices, recordkeeping and billing, specimen processing, and CLIA waived and point-of-care laboratory testing. The importance of professionalism, communication skills, attention to detail, personal and patient safety, and accurate technical skill development will be emphasized.

**MA 250 MEDICAL ASSISTING II****CREDITS: 3**

This course will teach students the clinical knowledge needed for an entry-level medical assistant. **PREREQUISITES:** HC125 INTRODUCTION TO PATIENT CARE and HC126 INTRODUCTION TO PATIENT CARE LAB AND CLINICAL.

**MA 251 MEDICAL ASSISTING II LAB AND CLINICAL****CREDITS: 4**

This course provides the medical assisting students the opportunity to apply their clinical skills and knowledge in the clinical setting after completion of lab hours. Students are placed in medical facilities of Rapid City and surrounding areas to gain hands-on experience in the clinical skills required of an entry-level medical assistant. Students are under the supervision of the facility and are periodically evaluated by the preceptor. **PREREQUISITES:** CURRENT CPR CARD and ADVISOR APPROVAL.

**MACH 110 MACHINE SHOP OPERATIONS****CREDITS: 3**

This course will cover the topics of machine shop safety, semi-precision and precision measurement, layout, inspection, bench work, band saw and drill press work, job planning, order of operations, tooling options, tool grinding, work holding devices and fixtures, and maintenance.

**MACH 115 TURNING THEORY AND OPERATIONS I****CREDITS: 3**

This course introduces the metal cutting lathe, its care, setup, and use as applied to current industry practices. Topics addressed will include lathe safety, machine setup, and carrying out the basic lathe operations of turning, drilling, boring, facing, and thread cutting.

**MACH 120 MILLING THEORY AND OPERATIONS I****CREDITS: 3**

The vertical milling machine and its set-up and operation are introduced in this course. Students will learn milling machine safety, tramping of the mill, and the use of edge finders and dial indicators to locate part features and align work. Use of the Cartesian coordinate system, drilling, surfacing, slotting, pocketing and contour milling procedures will be covered.

**MACH 125 MECHANICAL BLUEPRINT READING****CREDITS: 3**

This course addresses the interpretation of blueprints commonly encountered in the machine shop. Drawing layout, sectional views, auxiliary views, assembly drawings, conventional, baseline, and GT&D dimensioning conventions, bill of materials, and symbols used in the metal working industry are among the topics covered.

**MACH 130 MATERIALS APPLICATIONS****CREDITS: 3**

Training in this course includes metals composition and characteristics, material selection, heat treatment, hardness testing, machinability, and use of the surface grinder and other precision grinding equipment. **PREREQUISITES:** MACH110 MACHINE SHOP OPERATIONS, MACH115 TURNING THEORY AND OPERATIONS I, MACH120 MILLING THEORY AND OPERATIONS I, and MACH125 MECHANICAL BLUEPRINT READING.

**MACH 135 TURNING THEORY AND OPERATIONS II****CREDITS: 3**

Expands on basic lathe skills by implementing the use of four-jaw chucks, collets, steady rests, follower rests, and face plate work. Taper turning, knurling, parting and machining between centers will be explored. Work will progress to include multi-part assemblies where fit, finish, and attention to detail need to be employed. Basics on operation of the CNC TRAK lathe will also be introduced. **PREREQUISITES:** MACH110 MACHINE SHOP OPERATIONS, MACH115 TURNING THEORY AND OPERATIONS I, and MACH125 MECHANICAL BLUEPRINT READING.

**MACH 140 MILLING THEORY AND OPERATIONS II****CREDITS: 3**

Expands on basic milling machine skills. Additional work holding methods such as rotary tables, strap clamps, angle plates, and a variety of fixtures will be implemented. The use of sine bars, gauge blocks, boring heads, indexing heads, and special purpose cutters will be explored. Work will progress to include multi-part assemblies where fit, finish, and attention to detail need to be employed. Basics on operation of the two axis ProtoTrak mill will also be introduced. **PREREQUISITES:** MACH110 MACHINE SHOP OPERATIONS, MACH120 MILLING THEORY AND OPERATIONS I, and MACH125 MECHANICAL BLUEPRINT READING.

**MACH 145 APPLIED COMPUTER AIDED DRAFTING FUNDAMENTALS****CREDITS: 3**

This course provides training in the use of SolidWorks to generate part geometry, shop drawings, and bills of materials for mechanical parts and assemblies. Design intent and strategies for using software to streamline work planning, fixturing, and finding set-up solutions in the machine shop are some of the topics covered. **PREREQUISITE: MACH125 MECHANICAL BLUEPRINT READING.**

**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 developed to meet the needs of the traditional post-secondary student and the needs of the mature student whose mathematical proficiency may have declined during years away from formal schooling.

**MATH 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. **PREREQUISITE: ACCUPLACER SCORE IN PRE-ALGEBRA DOMAIN OF 40 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. **PREREQUISITE: ACCUPLACER 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, and zeros of polynomials; systems of equations; exponential, logarithmic, inverse functions, and applications and graphs. Other topics selected from sequences, series, and complex numbers will be covered. **PREREQUISITES: ACCUPLACER 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. **PREREQUISITE: ACCUPLACER 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. **PREREQUISITE: ACCUPLACER SCORE IN PRE-ALGEBRA DOMAIN OF 40 OR HIGHER.**

**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: ACCUPLACER SCORE IN ALGEBRA DOMAIN OF 42 or HIGHER, or PASSING GRADE IN MATH101 or MATH102.**

**MDS 210 HEALTHCARE CODING I****CREDITS: 4**

This is an introductory course to the statistical classification system of the International Classification of Diseases, Ninth and Tenth Revision, Clinical Modification (ICD-9-CM and ICD-10-CM and PCS), 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 and/or the ICD-10-CM and PCS classification and coding system. The course also introduces Current Procedural Terminology (CPT). **PREREQUISITES: HC213 MEDICAL TERMINOLOGY I AND HC114 ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS or PERMISSION FROM INSTRUCTOR.**

**MDS 211 HEALTHCARE CODING II****CREDITS: 3**

This course is a continuation of Health Care Coding I with the introduction of DRG and APC systems of reimbursement. ICD-9-CM, ICD-10-CM and PCS, CPT and HCPCS manuals will be utilized. HCPCS coding system will be investigated. Additionally, this course includes an overview and education of electronic coding systems. **PREREQUISITE: MDS210 HEALTHCARE CODING I.**

**MDS 212 HEALTHCARE FUNDAMENTALS AND REIMBURSEMENT****CREDITS: 3**

This course will cover financial reimbursement and third-party payers including government programs. HIPAA regulations and clinical and hospital corporate compliance issues will be reviewed.

**MDS 250 ADVANCED CODING****CREDITS: 2**

Advanced level of coding focusing on surgical procedural coding. Utilization and coding of templates is reviewed. Diagnostic Related Groups (DRG's) in the inpatient hospital setting are analyzed. Surgical instrumentation and operating room processes and coding are evaluated in more depth. The importance of utilizing coding resources is emphasized and utilized for a broader view of the coding arena. PREREQUISITES: HC213 MEDICAL TERMINOLOGY I and MDS210 HEALTHCARE CODING I.

**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. PREREQUISITE: ADVISOR APPROVAL

**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 I, BUS 115 KEYBOARDING, HC213 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 FOR THE HEALTH PROFESSIONS, HC213 MEDICAL TERMINOLOGY I, and HC215 MEDICAL TERMINOLOGY II.

**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 utilizing the language of medicine.

**NSG 116 FOUNDATIONS IN NURSING CLINICAL****CREDITS: 4**

Laboratory and clinical experiences are incorporated into this course to enhance the learning process. The course includes direct care of the older adult with focus on assessment skills. PREREQUISITES: ACCEPTANCE INTO PROGRAM, CHEM106 CHEMISTRY SURVEY, CHEM106L CHEMISTRY SURVEY LAB, HC213 MEDICAL TERMINOLOGY I, MATH101 INTERMEDIATE ALGEBRA, and PHGY220 ANATOMY & PHYSIOLOGY I.

**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 and communication skills. PREREQUISITES: ACCEPTANCE INTO PROGRAM, CHEM106 CHEMISTRY SURVEY, CHEM106L CHEMISTRY SURVEY LAB, HC213 MEDICAL TERMINOLOGY I, MATH101 INTERMEDIATE ALGEBRA, and PHGY220 HUMAN ANATOMY & PHYSIOLOGY I WITH LAB.

**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 addresses issues that nurses will face as they work with clients with special mental and emotional needs. PREREQUISITES: NSG118 GERIATRIC CLINICAL, NSG200 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS, NSG201 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS LAB, and NSG205 PHARMACOLOGY IN NURSING.

**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. PREREQUISITES: NSG118 GERIATRIC CLINICAL, NSG200 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS, NSG201 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS LAB, and NSG205 PHARMACOLOGY IN NURSING.

**NSG 129 ADULT HEALTH NURSING****CREDITS: 6**

This course includes nursing theory with an emphasis on care of patients with diseases/disorders of the following systems: nervous, sensory, respiratory, circulatory, urinary, gastrointestinal, endocrine, male reproductive, musculoskeletal, immune, integumentary, and hematological. The nursing process is integrated into the study of each disease process. **PREREQUISITES:** NSG118 GERIATRIC CLINICAL, NSG200 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS, NSG201 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS LAB, and NSG205 PHARMACOLOGY IN NURSING.

**NSG 135 PROFESSIONAL DEVELOPMENT****CREDITS: 2**

This course is designed to prepare the student for successful transition into the workforce. NCLEX (State Nursing Board Exam) review is included to prepare the student for licensure exam. The course also incorporates skills to assist in job placement. **PREREQUISITES:** NSG118 GERIATRIC CLINICAL, NSG200 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS, NSG201 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS LAB, and NSG205 PHARMACOLOGY IN NURSING.

**NSG 136 MENTAL HEALTH NURSING 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. **PREREQUISITES:** NSG118 GERIATRIC CLINICAL, NSG200 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS, NSG201 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS LAB, and NSG205 PHARMACOLOGY IN 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:** NSG118 GERIATRIC CLINICAL, NSG200 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS, NSG201 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS LAB, and NSG205 PHARMACOLOGY IN NURSING.

**NSG 140 MATERNAL/CHILD HEALTH PRACTICUM****CREDITS: 1**

This course is the clinical component of NSG 125 and includes clinical experiences in OB and pediatric settings. The clinical settings will vary, but may include hospitals, clinics, and physicians' offices. **PREREQUISITES:** NSG118 GERIATRIC CLINICAL, NSG200 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS, NSG201 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS LAB, and NSG205 PHARMACOLOGY IN NURSING.

**NSG 200 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS****CREDITS: 6**

This course establishes the foundation for the 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:** ACCEPTANCE INTO PROGRAM, CHEM106 CHEMISTRY SURVEY, CHEM106L CHEMISTRY SURVEY LAB, HC213 MEDICAL TERMINOLOGY I, MATH101 INTERMEDIATE ALGEBRA, and PHGY220 HUMAN ANATOMY & PHYSIOLOGY I WITH LAB.

**NSG 201 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS LAB****CREDITS: 1**

This is the lab component of Foundations in Nursing. This lab course offers a thorough introduction to the fundamental skills required of the 21st Century nurse. Emphasis is placed on the development of the myriad of basic skills, including the cornerstone of nursing, physical assessment. Skills offered range from basic nursing skills through complex skills. **PREREQUISITES:** ACCEPTANCE INTO PROGRAM, CHEM106 CHEMISTRY SURVEY, CHEM106L CHEMISTRY SURVEY LAB, HC213 MEDICAL TERMINOLOGY I, MATH101 INTERMEDIATE ALGEBRA, and PHGY220 HUMAN ANATOMY & PHYSIOLOGY I WITH LAB.

**NSG 205 PHARMACOLOGY IN NURSING****CREDITS: 4**

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. **PREREQUISITES:** ACCEPTANCE INTO PROGRAM, CHEM106 CHEMISTRY SURVEY, CHEM106L CHEMISTRY SURVEY LAB, HC213 MEDICAL TERMINOLOGY I, MATH101 INTERMEDIATE ALGEBRA, and PHGY220 HUMAN ANATOMY & PHYSIOLOGY I WITH LAB.

**NSG 212 ADULT HEALTH NURSING LAB/CLINICAL****CREDITS: 6**

This lab course includes nursing skills with an emphasis on care of patients with diseases/disorders of the following systems: nervous, sensory, respiratory, circulatory, urinary, gastrointestinal, endocrine, musculoskeletal, integumentary, and hematological. This is the clinical component of Adult Health Nursing. The students provide direct care to patients in a variety of acute, inpatient settings and also in physicians' offices and outpatient care centers. Students are supervised by RN clinical instructors at all times. The students utilize the various components of the nursing process to design appropriate care. **PREREQUISITES:** NSG118 GERIATRIC CLINICAL, NSG200 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS, NSG201 FOUNDATIONS IN NURSING WITH GERIATRIC CONSIDERATIONS LAB, and NSG205 PHARMACOLOGY IN NURSING.

**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 healthcare 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 are 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. **PREREQUISITE OR CO-REQUISITE:** PH102 INTRODUCTION TO PHLEBOTOMY.

**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, and 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, HC213 MEDICAL TERMINOLOGY I, and PH 121 PRINCIPLES AND PRACTICES.

**PH 150 CLINICAL PRACTICE AND CAPSTONE****CREDITS: 7**

The clinical section consists of clinical practice in phlebotomy and laboratory assistant training at various healthcare institutions and laboratories. The program director will coordinate clinical schedules and evaluations. Capstone will focus on problem analysis, critical and creative thinking, and effective communication. Students will also complete a program of study post-test. **PREREQUISITES:** PH102 INTRODUCTION TO PHLEBOTOMY and PH121 PRINCIPLES AND PRACTICES.

**PHGY 220 HUMAN ANATOMY & PHYSIOLOGY I W/LAB****CREDITS: 4**

This course is the first part in the study of the physiology and anatomical structure of the human body. We will explore basic concepts of biochemistry, cell structure, tissues, histology, metabolism, and the different systems, integument, skeletal, muscular and nervous. Integration of anatomical structure as it relates to physiology will also be incorporated. The course is designed for students interested in health care careers.

**PHGY 230 HUMAN ANATOMY & PHYSIOLOGY II W/LAB****CREDITS: 4**

This course is the second part in the study of the physiology and anatomical structure of the human body. We will explore basic concepts of multiple body systems/areas to include endocrine, lymphatic, immune, cardiovascular, respiratory, digestive, urinary, and reproductive systems. Other areas of study will include the blood anatomy and physiology, nutrition and metabolism, and fluid and electrolytes. Integration of anatomical structure as it relates to physiology will also be incorporated. The course is designed for students interested in healthcare careers. **PREREQUISITE:** PHGY220 HUMAN ANATOMY & PHYSIOLOGY II W/LAB.

**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**

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 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 these settings. Also included are the institutional medication distribution systems and prescription filling in retail pharmacy.

**PHR 130 PHARMACY PRACTICAL LAB****CREDITS: 1**

This 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 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 setting.

**PHR 200 RX ABBREVIATIONS/SIG DECODING****CREDITS: 2**

This course is designed to increase the student's understanding of pharmacy abbreviations and prescription sig decoding.  
PREREQUISITE: MATH102 COLLEGE ALGEBRA.

**PHR 205 PHARMACOKINETICS/PHARMACODYNAMICS****CREDITS: 3**

This course is designed to increase the student's success as a pharmacy technician by providing a basic understanding of how medications affect the body systems and how those same body systems affect medications. PREREQUISITE: MATH102 COLLEGE ALGEBRA and PHR121 PHARMACOLOGY/PHARMACEUTICAL PRODUCTS II.

**PHR 210 U.S. HEALTHCARE AND MEDICAL INSURANCE****CREDITS: 3**

This course is designed to increase the student's employability in a pharmacy by providing an in-depth understanding of U.S. healthcare systems and the types of medical insurances they will experience every day.

**PLL 111 INTRODUCTION TO PARALEGALISM****CREDITS: 2**

This course provides the student with an introduction to the fundamental concepts and 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, discharge of legal obligations, assignments, delegations, 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, 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 AND WRITING I.**

**PLL 150 WILLS, TRUSTS, AND ESTATES**

**CREDITS: 2**

This course covers the role of the paralegal in estate planning practice, emphasizing those aspects most related to paralegal functions. Topics include the control and disposition of property during life and death and intestate succession. Federal gift and estate taxes are also explored.

**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 220 LAW OFFICE PROCEDURE**

**CREDITS: 2**

This course familiarizes students with practical inner workings of a law office. Topics include office organization, legal terminology, fees and billing procedures, scheduling and calendaring, preparation and maintenance of case files, preparation of law office forms, and an introduction to a variety of legal-specific software applications.

**PLL 232 LITIGATION CLINIC I**

**CREDITS: 2**

This course introduces the student to the proper methods of conducting an investigation through interviewing techniques, records 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: PLL232 LITIGATION CLINIC I.**

**PLL 235 FAMILY LAW****CREDITS: 3**

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 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 or INSTRUCTOR APPROVAL.**

**PLU 120 PLUMBING THEORY I****CREDITS: 3**

This course provides instruction on the basic principles of plumbing system installations. At the conclusion of the course, the student will be able to complete a variety of plumbing-related tasks such as identify and describe safe work practices; identify and explain the materials, fittings and supports used in a plumbing installation; identify the Uniform Plumbing Code; identify the content covered in each chapter of the UPC and perform basic pipe sizing; create plan and elevation plumbing drawings and sketches; and identify and describe potable water systems, water wells and basic water treatment.

**PLU 121 PLUMBING THEORY I LAB****CREDITS: 3**

Laboratory designed to accompany PLU120 PLUMBING THEORY I.

**PLU 125 PLUMBING PRACTICES I****CREDITS: 4**

This course provides instruction on common pipe joining techniques and common pipe fitting procedures for pressure and drainage weight pipe and fittings. At the completion of the course, the student will be able to identify the common materials used in plumbing and gas piping systems, identify and perform common joining methods used on piping materials, and maintain a job log of time spent and materials used for each of the piping assignments.

**PLU 130 PLUMBING PLAN AND PRINT READING****CREDITS: 2**

This course provides instruction on reading, interpreting and understanding standard construction drawings. From a given construction drawing, students develop piping sketches including plan, elevation and isometric views, size drain waste and vent piping by use of the Uniform Plumbing Code and the City of Rapid City amendments, prepare a materials list from a given piping sketch and download and print a variety of manufacturers' product information sheets for fixtures, faucets, fittings and other related items.

**PLU 135 PLUMBING THEORY II****CREDITS: 3**

This course provides instruction in all aspects of plumbing installations in a residential setting. Students learn to plan, design and install a plumbing drain, a waste and vent system, plumbing fixtures, water distribution systems, natural gas supply piping, venting, and chimney systems in accordance with the Uniform Plumbing Code, state and local amendments.

**PLU 136 PLUMBING THEORY II LAB****CREDITS: 4**

Laboratory designed to accompany PLU135 PLUMBING THEORY II.

**PLU 140 PLUMBING PRACTICES II****CREDITS: 4**

This course provides instruction for installation of plumbing systems. At the completion of the course, the student will be able to plan, design and install a plumbing drain, a waste and vent system, plumbing fixtures, water distribution systems, natural gas supply piping, venting, and chimney systems in accordance with the Uniform Plumbing Code, state and local amendments.

**PLU 145 ADVANCED PLUMBING PLAN AND PRINT READING****CREDITS: 2**

This course provides additional and advanced instruction on reading, interpreting and understanding standard construction drawings. From a given construction drawing, students develop piping sketches including plan, elevation and isometric views, size drain waste and vent piping by use of the Uniform Plumbing Code and the City of Rapid City amendments, prepare a materials list from a given piping sketch and download and print a variety of manufacturers' product information sheets for fixtures, faucets, fittings and other related items.

**PSYC 101 GENERAL PSYCHOLOGY****CREDITS: 3**

This course is an introduction survey of the field of psychology with consideration of the biological bases of behavior, sensory and perceptual processes, learning and memory, human growth and development, social behavior, and normal and abnormal behavior.

**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.

**SOC 100 INTRODUCTION TO SOCIOLOGY****CREDITS: 3**

Comprehensive study of society with analysis of group life and other forces shaping human behavior.

**SPCM 101 FUNDAMENTALS OF SPEECH****CREDITS: 3**

Introduces the study of speech fundamentals and critical thinking through frequent public speaking practice, including setting, purpose, audience, and subject.

**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.

**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 handing/handling of surgical instrumentation, sharps, 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:** HC114 ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS, HC213 MEDICAL TERMINOLOGY I, ST102 INTRODUCTION TO SURGICAL TECHNOLOGY, and ST111 INTRODUCTION TO SURGICAL TECHNOLOGY LAB.

**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:** HC114 ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS, HC213 MEDICAL TERMINOLOGY I, ST102 INTRODUCTION TO SURGICAL TECHNOLOGY, and ST111 INTRODUCTION TO SURGICAL TECHNOLOGY LAB.

**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:** HC114 ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS, HC213 MEDICAL TERMINOLOGY I, ST102 INTRODUCTION TO SURGICAL TECHNOLOGY, and ST111 INTRODUCTION TO SURGICAL TECHNOLOGY LAB.

**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:** HC114 ANATOMY & PHYSIOLOGY FOR THE HEALTH PROFESSIONS, HC213 MEDICAL TERMINOLOGY I, ST102 INTRODUCTION TO SURGICAL TECHNOLOGY, and ST111 INTRODUCTION TO SURGICAL TECHNOLOGY LAB.

**ST 135 CLINICAL PRACTICE I****CREDITS: 3**

This course provides clinical practice to prepare students to work at healthcare facilities. The student will progressively apply concepts of both the scrub and circulator role, continually building on experiences gained throughout instruction. **PREREQUISITE:** ST111 INTRODUCTION TO SURGICAL TECHNOLOGY LAB.

**ST 136 CLINICAL PRACTICE II****CREDITS: 6**

Clinical Practice II 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 perform and develop to entry-level competency as a surgical technologist. **PREREQUISITES:** ST125 PRINCIPLES AND PRACTICE OF SURGICAL TECHNOLOGY, ST126 SURGICAL PROCEDURES, ST127 SCIENCE AND TECHNOLOGIES FOR THE SURGICAL TECHNOLOGIST, ST128 SURGICAL PHARMACOLOGY, and ST135 CLINICAL PRACTICE I.

**ST 137 CLINICAL PRACTICE III****CREDITS: 6**

This is a continuation of ST136. 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:** ST125 PRINCIPLES AND PRACTICE OF SURGICAL TECHNOLOGY, ST126 SURGICAL PROCEDURES, ST127 SCIENCE AND TECHNOLOGIES FOR THE SURGICAL TECHNOLOGIST, ST128 SURGICAL PHARMACOLOGY, and ST135 CLINICAL PRACTICE I.

**TTT 110 VEHICLE ELECTRICITY AND ELECTRONICS****CREDITS: 4**

This course is designed to provide the students with knowledge of shop safety while learning the electronics background necessary to understand and diagnose the sophisticated electronic systems of the modern automobile.

**TTT 112 VEHICLE ELECTRICITY AND ELECTRONICS LAB****CREDITS: 6**

This course is designed to provide the students with knowledge of shop safety while learning hands-on vehicle electrical systems.

**TTT 115 ENGINE CONSTRUCTION AND OPERATION****CREDITS: 3**

This course is designed to instruct the student on the operation and diagnosis of engines. Particular attention will be paid to the techniques of analyzing internal failures of the compression, lubrication, and cooling systems.

**TTT 120 SHOP AND 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.

**TTT 121 INTRODUCTION TO HYBRIDS****CREDITS: 1**

In this class, the students will learn the different types of hybrids, how hybrids work, and precautions and maintenance of hybrids.

**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.

**TTT 125 ENGINE PERFORMANCE****CREDITS: 4**

This course is designed to provide the student with the necessary instruction to diagnose and repair ignition-, fuel-, and emissions-related drivability problems.

**TTT 126 ENGINE PERFORMANCE LAB****CREDITS: 6**

This course is designed to provide the student with the necessary hands-on instruction to diagnose and repair ignition-, fuel-, and emissions-related drivability problems.

**TTT 129 WELDING AND 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.

**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).

**TTT 201 UNDER-CAR DIAGNOSIS****CREDITS: 3**

The theory of construction, operation, and repair of automotive brakes, steering, and suspension systems will be covered in this course. Vehicle alignment theory will also be taught during this course.

**TTT 203 HVAC-LIGHT DUTY****CREDITS: 3**

HVAC is a course designed to enable the student to understand the principles of heating, ventilation, and air conditioning systems. The student will use modern equipment for testing and diagnosing related systems.

**TTT 204 ENGINE OVERHAUL****CREDITS: 4**

The construction and repair of automotive engines will be covered.

**TTT 205 UNDER-CAR DIAGNOSIS LAB****CREDITS: 5**

The hands-on construction, operation, and repair of automotive brakes, steering, and suspension systems will be covered in this course. Vehicle alignment procedures will also be taught during this course.

**TTT 210 UNDER-TRUCK DIAGNOSIS****CREDITS: 3**

The theory of construction, operation, and repair of heavy duty vehicle brakes, steering, and suspension systems will be covered in this course. Vehicle alignment theory will also be taught during this course.

**TTT 211 HEAVY DUTY DRIVETRAINS****CREDITS: 4**

This course introduces the basic principles of transmissions, differentials, and drivetrains. Students will understand the operation of all drivetrain components and the procedure for disassembly, repair, and the reassembling of each component. Included are how to perform failure analysis and how to troubleshoot drivetrain problems. Additional areas included are automatic transmissions, agriculture transmissions, and power shift transmissions.

**TTT 212 DIESEL ENGINES****CREDITS: 5**

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, fuel systems, troubleshooting, and repair.

**TTT 213 HVAC-HEAVY DUTY****CREDITS: 3**

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, troubleshoot, and repair heating and air conditioning systems.

**TTT 215 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, students will learn to read hydraulic schematics and troubleshoot hydraulic problems.

**TTT 222 LIGHT DUTY DRIVETRAINS****CREDITS: 4**

This course will teach the theory of construction, operation, and repair of automatic and standard transmissions/transaxles, clutches, drivelines, and differentials of automobiles. The theories of hydraulics will also be introduced to get a better understanding of how the internals of an automatic transmission and slave cylinders work.

**TTT 223 LIGHT DUTY DRIVETRAINS LAB****CREDITS: 6**

This course will demonstrate the hands-on construction, operation, and repair of automatic and standard transmissions/transaxles, clutches, drivelines, and differentials of automobiles. The hands-on application of hydraulics will also be introduced to get a better understanding of how the internals of an automatic transmission and slave cylinders work.

**TTT 240 UNDER-TRUCK DIAGNOSIS LAB****CREDITS: 5**

The hands-on construction, operation, and repair of heavy duty vehicle brakes, steering, and suspension systems will be covered in this course. Vehicle alignment procedure will also be taught during this course.

**TTT 299 INTERNSHIP****CREDITS: 3**

Students will be placed throughout the area in automotive or diesel shops. They will work with different mechanics learning the various methods of repairing engines, drivetrains, suspension systems, brake systems, hydraulic systems, and electrical systems.  
**PREREQUISITE: INSTRUCTOR APPROVAL REQUIRED.**

**WDM 102 SHIELDED METAL ARC WELDING I****CREDITS: 3**

Shielded Metal Arc Welding theory and skills training will allow the student to attain an acceptable level of welding skills. Equipment safety, setup, operation, and maintenance and 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 103 GAS METAL ARC WELDING I****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 weld in all positions.

**WDM 104 FABRICATION I****CREDITS: 3**

This course is an introduction to fabrication concepts. It focuses on safety fundamentals, basic skills of measurement, industry math practices, hand tools, pattern development, beginning metal forming, joint design, and an introduction to metallurgy. Projects will be designated by the instructor.

**WDM 105 OXY FUEL WELDING/CUTTING****CREDITS: 3**

This course is the study of welding and cutting using oxygen and acetylene gases. Students will learn the proper setup, shut down, and safety associated with this process. Shop work will cover manual cutting, semi-automated cutting, filler and autogenous welding.

**WDM 150 SHIELDED METAL ARC WELDING II****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. PREREQUISITE: WDM102 SHIELDED METAL ARC WELDING I.

**WDM 151 GAS METAL ARC WELDING II****CREDITS: 3**

This course is designed to provide the student with a technical understanding of wire welding processes, equipment set-up, metal transfers, and shielding gases including solid and flux core wires. Students will practice developing their welding skills in and out of positions using differing processes to successfully weld various types and thickness of structural metal. Students will weld grooved plate with backing in all positions. PREREQUISITE: WDM103 GAS METAL ARC WELDING I.

**WDM 152 FABRICATION II****CREDITS: 3**

This course continues the study of fabrication concepts with a focus on material selection, blueprint reading, fastener selection, weld symbols, and application of joint design with proper part fitment. It will also cover material preparation, part assemblies, and welding procedure. Projects will be designated by instructor. PREREQUISITE: WDM104 FABRICATION I.

**WDM 153 GAS TUNGSTEN ARC WELDING I****CREDITS: 3**

This course is an introduction to GTAW theory and skills training. Students will learn and apply proper equipment setup and safety related to this process. Fundamentals will be taught on light gauge ferrous material and be joined autogenously and with filler.

**WDM 201 GAS TUNGSTEN ARC WELDING II****CREDITS: 3**

This course continues the study of GTAW theory and skills training. Students will apply fundamental skills to weld in and out of position on light gauge material, tubing, and open root pipe. Ferrous and nonferrous materials will be used. PREREQUISITE: WDM153 GAS TUNGSTEN ARC WELDING I.

**WDM 202 FABRICATION III****CREDITS: 3**

This course continues the study of fabrication concepts with a focus on preliminary manufacturing modules. The course will cover an introduction to project design and layout, manufacturing implementation, jigs and fixtures, and quality control. It will also cover the use of manufacturing techniques, welding economics, and application of a BOM (bill of materials). Projects will be designated by instructor. PREREQUISITE: WDM152 FABRICATION II.

**WDM 203 GAS METAL ARC WELDING III****CREDITS: 3**

This course is designed to give students the ability to use their fundamental MIG welding skills and apply them to various real-world applications. Fillet welding techniques will be expanded to encompass welding parameter settings on light gauge through unlimited thickness. Emphasis will be placed on operator understanding and selection of solid-wire (mild steel), metal-core (mild steel, and or low-alloy steels), and flux-cored (mild, steel, and or low-alloy steels) for the correct application. Equipment understanding, setup, and variations will be explored. PREREQUISITE: WDM 151 GAS METAL ARC WELDING II.

**WDM 204 SHIELDED METAL ARC WELDING III**

**CREDITS: 3**

This course continues the study of SMAW theory and skills training with a focus on open root welding in the 3G and 4G positions as well as 1G pipe. Students will complete these tasks using E7018 and E6010 electrodes. PREREQUISITE: WDM150 SHIELDED METAL ARC WELDING II.

**WDM 252 FABRICATION IV**

**CREDITS: 3**

This course will encompass all concepts and techniques used in Fabrication 1, 2, and 3 to design and develop a final project in a complete manufacturing module process. Final project will be designated by instructor. PREREQUISITE: WDM202 FABRICATION III.

**WDM 253 GAS METAL ARC WELDING IV**

**CREDITS: 3**

Advanced semi-automated wire fed processes will be explored with ferrous, non-ferrous, and alloyed materials. Newest industry technologies will be studied as appropriate. PREREQUISITE: WDM203 GAS METAL ARC WELDING III.

**WDM 254 SHIELDED METAL ARC WELDING IV**

**CREDITS: 3**

This course continues the study of SMAW theory and skills training with a focus on 2G, 5G and 6G pipe. Students will complete these tasks using E7018 and E6010 electrodes. PREREQUISITE: WDM204 SHIELDED METAL ARC WELDING III.

**WDM 255 WELDING CAPSTONE**

**CREDITS: 3**

This class will provide the graduating student skills to prepare them for management, supervisor, and foreman positions in the welding industry. This will be accomplished by taking a critical look at the economics behind successful weld production and manufacturing. Topics covered during theory will be, but not limited to, expenditures, productivity, AWS code, research and development, team building, specialized welding processes, and industry trends. Skills training in the lab will be based on the industry that the student has chosen as a career path and, when applicable, the student will work with standards set by a future employer or by industry. PREREQUISITE: INSTRUCTOR APPROVAL.