Areas of Study

Agriculture
- Agri-Business Option
- Agri-Production Option
- Commodity Merchandising Option
- Dairy Option
- General Science Degree
- Livestock Production & Management Option
- Precision Technology Option

Auto Body and Paint Technology

Automotive Technology
- Auto Technology or Light Duty Diesel Option
- Electric Vehicles Option for Auto Graduates

Aviation
- Aviation Maintenance Technology Program
- Professional Fixed Wing Pilot Program - UAS Option

Building Trades Technology

Business
- Entrepreneurship Option
- Human Resource Option
- Marketing & Management Option
- Photography/Media Option

Community Health Worker - Online Certification

Computer Information Systems
- Graphic Design & Digital Communications
- Networking & Cyber Security
- Software Development & Database Administration

Cosmetology

Dental Assisting - Certified

Diesel Technology
- Ag/Industrial Tractor or Truck Options
- Diesel Butler MAX Option
- Diesel Case New Holland Option
- Diesel Kubota Tech
- Diesel TechKnowledge John Deere Option
- Diesel ThinkBIG Caterpillar Option

Electronic Systems Technology
- Biomedical Technician Option

Energy Operations

Energy Technology

Financial Services
- Agri-Financial Services Option
- Business Accounting Option
- Consumer Financial Services Option

Heavy Equipment Operator

Human Services Technician
- Child Development Option
- Developmental Disabilities Option
- Mental Health/Activity Technician Option
- Youth Offender Option

Law Enforcement
- Law Enforcement Academy

Med/Fire Rescue
- Emergency Medical Specialist Option
- EMT Basic Online Certification
- Paramedic Option

Medical Assisting

Medical Laboratory Technician

Natural Resources Management

Nursing - Practical Nursing

Nursing - Registered Nursing

Occupational Therapy Assistant

Physical Therapist Assistant

Precision Machining

Robotics
- Biomedical Technician Option

Surgical Technology

Welding Technology

E-DEGREES (online hybrid programs)

Agriculture
- Agri-Business Option
- Commodity Merchandising Option
- Livestock Production & Management Option

Business
- Entrepreneurship Option
- Human Resource Option
- Marketing & Management Option

Community Health Worker - Certification

Computer Information Systems Hybrid

Dental Assisting - Certified Part-Time Hybrid

Electronic Systems Technology Hybrid

Emergency Medical Technician - Certification only

Financial Services

Law Enforcement Hybrid Option - Articulation SDL EO STC

Med/Fire Rescue
- Emergency Medical Technician (EMT Basic) – Certification only
- Paramedic Option

Medical Lab Technician

Nursing - Practical and Registered Nursing

Precision Machining

Robotics

LAKE AREA TECHNICAL COLLEGE

1201 Arrow Avenue
Watertown, SD 57201
(605) 882-LATI
1-800-657-4344
www.lakeareatech.edu

2024-2025 Lake Area Technical College Watertown, South Dakota

LAKE AREA TECHNICAL COLLEGE

2024 - 2025

CATALOG

THE ASPEN INSTITUTE ASPEN PRIZE FOR COMMUNITY COLLEGE EXCELLENCE
WINNER
Lake Area Technical Institute
2017

THE COURSES AND PROGRAM INFORMATION LISTED IN THE CATALOG ARE BELIEVED TO BE ACCURATE AT THE TIME OF PRINTING AND ARE PROVIDED TO FACILITATE ACADEMIC PLANNING.

Watertown School District 14-4 provides equal opportunity in its employment regulations, educational, and activity programs. It is the policy of the District not to discriminate on the basis of sex, race, color, national origin, creed, religion, marital status, status in regard to public assistance, age, ancestry, or disability.

The Board's policy on nondiscrimination will extend to students, staff, the general public and individuals with whom it does business.

Persons with inquiries regarding implementation and compliance of Americans with Disabilities Act and Section 504 may contact the special services director. Those in need of accommodations should notify their instructor and make appropriate arrangements with LATC's Office of Disability Services at 882-5284, Ext. 399. Persons with inquiries regarding implementation and compliance regarding Title IX may contact the superintendent at 200 9th St. NE, Watertown, SD 57201, 605-882-6312. Additional inquiries may be directed to the Regional Director, Dept. of Education, Office for Civil Rights, 1961 Stout Street, Denver, CO 80294.

Accredited by: The Higher Learning Commission
230 South LaSalle Street, Suite 7-500
Chicago, Illinois 60604
(800) 621-7440
www.hlcommission.org

1201 Arrow Avenue
P.O. Box 730
Watertown, South Dakota 57201-0730
(605) 882-LATI or 1-800-657-4344
FAX: 1-605-882-6299
www.lakeareatech.edu

Date of Publication – April 2024

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ABOUT
Lake Area Tech

Lake Area Tech operates in full accordance with the State of South Dakota and the regulations of the State Board of Education.

Value Statements

- We believe in integrity, honesty and a caring attitude.
- We believe all people are valuable and should be treated with respect.
- We believe in promoting a positive image for technical education.
- We believe all employees contribute to the success of the institution.
- We believe that excellence and quality performance promotes success.

Mission Statement

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Vision Statement

Lake Area Technical College will be the leader in technical education, working in partnership with business and industry and all levels of education. Lake Area Tech staff will integrate the latest technology and methods of delivering quality education to meet emerging global workforce demands. Lake Area Tech will continue to develop marketing strategies to promote technical education and will maintain excellence in all programs.

Admission Policy

It is the policy of Lake Area Tech that every person be given equal opportunity to be admitted into the program of his or her choice regardless of sex, race, color, national origin, creed, religion, marital status, status in regard to public assistance, age, ancestry, or disability.

Lake Area Tech accepts students for full-time enrollment who have a high school diploma or GED. In order to identify the students most capable of program completion and subsequent career success, LATC will require either an ACT test score, Level 3 Smarter Balance scores, ACCUPLACER test score, or ATI-TEAS test score for all students desiring admission (some programs require additional testing). The tests need to have been taken within the last seven years. LATC strongly encourages all high school students considering technical education to take the ACT test when it is offered in their area. If that is not possible, applicants will need to schedule the ACCUPLACER or ATI-TEAS test at Lake Area Tech. Acceptance will be based on test scores.

All programs accept qualified students who meet the entrance standards until program capacity is met. After that, qualified accepted applicants are placed on a wait list. The Practical Nursing, Registered Nursing, and Physical Therapist Assistant programs' acceptance procedures includes a cutoff date as demand for the program exceeds capacity. Applicants are ranked by the Acceptance Committee according to acceptance test scores. Previous post-secondary GPA and work history may also be a factor.

Admission Procedures

Lake Area Tech requires all interested students to:

1. Complete an application form. Lake Area Tech also requires a $25 non-refundable application fee. If a student attended Lake Area Tech previously, the $25 application fee will still be required to update his/her admission file.
2. Submit a transcript of high school record or GED certificate. (All transcripts need to be sent from the issuing institution directly to LATC). If an applicant has attended other post-secondary schools or colleges, official transcripts should also be sent. High school seniors may apply any time during their senior year, but applications from juniors will not be processed.
3. All applicants need to submit ACT scores or schedule an appointment at LATC to take an entrance test. Existing test scores need to have been taken within the last seven years. These test scores, along with the transcripts, will assist the admission officer in determining if the applicant has the necessary ability to succeed in their program of choice. Some LATC programs require additional testing and an interview.
4. Once you are accepted, you will be required to pay a $150 dollar holding fee. Of that, $25 is non-refundable, and $125 will be put towards your tuition. *Notify us by July 1st if you will not be attending LATC, and we can reimburse $125.

We recommend applying early to ensure your best chance of being admitted into the program of your choice. The application process is completed online at **www.lakeareatech.edu**.

Recognized Home School Diploma or Equivalency

High school diplomas obtained through an online high school

2024-2025 Academic Calendar*

Orientation Day	August 23
Fall Semester Begins	August 26
Labor Day	September 2
Native American Day	October 14
Veterans Day Holiday (Observed)	November 11
Thanksgiving Break	November 27-29
Fall Semester Ends	December 19
New Student Orientation	January 10
Spring Semester Begins	January 13
Martin Luther King Day	January 20
Presidents Day	February 17
Spring Break	March 17-21
Easter Break	April 18-21
Spring Semester Ends/Graduation	May 16
Memorial Day	May 26
Summer Session Begins	May 27
Independence Day Observed	July 4
Summer Session Ends	July 22

* Academic calendar subject to change. See website for the most recent Academic Calendar.

program will be accepted by Lake Area Tech if the institution granting the diploma is accredited by the Higher Learning Commission or a State Board of Education.

Home school graduates will be recognized as high school graduates. Some Lake Area Tech programs have national licensure requirements that may affect the admission process. Please contact Lake Area Tech for further information.

Acceptable ACCUPLACER or ACT scores (no older than seven years) will be required for admission from online high school graduates, home school graduates, high school graduates or GED certificate holders. Please contact the Admissions office for further information or if you have specific questions.

Admission of Transfer Students

A decision concerning the acceptance of transfer students will not be made until an official transcript has been received by the Admissions Office from the institution the student previously attended.

Credits earned at other recognized accredited colleges, universities, and technical schools may be accepted in transfer; however, only those that apply to the student's major at Lake Area Tech are recorded on the transcript.

Admission of Former Students

Any former student who was in good standing will be re-admitted if a suitable class schedule can be arranged for the applicant. All other applicants will be reviewed on a case by case basis.

Remediation courses

Remediation is available in math (MATH 090) writing (EN 090), and reading (RDG 090) for students whose scores are within one grade level of the program standards. Individual programs may have additional restrictions and requirements.

Admission of International Students

To be considered for admission to Lake Area Tech international students must:

1. Rank in the upper half of their secondary school graduation class.
2. Have a 3.0 (B) average if transferring from another technical school, college or university.
3. Be proficient in English.
4. Be financially self-sustaining.

Your application will be processed when we receive ALL of the following documents and information. Please use the following as a checklist:

1. Complete and return an application form. Files for international students must be complete by May 1 for Fall Semester and September 1 for Spring Semester.
2. Submit the $250 international application fee.
3. Academic credentials (translated into English)
4. TOEFL IBT minimum score of 74 or complete the PTE Academic test. The results must be sent to Lake Area Technical College, Attention: Registrar, P.O. Box 730, Watertown, SD 57201.
5. Financial certification form.
6. Letter from financial sponsor (if applicable).
7. Bank/Employer/Broker financial statement.

An I-20 cannot be issued to you until your file is complete and you are admitted to Lake Area Tech. The form I-20 is usually necessary for admission into the United States for post-secondary attendance. The American Consulate in your country can supply detailed information on student status and required visas.

Students With Special Needs

Persons with inquiries regarding implementation and compliance of Americans with Disabilities Act and Section 504 may contact the Disability Services Coordinator. Those in need of accommodations should notify their instructor and make appropriate arrangements with LATC's Office of Disability Services, 882-5284, Ext. 399. Persons with inquiries regarding implementation and compliance regarding Title IX may contact the superintendent at 200 9th St. NE, Watertown, SD 57201, 605-882-6312. Additional inquiries may be directed to the Regional Director, Dept. of Education, Office for Civil Rights, 1961 Stout Street, Denver, CO 80294.

Course Registration

All new students are registered by the Registrar's Office. If you believe some of your high school and/or college credit may be transferable to LATC, please contact the Registrar (605-882-5284, ext. 249). Once registered, you will be able to view your class schedule through the online student portal. Continuing students, please ask your advisor for guidance.

Visitors

Visitors are always welcome! LATC offices are open Monday through Friday from 7:30 a.m. to 5:00 p.m. Please allow at least one hour for touring and visiting with school staff. Since most classes are over by 3 p.m., please come earlier so you can see the labs and classrooms in action. To set up a tour, **click here** or contact the Admissions Office at:

Lake Area Tech
P.O. Box 730, 1201 Arrow Ave.
Watertown, SD 57201-0730
(605) 882-LATI or 1-800-657-4344

Summer New Student Orientation

To help you find your way around Lake Area Tech, we schedule a New Student Orientation in the summer. Join other incoming students for a day of helpful explanations, a fun overview of the services we provide, and introductions to LATC staff. Dates and times will be posted on our website.

Applying Online

For complete instructions on how to apply online, visit our website at **www.lakeareatech.edu**.

Immunization requirements

South Dakota legislation requires any student born after 1956 entering a post-secondary education institution in South Dakota for the first time shall, within 45 days after the start of classes, present certification from a licensed physician that the student has received or is in the process of receiving the required two doses of immunization against measles, rubella and mumps OR has the presence of an immune antibody titer against measles, mumps, and rubella. This documentation may be accomplished by either a State Health Department certificate, high school immunization records or it may be included on the LATC Report of Health Evaluation signed by a licensed physician.

Students who are unable to ascertain their immunization status must obtain, at their own expense, the necessary tests and vaccinations.

In the event the South Dakota State Department of Health declared an epidemic of measles or rubella, students who have no vaccination or immunity against the required preventable infectious diseases may be dismissed from the campus.

See www.lakeareatech.edu for program-specific immunization requirements.

Additional Immunization Requirements for Health Programs

Students enrolled in Dental Assisting, Medical Assisting, Med/Fire Rescue, Medical Lab Tech, Occupational Therapy Assistant, Physical Therapist Assistant, Nursing - LPN, Nursing - RN, Cosmetology and Human Services Technician must provide proof of specified vaccinations. For complete requirements, contact your program or view the LATC Report of Health Evaluation (distributed to all applicants in the health programs listed above).

Background Checks

Criminal background checks are performed on most health program students before clinical rotations begin. Please visit with your advisor about any possible concerns with licensure. Our Law Enforcement program also requires a background check. The background check is performed at the student's expense.

Personal Information Changes

Lake Area Tech is committed to maintaining clear and accurate student information records. The information recorded is obtained from a student's initial admission application. If a student has a legal name change after the admission application is submitted, the student is required to complete and submit the Name Change Form, which must be accompanied with legal documentation verifying the name change such as a social security card, marriage certificate, or court document. The Name Change Form is available to students on the My Forms page on My Portal. Paper copies are available at the Registrar's desk in the Student Services area. Likewise, students can update any changes in an address or contact information by completing and submitting the Address and/or Contact Information Change Form.

Annual Assessment Report

The Lake Area Tech Annual Assessment Report is available upon request. Contact the Assessment Coordinator at (605-882-5284).

ABOUT
Watertown

South Dakota's Rising Star

Watertown, South Dakota, is a growing city of 22,000 located on the Big Sioux River and bordered by Lake Kampeska and Lake Pelican.

Experience the vibrant seasons of this unique prairie city. Swim or relax in nearby lakes and parks; join the sportsmen and women in year-round fishing tournaments for world-class walleye, bass, and northern; or head out into the fields for incredible pheasant, duck, deer, and turkey hunting.

Watertown is a growing city with so much to offer. Whether you like to snowmobile, play ball, jet ski, hike, shop, eat, or check out concerts and art galleries - there is something here for YOU!

Indoor/Outdoor Recreation

PRAIRIE LAKES WELLNESS CENTER

LATC students get a free basic membership to the new Prairie Lakes Wellness Center. (Select classes, etc. will have a charge. Check with the center for more details). The Wellness Center features a walking track, leisure pool, racquet ball courts, basketball courts, expanded cardio and weight area, larger fitness class areas, four full-size courts, an eight-lane pool, and more.

The Watertown area also offers other fun options like:

BASEBALL/SOFTBALL • 30 MILES OF PAVED TRAILS FOR BICYCLING AND JOGGING • BOATING/FISHING • BOWLING • MINIATURE GOLF/GO-KART RACING • GOLF • HUNTING • INDOOR/OUTDOOR ICE SKATING ARENA • SNOWMOBILING • SLEDDING • ICE FISHING • STOCK CAR RACING • OUTDOOR POOLS • BEACHES • INDOOR/OUTDOOR WATER PARKS • TENNIS COURTS • MOVIE THEATRE • PRAIRIE LAKES ICE ARENA

Shopping

DOWNTOWN SHOPPING WITH BOUTIQUES, COFFEE SHOPS, RESTAURANTS, AND ART GALLERIES • WATERTOWN MALL • TARGET • MENARDS • WALMART • SPECIALTY BUSINESSES

Parks

BRAMBLE PARK ZOO is home to more than 500 mammals, reptiles, and birds and features a Discovery Center, gift shop, picnic area, park, playground, and outdoor band concerts!

MEMORIAL PARK, located on Lake Kampeska, offers swimming, a boat launch, camping, and concessions.

STOKES-THOMAS LAKE CITY PARK, located on Lake Kampeska, features modern camping, swimming and a boat launch.

LAKE PELICAN RECREATION AREA is located on Lake Pelican and offers fishing, camping, swimming, and boating. In the winter, a warming house is available for ice fishing, snowmobiling, and cross-country skiing.

SANDY SHORES STATE PARK on beautiful Lake Kampeska features water sports, a boat launch, picnic area and camping.

The Arts

REDLIN ART CENTER, a 52,000 square foot monumental brick building at the junction of Highway 212 and Interstate 29 in Watertown, is home to more than 160 of Terry Redlin's original oil paintings.

GOSS OPERA HOUSE, an historic three-story building in uptown Watertown that features world-class entertainment and a gourmet restaurant.

Restaurants

Whether you have a craving for burgers, pizza, subs, or wings - Watertown has it all and everything in between! The food choices in town are incredible as are the venues. There are many fine-dining establishments for special occasions, restaurants for the whole family, fast-food chain options, and a variety of ethnic-specific restaurants. Would you rather dine-in? Several restaurants deliver to your front door. Watertown's food establishments welcome LATC students to our fine city and look forward to serving you.

Festivals and Events

Watertown Winter Farm Show - Crazy Days - 4th of July Celebration - Cookin' on Kampeska - Winter Wonderland

TUITION & OTHER COSTS

Tuition and Other Costs

Tuition
The tuition rate is $124.00 per semester credit.

Fees
The facility fee rate, set by the State of South Dakota, is $36 per credit for all students. LATC also charges departmental, campus support, repair/maintenance, state technology, state program development and parking fees. Please see a current cost sheet.

Distance Fees
For classes offered through LATC's eLearning system, you will be charged the established tuition and fees based on the number of credits taken. You will also be charged a $47 per credit distance fee.

Books, Supplies and Tools @ STAX
Students are required to purchase assigned books and necessary tools/supplies for each course. Some programs require uniforms. Some programs also require the use of a laptop. See our Stax bookstore webpage for more details. Almost everything you need can be conveniently purchased from Stax.

Housing
To help you find a place to live, LATC maintains a list of Watertown housing currently available to students, with helpful specifics like type of housing, size and cost. For a copy of the housing list, stop by the front office or check out our **housing webpage**.

Meals @ market 65
Market 65, located in the Student Center, serves fresh meals everyday from 6:45 a.m. to 3 p.m. (Abbreviated summer hours) The cafeteria is designed for student and staff convenience. Students are not required to buy a meal plan at LATC.

Applying For Financial Aid
In order to apply for federal financial aid, you need to complete the Free Application for Federal Student Aid (FAFSA). You can complete the FAFSA for the upcoming school year, on or after October 1. The FAFSA requires "prior prior" tax year information, thus making it easier to apply for financial aid. For example, the 2025-2026 FAFSA will be available October 1, 2024 and will require 2023 tax information.

The FAFSA will determine eligibility for the Pell Grant, Supplemental Educational Opportunity Grant, Work Study, Federal Direct Loan, and other need-based financial aid.

- Complete the FAFSA on or after October 1st for the upcoming school year.
- Make sure to submit your FAFSA by our priority date. (Please contact the LATC Financial Aid Office as that date may change in future years.)
- List LATC's school code of 005309 on your FAFSA.
- If additional information is needed for your file, a letter will be sent to you.
- Once we start awarding files, you will be sent a financial aid offer indicating the types and amounts of financial aid you are eligible for. (BE SURE TO SIGN AND RETURN ONE COPY.)

The Financial Aid Office at Lake Area Tech has the capability to process corrections to FAFSA data electronically.

Priority Date
Lake Area Tech prioritizes FAFSAs submitted by April 1 for possible eligibility based on demonstrated financial need to receive an offer for Federal Work Study or the Federal Supplemental Educational Opportunity Grant (SEOG). The priority date is not a cutoff date for FAFSA submissions, but instead gives those students with financial need the priority to receive these limited funds. The priority date does not affect eligibility for the Federal Pell Grant or Federal Direct Loans.

Financial Aid Resources
Federal Pell Grants are funds available to undergraduate students who have not previously earned a bachelor's degree. They do not have to be repaid. Eligibility is based on need and determined by your Student Aid Index (SAI) listed on your Student Aid Report. If your SAI is high, you may not qualify for a Pell Grant if you are enrolled less than full-time. The amount of Pell Grant that a student is eligible for will be adjusted each semester and is based on the number of credits a student is enrolled in. Learn more at www.studentaid.gov.

Federal Supplemental Educational Opportunity Grant (SEOG) is a grant that is awarded to an undergraduate student who demonstrates exceptional financial need to help pay for their education. Priority is given to students with the lowest Student Aid Index (SAI) and must also be Federal Pell Grant recipients.

SDEAF Grant: The South Dakota Education Access Foundation Grant is a private grant program available to undergraduate students who show need and meet eligibility requirements as determined by the institution. Must be enrolled at least half-time and submit a FAFSA.

The South Dakota Need-Based Grant (SDNBG) is a state grant program awarded to undergraduate South Dakota residents enrolled at least half-time. A FAFSA must be submitted to determine eligibility.

Federal Work Study: The Federal Work-Study program provides part-time jobs for college students with a financial need. College students who qualify for Federal Work-Study are paid $14 per hour. These funds should be used to cover indirect college costs as the student is paid monthly throughout the school year.

Federal Direct Loan is a low interest loan through the federal government that allows students to borrow up to $3,500 for their first year and $4,500 for their second year. This loan is either subsidized, unsubsidized, or a combination. If the loan is subsidized, the interest does not accrue while you are enrolled at least half-time. If the loan is unsubsidized, interest accrues from the time the loan is disbursed. Independent students may be eligible for an additional $6,000 a year in unsubsidized Direct Loans. Dependent students may be eligible for an additional $2,000 a year in unsubsidized Direct Loans. Visit www.lakeareatech.edu for more information.

Federal Direct Parent Loan (PLUS) is a loan program through the federal government which provides an opportunity for parents of dependent students to borrow funds for their

student's educational costs. Loan amounts may not exceed the estimated budget minus other financial aid. To apply for the PLUS loan, contact the Financial Aid Office.

Private Education Loans: Lake Area Tech works with several lenders to offer private education loans. These are non-federal, private loans. Visit www.lakeareatech.edu for more information.

Additional Financial Aid Sources

Tribal Education Funding: If you believe that you may be eligible for funding through your native tribe, you may obtain application materials through your local Tribal Education Office. The Tribal Education Offices typically have deadlines for reviewing applications and making awards. Lake Area Technical College will assist you in meeting these deadlines.

Vocational Rehabilitation Services offer individuals with disabilities support on their journey to higher education. Students may contact the Lake Area Tech Disabilities Coordinator, who will coordinate facilitation with a representative from the SD Vocational Rehabilitation Services. More information can be found at dhs.sd.gov.

Veterans: Students enrolled at Lake Area Tech are eligible to apply for **Veterans' Benefits**. Service members should speak with their Educational Services Officer (ESO) or counselor within their Military Service prior to enrolling at Lake Area Tech. Students should also contact the LATC VA School Certifying Official located in Student Services.

National Guard Benefits: Members of the National Guard may qualify for tuition assistance or monthly stipends under the Chapter 1606 program. Service members should speak with their Educational Services Officer (ESO) or counselor within their Military Service prior to enrolling at Lake Area Tech. Students should also contact the LATC VA School Certifying Official located in Student Services.

Workforce Innovation and Opportunity Act (WIOA) was signed into law on July 22, 2014. WIOA is designed to help specific vulnerable populations obtain access to employment, education, training and support services to succeed in the labor market and to match employers with the skilled workers they need to compete in the global economy. https://dlr.sd.gov/workforce_services/wioa/default.aspx

Student Consumer Disclosure Information

The Higher Education Act of 1965, as amended, requires that institutions participating in federal student aid programs provide various consumer disclosure information to students. This includes, but is not limited to, LATC policies, data on enrollments, program completions, graduation rates, faculty and staff, finances, institutional prices, privacy, and student financial aid. This information can also be accessed at www.lakeareatech.edu.

Admissions and Academic Information
Academic Calendar, Accreditation, Admission Policies, Admissions Deadlines, Catalog, Immunization & Health Info, Student Handbook, Transfer/Prior Learning, and FERPA.

CARES Act Higher Education Emergency Relief Fund (HEERF) Reporting
Each HEERF participating institution must post the information in a format and location that is easily accessible to the public 30 days after the date when the institution received its allocation under 18004(a)(1) and updated every 45 days thereafter until the final quarterly report is posted. **See our website for full report.**

CARES Act Institutional Portion Expenditure Reporting

Exit Loan Counseling for Student Borrowers

General LATC Information
Accountability Report, Americans with Disabilities Act Policy, College Navigator Link to LATC, Computer Hardware & Software Use (Copyright), Faculty & Staff, File a Complaint, IPEDS link to LATC, Nondiscrimination/Accessibility Policy, Special Facilities for Disabled Students, Textbooks & Laptops

Lake Area Tech Federal Single Audit

Student Financial Assistance & Student Loan Information
Code of Conduct, Entrance Loan Counseling for Student Borrowers, Federal Student Aid Penalties for Drug Law Violations, Financial Aid Information, Net Price Calculator, Private Education Loan Policy, Refund Policy, Satisfactory Academic Progress Policy, Tuition & Costs, Return of Title IV Funds (containing withdrawl/drop process and refund policy), and Verification Policy

Health and Safety
Campus Crime and Safety, Drug and Alcohol Abuse Policy, Immunization & Health Info, In the Event of an Emergency, Tobacco Use on Campus

Student Outcomes
LATC Graduation Rates, LATC Retention Rates

Voter Registration
South Dakota Voter Registration, National Voter Registration

Job Placement Information
Current Placement Report, Employer Satisfaction Survey/Assessment Report, Career Interest Inventory

Refund Policy

Refunds of tuitions/fees for financial aid recipients will be made in accordance to the U.S. Department of Education Return of Title IV Funds. Students not receiving financial aid will receive a refund based on the institutional refund policy. The LATC institutional refund policy mirrors the Department of Education policy. Further information and examples of the refund policy are available by contacting the Financial Aid Office at Lake Area Tech.

Family Education Rights And Privacy Act (FERPA)

Legislation enacted in 1974 sets forth requirements designed to protect the privacy of students' educational records. FERPA questions may be directed to the Director of Enrollment.

SCHOLARSHIP INFORMATION

Lake Area Tech Foundation

Funding for Lake Area Tech Foundation scholarships is made possible by donations provided from individuals, businesses, corporations and by LATC staff, faculty and alumni. Thanks to their generosity, the Lake Area Tech Foundation awarded nearly $450,000 in scholarships to 450 students during the 2022-2023 school year!

The incoming student application timeline to apply for scholarships is January 1 - March 31. Scholarship recipients must be enrolled in 12 credit hours per semester, maintain satisfactory program progress, and complete customary donor acknowledgements as outlined by the Foundation office.

Universal Application for All Scholarships

It's never been easier to apply for scholarships at Lake Area Tech. Whether you're applying for one or more, there is only one application to complete to qualify for all scholarships currently available through the Foundation. This includes LATC Foundation scholarships as well as Build Dakota full-ride scholarships (for eligible programs). The system automatically links each student with all scholarships for which he/she meets eligibility criteria.

Accepted LATC students can log in to MyPortal to apply for LATC Foundation and Build Dakota scholarships. Simply use your MyPortal login credentials:
username: MyPortal+@lakeareatech.edu
(example: AB12345@lakeareatech.edu)
password: MyPortal Password

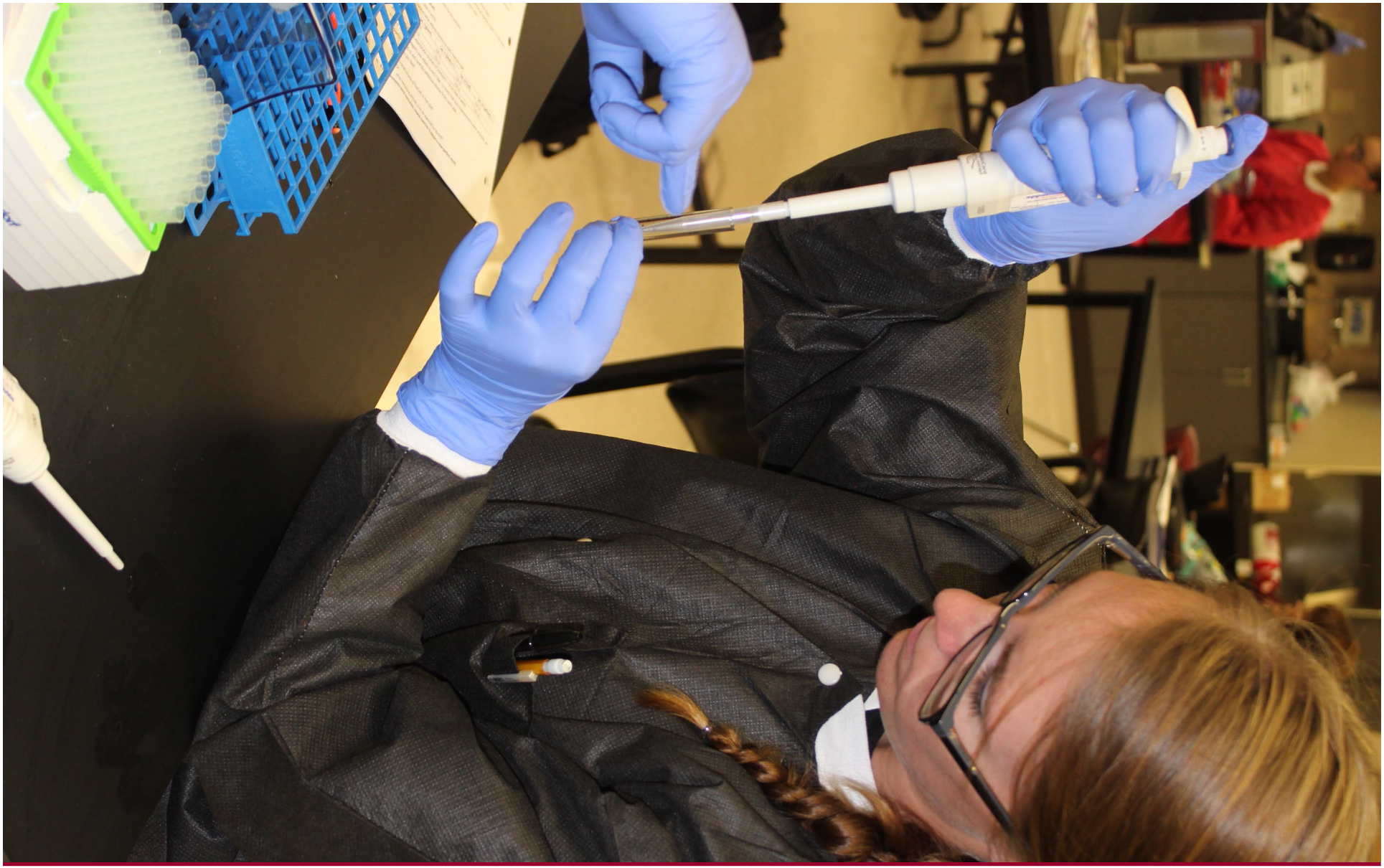
Build Dakota/Stretch the Million Scholarships

- Both in-state students and out-of-state students are eligible for Build Dakota scholarships.
- The Build Dakota scholarships will support tuition, fees, books and other required program expenses in the eligible technical college programs.
- Recipients of the Build Dakota scholarships will commit to living and working in the state, in their field of study, for three years following graduation.
- For additional information about program requirements and the student workforce commitment, please visit the Build Dakota Scholarship site at www.builddakotascholarships.com.

In an effort to 'stretch' the available dollars in the Build Dakota Scholarship program, industry partners participate as a "Stretch the Million" partner. STM partners commit to paying half of the expenses of the Build Dakota Scholarship for a student scholar.

- BDS Full-ride scholarships support tuition, fees, books and other required program expenses in the eligible technical college programs.
- Both in-state students and out-of-state students are eligible for the scholarships.
- Recipients of the scholarships will commit to living and working in the state, in their field of study, for three years following graduation.
- If a scholarship recipient has an industry (Stretch the Million) partner, the three year work commitment is with that business.

For questions about scholarships, contact the Lake Area Tech Foundation office at foundation@lakeareatech.edu.



ACADEMIC STANDARDS

Accreditation

Lake Area Tech is accredited by The Higher Learning Commission, the South Dakota Division of Workforce and Career Preparation, and by numerous agencies governing the quality and accreditation of the many programs at Lake Area Tech.

General Education

An integral part of LATC's mission statement is the comprehensive, foundational nature of the technical education we provide. The required general education classes are critical to LATC's four core values: the General Education Student Learning Outcomes. General Education provides the broad knowledge and skills to enable LATC graduates to work effectively within society.

General Education Purpose Statement

The purpose of LATC General Education is to provide the building blocks for success. Through core general education courses, students gain skills and knowledge for effectiveness in communication, computer, math and the sciences.

General Ed Student Learning Outcomes

- Demonstrate problem-solving skills and critical thinking.
- Develop professionalism, including team-working skills.
- Communicate effectively.
- Find and use information.

Instructors

All instructors have many years of successful practical experience in the job areas they teach, as well as having professional education and academic training. All instructors are certified by the South Dakota Office of Learning and Instruction.

Satisfactory Progress

Students are expected to meet standards of progress as determined by general school policy and department policy. Each department sets its minimum standards based on industry requirements. Students with academic deficiencies will be subject to loss of financial aid and may be terminated from school. Academic deficiencies may also affect eligibility for other types of financial assistance. The Department of Education requires schools to define and monitor satisfactory academic progress for financial aid recipients.

Attendance

All departments have attendance requirements. Attendance is important to the mastery of course skills and development of proper work habits.

prior learning

Prior Learning (PL) is granted in cases where a student may have work experience or other experiences where technical credit may be granted. This decision is made by the program department head, verification may be requested. **Click here** for more information.

Test Outs Available For These Courses:*

ACCT 210 Principles of Accounting I Students who have had two or more semesters of Accounting on the high school level and who received a "B" or better may elect to take the Accounting I challenge test. The test consists of an accounting simulation and takes approximately five hours (this may be completed over several days). A minimum score of 80% is needed to pass. If successful, the student receives CPL for

ACCT 210 (3 credits). There is a fee of $50.00 per credit (i.e. $150.00 for ACCT 210) to take the test and have the course added to the student's transcript.

CSC 100 or 102 Computer Test-Out Policy Several LATC programs require a one or three credit computer course. An opportunity to test out of these classes is available. The instructor will explain this option the first day of class. A fee of $50 per credit is required for the test.

MA 115 Medical Terminology Students who have taken medical terminology in high school may test out of this 3-credit class. Check with the Registrar's Office for details. A fee of $50 **per credit** is required for this test. The fee is waived if the class is part of a tech prep articulation agreement applicable to the student's program.

MATH 100 The test must be taken during the first week of the semester. A fee of $50 per credit (i.e. $150.00 for MATH 100) to take the test and have the course added to the student's transcript.

* **Only one test out allowed per course.**

ACCUPLACER Policy and Procedures

Lake Area Tech complies with the Board of Regents' request that all students demonstrate a readiness for ENGL 101 and MATH 114. Students registering for these courses will be contacted if they need to take the ACCUPLACER test.

Transfer of Previously Earned College Credits to Lake Area Tech

Any credits transferred to Lake Area Tech must meet the following criteria:

1. An official transcript must be submitted from an accredited post-secondary institution. This will be kept in the student's official file at Lake Area Tech.
2. Credits must have a grade of "C" or above to be considered for transfer. When a course has been repeated for credit, the last grade earned will be evaluated for transfer.
3. Transfer credits will be recorded on the Lake Area Tech transcript with a TR notation. Transferred credits are not calculated in Lake Area's grade point average.
4. There is no charge to transfer credits for presently-enrolled students.
5. Transfer credits are not eligible for financial aid.
6. The minimum unit to be transferred is one-half credit.

Courses accepted in transfer from institutions with different credit and/or grading systems than Lake Area Tech's will be converted.

Transfer of General Education College Credits

In addition to the preceding criteria, the following policies apply:

1. No age restrictions are placed on the life of the general education credit to be transferred. The course to be transferred must be applicable to the student's degree program at Lake Area Tech. Credit will not be given for duplication of courses.
2. General education credits fulfilling the Associate of Applied Science degree requirements must be approved by the Director of Enrollment.

Transfer of Technical Studies College Credits

In addition to the preceding criteria, the following policies apply:

1. Technical studies credits fulfilling the Associate of Applied Science degree or diploma requirements must substantially match Lake Area Tech's curriculum.
2. The decision to accept specific technical credits will be made at the program level.
3. Time limit for accepting transfer technical credit will be five (5) years. Credits earned more than five (5) years ago must be verified and approved at the Lake Area Tech department level.
4. A minimum of one-third of the technical credits must be from Lake Area Tech in order to be granted a diploma or degree.

Transfer of Online Course Credit

Students may transfer online course credits to LATC. The courses must be accredited through a professional accrediting agency and must conform to the requirements of courses as determined by each program. The Registrar's office will grant final approval of online course credits regarding the appropriateness and applicability to the student's course of study.

Process for Transferring Diploma Credits to A.A.S. Degree

Lake Area Tech graduates who have previously received a diploma and desire to receive an A.A.S. degree will be subject to the following conditions:

1. All technical credits must have been earned within the past five (5) years by time of completion. Credits older than five (5) years will be verified at the department level. The verification process may include documentation by current employer or previous employer.
2. Any general education credits transferred in must meet the transfer requirements of Lake Area Tech.
3. Technical education courses must meet the requirements of the current program.
4. Transferring credits for enrolled students is subject to current policy.
5. Non-enrolled students will be charged $10 per course for transferring credits.

Transferring to a College or University

Lake Area Tech has many formal program-to-program transfer/articulation agreements with private and public colleges and universities in South Dakota and out-of-state. Students who attend and graduate from Lake Area Tech may decide to continue their education with one of the many institutions that have articulation agreements in place. The amount of credits that transfer differ based on the major and college or university selected.

For further information and a complete listing of agreements, go to **www.lakeareatech.edu** and visit the programs pages under Academics, or call our admissions office.

Student Records

Student records include the following information:

- LATC transcript (on file permanently)
- Application (on file seven (7) years)
- High school/college transcripts (on file seven (7) years)
- Correspondence (on file seven (7) years)

Any student objecting to information being released by Lake Area Tech may block such release by notifying the Registrar's office.

All student records are the property of Lake Area Tech. Upon written request from the student, a copy of the student's admission test results and high school transcript will be provided to a student.

STUDENT SERVICES

How Can We Help You?

Our Student Services are designed to help you get the most out of your time at Lake Area Tech. We encourage you to take a moment and check out what our campus has to offer!

Career Guidance

The LATC admissions staff is dedicated to helping you choose the best training program among the options at Lake Area Tech. Call or stop in to visit with one of our friendly Admission Representatives or set up a tour to get first-hand knowledge of the program of your choice.

Counseling

Personal counseling is available from on-staff counselors. These services are kept confidential. Many situations can be handled on-campus, but occasionally students may be referred to another agency more suited to their needs.

Housing

All Lake Area Tech students live off campus. Lake Area Tech does not own or provide any housing. The Lake Area Tech Housing Coordinator keeps a **current list** of available houses, apartments, sleeping rooms and other rentals suited to the students' needs. Housing information may be obtained by requesting a paper copy or going online to our website. The Housing Coordinator will be glad to offer assistance. Some LATC programs require internships/field work which may shorten a student's stay on campus. Keep this in mind when signing a lease.

Financial Aid

Financial Aid Office personnel are available to assist students in understanding the wide variety of financial aid available. They will be glad to explain which benefits students are eligible for, and they are available to answer questions when applying for financial aid. There are no age limitations on who can qualify for financial aid.

Health Care

While Lake Area Tech does not employ a school nurse, the LATC Nursing Program faculty serves our students as a healthcare resource for students with questions about local healthcare providers. Students in need of healthcare services should bring their insurance card to their provider of choice.

Special Facilities for Disabled Students

Lake Area Tech is recognized as having educational facilities that are accessible to the disabled with mobility impairments. Wheelchair entrances are located at Door 3A, Door 2A (near the library), the Automotive and Construction Technology Center, the Manufacturing, Energy and Transportation Center, the Ag and Environmental Center, and the Student Center. Lake Area Tech complies with the 1973 guidelines established by the U.S. Department of Health, Education and Welfare.

Student Assistance Program

Information on preventing drug and alcohol abuse will be presented to all students during the school year. Specific referrals for drug and alcohol-related issues will be made by on-campus counselors. Referrals are directed to NESD Alcohol and Drug Prevention Resource Center when deemed necessary.

SkillsUSA®

SkillsUSA® is a national student organization committed to building the future skilled workforce our nation depends on. It's mission is to empower students to become skilled professionals, career-ready leaders and responsible community members. Lake Area Technical College students are able to join the organization and compete in industry-related competitions at state and national levels.

Prairie Lakes Wellness Center

Lake Area Tech students enjoy a free basic membership to the Prairie Lakes Wellness Center in Watertown. (Additional fees apply for select activities/amenities beyond the basic membership):

- Walking Track
- Leisure Pool
- 8-Lane Pool
- Racquetball Courts
- Basketball Courts
- Cardio/Weight Areas, and so much more!

Lake Area Tech students can also join sports leagues at the Prairie Lakes Wellness Center free of charge if the team consists of LATC students only.

Student Activities

There's always something to do!

- Outdoor Campus Fun
- Fundraisers
- Volunteer Activities
- Free Movie Nights
- MakerSpace Projects
- Free Painting Nights
- Intramurals
- Social Gatherings

Intramural Sports

LATC also has an active intramural program, including:
• Basketball • Softball • Volleyball • Pool • Darts
Register for intramural sports with our Student Activities Coordinator.

Student Organizations

A variety of clubs and organizations are available including:

- American Dental Assistants Association, Student Member
- American Physical Therapy Association, Student Chapter
- Associated General Contractors, AGC Student Chapter
- CRU - Campus Crusade
- Diesel Tech Club
- eSports - NJCAA
- Home Builders' Association, Student Chapter
- Laboratory Technology Club
- Lake Area Tech Car Club
- Non-Traditional Student Club
- Occupational Therapy Assistant Club
- Post-Secondary Agricultural Student Organization (PASO)
- Rodeo Club
- SkillsUSA
- Student Medical Assistants Organization
- Student Voice
- Trap Shooting (Competitive)
- Veterans' Club

Student Ambassadors

Student Ambassadors are selected by their instructors to represent their programs as well as Lake Area Tech. Ambassadors assist with tours, presentations, open houses, and conferences.

Student Voice

The Student Voice organization meets monthly and provides LATC students a say in campus policy and decisions by establishing direct, open dialogue between students and Lake Area Tech administration. Representing all LATC students, membership consists of delegates elected by the students in each program. Student Voice members also participate and host community give-back projects such as food drives, Penny Wars, the Angel Tree, Polar Plunge, and more.

Library Facilities

The Leonard H. Timmerman Library is full of helpful resources and services. The library's collection includes various online databases, ebooks, streaming educational videos, books, reference materials, magazines, journals and newspapers. The LATC **Library webpage** puts many of these information resources right at students' fingertips. The website also helps students with research-based tasks such as locating sources, utilizing sources and citing sources. At the library, full-time staff is available to assist students with their research questions

and writing needs. Other services available through the library include peer tutoring assistance, online and face-to-face interlibrary loan, computer access, printers, photocopier, collaborative workstations, scanners, smart boards, and a video recording studio.

The library, located in room 210 of the Main Building, supports both collaborative and individual study. The space includes study rooms students can use as quiet individual study spaces or as places to meet and work in groups. Library hours are 7:30 a.m. to 8:00 p.m. Monday through Thursday and 7:30 a.m. to 4:00 p.m. on Fridays. Hours subject to change. Summer hours are abbreviated.

The Net

The purpose of the Net is to provide Lake Area Tech students an interconnected network of professionals working to ensure our students have a positive and supported college experience.

Services include Counseling, Title IX, Student Activities, Disability Services, and Dual Credit Coordination. The Net is open Monday - Friday from 8:00 a.m. to 5:00 p.m. and is located next to the library.

Laptop Lease-to-Own Program

Many programs require students to lease a laptop from LATC. This technology is necessary to keep students at the forefront of technology in their fields. We have found laptops and the ability to utilize the latest software is extremely important to the success of our students.

Some programs are eligible, but not required, to lease a laptop. Please visit our **laptops page** on our website for specific details regarding laptops or contact the Lake Area Tech Help Desk.

Student Identification Cards

As a student at LATC, you will receive a Student ID card, which entitles you to attend and participate in events sponsored by Student Services and the Campus Activities Board. If you choose to deposit money into a Campus Cash account (see below) your Student ID card can also be used to make campus purchases.

Campus Cash

As a student at LATC, you may open a Campus Cash account. Your card will not be activated until you have deposited money into your campus cash account. Once money has been deposited into your Campus Cash account, you can use your student ID card to make purchases in the Lake Area Tech bookstore, Stax, the Mind Grind Coffee Shop and Market 65, our cafeteria.

Student Center

The Lake Area Tech Student Services Center is centrally located on the main campus. Students gather in the Student Center for meals, coffee breaks, entertainment, activities, socializing and studying.

Food Service - Market 65

Market 65 is located in the Student Services Center. A wide variety of meals and snacks are served from 7:00 a.m. to 3:00 p.m. each day. The food service operates on a "cash and carry" basis. Students aren't required to purchase meal plans.

Coffee Shop - Mind Grind

Located next to the food service area, LATC's coffeehouse - Mind Grind - is open weekdays from 7:00 am - 1:00 p.m. (summer hours vary) and serves specialty coffees, espressos, lattes, and blended coffee drinks.

Bookstore - Stax

Stax, the Lake Area Tech Bookstore, stocks all program textbooks and supplies and most uniforms and tools required by LATC programs. Stax is located on the second floor of the Student Services Center and also offers clothing and gift items.

Lake Area Tech Children's Educare Center

The center provides day care and preschool for the children of Lake Area Tech students, staff, and community. Admission to the center is limited and a fee is charged for these services. Contact the Educare Center at 882-5284, Ext. 440 for more information.

Insurance

Students attending Lake Area Tech are expected to obtain medical insurance coverage. The school provides no insurance coverage. Student coverage through a private insurance company is made available for those who wish to apply. Please inquire in the Admissions Office.

Institutional Liability

Lake Area Tech disclaims liability for any kind of student injury or illness as a result of participation in intramural sports, student activities, field trips, shop or laboratory work and classroom activities. Every reasonable effort is made to provide safe conditions for these activities.

Religious Activities

The local churches in Watertown have a primary objective to stimulate the moral and spiritual values of students attending Lake Area Tech. There is active cooperation between the churches and the school.

Campus Crusade (cru)

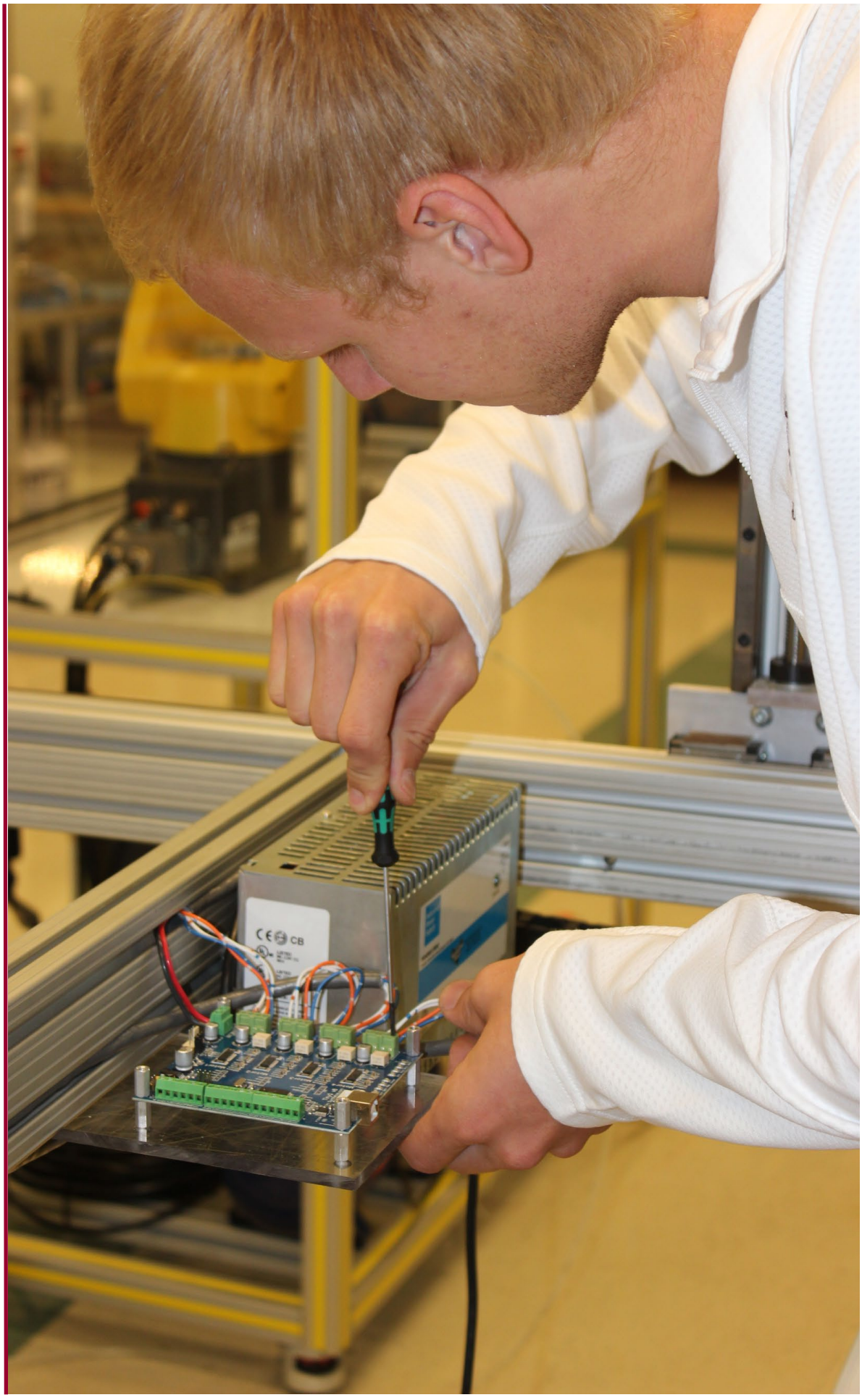
Lake Area Tech's Campus Crusade is a non-denominational religious organization made up of students who gather for fellowship and Bible study. Cru meets weekly, see the student activities calendar for details.

Student's Right to Know and Campus Security Act

In compliance with the Crime Awareness and Campus Security Act of 1990, Lake Area Tech has made available upon request, statistics of criminal offenses that have occurred on campus and the policies and procedures for reporting a criminal action. This information is listed in the Lake Area Tech **Student Handbook** which is posted on our website.

LAKE AREA TECH

PROGRAMS



AGRICULTURE
Agri-Business Option

The Right Place

Lake Area Tech is a strong and active presence in the world of agri-business. For more than 50 years we've been training the employees and owners of the region's agricultural supply businesses. Because we are well-established and have an outstanding reputation for skilled graduates, you can feel confident about job opportunities all over the Midwest.

If you have agriculture in your blood, love business and working with people, this option is for you!

What can I expect?

With our specially designed ag training, you'll get the latest education in crops, soils, fertilizers, chemicals, animal science and nutrition, business management, credit and collections, supervision, business law, sales, accounting and more!

As a student, you'll have opportunities to be involved in Lake Area Tech's demonstration farm, which works in partnership with area ag businesses. Each year of this two-year program also includes a Supervised Occupational Experience (SOE) or internship with a local or regional co-op, CHS affiliate, Agtegra, or a privately owned facility.

When you have successfully completed the required courses, you will be awarded an Associate of Applied Science (A.A.S.) degree.

Lake Area Tech Farm

The Lake Area Tech Ag program has developed a working demonstration farm northwest of Watertown. The Ag students are actively involved in the management decisions of the farm and implement industry trends in agriculture including mapping and precision ag study. The demonstration farm applies the no-till/strip-till concept and is making use of cover crops to observe the benefits of this type of application. Partnerships with ag business and industry allows us to utilize state-of-the-art ag equipment to plant and harvest the crops. Producer tours are conducted during the year as well as other regional ag events and educational seminars.

A laptop is required for this option.

Learn more at **www.lakeareatech.edu**

Click here to view the Ag/Agri-Business webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Agri-Business degree online.
For more information, visit the
Agri-Business e-degree page.

Master the Technology

Because of the enormous changes that have taken place in agriculture, today's farm owners and managers must have comprehensive knowledge of crops, growing conditions, and diseases to make successful decisions. At LATC, you'll be immersed in the latest and best farming techniques. You'll also get a healthy dose of modern economics and savvy business practices.

Agri-Production is designed for graduates who plan to own or manage a farm or livestock operation and want to succeed!

What can I expect?

This option offers the unique chance to tailor your training by choosing classes that fit your goals. Get instruction - and plenty of practical experience - in animal nutrition, crop science, marketing, fertilizers, livestock development and maintenance, farm machinery, farm management, decision-making, record-keeping, planning and farm accounting.

This hands-on, experience-rich option is specially designed for future farmers and ranchers. During the spring semester of your first year you will return to a farm or ranch to practice real record keeping procedures. During your second year you'll be given the opportunity to work with an area agri-business. The knowledge you need to run a profitable operation is found in this curriculum!

We Practice What We Preach

The Lake Area Tech Agriculture program has developed a working demonstration farm northwest of Watertown. The Agriculture students are actively involved in the management decisions of the farm, and are continually exploring and applying industry trends in agriculture.

Learn to operate geospatial technology as you perform GPS data collection, mapping, variable rate methods, and more! Strong partnerships with ag business and industry give Lake Area Tech students access to the latest in equipment. Producer tours are conducted during the year as well as other regional ag events and educational seminars.

A laptop is required

for this option.

Learn more at **www.lakeareatech.edu**

Click here to view the Ag/Agri-Production webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

AGRICULTURE
Agri-Production Option

AGRICULTURE
Commodity Merchandising Option

Success Starts Here

As a leading industry in South Dakota, agriculture provides premium career opportunities. In particular, the area of commodity merchandising - which unites buyers and sellers of grain, manages investments, and offers financial advice - is an important and vital part of the ag industry. As grain markets evolve with technology and globalization, there is an ever increasing demand for qualified field experts who can build and manage profitable local grain businesses.

As an agriculture commodity merchandiser, you'll set prices and purchase commodities for grain elevators on a local level. If you think you would enjoy working with a diverse range of people, making frequent decisions, and offering financial guidance, then look no further for a great career!

What can I expect?

As a student in the Commodity Merchandising Option, you'll get plenty of interactive, practical experience. You can expect courses in: Accounting, Seed and Grain Technology, Financial Management, Commodity Marketing and Merchandising, Co-op Principles, and more! To make sure you are as ready as possible for a great career - we also require two business internships.

Careers

As a graduate of this program you can expect outstanding opportunities and a great income! Strong employment growth is expected to result from increasing investment in securities and commodities, along with the growing need for investment advice. Though most commodity merchandisers will work for local grain elevators, ethanol plants nationwide are also hiring buyers/merchandisers.

A laptop is required for this option.

Learn more at **www.lakeareatech.edu**

Click here to view the Ag/Commodity Merchandising webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Commodity Merchandising degree online. For more information, click here.

The Dairy Industry Needs You

In an effort to keep up with industry, many Midwestern dairies have expanded into larger, more efficient operations and now produce a higher quality and quantity of milk than ever before. In the world of dairy, operators rely on cutting-edge techniques and knowledge to manage optimal dairy production, nutrition, and health.

Dairies everywhere are struggling to find employees who have the skills to help them succeed. This option is designed to prepare you for a great career in the dairy industry. If dairy is your passion, this is the place for you!

What can I expect?

After completing the Ag Dairy Option, you will have the knowledge and experience to work at, manage, or even own a large, state-of-the-art dairy operation. We feature hands-on, active learning, including field trips to local dairies and AI training by a certified company (for which there is a fee). You'll be immersed in the latest information on dairy science, health, and nutrition. You'll learn to trouble-shoot problem areas in the dairy herd, and get practical training in farm management and commodity marketing. Most importantly, you will learn to keep accurate and consistent records on a dairy herd.

You will also complete two supervised occupational experiences (internships) at a dairy of your choice.

A laptop is required for this option.

Learn more at **www.lakeareatech.edu**

Click here to view the Ag/Dairy webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

AGRICULTURE

Livestock Production & Management Option

Become a Livestock Production Expert

Lake Area Tech's Agriculture program option, Livestock Production and Management, combines the previous studies of Large Animal and Ranch Management! Students will acquire valuable knowledge and experience needed to work and succeed in modern livestock operations, feed supply companies, and animal health businesses – in addition to high-demand jobs in the ag-production industry.

What can I expect?

During the 18-month option, students will gain an understanding of various topics including soil and crop science, safety, animal science, commodities, animal health, basic animal husbandry, breeding practices, farm management, equine science, sheep and goat production, swine science, dairy science, fertilizers, soil and water management, nutrition, plant management, beef production, herd management, forages and grasses, milk production, marketing, and more. Also included are two supervised internships, during which students will obtain beneficial, hands-on experiences.

Ag classes take place in our modern agriculture center complete with smart classrooms, state-of-the-art labs, and a spacious shop area. Upon completion, the student will earn an Associate of Applied Science degree in Agriculture.

A laptop is required for this option.

Learn more at **www.lakeareatech.edu**

Click here to view the Ag Livestock Production & Management webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Livestock Production and Management degree online! Click here for more information.

Know the Future of Farming

Geospacial technology has revolutionized the operation of today's successful farms. GPS and GIS now allow farmers to optimize input, reduce waste, and generate maximum yields. Designed for use in all types of agricultural systems, precision technology has improved the production of everything from row crops to dairies. Now you can learn to use this valuable technology to its highest potential!

What can I expect?

As as student in this option, you'll get hands-on experience with hydraulics, electronics, GPS, as well as software applications for data collection and analysis. Expect to learn installation, troubleshooting and servicing precision technology on planters, sprayers, and other equipment used in the field.

You'll get lots of active, "real time" learning as you gather and use data from the LATC demonstration farm and area co-op farms. You will also have two internship opportunities with co-ops, private businesses, producers and/or a home farm operation.

Career Opportunities

This option will prepare you for a career in the precision agriculture industry, including precision farming, geographic information system (GIS) analysis, and equipment manufacturer technician and sales. Specific job responsibilities might include GPS mapping, GIS database management, precision agriculture consulting, and applications in variable rate application technology. As more and more farms nationwide adopt the use of precision ag systems, more technicians will be needed to operate, troubleshoot, and repair the equipment!

Putting it to Use

The Lake Area Tech Agriculture program has developed a working demonstration farm located northwest of Watertown. LATC Ag students are actively involved in the management decisions of the farm and implement industry trends in agriculture including mapping and precision ag study. Partnerships with ag business and industry allow LATC to utilize state-of-the-art equipment to plant and harvest the crops. Producer tours are conducted during the year as well as other regional ag events and educational seminars.

A laptop is required for this option.

Learn more at **www.lakeareatech.edu**

Click here to view the Ag Precision Technology webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

AGRICULTURE
Precision Technology Option

AUTO BODY & Paint Technology

Designed to Succeed

A great option for creative and detail-driven people, the Auto Body & Paint Technology program will send you into the manufacturing and automotive industries with the solid training you need to shine in the business of collision repair, painting, and detailing. This program focuses on teaching students to master the foundational aspects of the field. As a graduate of this program, you'll be equipped to move beyond the shop, build on your skills through industry experience, and apply your hands-on training to various manufacturing fields.

What can I expect?

As a student of Auto Body & Paint Technology, you'll be immersed in the world of collision repair and paint applications. First-year students can expect hands-on training as you practice the most current techniques in sheet-metal work, welding, body damage repair, safety, undercoats and spray techniques, automotive painting, detailing, industrial painting, collision estimating, glass installation, and hazardous materials training.

Second-year students will learn minor & major collision/structural repair, blending/tinting, waterborne painting, fabrication, computerized estimating, body/paint production, and air brushing/special effects.

The program has a virtual reality paint training system that enables students to practice paint gun techniques right in the classroom without any product usage or discharge of VOC. Auto Body & Paint Technology graduates earn an Associate of Applied Science degree in 18 months or have the option to exit with a diploma after the first year.

Solid Careers

A graduate from this program is ready for a career in auto restoration, collision repair, or essentially any basic painting industry that requires well-rounded training. Industry is actively seeking trained painters and collision/custom auto body technicians. Get ready - this program will set you up for the career you've always dreamed of!

Click here to view the Auto Body & Paint Technology webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

What can I expect?

Be ready to hit the ground running. When employers advertise for auto repair technicians, they're looking for someone with a solid technical background who has experience using the latest diagnostic equipment. That can be you! Lake Area Tech's Automotive Technology program is tailored to meet those industry demands. Because of that, our graduates are highly successful in obtaining top-notch jobs.

As a student in the 18-month auto program, you'll spend about 75 percent of your time working in the program's 27,900 square foot auto repair shop, gaining valuable real-life work experience. After your first year of gaining a solid foundation, you'll decide upon entering the **Automotive Gas option or the Light Duty Diesel option**, allowing you to specialize in the area you're most interested in. During your time here, you'll run diagnostic tests and make repairs on cars, light trucks, vans, and sports utility vehicles using up-to-date equipment in the spacious automotive shop. Another plus is that our auto shop has its own parts department!

Staying current with industry standards is a priority. Not only is the Automotive Technology program certified by the Automotive Service Excellence (ASE) Education Foundation, our instructors are also certified by ASE, so as a student, you can be confident your training at Lake Area Tech is second to none.

To complement our academic excellence, the program invests significant resources in obtaining and maintaining the latest in automotive training aids and diagnostic equipment including six light duty diesel vehicles, eight hybrid and electric vehicle models, several gas cars, a Hunter Alignment System, Premium Scissor Long-Deck Rack, RoadForce Touch 4th Generation Wheel Balancer, and an Ergonomic Center Clamping Tire Changer. This equipment ensures students are training on the industry's most up-to-date automotive gear.

After graduating with an Associate of Applied Science degree in Automotive Technology, our students secure jobs as service technicians, shop managers/owners, and transmission specialists. Let us help you begin your journey in the automotive industry!

Electric Vehicles Option for Auto Grads

Graduates of an ASE Education Foundation Master Level accredited automotive technician program may enroll in the new one-year Electric Vehicle option! As the transportation industry continues to evolve

toward electric and hybrid vehicles, there is a growing demand for skilled service technicians who are trained to troubleshoot and repair them. Upon completion of this option, graduates will be able to develop diagnosis and repair procedures for electric and hybrid vehicles; demonstrate electric vehicle and hybrid safety and service procedures; describe electric vehicle and hybrid batteries and service as well as electric vehicle and hybrid electric motors, generators, and controls; and describe regenerative braking systems as well as electric vehicle and hybrid powertrains and power steering. Students enrolled in the new option will build on the automotive skillsets learned during their Automotive Technology coursework, and gain another highly marketable skill.

Diesel Option for Auto Graduates

Lake Area Tech Auto graduates who are interested in earning an A.A.S. in Diesel Technology are eligible to transfer some previously completed courses. During the 18-month program, students will choose between the Diesel Truck or Tractor option.

Career Opportunities

With experience, many of our graduates have gone on to service manager positions, opened their own repair shops, or even used their mechanical skills to secure great careers in the manufacturing field!

This program has been awarded ASE Master Certification. This is the highest level of achievement recognized by the National College for Automotive Service Excellence.

A laptop is required for this option.

Learn more at **www.lakeareatech.edu**

Click here to view the Automotive Technology webpage and course outline.

AUTOMOTIVE Technology

AVIATION Maintenance Technology

Be Part of an Exciting Field

Graduates of our Federal Aviation Administration (FAA) certified program can look forward to excellent pay, unique travel privileges, great fringe benefits, and the ability to work anywhere in the world!

What can I expect?

Our 20-month Aviation Maintenance program will train you to be an Airframe & Powerplant (A&P) mechanic. You'll be eligible to test for your airframe certification at the end of your first year, and your powerplant certification at the end of your second year. Aviation students can expect to be immersed in the mechanical, electrical, and structural workings of airplanes. You'll study a variety of subjects, including physics, aerodynamics, welding, aircraft drawings, piston and turbine engines, aircraft structure, aircraft systems, and more!

The Aviation Maintenance program at LATC specializes in unique opportunities to strengthen your knowledge of aircraft performance and operation, including the chance to acquire private, instrument, commercial and multi-engine pilot rating in a unique variety of aircraft.

Students of this program have the opportunity to complete the coursework necessary for an Associate of Applied Science (A.A.S.) degree.

Careers

Wherever aircraft are being used, a licensed aviation maintenance technician must be available to service and maintain them. Graduates could work for fixed-base operators, certified repair stations, corporate aviation, regional or international air carriers, or state and federal agencies. This profession usually includes an awesome salary, adventure, and boundless opportunities!

Lake Area Technical College's curriculum for Aviation Maintenance Technology meets the educational requirements for professional licensure in South Dakota and many other states. Professional licensure and certification requirements often vary from state to state. Prospective or current students considering an academic program that leads to a professional license or certification are strongly encouraged to seek guidance from the appropriate licensing agency in the state you plan to work before beginning an affiliated academic program. See website for the most up-to-date information.

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the Aviation Maintenance Technology webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

AVIATION
Professional Fixed Wing Pilot

Be Part of an Exciting Field

Lake Area Tech's 18-month Professional Fixed Wing Pilot Associate of Applied Science degree is designed for students interested in a career in the professional pilot industry. The program will prepare individuals to apply technical knowledge and skills to the field of aviation relative to employment as a professional fixed-wing pilot.

Students will be trained in the areas of: aerodynamics, private pilot simulation, private pilot flight training, private pilot ground school, aviation safety, federal air regulations, instrument rating ground/simulation/flight, commercial pilot ground/flight training, instrument instructor ground/flight training, airspace systems, airspace operations, and flight instructor ground/flight training.

Professional pilots often own and manage their own business however, other career possibilities include employment in: aerial survey, aerial photography, corporate aviation, cargo, air ambulance, aerial application, and with airlines.

What Can I Expect?

The Professional Fixed Wing Pilot program will include a combination of classroom instruction, simulation lab experiences, and flight training. PFWP students will choose between two options: the Certified Flight Instructor option or the Unmanned Aerial Systems Pilot option. The coursework for these concentrations is completed in the students' second year, second semester. The program will also utilize the Watertown Regional Airport and Lake Area Tech training facilities for flight training, regional or international air carriers, or state and federal agencies. This profession usually includes a great salary, adventure, and boundless opportunities!

Unmanned Aerial Systems Pilot Option

Students in the Professional Fixed Wing Pilot program can opt into the Unmanned Aerial Systems Pilot option. This option will prepare graduates to pursue careers operating large unmanned aerial vehicles, commonly referred to as drones, beyond the visual line of sight and in controlled air spaces. The program option has been designated an Unmanned Aircraft Systems-Collegiate Training Initiative program by the Federal Aviation Administration. That distinction means graduates earning a degree with this option will have access to a professional consortium that shares best practices in this industry through UAS training tools, resources, and guidelines. Note: Students who enroll in this option do not earn their CFI and CFII for credit.

Certified Flight Instructor Option

The Certified Flight Instructor (CFI) option offers graduates the opportunity to gain employment as flight instructors or entry level FAA certified commercial pilots. For those who have a passion for teaching, the LATC CFI option provides a means to fulfill that dream. Flight instructor certification provides an opportunity to build flight hour time toward more advanced commercial pilot opportunities (such as the airlines) while getting paid to fly. Certified Flight Instructors are in high demand due to the current need to fill commercial pilot positions across the globe. If teaching is not your thing, our program gets you certified to pursue your passion to fly commercially. Graduates of the LATC Certified Flight Instructor program have the following FAA certifications:

- Airplane Single Engine Land Commercial Certificate
- Multi-Engine Land Commercial
- Instrument Rating Airplane
- Certified Flight Instructor Airplane (CFI)
- Certified Flight Instructor Instrument (CFII)

What Makes This Pilot Program Unique?

Lake Area Tech's Professional Fixed Wing Pilot program focuses on three key aspects.

1. We fly tailwheel airplanes and gliders. We believe this develops critical stick and rudders skills as well as energy management. And, it's just plain fun!

2. We require students to fly with each other to split time. Not only does this help keep costs down for the student, but it introduces the students to flying in a two-pilot environment. We require students to safety pilot at least 25 hours for their peers.

3. We fly our simulators. A LOT. Simulators allow us to practice at a reasonable rate. It allows the instructor to put the student in various situations where safety measures are required. Students can expect to fly at least 50 hours on the simulator.

Lake Area Technical College's curriculum for Professional Fixed-Wing Pilot program options meets the educational requirements for professional licensure in South Dakota and many other states. Professional licensure and certification requirements often vary from state to state. Prospective or current students considering an academic program that leads to a professional license or certification are strongly encouraged to seek guidance from the appropriate licensing agency in the state you plan to work before beginning an affiliated academic program. See website for the most up-to-date information.

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the Professional Fixed Wing Pilot webpage and course outline.

Hands On

Building a bright future in the construction and carpentry world begins right here at Lake Area Tech! Do you have a flair for design? A way with a hammer? An eye for detail? Then our Building Trades Technology program might be just what you're looking for. In only 18 months, your new and diverse career could be a reality!

What can I expect?

Our students gain a solid foundation in residential design, site preparation, concrete work, floor/wall/roof construction, ventilation, interior finishing, cabinetry, and building codes. Yes, you'll hit the books, but much of your time will be spent building a custom-made home from start to finish. This on-site experience will escalate your skills and give you the upper hand once you hit the job market.

Careers

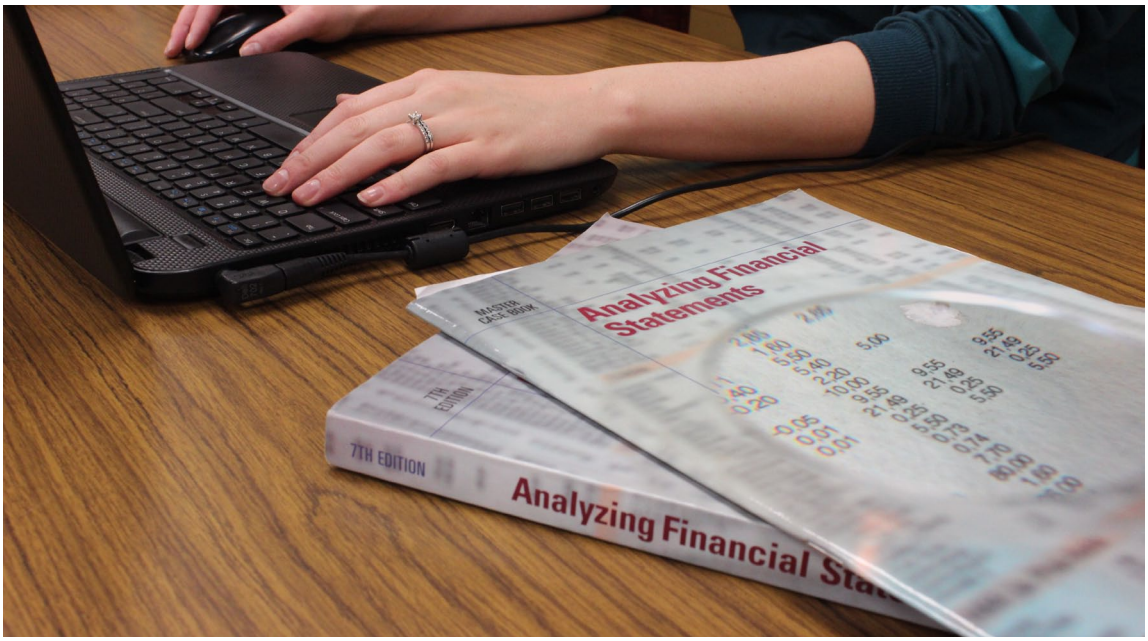
Speaking of the job market, occupations in the construction field are expected to grow at a faster than average pace! Jobs with commercial contractors, maintenance shops, woodworking shops, sash and door companies, furniture manufacturers, and home contractors are waiting for you. Want to be your own boss? Consider our Business/Entrepreneurship program option after completing your A.A.S. degree in Building Trades and you'll be well on your way to printing business cards with the word 'Owner' behind your name!

But wait, there's more! In the classroom, you'll also learn about light commercial construction, estimation, and working in a green industry. And, you'll be exposed to the latest in construction technology like blower door testing. Out of the classroom, you'll get the chance to sharpen your leadership skills and interact with a network of professionals by joining trade organizations like the Home Builders Student Chapter, the Associated General Contractors of SD, and Skills USA.

Click here to view the Building Trades Technology webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

BUSINESS
Accounting Option



A Career to Count On

As a graduate of this option you will be able to set up and use any existing accounting system. No matter what the economic situation, businesses and organizations everywhere need individuals to manage their financial information. In other words - the job prospects are good!

What can I expect?

Our graduates are known for having the perfect blend of financial knowledge and real-life working experience. This program features student-friendly, flexible options. You can expect to study cost accounting, tax accounting, payroll accounting, wealth management, computerized accounting and financial analysis. Our students have a variety of opportunities to gain valuable, real life experience including:

- Experience with actual accounting software.
- Helping low income and elderly people with tax preparation through the special Volunteer Income Tax Assistance (VITA) program.
- Completing a credited part-time or summer internship in the financial sector.

Placement

According to our last placement report, graduates of the Lake Area Tech Financial Services program were earning competitive wages while working in a training-related field or seeking further education. These statistics are reported six months after graduation.

A windows-based laptop is required for this program.
Learn more at **www.lakeareatech.edu**

Click here to view the Business Accounting Option webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Business Accounting degree online.
For more information, click here.

Make Your Dreams Happen

Always wanted to start your own business? Lake Area Tech's Business/Entrepreneurship program option is designed to help you succeed. Whether you are an enterprising student in a current technical program, a returning graduate, or someone with ideas and drive who wants additional creative, managerial, financial, and productive skills - this option is designed for you. Our economy needs new thinkers, leaders, and owners!

What can I expect?

In the Entrepreneurship option, you will learn the crucial theories and practices needed to be successful including: creative problem solving, networking, strategic goal-setting, defining markets, business plan development, and incorporating principles of manufacturing, selling, and accounting.

Our curriculum is approved and continually updated by an industry advisory board of area entrepreneurs and potential employers. As a student, you will be guided in business planning, real world projects with area companies, industry field trips, and finally, an internship and/or capstone project.

Program Features

If you are an A.A.S. technical college graduate, consider taking your education to the business-owner level by adding an additional year of study in our Entrepreneurship option. Click at the bottom of this page for more information on the online option!

Whatever your plans, we are here to help you start your journey!

A laptop is required for this program.

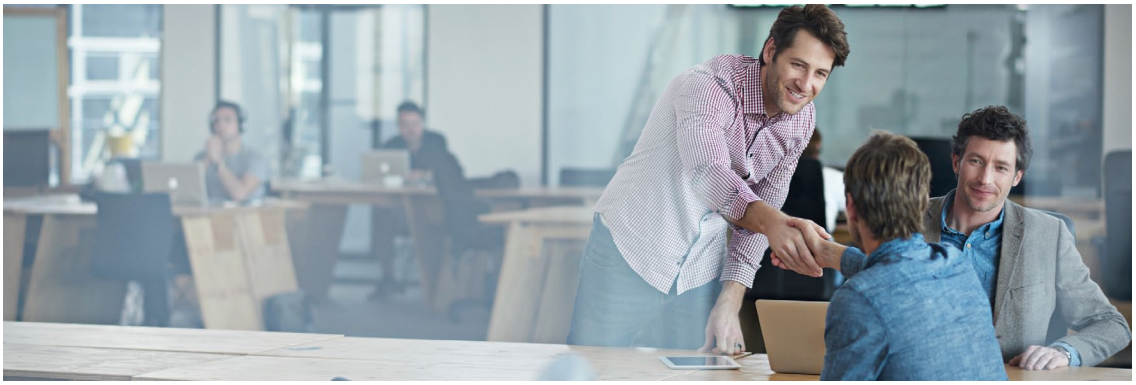
Learn more at **www.lakeareatech.edu**

Click here to view the Business/Entrepreneurship webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Business/Entrepreneurship degree online.
For more information , click here.

BUSINESS
Entrepreneurship Option



Be That Essential Person

Human Resource professionals help companies find, hire, and keep the most effective employees. As an HR associate, you might specialize in a specific HR department (payroll, benefits, safety, etc), work with a small HR team, or (depending on the size of the company) you might manage HR all on your own! You could:

- Explain company procedures and benefits to new employees, including details on vacation and sick leave
- Develop training presentations
- Initiate, organize, maintain and store personnel records for a business or corporation
- Manage issues, problems, and/or crisis situations in the workplace

This 20-month option features creative, practical training. You can expect lots of hands-on projects, as well as learning and networking opportunities with visiting HR professionals. To make sure you have experience you'll need, we also require a credited internship or final (capstone) project equivalent.

Careers

Any business or organization that depends on large amounts of employees needs human resource personnel. If you are detailed, creative, efficient, compassionate, and enjoy working with people - human resources could provide you with the career you've always dreamed of!

A laptop is required for this option.

Learn more at **www.lakeareatech.edu**

Click here to view the Business/Human Resource webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Business/Human Resource degree online.
For more information, click here.

BUSINESS

Human Resource Option

Prepare to Succeed

The Marketing & Management option offers world-class business training. Our experienced faculty will teach you:

- the evaluation of customer needs
- price determination
- promotion/advertising
- social media marketing
- data analysis
- sales strategy
- government regulations
- supervised occupational experience/internship
- ...and much more!

What can I expect?

Our Business program features an active, hands-on approach to learning. In Marketing & Management, you can expect to complete a variety of real-world projects, visit businesses, and interact with various professionals who have made a career in marketing and management. To boost your confidence (and your resume) we also require an internship experience.

Careers

Marketing and management are some of the fastest growing career areas - and employers are eager to hire applicants with experience and skill. Graduates will find work in the vast wholesale and retail sectors, or in advertising, social media marketing, small business management, or accounting.

A laptop is required for this option.

Learn more at **www.lakeareatech.edu**

Come experience . . .

...our like-no-other business program. With small, personal class sizes and world-wise instructors - our program will definitely set you apart!

Click here to view the Business/Marketing & Management webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Business/Marketing & Management degree online. For more information, click here.

BUSINESS

Marketing & Management Option

BUSINESS
Photography/Media Option

Make Your Vision Happen

Offering a unique mix of photography and business training, this option will prepare you to launch your own photography business, or work in the artistic/visual communications field. Graduates of this option will earn an Associate of Applied Science degree in Business.

What can I expect?

As a student of this 20-month option, you can expect project-based training in a broad range of photography styles. You'll get advanced training in photo editing and enhancement, learn how to effectively market/broadcast your work, and learn real-world application from visiting professional photographers. You will also complete an experience-building internship or final (capstone) project. In addition, students will also take core business courses to give those wishing to own and operate their own businesses a solid business foundation.

Careers

Graduates of the Business Photography/Media option can develop careers in portraiture, commercial product illustration, photojournalism, studio management, and digital imaging. As a graduate, you may also wish to utilize our strong business/entrepreneurship training in a photography venture of your own!

A laptop is required for this option.

Learn more at **www.lakeareatech.edu**

Please note . . .

...you will be required to purchase a professional quality camera.

Click here to view the Business/Photography-Media webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

COMMUNITY HEALTH WORKER
Online Certificate Program

Make a Difference

Make a difference in the lives of others in one semester with an exciting career as a Community Health Worker - a new role in healthcare!

A Community Health Worker (CHW) is a frontline public health worker who is a trusted member of and/ or has an unusually close understanding of the community served. This trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery.

Lake Area Tech offers students the opportunity to complete the online Community Health Worker certificate in one or two semesters. After completing the program, graduates will be equipped with the necessary skills to be employed in medical or social service positions focusing on client advocacy, health system navigation and resource coordination, health promotion, coaching and education.

Options

Students choosing the online full-time or part-time Community Health Worker certificate program at Lake Area Technical College may begin in the fall or spring semester. The full-time option is completed in one semester and the part-time option is completed in two. Part-time spring starts will complete their second semester during the summer session of the same year.

Coursework is focused entirely on Community Health Worker-specific courses.

The six classes are:

- CHW Role, Advocacy, Outreach and Resource Finding
- Health Communication, Teaching and Capacity Building
- Documentation, Legal and Ethical Issues
- Health Promotion I, focusing on health education and chronic disease
- Health Promotion II, focusing on Trauma Informed Care
- Internship, 60 hours spent learning about resources in your community

Please see the course outline links below for a complete listing.

Other program requirements include a laptop, background check, drug screening, and vaccinations based on internship-specific requirements.

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the online Community Health Worker certificate webpage and course outlines.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

COMPUTER INFORMATION SYSTEMS

Graphic Design & Digital Communication

Unlock Your Creativity

Do you have a passion for visual expression? Are you eager to translate your creative instincts into the digital domain of design? If the answer is yes, then our Graphic Design and Digital Communications specialization might just be the ideal path for you. Throughout your educational journey at Lake Area Tech, you'll develop the essential skills needed to excel in a dynamic and innovative environment.

What can I expect?

Dive into industry-standard software and hardware mastering image manipulation, layout design, illustration, video, audio, animation, and motion graphics. Gain a competitive edge across web, social media, print, and multimedia platforms.

Businesses everywhere require skilled media creators to craft captivating and impactful graphics and content for promoting products and services, social media marketing materials, and other communication assets. Our curriculum emphasizes art, design, and media theory, enhancing your understanding of visual communication. Expect a comprehensive education covering imaging, graphics, multimedia production, animation, web development, and social media content creation. Plus, delve into courses in database design and IT basics, enhancing your readiness for your desired career path.

During this 18-month program, you'll spend about 80% of your time engaged in instructor-led hands-on projects, providing invaluable real-world experience. Upon completion, unlock opportunities in advertising, marketing agencies, print companies, and businesses seeking skilled visual design content creators. Let us support you on your journey to success!

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the CIS/Graphic Design and Digital Communications Specialist webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your CIS/Graphic Design & Digital Communications degree online. Click here for more information.

Become a Guardian!

In today's digital landscape, information networks face constant threats like theft, fraud, and sophisticated viruses. Businesses, investing heavily in innovative technology, rely increasingly on specialists to safeguard the integrity and security of their systems and data. Our Networking and Cyber Security option blends network administration with cybersecurity principles, focusing on deploying, managing, and fortifying networks and computer systems.

What can you expect?

In our Networking and Cyber Security specialization, you'll learn to set up and secure networks, anticipate and counteract future threats through simulated network intrusions, and install and oversee information security systems. You'll also gather and analyze data for computer crime investigations.

Through hands-on labs and simulations, you'll be well-prepared for real-world scenarios, as our labs continuously adapt to current threats. Our curriculum covers the latest networking and security technologies relevant to our field. Upon completion, you'll be equipped to apply your knowledge and skills in the workforce.

During this 18-month program, gain extensive experience in networking and security through core classes in computer hardware, Windows and Linux operating systems, networking, security, programming, and database fundamentals. We offer industry-recognized certifications such as CCNA and CCNP from Cisco, as well as CompTIA A+, Security+, Network+, and PenTest+. Other offerings include Red Hat Enterprise Linux and Certified Ethical Hacker courses.

Looking Ahead

Our graduates also have the option to take advantage of articulation agreements with in-state and out-of-state universities, which means when a student graduates with a two-year Associate of Applied Science degree in Computer Information Systems from Lake Area Tech, they can transition to the university with two years of study that will count towards their four-year bachelor's degree!

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the CIS/Networking & Cyber Security webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your CIS/Networking & Cyber Security degree online. For more information, click here.

COMPUTER INFORMATION SYSTEMS

Networking & Cyber Security

COMPUTER INFORMATION SYSTEMS

Software Development & Database Administration

Imagine the Possibilities!

The software we rely on daily owes its existence to developers. These specialists craft programs, whether for business or personal use, that form logical sequences of instructions computers can follow. In essence, software developers conceive, design, implement, and maintain programs to fulfill specific tasks and operate computers.

What can you expect?

In the Software Development and Database Administration specialization, you'll learn 11 programming languages and become fluent in industry techniques and software relevant to software and database development, construction, and upkeep. You'll delve into creating desktop and web applications, constructing databases from scratch, and explore security and other IT-related topics.

This specialization prioritizes hands-on learning. Throughout this 18-month program, you'll spend about 80% of your time engaged in instructor-led hands-on projects, providing invaluable real-world experience. Numerous career opportunities await, encompassing roles such as software developer, computer programmer, database administrator, web developer, mobile application developer, and IT consultant, among others.

Looking Ahead

Our graduates also have the option to take advantage of articulation agreements with in-state and out-of-state universities, which means when a student graduates with a two-year Associate of Applied Science degree in Computer Information Systems from Lake Area Tech, they can transition to the university with two years of study that will count towards their four-year bachelor's degree!

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the CIS/Software Development and Database Administration webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your CIS/Software Development and Database Administration degree online. For more information, click here.

COSMETOLOGY

Helping People Look and Feel Great

Cosmetology professionals help people look and feel their best. Our Cosmetology program offers a team of talented instructors who train full-time students of all ages. Our students are anxious to work in this exciting and rewarding industry. We believe education is an adventure and the learning experience needs to be progressive and fun!

What can I expect?

Our Cosmetology program offers training in hair, skin, and nail care. You'll study the fundamentals of cosmetology and apply your knowledge on the Cosmetology clinical floor – a fully operational public salon right here on campus. The program is 2100 hours with an option of a 1500 hour exit point.

You will incorporate the latest techniques and technical talents while cutting, coloring, shaping, and designing hair. You will also apply make up and perform manicures, pedicures, and facials. During the year, the Cosmetology program sponsors on-campus cosmetology events during which experts in the field share the latest trends in the industry. All students are required to take a state board exam after completion of the program.

Careers

Imagine a career that is rewarding and gratifying every day. You could work as a stylist, research technician, platform artist, manufacturer's representative, salon owner or manager, nail tech, esthetician, or instructor. The opportunities in this field are vast! Let us help you begin your exciting career in cosmetology!

Professional Licensure

All students are required to take a board examination. Lake Area Technical College's curriculum for Cosmetology meets the educational requirements for professional licensure in South Dakota. Professional licensure and certification requirements often vary from state to state. Prospective or current students considering an academic program that leads to a professional license or certification are strongly encouraged to seek guidance from the appropriate licensing agency in the state you plan to work before beginning an affiliated academic program.

Interested in . . .

...owning your own business? Consider combining your cosmetology training with a degree in the Business/ Entrepreneurship option!

Learn more at:
www.lakeareatech.edu/academics/

Click here to view the Cosmetology webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

DENTAL Assisting - Certified

A Shining Career

Dental assistants are the "extra hands" of the dentist, and vital members of the dental health care team. A career in dental assisting will give you:

- **Variety:** Dental assistants positions are diverse and interesting.
- **Flexibility:** Career options include both full-time and part-time positions. Since dental assistants are in demand, you may have some flexibility in choosing your hours.
- **Excellent working conditions:** Dental offices are interesting, pleasant, people-oriented environments.
- **Personal satisfaction:** Dental assisting involves contact with people, and with this personal interaction comes the satisfaction of knowing you've really helped someone by providing a valuable health service.

What can I expect?

As a student of our Certified Dental Assisting program, you'll get active, hands-on training and experience in our on campus lab. You can expect classroom and lab instruction that will prepare you to:

- Perform chair-side procedures in general and specialty practices
- Perform radiographic techniques
- Maintain patient records and perform office management skills
- Take impressions and perform basic laboratory procedures
- Perform expanded functions allowed in SD

Students interested in the online option of the Certified Dental Assisting program can learn more by clicking on the edegree graphic below.

Excellent Opportunities

Most dental offices hire multiple trained dental assistants. The U.S. Bureau of Labor states employment opportunities in this field are "excellent" - in fact, dental assisting is one of the fastest growing occupations nationwide. Positions are available in private and group practices for general dentistry as well as in specialty practices such as oral surgery, orthodontics, periodontics, endodontics and pediatric dentistry. Other sources of employment include public health dentistry, hospitals, dental school clinics, insurance companies, and sales.

Accreditation

The program in dental assisting is accredited by the Commission on Dental Accreditation **(and has been granted the accreditation status of "approval without reporting requirements.")** The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

All graduates are eligible to become a Certified Dental Assistant by completing the Dental Assisting National Board exam. Graduates meet all requirements to be a Registered Dental Assistant able to perform expanded functions by the South Dakota Board of Dentistry and may apply for their Radiographer and Administration of Nitrous Oxide Administration permits. To be accepted into the program, the American Dental Association requires all applicants to have a high school diploma or GED.

Lake Area Technical College's curriculum for Dental Assisting meets the educational requirements for professional licensure in South Dakota and many other states. Professional licensure and certification requirements often vary from state to state. Prospective or current students considering an academic program that leads to a professional license or certification are strongly encouraged to seek guidance from the appropriate licensing agency in the state you plan to work before beginning an affiliated academic program.

Click here to view the Certified Dental Assisting webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Dental Assisting degree online.
For more information, go to the
Dental Assisting - Certified part-time hybrid e-degree page.

America Runs on Diesel!

Diesel-powered equipment is essential to this country's operation and economy. Diesel equipment is used to plant, fertilize, and harvest on typical American farms. Diesel trucks, trains, and ships carry grain and livestock to market and keep manufactured products en route to American stores. Everywhere, powerful diesel machines build and repair roads, dams and levees, and prepare the ground for building projects.

What can I expect?

As a first-year Diesel Technology student, you'll complete hands-on training in our spacious diesel facility. Our instructors will instruct you on small engines, light-duty diesel engines, power trains, hydraulics, electrical systems, welding, and heating/ventilation/air conditioning (HVAC). In your second year, you have the option to specialize in Ag/Industrial Tractor or Truck.

In Ag/Industrial Tractor, you'll be trained in diesel engine overhaul, hydraulic system diagnostics, HVAC system diagnostics, tractor electrical system diagnostics, fuel injection systems, diesel engine tune-up, electrical/ hydraulic systems, and GPS combine familiarization. If you choose the Truck option, you'll train in diesel engine overhaul, diesel fuel systems, diesel engine tune-up/ troubleshooting, truck electrical systems, electronic diesel engine controls, truck drive trains, air brake systems, suspension/ steering, and preventive maintenance. Both options feature projects on customer-owned equipment.

Careers

As an Ag/Industrial Tractor option graduate, you may work for a farm equipment dealer, an independent equipment repair shop, a construction firm, a diesel injection equipment repair shop, a farm repair shop, or maintenance facility. As a Truck option graduate, you may work for a truck dealership, a commercial truck fleet, a bus line, a heavy equipment shop, a construction firm, or independent repair shop. A diesel technology career often leads to positions in equipment/part sales and management positions at all levels.

AED Accredited Program

Lake Area Tech's Diesel Technology program is fully accredited by the Associated Equipment Dealers Foundation (AED). AED has evaluated LATC'S Diesel program curriculum, equipment, and facilities and has determined all AED's criteria has been met.

CNH Top Tech

Students who are interested in a career with Case New Holland may enroll in the Diesel Case New Holland Top Tech program at Lake Area Tech. For more information click here or contact your local CNH dealer or LATC.

TechKnowledge John Deere Option

The Brandt Holdings TechKnowledge Program is fully accredited by the AED Foundation and is a two-year **Student Technician Training Program** that finishes with an Associate of Applied Science degree at Lake Area Tech. For more information, email careers@KibbleEq.com or call 1-605-237-3956.

ThinkBIG Caterpillar Option

Students selected for the Diesel ThinkBIG Caterpillar program will have the opportunity for full-time employment with the dealership upon successful completion of the program. For more information, go to www.lakeareatech.edu or contact Mike Sanden at Butler Cat at 1-800-873-8858. The LATC ThinkBIG program is fully accredited by the AED Foundation – an affiliate of the Associated Equipment Distributors. **Click here for more information.**

ButlerMAX Option

The ButlerMAX option will train and prepare students to enter the field as ag diesel technicians in Butler Ag Equipment and Butler Machinery Company dealerships. During their time, they'll complete hands-on training on industry-leading agricultural equipment, classroom instruction, and a paid internship at a Butler dealership location. **Click here for more information.**

Kubota Tech Option

The Kubota Tech opportunity, integrated into the Diesel Technology program, provides Diesel Tech students a pathway to earn industry-recognized certifications focused on the repair and service of Kubota equipment, giving them the knowledge and skills for employment as a diesel technician in the off-road diesel industry. **Click here for more information.**

Light Duty Diesel Option

Graduates of the LATC Diesel program can enroll in the Automotive Light Duty Diesel option. This option offers comprehensive theory and hands-on skills to successfully master light-duty consumer trucks and diesel engines. During the five-month option, students will work with various manufacturers' engines and learn how diesel power and performance is achieved.

A laptop is required for this option.
Learn more at **www.lakeareatech.edu**

Click here to view the Diesel webpages and course outlines.

DIESEL Technology

ELECTRONIC Systems Technology

You'll be in demand - guaranteed.

Are you ready to begin an exciting journey into one of today's most dynamic and in-demand fields– electronic systems? Picture yourself at the heart of cutting-edge technology, serving as the powerful "central nervous system" driving forward manufacturing and business operations. From the intricate workings of computer systems to the precision of automated manufacturing, from the life-saving capabilities of medical machines to the captivating displays of digital signs, the role of skilled technicians in this industry is indispensable.

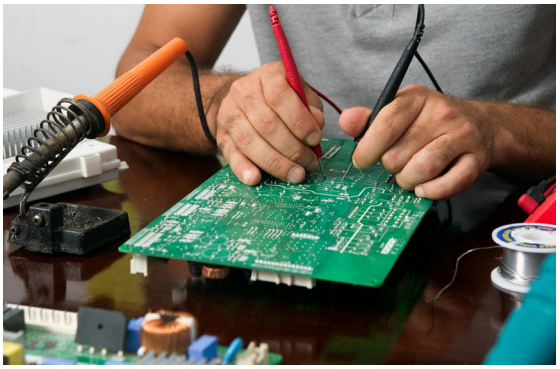
Our program is currently experiencing a remarkable surge in demand. In fact, we're inundated with job listings from potential employers, far outnumbering the graduates from our program. What does this mean for you? It means that by stepping into this field, you're guaranteed to be in demand – now and in the foreseeable future.

What can I expect?

In our comprehensive 18-month program, you'll begin by mastering electronics at the component level, laying the foundation for your journey ahead. Next, delve into the intricacies of surface mount soldering, the complexities of microprocessors, the finesse of motor controls, and the versatility of programmable logic controllers.

We'll equip you with the skills to design circuit boards, troubleshoot issues like a pro, and even dive into the fascinating world of robotics. And here's the best part – at Lake Area Tech, we believe in learning by doing. That's why our program emphasizes hands-on training, ensuring that you're not just equipped with theoretical knowledge, but also real-world experience.

Upon graduation, you can choose to seamlessly transfer applicable credits toward earning a Bachelor of Science degree through our established articulation agreements with four-year universities, opening up even more doors for your future career.



Careers

So, where could this program take you? The possibilities are endless. Picture yourself working in visual communications, playing a pivotal role in manufacturing operations, contributing to electronic distribution networks, or even specializing in the development of cutting-edge machine safety products. As an electronic technician, you'll be involved in every aspect of the process – from design and manufacturing to technical support.

And let's talk about the perks – high wages and ample opportunities for advancement await you in this dynamic field. So why wait? Don't miss out on the chance to embark on a rewarding career in electronic systems technology. Explore more about our program on our webpage today, and take the first step towards a future filled with endless possibilities!

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the Electronic Systems Technology webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Electronic Systems Technology degree online. For more information, click here.

Be Where the Energy Is!

The future of energy is now! Our 20-month Energy Operations program is designed to meet the demands and guidance of the energy industry, preparing you for a fulfilling career in the operation of power (coal, hydro, wind, nuclear, etc.) or process (ethanol, oil, bio-diesel, etc.) plants.

What can I expect?

Prepare for a blend of cutting-edge classroom training and hands-on experience in our fully equipped Lake Area Tech Energy Lab. You'll lay a solid foundation in energy mechanics and systems, equipping yourself for a career in the high-demand fields of process plant or power plant operation. Dive deep into monitoring, controlling, and troubleshooting for plant and process systems, including electrical systems, turbines, boiler systems, and more. Throughout your coursework, you'll study subjects like metallurgy, pneumatics, hydraulics, thermodynamics, combustion, vibration analysis, and dynamic balancing.

To ensure you're fully prepared for the workforce, we also require an industry internship where you'll gain invaluable real-world experience.

Dynamic Careers

Graduates of our program step into dynamic roles earning high wages in various sectors such as ethanol plants, power plants, wind turbine farms, pipelines, dairy and cheese processing plants, and any industry requiring skilled technicians to monitor, control, and operate production equipment.

Ready to dive into a career where the energy flows and the opportunities abound? Click on the links below to learn more about our program and discover the latest wages earned by our new graduates! Don't miss out on the chance to be at the forefront of the energy revolution – join us at Lake Area Tech and let's power the future together!

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the Energy Operations webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

ENERGY
Operations

ENERGY Technology

Technicians in Demand

The energy-producing industry is actively seeking skilled technicians with the expertise to maintain and repair production equipment, including wind energy – recognized as the fastest-growing sector of renewable energy by the U.S. Bureau of Labor Statistics. This field not only offers high wages but also provides the assurance of a growing job market. Kick start your journey and become a vital part of the new technology powering our world!

What can you expect?

As a student in our 20-month Energy Technology program, you'll dive into a hands-on learning experience, complementing your classroom training. You'll spend significant time in LATC's fully equipped Energy Lab, where you'll receive instruction in mechanical maintenance, repair, and overhaul. Additionally, you'll master alignment techniques, delve into metallurgy, explore pneumatics and hydraulics, learn about combustion, vibration analysis, and dynamic balancing – all crucial skills for a successful career in the energy industry.

Careers

With the energy industry experiencing significant growth nationwide, graduates of our program will find ample job opportunities and earn competitive wages. Whether it's working in ethanol plants, power plants, wind turbine farms, pipelines, or dairy and cheese processing plants, your skills will be in high demand and well-compensated.

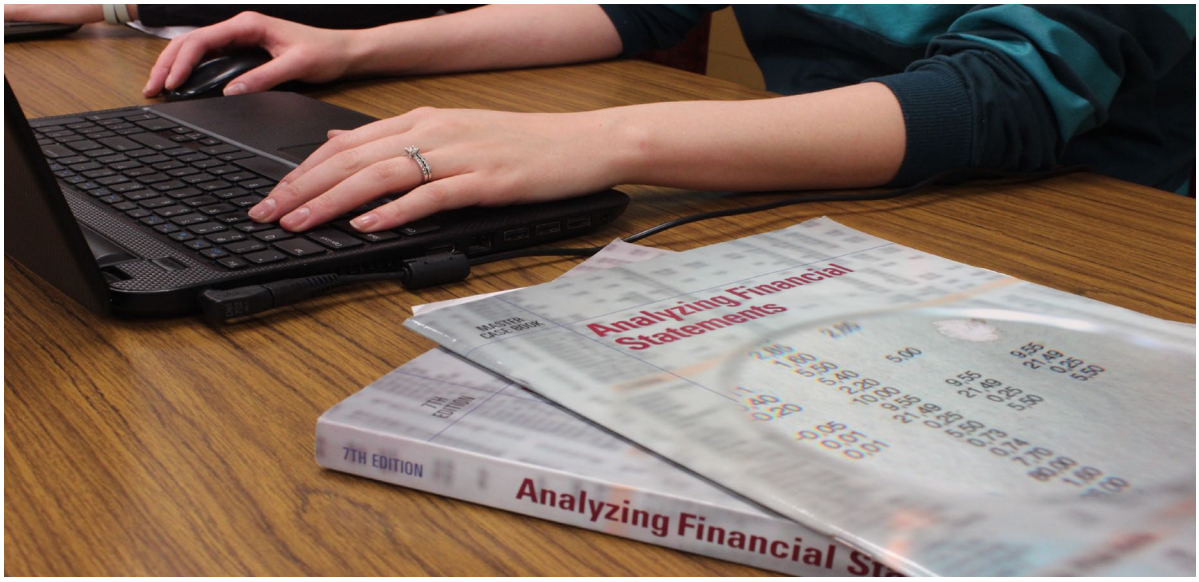
Ready to embark on a rewarding career path in the energy sector? Click on the links below to learn more about our program and explore the latest statistics on Lake Area Tech Energy Technology graduates, including wage averages that rank among the highest in all of our programs! Don't miss out on the chance to be part of a dynamic and thriving industry – join us at Lake Area Tech and power up your future today!

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the Energy Technology webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.



Why Financial Services?

Financial Services is a diverse and exciting field. As a graduate, you could have a career in accounting, banking, insurance, or investing, to name a few.

Our graduates are known for having the perfect blend of knowledge and real-life working experience. We offer three high-demand options within the Financial Services program: Agri-Financial Services, Business Accounting, and Consumer Financial Services.

If you like working closely with people and money, this could be the program for you!

What can I expect?

As a student of our Financial Services program, you can expect a focus on practical, active learning. You will receive a strong core of financial education, including training in accounting, taxes, personal finance, micro and macro economics, financial statement analysis, and financial management. You will then move on to specialized financial training in one of our three options.

In all three options you will also complete at least one credited internship. This is a valuable opportunity to test your knowledge, gain work-place experience, and punch up your resume.

Careers

This program has a high job placement rate. We currently have graduates working at banks and businesses across South Dakota and beyond!

A windows-based laptop is required for this program.
Learn more at **www.lakeareatech.edu**

Click here to view the Financial Services webpage, option descriptions and course outlines.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Financial Services degree online. For more information, click here.

HEAVY EQUIPMENT Operator

Get Paid to Play in the Dirt!

Did you like to play with tractors, bulldozers, and shovels as a kid? Get paid for it now! Graduates from LATC's Heavy Equipment Operator program will enter into a field in high-demand for qualified workers in commercial and industrial construction, heavy equipment operation, and earthmoving equipment operation. The job demand is high for Heavy Equipment Operators so jump on board and we'll help get you there!

What can I expect?

Not only will you learn safety, maintenance, and technical aspects of the job, but you'll be trained to operate heavy equipment that's used in commercial and industrial construction. Get ready to sit behind the wheels of dozers, graders, and loaders!

LATC's solid Diesel, Welding, Electronics, and Precision Machining programs are great resources for the Heavy Equipment Operator program students. Plan to rub elbows and share equipment with students and instructors in these established programs as you advance through the hands-on course work.

Careers

Graduates of the program will enter the work force ready and able to perform in this industry with a solid background in safety, technology, and operations. Employers are waiting for you!

Graduates of this program may also choose to transfer into an environmental management program at a four-year institution. Job demand is high and is expected to remain high in this field and the beginning wage projections are above average. We are here to help you uncover a new world, so let us know if you have any questions about this exciting program at LATC.

Click here to view the Heavy Equipment Operator webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

HUMAN Services Technician

A Career that Touches Lives

Our diverse Human Services program will prepare you for a career that makes a difference. As a graduate, you could provide daily care and support to children or the elderly. You could also help people overcome personal, professional, and/or social barriers.

This program allows you to choose among four high demand training options: Activity/Mental Health Technician, Child Development, Developmental Disabilities and Youth Offender.

What can I expect?

All four Human Services options feature interactive, experience-based learning. The coursework has been carefully designed to give you opportunities to learn, develop and practice meaningful activity and care methods. You will also complete a three to four week specialized internship at the end of your second semester. Graduates from Lake Area Technical College with an Associate of Science Degree in Human Services Technician are able to apply for the Social Work Associate license in South Dakota.

Rewarding Careers

As an **Activity/Mental Health Technician**, you will work to bring stimulating, positive activity into the lives of nursing home, group home, or assisted living residents. You might arrange for entertainment (speakers, musicians, etc.) or organize group games, crafts, or outings.

Child Development or Early Childhood Educator: As a day care provider, preschool teacher, or preschool paraprofessional, you can help provide children ages newborn-six a stable, nourishing environment. Spend your workday building confidence, encouraging interests and talents, and allowing children to grow and learn through play and exploration!

Developmental Disabilities: This option will prepare you to assist people with developmental disabilities (autism, Down syndrome, learning disabilities, etc.). You could work with individuals in schools, in group homes, or in a developmental training center.

Youth Offender: This unique option will prepare you to work with youth who have been removed from their homes/communities because of behavioral or mental health concerns. You could be a youth counselor in a group home, or work in behavioral education as a paraprofessional.

Click here to view the Human Services Technician webpage, option descriptions, and course outlines.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

No Ordinary Job

Are you looking for variety and action? Do you consider yourself fair, confident, and inquisitive? Then read on to learn more about our 18-month Law Enforcement program! Lake Area Tech values the partnership it has with local, state, tribal, and federal agencies as its mission is to graduate students with the necessary knowledge and skills to be employed in the law enforcement field including positions as police officers, sheriff deputies, corrections officers, highway patrol troopers, criminal investigators, tribal officers, crime scene specialists, communications officers, conservation officers, probation, parole, and juvenile officers.

What can I expect?

At LATC, Law Enforcement students will be offered training in areas not limited to but including Constitutional Law, Criminal Law & Procedures, Criminal Investigations, Crime Scene Evidence Collection, Juvenile Justice, First Responder, Patrol Procedures, Firearms, Mechanics of Arrest, Street Survival Tactics, Corrections, and Emergency Vehicle Operations. Students will also learn how the legal and criminal justice systems work in tandem with local, state, and federal government agencies. Students will need to have access a word processor and the internet/ portal for classes. After successful completion of the program, students will earn an Associate of Applied Science Degree in Law Enforcement.

Our mission is fundamental: To recruit, educate, train, and develop outstanding law enforcement leaders who will remain true to the principles of Law Enforcement - service, justice, and fundamental fairness. Our vision is predetermined by our profession: to become noble guardians of democracy!

Law Enforcement Virtual Academy

Our Law Enforcement program offers currently serving officers a virtual pathway to an Associate of Applied Science degree in Law Enforcement In just nine short months, officers who have successfully completed the South Dakota Basic Officer Certification are eligible to apply to the LATC Law Enforcement Virtual Academy. To accommodate an officer's work schedule, Lake Area Tech will provide a mix of online and on-campus (or hybrid) classes. This Virtual Academy option has been developed in conjunction with the Law Enforcement Officers Standards and Training Commission and Law Enforcement partners across South Dakota.

Lake Area Tech will count, as prior learning experience (PLE), all classes completed by graduates of the South Dakota Law Enforcement Academy and will waive commensurate coursework leading to the A.A.S. degree option in Law Enforcement. If an officer isn't currently employed in law enforcement at the time of the application for PLEs, they must have completed the SDLEOSTC Training Academy not more than five years prior to the first application for PLEs. If it's been longer than five years, LATC will review applications on a case-by-case basis.

Click here to view the Law Enforcement webpage and course outlines.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

MED/FIRE Rescue

A laptop is required for this program.

No Ordinary Job

In crisis situations, people's lives often depend on the quick and highly skilled reaction of emergency medical technicians (EMTs), paramedics, and firefighters. The fast pace and intense situations in this field require emergency personnel to be emotionally steady, focused, compassionate, and physically strong.

You never know what the day will bring with a career in Med/Fire Rescue! You might:
- Control and/or extinguish fires
- Protect lives and property
- Administer emergency/lifesaving services
- Assist in disaster recovery
- Provide aircraft fire rescue
- Control and clean-up hazardous chemical spills

Earn an Associate of Applied Science Degree in Med/Fire Rescue and receive a solid foundation in the medical and fire-fighting aspects of this career. If you're interested in a job where life-saving decisions are made every day, this fast-paced field might be for you! Or, after the first year of MFR coursework, move to the Emergency Medical Specialist option and focus on patient care and "behind the scenes" processes like billing and coding for insurance claims and using electronic health records. If you consider yourself highly detailed and organized, then check this option out! Both of these options are 20-month programs. Not interested in the 20-month options? We've got another option: earn a Paramedic Diploma after completing the first 15 months of the program!

There are two online options available in the Med/Fire Rescue program: Online Emergency Medical Technician/Certification Only and Online Paramedic Diploma. The Online Emergency Medical Technician/Certification Only option can be completed online in one semester. Students in this option will complete most of the coursework online, but will visit campus for testing, skill practice, and hands-on learning. Click to view the EMT application form. This is a separate application process.

The second online option is the online Hybrid Paramedic Diploma. In only 20 months, you could obtain your diploma and begin work in this exciting field! To apply, complete the Lake Area Tech application form and select the (MFRO – or the actual program menu drop down name on the application). This program starts in the spring semester each year (January). PLEASE NOTE: To be considered for this program, students MUST have successfully completed an EMT Basic certification course and have up-to-date certification (prior to applying). If needed, certification can be obtained at Lake Area Tech.

Accreditation

Our Med/Fire Rescue program has been approved for accreditation by the National Board on Fire Service Professional Qualifications (Pro Board) – Committee on Accreditation for the following levels and standards:

NFPA 1001: Firefighter I and II
NFPA 1002: Driver/Operator
NFPA 1003: Airport Firefighter
NFPA 1021: Fire Officer I and II
NFPA 1041: Fire Instructor I
NFPA 1072: Hazardous Materials, Responder
- Awareness Level
- Operations Level
- Technician Level

Lake Area Tech's Med/Fire Rescue program is the only program in the region to have both the National Board on Fire Service Professional Qualifications (Pro Board) accreditation and Paramedic Program accreditation by the Commission on Accreditation of Allied Health Education Programs. Contact information is as follows: Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756. The phone number is 727-210-2350 and it is on the web at www.caahep.org. Educational Programs for the Emergency Medical Services Professions contact information is: 8301 Lakeview Parkway, Suite 111-312, Rowlett TX 75088. The phone/fax numbers are (214) 703-8445 and FAX (214) 703-8992. Find them on the web at www.coaemsp.org.

CoAEMSP 2022 Annual Report Statistics

CAAHEP Accredited Paramedic Programs and CoAEMSP Letter of Review (LoR) Programs track and report outcome measures annually to the Committee on Accreditation for the Emergency Medical Services Professions (CoAEMSP). The most current CoAEMSP Annual Report was for the calendar year 2022.
The most recent **success rate** for the National Registry of EMT Paramedic/State Cognitive exam was:
– **46%** passed within 3 attempts
– The most recent **positive placement rate** for graduates was 92%. Positive placement is defined by the CoAEMSP as 'Employed full or part-time in a related field and/or continuing his/her education and/or serving in the military'. Positive placement is measured at completion of the program. The most recent **retention rate** was 100%.

The MFR program's goal is "to prepare competent entry-level Paramedics and Firefighters in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels."

Lake Area Technical College's curriculum for Med/Fire Rescue meets the educational requirements for professional licensure in South Dakota. Professional licensure and certification requirements often vary from state to state. Prospective or current students considering an academic program that leads to a professional license or certification are strongly encouraged to seek guidance from the appropriate licensing agency in the state you plan to work before beginning an affiliated academic program.

Click here to view the Med/Fire Rescue webpage, course outlines and student outcomes.

A Diverse Health Professional

Medical assistants are multi-skilled health professionals specifically educated to work in a variety of healthcare settings performing clinical and administrative duties. The practice of medical assisting necessitates mastery of a complex body of knowledge and specialized skills requiring both formal education and practical experience that serve as standards for entry into the profession.

The **administrative** duties of a medical assistant include:

- Receiving patients in a professional and friendly manner
- Performing duties to include patient scheduling, medical coding, and insurance billing
- Public relations functions

The **clinical** responsibilities of a medical assistant include:

- helping patients prepare for examinations
- assisting the doctor
- cleaning and sterilizing instruments and equipment

What can I expect?

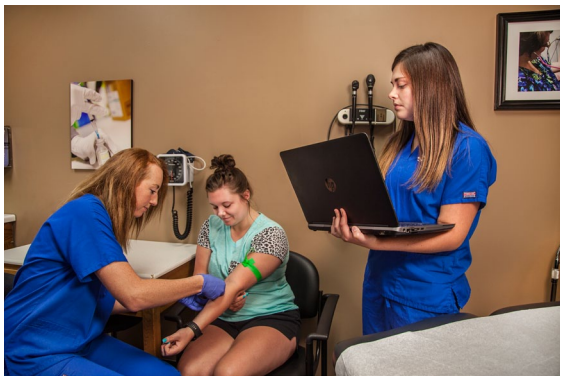
To obtain a diploma in Medical Assisting, you will complete 11 months of competency-based instruction and a supervised externship.

Program Graduation Requirements

It is the goal of the Medical Assisting program at LATC to prepare medical assistants who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession. To achieve that goal, students must earn a grade of C (2.0) or higher in all courses as a prerequisite to MA 240 Administrative and Clinical Externship. Students must earn a passing grade in their clinical externship in order to graduate.

Externship: As a student of medical assisting, you will be required to complete a 240-hour, non-paid, supervised externship in a medical facility. The externship will provide you with a total picture of your responsibilities as a medical assistant, including observation of a working health care facility. You'll also gain valuable experience working with other healthcare professionals as you develop and utilize your technical skills.

When you complete the program you will be eligible to take a national certifying examination. After successfully passing the exam, you will earn the title of Certified Medical Assistant, (CMA, AAMA) or



Registered Medical Assistant (RMA).

Outcomes

The diploma in Medical Assisting at Lake Area Technical College in Watertown, SD, has the following outcomes based on the most recent Annual Report Form submitted to the Medical Assisting Education Review Board (MAERB) and the Commission on the Accreditation of Allied Health Education Programs (CAAHEP):

The Medical Assisting program at Lake Area Tech has a five-year average of 91.07% job placement and an 85.45% exam passage rate for the years 2018-2022.

Accreditation

The Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Review Board (MAERB). Commission on Accreditation of Allied Health Education Programs: 9355 113th St. N., #7709 Seminole, FL 33775 727-210-2350. www.caahep.org

Professional Certification

Lake Area Technical College's curriculum for Medical Assisting meets the educational requirements for professional certification. Professional certifications are recognized nationwide. More information about professional certification and licensure programs can be found by **clicking here.**

Click here to view the Medical Assisting webpage and course outlines.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

MEDICAL Laboratory Technician

This Could be You

Medical laboratory is a rewarding, challenging field that is absolutely vital to the world of healthcare. Did you know - over 70% of objective clinical data that physicians use to determine treatment comes from tests that medical laboratory technicians (MLTs) perform on patient samples?

An MLT helps determine the cause of patient symptoms by performing a wide variety of tests. They identify infection-causing microorganisms and provide information on the best antibiotic for treatment, perform cell counts on blood, type and crossmatch blood for transfusion, measure chemicals in blood and body fluids and microscopically identify cells in the urine and blood.

Lake Area Tech's Medical Laboratory Technician program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL, 60018. (773) 714-8880 www.naacls.org.

What can I expect?

Our 20-month program offers interactive, hands-on learning in LATC's three fully equipped medical labs. We also boast a Sim Lab experience with prepared specimens for Blood Bank and Microbiology testing using industry standard equipment. After the completion of Sim Lab, the student will proceed to a 15-week clinical. The online program is 23 months with a 15-week clinical.

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Clinical sites include:

- Avera Medical Group Brookings, SD
- Avera Dells Area Hospital, Dell Rapids, SD
- Avera McKennan Hospital, Sioux Falls, SD
- Avera Sacred Heart Hospital, Yankton, SD
- Avera St. Luke's Hospital, Aberdeen, SD
- Brookings Health System, Brookings, SD
- Brown Clinic, Watertown, SD
- Chippewa County Hospital, Montevideo, MN
- Coteau des Prairies Hospital, Sisseton, SD
- Huron Regional Medical Center, Huron, SD
- Madison Healthcare Services, Madison, MN
- Milbank Area Hospital - Avera, Milbank, SD
- Mobridge Regional Hospital and Clinic, Mobridge, SD
- Ortonville Area Health Services, Ortonville, MN
- Prairie Lakes Healthcare System, Watertown, SD
- Sanford Clinic, Watertown, SD
- Sanford Medical Center, Aberdeen, SD
- Sanford Medical Center, Sioux Falls, SD
- Sanford Heath, Fargo, ND

Upon graduation from the MLT Program, students will be eligible to take the American Society of Clinical Pathologist's Board of Certification national certification test. In 2023, the program's certification pass rate was 96% (three-year average for graduates taking the exam within a year." **Click here** for all of the 2023 NAACLS program outcomes. Both online and on campus applicants may enroll in either the fall or spring semesters.

Careers

Currently, many opportunities for MLTs are available due to industry demand and retirements. Hospitals need competent laboratory personnel such as medical laboratory technicians to help meet increased demands for lab services. Medical Lab Technicians work in hospital and clinic laboratories. Others have chosen employment in food production labs, ethanol plants, research facilities, the armed forces, and public health centers.

Professional Licensure

South Dakota does not require an additional licensure to practice as a Medical Laboratory Technician. Those states that require an additional licensure to practice as an MLT include: California, Hawaii, Florida, New York, North Dakota, Tennessee, Louisiana, Nevada, West Virginia, Montana, and Georgia. Puerto Rico also requires a licensure.

Click here to view the Medical Laboratory Technician webpage and course outlines.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Medical Laboratory Technician degree online. For more information, click here.

NATURAL RESOURCE Management

Make a Difference

Natural Resource Management (NRM) refers to the sustainable utilization of major natural resources, such as land, water, air, minerals, forests, fisheries, and wild flora and fauna. Together, these resources provide the ecosystem services that provide better quality to human life, as cited in Science Direct, 2024.

Most recently, graduates of this program have found cutting-edge jobs with alternative fuel suppliers (such as ethanol plants), ecological/wildlife agencies, environmental consulting firms, conservation organizations, and agricultural businesses, just to name a few.

Job duties may include:

- Making chemical solutions and reagents
- Conducting environmental site assessments
- Performing quality assurance evaluations
- Participating in research and development programs
- Using various instruments to collect, prepare and analyze environmental samples
- Performing microbiologic and molecular testing
- Conducting ecological wildlife surveys
- Conducting environmental health and safety audits and inspections

LATC's Natural Resource Management program is a great choice for anyone who cares about the future of our environment. If you like science, variety, and being outdoors, this is the option for you!

What can I expect?

As a student in the Natural Resource Management program, you will be trained to use the newest testing and monitoring technology. You will also learn proper sampling and record-keeping procedures through hands-on lessons, experiments, and projects that take place both in and out of the classroom. To make sure you have the experience you'll need, we also require two field internships.

Careers

Natural Resource Management technicians work in the laboratory and in the field for federal, state, and local environmental, wildlife or health agencies, agricultural, architectural and engineering firms, and environmental consultants. You might also be employed by water/wastewater treatment facilities, private industry, utility companies, biofuel facilities and petroleum/natural gas industries.

Click here to view the Natural Resource Management webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Is Nursing for You?

Nursing—few career fields are as rewarding—or as challenging. Nurses use the latest medical technology at the direct and critical level of patient care. The best nurses are also responsible, compassionate, and ultimately motivated by a sincere desire to help people.

What can I expect?

Lake Area Tech's high standard of nursing education will prepare you to give excellent care to obstetrical, pediatric, medical, psychiatric, surgical and geriatric patients. After the Practical Nursing program, you may choose to test for your LPN (Licensed Practical Nurse) license and enter the workforce, or test and apply for a second year to become a Registered Nurse through Lake Area Tech's Registered Nursing program. This will allow you to prepare for your RN exam without ever leaving the Lake Area Tech campus.

Acceptance Criteria

Admission is competitive. Acceptance is based on:

- ATI-TEAS Score
- GPA - Most recent GPA of 2.5 or better
- Completion of general education listed on semester course outline

See website for more information.

Options

There are four paths or opportunities for a student looking to complete the LPN nursing diploma. There is a full-time campus option, a part-time campus option, a full-time online option and part-time online option. Full-time campus and online begin each fall in August. The full-time options are 11 months in length. The part-time options starts in January of each year and take 18 months to complete. See our website for current deadlines.

Accreditation

The Practical Nursing program at Lake Area Technical College is accredited by the:

Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400
Atlanta, GA 30326
(404) 975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the Practical Nursing Program is Continuing Accreditation. View the public information disclosed by the ACEN regarding this program at: http://www.acenursing.com/accreditedprograms/programsearch.asp

South Dakota Board of Nursing
4305 S. Louise Ave. Suite 201
Sioux Falls, SD 57106-3115 Phone: (605) 362-2760
state.sd.us/doh/nursing

Please note: if a prospective student has been convicted of a felony, he/she could possibly not meet the qualifications to write the licensing exam.

Professional Licensure

Lake Area Technical College's curriculum for Practical Nursing meets the educational requirements for professional licensure in South Dakota and many other states. Professional licensure and certification requirements often vary from state to state. Prospective or current students considering an academic program that leads to a professional license or certification are strongly encouraged to seek guidance from the appropriate licensing agency in the state you plan to work before beginning an affiliated academic program.

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the Practical Nursing webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Practical Nursing degree online. For more information, click here.

Is Registered Nursing for You?

The Professional Registered Nursing Program at Lake Area Tech is an Associate of Applied Science Degree Program. The A.A.S. Nursing Program prepares students who are Licensed Practical Nurses to complete a program of study in professional nursing that incorporates theory, clinical, lab, and simulation experiences.

The program lasts 11 months over three semesters that builds off of the student's LPN degree. The RN program is available both on-campus and online. The program is full-time, beginning each fall. Upon completion of this program, graduates are eligible to take the NLCEX-RN (National Council Licensure Examination for Registered Nurses). Graduates of this program may apply to another college or a university to pursue a Bachelor's degree in nursing after completing their A.A.S. degree and becoming a registered nurse.

The Registered Nursing program will accept a limited number of students in the fall of each year. Individuals interested in the program need to have a current unencumbered LPN license.

Acceptance Criteria

All students interested in applying for the Professional Registered Nursing Program must meet each of the following acceptance criteria:

- ATI-NCLEX-PN Comprehensive Predictor Score
- GPA – most recent of 2.75 or better
- Completion of general education courses listed on the semester outline
- Math 103 or higher

Admission is competitive and acceptance is contingent upon meeting all of the requirements. Please visit the website for further information and other requirements including deadlines.

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Accreditation

Accreditation Commission for Education in Nursing (ACEN) – Fully Accredited, January 2020
3390 Peachtree Road NE, Suite 1400
Atlanta, GA 30326
(404) 975-5000 https://www.acenursing.org/

View the list of accredited ACEN programs: http://www.acenursing.com/accreditedprograms/programsearch.asp

South Dakota Board of Nursing Approval – Initial approval established 2/8/18. Full approval achieved 2/11/2021.
South Dakota Board of Nursing
4305 S. Louise Ave. Suite 201
Sioux Falls, SD 57106-3115 Phone: (605) 362-2760
state.sd.us/doh/nursing

Professional Licensure

Lake Area Technical College's curriculum for Registered Nursing meets the educational requirements for professional licensure in South Dakota and many other states. Professional licensure and certification requirements often vary from state to state. Prospective or current students considering an academic program that leads to a professional license or certification are strongly encouraged to seek guidance from the appropriate licensing agency in the state you plan to work before beginning an affiliated academic program.

Click here to view the Registered Nursing webpage and course outline.

Click here to view our Registered Nursing Admission Criteria

Get your Registered Nursing degree online. For more information, click here.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

OCCUPATIONAL Therapy Assistant

What is Occupational Therapy?

Occupational Therapy promotes health by enabling people to engage in activities of daily living. Under the supervision of an Occupational Therapist, Occupational Therapy Assistants (OTAs) assist people in overcoming physical, mental, and emotional barriers. When addressing client needs, OTAs commonly use what is individually familiar and enjoyable to that person to teach injury prevention, improve functional ability, and adapt equipment/environment/task to improve quality of life. Our fully accredited 20-month program will prepare you to work in a variety of educational and health care settings.

What can I expect?

As a student of this program, you'll receive the most up-to-date OTA training, including lecture, lab experience, discussion, demonstration and off-site fieldwork experiences. Satisfactory completion of this program requires that the individual maintain a 2.0 GPA and complete all course work with a grade of C or higher (one grade of D will be allowed in a general or related course with the exception of ANAT 142, which must be completed with a C or higher to register for PHGY 210).

Graduates of this accredited program are eligible to take the national certification examination administered by the National Board for Certification of Occupational Therapy (NBCOT). After successful completion of the exam, the graduate will be a Certified Occupational Therapy Assistant (COTA). Most states also require licensure to practice. Licensure is determined by results of the NBCOT Certification Exam and other factors.

Careers

Just six months after graduation, our Occupational Therapy Assistant grads are earning competitive wages according to Lake Area Tech's latest placement report.

Graduates of this program could work for home health care providers, outpatient clinics, long-term care facilities, hospitals, elementary/secondary schools, mental health facilities, and more!

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Application Process

If you are interested in applying for the OTA program you may begin building an application file at any time. Completed applications are processed as they are received. Your application will not be processed until it is complete, or contains:

- $25 application fee, and an official high school transcript or GED certificate.
- Official transcripts from any post-secondary work.
- ACT or ACCUPLACER NextGen score.

Experience with disadvantaged populations or observing an OT or OTA is recommended but not required.

See the OTA webpage for specific admission criteria.

Accreditation

Lake Area Technical College is accredited by The Higher Learning Commission. The OTA program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) c/o Accreditation Department, American Occupational Therapy Association (AOTA), 7501 Wisconsin Avenue, Suite 510E, Bethesda, MD 20814. ACOTE's telephone number c/o AOTA is (301) 652-AOTA. Their website is www.acoteonline. org. Be advised that students graduating from an unaccredited program are not eligible to take the NBCOT Certification Exam. In addition, a felony conviction may affect an individual's eligibility to sit for the national exam and/or obtain state licensure. LATC is an open admissions technical college.

Professional Licensure

Lake Area Technical College's curriculum for Occupational Therapy Assistant meets the educational requirements for professional licensure in South Dakota and all other states. Professional licensure and certification requirements often vary from state to state. Prospective or current students considering an academic program that leads to a professional license or certification are strongly encouraged to seek guidance from the appropriate licensing agency in the state you plan to work before beginning an affiliated academic program.

Click here to view the Occupational Therapy Assistant webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

An Outstanding Career

Under the supervision of physical therapists, physical therapist assistants (PTAs) help patients who are suffering from physical mobility impairments, movement dysfunctions, and pain. As a PTA, you might implement treatment plans of care that incorporate therapeutic exercises, rehabilitation, therapeutic heat and cold, soft tissue mobilization, ultrasound, electrical stimulation, traction, and more!

PTAs identify barriers for the disabled and assist in teaching other professionals, patients, and family to perform treatment procedures, exercises, and functional activities. They recognize the psychosocial effects of illness and injury and know how to interact appropriately with patients and their families.

What can I expect?

As a student of our 20-month, nationally accredited Physical Therapist Assistant program, you'll get the latest and most effective classroom instruction, and valuable experience in our fully equipped physical therapy labs. You will also complete three clinical experiences.

Individuals interested in the PTA program should have strong people skills and some background in the biological sciences. Potential students should also be fit, as the physical demands include moderate to heavy lifting. Upon successful completion of the required courses, graduates will be awarded an Associate of Applied Science (A.A.S.) degree and will be eligible to take the National Physical Therapy Exam (NPTE).

Opportunities

Graduates of this program report high job satisfaction and excellent wages. Our physical therapist assistants can secure jobs in hospitals, long-term care facilities, rehabilitation centers, schools and private practice clinics.

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Application Process

Acceptance into the PTA program is limited to 28 students. Applicants are evaluated based on the assessment of ACT/ACCUPLACER reading scores and essay questions. All application process steps must be completed by the application priority deadline of December 15, 2024, to be considered for the fall 2025 program. Applications received on or after the priority deadline will be reviewed for consideration to the wait list. Late applicants are encouraged to complete the required application steps in a timely manner. Detailed information regarding the application process can be received by contacting the LATC Admissions Office or viewing the **Application Checklist** on the PTA page of the Lake Area Tech website.

Accreditation

The Physical Therapist Assistant program at Lake Area Technical College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) 3030 Potomac Ave., Suite 100, Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email:accreditation@apta.org; website: http://www.capteonline.org.

Professional Licensure

Students in programs which customarily lead to professional licensure are responsible for determining whether or not this program or course meets requirements for licensure in the state in which the student resides or intends to reside upon graduation. All states require graduates to pass the National Physical Therapy Exam in order to become licensed or certified. Students must graduate from PTA programs that are accredited by the Commission on Accreditation in Physical Therapy to become eligible to sit for the NPTE.

Click here to view the Physical Therapist Assistant webpage and course outline.

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PHYSICAL Therapist Assistant

PRECISION Machining

Purposeful American Career

Virtually everything manufactured in U.S. industries - automotive, space, medical, green, etc. can be traced back to the work of a machinist. Trained in the working properties of metals, machinists use manual and cutting-edge computer-controlled methods to make precision-machined products. There is a constant and unmet need for these "surgeons of steel" in American manufacturing - as they supply highly respected skills and expertise to an area's business and infrastructure.

Our Precision Machining graduates report high wages, great advancement opportunities, and job satisfaction. Machinists make America! Let us help you start your journey towards a secure career!

What can I expect?

As a student of our 18-month program, you will receive cutting edge experiences, including practical, project-based learning in our 11,000 square foot precision machining lab. The day begins at 8 a.m. and ends at 2 p.m. to allow students afternoon employment if they choose. During your first year, you'll be introduced to blueprint reading with Intro to CAD, machine trades math, precision measuring, cutting tool geometry, manual milling, manual turning, and an introduction to CNC milling and turning centers.

During your second year, you'll expand your knowledge of Computer Numerical Control (CNC) machines, using vertical machining centers, turning centers 4th and 5th axis, and programming soft wares. To keep you on top of the hiring game, as well as help you qualify you for better pay and a specialized job title, you will learn to program and monitor the work of a variety of CNC machines. You will also learn how to produce fixtures, punches, dies, and molds.

Opportunities

Graduates of this program will find employment as machine set-up personnel, maintenance technicians, general machinists, tool-and-die-makers, moldmakers and CNC operators/programmers. Precision Machining graduates earn great pay according to our latest placement reports!

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the Precision Machining webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Precision Machining degree online. For more information, click here.

The Best and Brightest

In today's rapidly evolving landscape, automated systems stand at the forefront, reshaping industries and enhancing safety and efficiency across various sectors. From transportation to agriculture, from mining to space exploration, and from manufacturing to healthcare, the impact of automation is undeniable. In this dynamic environment, skilled technicians play a pivotal role in ensuring the seamless operation and effectiveness of robotic systems. To prepare you for a career in this exciting field, Lake Area Tech has made substantial investments in a cutting-edge Robotics Lab, equipped with the latest technology and equipment.

What can I expect?

As a student in our 18-month program, you can expect an immersive and hands-on learning experience. Our curriculum is meticulously designed to cover a comprehensive range of topics, including circuitry, soldering, blueprint reading, mechanical systems, robotic engineering, welding, machining, and much more. With a focus on practical skills and industry-relevant knowledge, you'll be well-prepared to tackle real-world challenges from day one.

One of the hallmarks of the Robotics program is the close interaction with industry professionals. Through guest lectures, workshops, and internships, you'll have the opportunity to network with experts and gain valuable insights into the latest trends and technologies shaping the field of automation. Additionally, our instructors bring years of industry experience to the classroom, providing you with invaluable mentorship and guidance.

Lake Area Tech offers flexibility in program start dates, allowing you to begin your studies in either the fall or spring semester. This ensures that you can begin at a time that best suits your schedule. Furthermore, our articulation agreements with leading universities allow a seamless credit transfer towards a Bachelor of Science degree, offering you a pathway to further academic advancement and career growth.

Careers

Upon graduation, a world of opportunities awaits you in the field of automation. Prospective jobs include fluid power controls/systems technician, electro-mechanical technician, robotics technician, automated systems technician, manufacturing technician, plant engineering technician, and process control technician. Our program boasts a remarkable placement rate, with graduates consistently reporting competitive wages and fulfilling career trajectories.

Join us at Lake Area Tech and kick start your journey towards a rewarding career in automation. With our state-of-the-art facilities, industry-focused curriculum, and unwavering commitment to student success, we are dedicated to empowering you with the skills and knowledge needed to thrive in the ever-evolving world of automated systems. Don't miss out on the opportunity to be part of this exciting field – enroll with us today and take the first step towards a bright and promising future!

A laptop is required for this program.

Learn more at **www.lakeareatech.edu**

Click here to view the Robotics webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

Get your Robotics degree online. For more information, click here.

SURGICAL Technology

Graduates in Demand

Do you dream of a career where you're an integral part of a team of medical practitioners providing the highest level of safe, surgical care to patients?

Surgical Technology, Lake Area Tech's newest healthcare program, just might be the perfect career path for you! Industry demand for surgical technologists is critical, meaning jobs in this high-demand profession will be waiting for graduates.

What can I expect?

The objective of the program is to prepare entry-level Surgical Technologists who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

Students in the 20-month Surgical Technology program will study theory and practice hands-on applications that ensure an operating room is safe, equipment functions properly, and the operative procedure is conducted under conditions that maximize patient safety. Program learning objectives include sterilization procedures; preoperative, intraoperative, and postoperative procedures; as well as perioperative case management.

The curriculum prepares students to become highly skilled in:

- Preparing the operating room, including a sterile table set up with instruments, supplies, equipment, and medications/solutions
- Assisting the surgeon with handling instruments, fluids, and supplies
- Performing a supply count
- Monitoring and adjusting sterilizers, lights, suction machines, or diagnostic equipment
- Performing post-procedure activities including instrument decontamination and sterilization of instruments

In addition to on-campus training, Surgical Tech students are required to complete clinicals at an approved healthcare facility. Graduates of the Surgical Technology program will be prepared to take the national Certified Surgical Technologist (CST) exam.

Lake Area Technical College's curriculum for Surgical Technology meets the educational requirements for professional certification. Professional certifications are recognized nationwide. Read more here regarding Professional Licensure Disclosures.

Click here to view the Surgical Technology webpage and course outline.

Lake Area Technical College: superior, comprehensive technical education that changes lives and launches careers.

WELDING
Technology

Graduates in Demand
A profession known for its versatility, welding and fabrication can be applied in countless industries. Welders—especially those trained in the latest technology—are in constant, nationwide demand.

What can I expect?
Our program features hands-on, interactive training in our spacious welding facility, which features OSHA standard ventilation and customized welding booths. You'll learn pipe welding oxy-acetylene safety and welding, air carbon arc cutting, SMAW & GMAW welding, aluminum tig, and push/pull welding. Students will also complete a capstone project.

You can expect the latest and best in welding instruction, including learning to operate automated (robotic) welding equipment. You'll also be exposed to related skills, like basic electricity, shop math, and blueprint reading.

As a graduate of our program, you'll be eligible to take the American Welding Society Certification Guided Bend Test on 3/8 inch steel in the vertical and overhead position, using shielded-metal arc welding, gas-metal arc welding or flux-cored arc welding.

You have options!
As a welding student at Lake Area Tech, you can complete your diploma degree in nine short months, go on to earn your Associate of Applied Science degree in 18 months, or choose the A.A.S. degree with a Marketing & Management option or Precision Machining option. See links below for those course outlines.

Careers
Welders who are skilled in the techniques, materials, designs, and new applications of the welding process can expect lots of opportunities and career advancement. Welders have a wide array of career choices including welder operator, repair and maintenance welder, pipeline welder, welding supervisor, welding inspector, welding technician and welding engineer.

Click here to view the Welding webpage and course outlines.

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COURSE Descriptions

ABP 100 BASIC SHEET METAL REPAIR
This course reviews shop safety when working on steel and aluminum, identifies characteristics of automotive sheet metal, and analyzes sheet metal damage and practice repair procedures. 4 credits

ABP 105 REFINISH PREP AND MASKING
Students will Understand the procedures of surface prep and how solvents are used in the refinish industry. Also identify types of masking material and proper technique. 2 credits

ABP 110 BODY DAMAGE REPAIR
This course will review shop safety when working with air tools and abrasives. Students will understand surface preparation and panel repairs using body fillers. 2 credits

ABP 115 SAFETY
Students will practice shop safety in an auto body and painting environment. Safety is a must to protect individuals and co-workers from injury or harm. 1 credit

ABP 120 UNDERCOATS AND SPRAY TECHNIQUES
Students will safely operate refinish equipment with proper technique and understand the refinishing process. 3 credits

ABP 125 INDUSTRY AND VEHICLE INTRODUCTION
Students will gain an understanding of the auto body industry and become familiar with vehicles and the specialty tools involved in the disassembly and assembly process. 1 credit

ABP 130 INTRODUCTION TO WELDING
Review and understand all safety precautions affiliated with the welding process. Perform the welding procedure on automotive sheet metal as required. 3 credits

ABP 135 AUTOMOTIVE PAINTING
Students will review and fully understand the application of under coats and understand the top coat process. 3 credits

ABP 140 PAINT DEFECTS/CAUSES & CURES
Students will identify paint defects and understand methods of prevention. 2 credits

ABP 145 FINAL DETAILING
Students will safely and effectively operate shop equipment and gain complete knowledge of the paint detailing process. 2 credits

ABP 150 INDUSTRIAL PAINTING
Safely operate spray equipment with proper technique and demonstrate the industrial refinish process. 3 credits

ABP 155 INTRO TO COLLISION ESTIMATING
Students will identify how to read and write a basic automotive collision estimator repair using the specified Crash Book. 1/2 credit

ABP 160 AUTOMOTIVE GLASS INSTALLATION
Safely operate tools and perform correct removal and installation of auto glass. 2 credits

ABP 200 AUTOBODY MINOR COLLISION
Remove dents adjust exterior panels, remove clips, repair damage, refinish and reassemble to industry standards. 3 credits

ABP 205 WATER SOLVENT BLENDING AND TINTING
This course teaches the student to understand blinding and tinting techniques, in theory or practice, using solvent or waterborne paints. 4 credits.

ABP 210 AUTOBODY STRUCTURAL REPAIR
Students will analyze vehicle damage of the frame or unibody and identify how to repair or replace damaged parts. Students will also identify the difference between body pulls and frame pulls on frame rack. 3 credits

ABP 215 WATER-BORNE PAINTING
Students will be able to mix, spray, and troubleshoot problems dealing with waterborne products to industry standards. 4 credits

ABP 220 PLASTIC REPAIR AND PAINT
Students will repair a gouge and/or cut in a plastic bumper, cover with repair compound, or plastic welder and refinish to industry standards 2 credits

ABP 225 AUTOBODY MAJOR COLLISION
Students will analyze and reverse damage, disassemble and repair and/or replace anything to do with extensive damage to vehicle including refinishing and detailing to industry standards. 3 credits

ABP 230 FABRICATION
Students will be able to use shop supplied tools safely to shape sheet metal. Students will be able to use straight edge, contour gauge, and scribe to map out sheet metal; along with miscellaneous hammers, dollies and anvils to shape sheet metal. 1 credit

ABP 235 COMPUTERIZED ESTIMATING
Students will identify how to read and write a basic automotive estimate collision or repair using computerized software. 1 credit

ABP 240 BODY AND PAINT PRODUCTION
Students will review and understand production body shop practices that involve, the tracking of pre-repair vehicle inspections, assigning Repair Order (RO) numbers, reading estimates and ordering parts needed to complete the vehicle repair, cycle times and pre customer delivery inspections. 6 credits

ABP 245 INTRODUCTION TO TIG, ALUMINUM & SILICON WELDING
Students will set up a Tig welder and weld 20 gauge metal and also perform six welds to be graded. 1 credit

ABP 250 AIR-BRUSHING & SPECIAL EFFECTS
Students will learn and demonstrate proper air brush techniques and complete projects with special effects. 1 credit

ACCT 210 PRINCIPLES OF ACCOUNTING I
An introductory course in the recording, reporting, and analysis of business transactions of sole proprietorships. 3 credits

ACCT 211 PRINCIPLES OF ACCOUNTING II
This course provides a thorough understanding of basic accounting concepts and techniques as they are applied to business. Involves analysis and use of accounting practices for partnerships and corporations. Cash-flow statements and financial statements are prepared. Accounting 210 must be successfully completed before enrolling in this class. 3 credits

ACCT 214 COST ACCOUNTING
This course provides the student with a thorough understanding of cost concepts, cost behavior, and cost accounting techniques as they are applied to manufacturing cost systems. Accounting 210 must be successfully completed before enrolling in this class. 3 credits

ACCT 218 TAX ACCOUNTING I
This introductory course will provide a thorough understanding of basic federal income tax. Prerequisite: ACCT 210 – Principles of Accounting I 3 credits

ACCT 220 COMPUTER ACCOUNTING APPLICATIONS
This course will reinforce the accounting concepts learned throughout the Financial Services program while learning to utilize QuickBooks accounting software. Prerequisite: ACCT 210 – Principles of Accounting I 3 credits

ACCT 222 PAYROLL ACCOUNTING
The student will possess an appreciation and an understanding of the personnel and payroll records that provide the information required under the numerous laws affecting the operations of a payroll system. Accounting 210 must be successfully completed before enrolling in this class. 3 credits

ACCT 224 FINANCIAL STATEMENT ANALYSIS

The student will gain knowledge of financial statements, analysis of liquidity, profitability and solvency. Use of ratio analysis, comparative analysis, company norms and industry average in the evaluation of a business. Prerequisite: ACCT 211 - Principles of Accounting II. 3 credits

ACCT 230 PRINCIPLES OF ACCOUNTING III

Provides an in-depth understanding of basic to intermediate accounting concepts and techniques as they are applied to business as well as an overview of the accounting profession. Accounting 210 and 211 must be successfully completed before enrolling in this class. 3 credits

ACCT 233 PRINCIPLES OF ACCOUNTING IV

Provides an in-depth understanding of basic to intermediate accounting concepts and techniques as they are applied to business as well as an overview of the accounting profession. Accounting 210 and 211 must be successfully completed before enrolling in this class. 3 credits

ACCT 235 TAX ACCOUNTING II

This course will equip students with the skills and certification necessary to prepare income tax returns for the low-income and elderly under the IRS VITA (Volunteer Income Tax Assistance) Program. Customer service and positive communication skills will also be practiced. Accounting 218 must be successfully completed before enrolling in this class. 2 credits

ACCT 237 APPLIED FEDERAL INCOME TAX

This course will allow students to prepare income tax returns for the low-income and elderly under the IRS VITA (Volunteer Income Tax Assistance) Program. They will also learn how to electronically file a tax return. Customer service and positive communication skills will also be practiced. Accounting 235 must be successfully completed before enrolling in this class. Concurrent with ACCT 235 - Tax Accounting II 1 credit

AED 100 AUTOMATED EXTERNAL DEFIBRILLATOR

To prepare individuals in the workplace to provide care for breathing emergencies, perform cardiopulmonary resuscitation (CPR) and use an automated external defibrillator (AED) for victims of sudden cardiac arrest. 1/2 credit

AG 100 SOIL SCIENCE

This course is an overview of soil and how we may manage a piece of land properly. Students will study glacial development of soil, structure, texture, soil type, soil chemistry, organic matter, and practices that will improve and protect the soil. The challenge will be to improve the soil over the long-term. Recently the ag society started to use methods by which soils were maintained or improved can you recommend them as an agronomist or how to use them on a farm or ranch. 3 credits

AG 102 CROP SCIENCE

The world's growing population and the technological changes in agriculture have created an atmosphere that is very intriguing and very fast-paced. The opportunities that are available have expanded greatly in recent years. This course will focus on growth stages of crops grown in the Midwest and also the different techniques used to grow those crops. 3 credits

AG 106 ANIMAL HEALTH I

Animal Health I is designed to provide the student with the basic knowledge of what causes diseases in livestock, how to identify livestock that are affected by different diseases, and basic treatment applications of medicines to those livestock. 3 credits

AG 122 FERTILIZERS

Students will learn to discuss the need for fertilizers, identify the different fertilizer needs for different soils and different crops, explain bulk blending, compute a bulk blend, and compute cost of fertilizer. 3 credits

AG 124 AG CHEMICALS

This course is designed to familiarize the student with resources and information required to develop a sound agronomic crop plan. AG 124 will prepare students for positions as agronomists who will be making these recommendations to area producers. 3 credits

AG 126 WEED MANAGEMENT

Coursework includes training to meet federal certification: recognition of pests and noxious weeds; selection, application and disposal of chemicals; construction of a field-mapping system. 3 credits

AG 135 FARM POWER/ENGINES

Discusses engine principles and design, safety, oil, fuel and coolant selection, and general engine and tractor maintenance principles. 2 credit

AG 159 FARM/RANCH RECORDS

(Financial Services) Application of standard financial procedures, using the computer to record, compile and complete typical financial records for farming operation projections. 3 credits

AG 200 ANIMAL NUTRITION

Animal nutrition is a very important aspect of raising animals so they can reach their maximum production level. This course will give the student a better understanding of the digestive system of different animal species; the essential nutrients required by all animals to live, maintain, grow, and reproduce; along with an understanding of the commercial feed industry. 2 credits

AG 214 AG CHEMICAL EQUIPMENT

This course is designed to familiarize the student with skills needed to operate effectively in custom application industry. This course will also prepare the student for a career in the field of custom application by completing and mastering the specific student outcomes. 2 credits

AG 216 FARM POWER/ELECTRICAL WIRING

Every farm depends on electricity on a day to day basis, whether that be ensuring livestock are fed, drying and transporting grain, or simply plugging in a grinder in the shop. This class aims to give students a basic understanding of electricity as well as the knowledge to install and repair simple electrical circuits. 2 credits

AG 226 COMMODITY MARKETING

Maximizing farm profit; using the futures market; hedging; avoiding dangers of speculation; participating in the options market; developing a personal market strategy. 3 credits

AG 247 BUSINESS SUPERVISED OCCUPATIONAL EXPERIENCE III (SOE)

Students will be provided the opportunity to gain hands-on practical experience through internships provided by members of the agricultural industry. This could include coops, seed dealers, chemical retailers and any other opportunities that offer service to our area producers in the farming community. 6 credits

AGR 101 BASIC ANIMAL HUSBANDRY

This course will familiarize students with livestock behavior and facility management for optimal health and well-being of livestock animals. This course is designed to familiarize students with handling livestock safely and humanely. 1.5 credits

AGR 103 BREEDING PRACTICES AND TECHNIQUES

This course will provide a basic introduction to the physiological mechanisms that control and affect reproductive processes in livestock species and how they can be manipulated. Students will be able to apply these basic concepts in managing livestock reproduction. Artificial insemination (hands-on) will be covered every year (extra fees apply). 1 1/2 credits

AGR 105 AG SAFETY

Agriculture is a very diverse industry, encompassing all sorts of jobs, opportunities, and potential safety hazards. This class is designed to provide students with some basic knowledge in regards to being safe in many agricultural settings, as well as provide information about different rules, regulation, and rights employees have in terms of their safety and well-being. 1 credit

AGR 107 EQUINE SCIENCE
This course introduces students to the equine industry. Topics covered will include equine evolution, domestication, industry, colors, breeds, parts and systems. 3 credits

AGR 110 ANIMAL SCIENCE
To provide a basic understanding of Animal Science as related to nutrition, genetics, reproduction, and the industry of beef, swine, and sheep. 3 credits

AGR 116 SHEEP/GOAT PRODUCTION
This course introduces basic sheep/goat management principles. Students will study the year around management and production cycle of a sheep/goat enterprise and how each production stage influences enterprise profitability. This course also studies the philosophy of sheep/goat management and its relationship to business goals. 1 credit

AGR 117 LIVESTOCK PRODUCTION & MANAGEMENT SUPERVISED OCCUPATIONAL EXPERIENCE (S.O.E.)
Students will gain hands-on, practical experience through an internship at their own ranch or other ranch that will offer an opportunity to utilize the skills and applications learned in the classroom. 6 credits

AGR 118 SOIL AND WATER MANAGEMENT
Topics include water quality, the relationship between soil and water, identification of water sources, and South Dakota law affecting water usage. 3 credits

AGR 119 PRECISION SUPERVISED OCCUPATIONAL EXPERIENCE I (S.O.E.)
Students will gain hands-on practical experience through internships provided by members of the agricultural industry. This could include coops, seed dealers, chemical retailers and any other opportunities that offer service to our area producers in the farming community. 6 credits

AGR 120 SEED AND GRAIN TECHNOLOGY
Stored grain is one of the most liquid assets a producer or elevator has to market. As such, knowledge behind preserving stored grain as well as the systems necessary to do so are key. Seed technology has also come a considerable ways recently, with advances in genetics, treatments, and agronomic knowledge based on selecting hybrids. This class strives to provide some introductory knowledge to both of these topics. 2 credits

AGR 121 INTRO TO PRECISION AG
Students will learn how the GPS system operates and how signal is corrected. Students will also learn basic components of Ag precision equipment along with set-up, navigation, and basic use. Students will demonstrate basic computer management skills that they will need for their internship and fall courses. 3 credits

AGR 124 AG CHEMICALS
This course is designed to familiarize the student with resources and information required to develop a sound agronomic crop plan and will prepare students for positions as agronomists who will be making these recommendations to area producers. 2 credits

AGR 125 PRECISION SUPERVISED OCCUPATIONAL EXPERIENCE II (S.O.E.)
Students will gain hands-on practical experience through internships provided by members of the agricultural industry. This could include coops, seed dealers, chemical retailers and any other opportunities that offer service to our area producers in the farming community. 5 credits

AGR 149 SWINE SCIENCE
This course will provide a basic introduction into the swine industry and familiarize the student with the scientific principles of swine science and the practical art of implementing those principles. 3 credits

AGR 156 FARM MANAGEMENT I
Student will gain practical experience in setting goals, conducting financial analysis, and building various budgets that can be used in the farm business. 3 credits

AGR 157 DAIRY SUPERVISED OCCUPATIONAL EXPERIENCE (SOE)
Students will be have the opportunity to gain hands-on practical experience through an internship on a local commercial dairy operation. Primary areas of focus will be dairy herdsmanship, milking, feeding, calf care and general farm duties. 6 credits

AGR 162 CO-OP PRINCIPLES
Identification of the structure and scope of American cooperatives, the economic rationale, marketing and financing concepts, management, and structural dynamics. 2 credits

AGR 163 PRINCIPLES OF SELLING
This course is an overview of the agricultural sales process, including selling, buying, customer relations, strategies, legal and ethical considerations. 3 credits

AGR 165 BUSINESS SUPERVISED OCCUPATIONAL EXPERIENCE I (SOE)
Students will be provided the opportunity to gain hands-on practical experience through internships provided by members of the agricultural industry. This could include coops, seed dealers, chemical retailers and any other opportunities that offer service to our area producers in the farming community. 6 credits

AGR 166 COMMODITY SUPERVISED OCCUPATIONAL EXPERIENCE I (SOE)
Students will gain hands-on practical experience through internships provided by members of the agricultural industry. This could include coops, seed dealers, chemical retailers and any other opportunities that offer service to our area producers in the farming community. 6 credits

AGR 167 BUSINESS SUPERVISED OCCUPATIONAL EXPERIENCE II (SOE)
Students will be provided the opportunity to gain hands-on practical experience through internships provided by members of the agricultural industry. This could include coops, seed dealers, chemical retailers and any other opportunities that offer service to our area producers in the farming community. 5 credits

AGR 169 PRODUCTION SUPERVISED OCCUPATIONAL EXPERIENCE I (SOE)
To achieve proficiency in general management skills, students work at an established farm/ranch, usually their homes. Structured assignments must be completed. Instructors will visit the sites several times during this period. 6 credits

AGR 170 DAIRY SCIENCE
This course will provide a basic introduction into the dairy industry and familiarize the student with the scientific principles of dairy science and the practical art of implementing those principles. 3 credits

AGR 176 COMMODITY SUPERVISED OCCUPATIONAL EXPERIENCE II (SOE)
Students will gain hands-on practical experience through internships provided by members of the agricultural industry. This could include coops, seed dealers, chemical retailers and any other opportunities that offer service to our area producers in the farming community. 5 credits

AGR 178 GENERAL SCIENCE SUPERVISED OCCUPATIONAL EXPERIENCE I
Students will gain hands-on practical experience through internships provided by members of the agricultural industry. 6 credits

AGR 180 ARTIFICIAL INSEMINATION (AI) CERTIFICATION
1 credit

AGR 201 MEDICAL TERMINOLOGY
Students will learn to articulate fluently medical terminology used within the large animal and veterinary fields. 3 credits

AGR 202 LIVESTOCK NUTRITION PROBLEMS

Livestock Nutrition Problems is intended for students with interest in the principles, as well as the application of livestock nutrition and feeding. 2 credits

AGR 204 ANIMAL HEALTH II
Animal Health II is designed to provide the student with the basic knowledge of the different diseases that most commonly affect livestock. The student will become familiar with disease symptoms to properly diagnose the affected livestock along with which medications to administer for that disease. 3 credits

AGR 205 TREATMENT OF ANIMAL INJURIES
Students will collect various samples from livestock animals, conduct routine treatments and demonstrate methods of treating common diseases and injuries of livestock animals. 3 credits

AGR 209 BIOLOGICS AND PHARMACEUTICAL
Students will develop pharmaceutical and vaccination protocols for large livestock, determine accurate withdrawal times, and apply safe handling practices for animals and products. 2 credits

AGR 210 FORAGES AND GRASSES
Production and management of common forages and grasses; management of tame pastures and rangelands; and various aspects of grazing practices. 3 credits

AGR 211 ANIMAL ANATOMY
Students will evaluate the anatomy and physiology of the animal body: specifically, cattle sheep and swine. Upon completion, students will be able to identify anatomical structures, describe basic functions and vital processes for all body systems. 3 credits

AGR 212 PLANT DISEASE/INSECT IDENTIFICATION AND CONTROL
A field can be a great sense of pride for both a producer as well as an agronomist. However, it can also be a fantastic home for many pest species of insects as well as providing host organisms for diseases. This class is designed to introduce students to the identification process of major crop pests and diseases. 3 credits

AGR 215 ADVANCED FERTILIZERS, SOILS AND WASTE MANAGEMENT
In this class students will plan the nutrition program for a specific piece of ground. The student will also explore different ways to fertilize the ground besides the use of commercial fertilizer. 3 credits

AGR 217 ELECTRONIC COMPONENTS AND TROUBLE SHOOTING
This course is designed as a study of the various electronic components that a person may encounter on most precision controlled equipment. It will include identification of various parts and the trouble shooting of those components. 2 credits

AGR 223 ADVANCED COMPUTER APPLICATIONS FOR AGRICULTURE
Student will gain a working knowledge of the various file systems and advanced equipment used in precision agriculture. Students will be able to identify file systems used by various precision Ag manufactures, their structure, and how to convert files to work with other manufactures. Student will also gain a working knowledge of advanced components in the precision agriculture industry. Also, students will have experience in setting up field computers and equipment to be used in the precision agriculture field. 3 credits

AGR 227 PRECISION AG TOOLS
Through the use of collected data and geographical information systems, students will learn how to identify variability that may exist in production fields. Based on the field's variability students will learn how to create management zones and write prescriptions to manage variability. 3 credits

AGR 232 FARM MANAGEMENT II
Farm Management II will introduce the student to a variety of topics that will prepare the student to make well-formed decisions in production agriculture. 3 credits

AGR 233 COMMODITY FUTURES AND OPTIONS
An overview of key topics in the futures industry such as futures fundamentals, hedging, basis, price analysis and options on futures. 3 credits

AGR 235 COMMODITY MERCHANDISING
Teaches the skills of basis trading; position reports, grain accounting; selling and customer service. 3 credits

AGR 236 BUSINESS MANAGEMENT I
This course is designed to expose the student to the business world and how both internal and external forces effect the success of the organization as a whole. AGR 236 is here to help prepare those students that will become managers of retail locations in the Ag industry. 3 credits

AGR 237 BUSINESS LAW AND SUPERVISION
Develop knowledge and skills in planning, organization, communication, motivation and leadership. An important course for anyone, especially in the business of agriculture. 3 credits

AGR 239 MICROSOFT EXCEL FOR AG
Students will learn how MS Excel spreadsheets can be used to organize, consolidate, analyze, and report agricultural industry data to aid in decision making and record keeping in the agriculture setting. 1 credit

AGR 241 FARM MACHINERY
Students will demonstrate the use of farm machinery during harvest time. 4 credits

AGR 243 FINANCIAL STATEMENT ANALYSIS FOR AG
Students will gain a basic understanding of financial statements relative to the ag industry. 3 credits

AGR 247 PRECISION SUPERVISED OCCUPATIONAL EXPERIENCE III (SOE)
Students will gain hands-on practical experience through internships provided by members of the agricultural industry. This could include coops, seed dealers, chemical retailers and any other opportunities that offer service to our area producers in the farming community. 6 credits

AGR 249 PRODUCTION SUPERVISED OCCUPATIONAL EXPERIENCE II (SOE)
To achieve proficiency in general farm/ranch management skills, students will work at an established farm/ranch, usually their homes. Structured assignments must be completed. Sixty internship hours must be completed in Animal Health and for agronomy related business. Instructors will visit the sites several times during this period. 6 credits

AGR 251 INTRO TO RANGE MANAGEMENT AND PLANTS
This course will cover the basic principles of range management which includes plant identification, range evaluation, and range improvements. 2 credits

AGR 252 ADVANCED NUTRITION
Advanced Nutrition is a very important aspect of raising livestock so they can reach their maximum production level. This course will give the student a better understanding of the principles of feeding, management, and proper care of stock cows, heifers, and bulls. 3 credits

AGR 254 BEEF PRODUCTION
This course includes an overview of the United States and national beef industry including an introduction to the segments of the beef production chain and the scope of the industry 2 credits

AGR 255 DAIRY HERD MANAGEMENT
This course is designed to familiarize students the management of a dairy herd. This will include current trends in the industry, facility development and maintenance, the importance of cow comfort, health and nutrition, record keeping, and development of replacement animals. 2 credits

AGR 257 MILK PRODUCTION
This course is designed to familiarize students with the fundamentals of the dairy industry as it relates to the most crucial component: milk. This will include nutrition, milk quality and the most recent trends in the industry. 1 credit

AGR 259 DAIRY SUPERVISED OCCUPATIONAL EXPERIENCE II (SOE)
Students will be provided the opportunity to gain hands-on practical experience through an internship on a local commercial dairy operation. Primary areas of focus will be dairy herdsmanship, milking, feeding, calf care and general farm duties. 6 credits

AGR 261 LIVESTOCK MARKETING AND EVALUATION
Students will study the market structures and organization of the livestock industry. Emphasis will be on factors affecting prices, changing competitive arrangements, and marketing problems facing farmers and ranchers. Additional emphasis will be placed on the development of a logical marketing plan. 3 credits

AGR 262 PRECISION AGRICULTURE/DATA COLLECTION
Precision Ag Data Collection prepares students in the use of software applications in agriculture. Students will use mobile and desktop application to analyze, manipulate, and create data used in the production agriculture industry. 2 credits

AGR 263 LIVESTOCK PRODUCTION & MANAGEMENT SUPERVISED OCCUPATIONAL EXPERIENCE (SOE)
Students will gain hands-on, practical experience through a second internship at their own ranch or other ranch that will offer an opportunity to utilize the skills and applications learned in the classroom. 6 credits

AGR 265 FARM MACHINERY COMPONENTS
Students will use critical thinking skills to troubleshoot machinery in a specific operation. After we identify the risk we will also determine how to minimize it. 2 credits

AGR 266 FARM CONSTRUCTION
All production farms rely heavily on structures to house livestock, equipment, and stored commodities. The purpose of this class is to familiarize students with the basics in safety, working with power tools, and general carpentry work. 2 credits

AGR 268 SWINE NURSERY FINISHING MANAGEMENT
Students will learn to manage reproduction efficiency, as well as growing and marketing hogs. 2 credits

AGR 276 COMMODITY SUPERVISED OCCUPATIONAL EXPERIENCE III (SOE)
Students will gain hands-on practical experience through internships provided by members of the agricultural industry. This could include coops, seed dealers, chemical retailers and any other opportunities that offer service to our area producers in the farming community. 6 credits

AGR 278 GENERAL SCIENCE SUPERVISED OCCUPATIONAL EXPERIENCE II
Students will gain hands-on practical experience through internships provided by members of the agricultural industry. 6 credits

ANAT 142 ANATOMY*
A study of cells, tissues and organs making up the integumentary, muscular, skeletal, nervous, endocrine, digestive, respiratory, lymphatic and urinary systems of the body. Emphasis is on structure and function of the systems and the relationship of the body structures (anatomy) to their function (physiology). 3 credits *College transferable.

AT 100 SAFETY
Safety practices in the lab. 1/2 credit

AT 107 INTRODUCTION TO BRAKE SYSTEMS
After completing the reading assignments, review questions, terms, study guide handouts, and chapter tests, the student will be able to identify, describe, and explain the operation of and/or the theoretical principles of the entire automotive brake systems. 2.5 credits

AT 108 BRAKE SYSTEMS DIAGNOSTICS
After completing the reading assignments, review questions, terms, study guide handouts, and chapter tests, the student will be able to identify, describe, and explain the operation of and/or the theoretical principles of the entire automotive brake systems. 3 credits

AT 119 INTRODUCTION TO STEERING, SUSPENSION, AND DRIVETRAIN SYSTEMS
After completing the reading assignments, review questions, terms, study guide handouts, and chapter tests, the student will be able to identify, describe, and explain the operation of and/or the theoretical principles of the entire automotive steering suspension and drive axle systems. 3.5 credits

AT 122 STEERING, SUSPENSION, AND DRIVETRAIN DIAGNOSTICS
After completing the reading assignments, review questions, terms, study guide handouts and chapter test, the student will be able to identify, describe, and explain the operation of and/or the theoretical principles of the entire automotive steering suspension and drive axle systems. 5 credits

AT 146 INTRODUCTION TO HEATING AND AIR CONDITIONING
After completing the reading assignments, review questions, terms, study guide handouts and chapter test, the student will be able to identify, describe, and explain the operation of and/or the theoretical principles of the entire automotive HVAC system. 2 credits

AT 148 HEATING AND AIR CONDITIONING DIAGNOSTICS
After completing the reading assignments, review questions, terms, study guide handouts and chapter test, the student will be able to identify, describe, and explain the operation of and/or the theoretical principles of the entire automotive HVAC system. 3 credits

AT 155 INTRODUCTION TO ELECTRICAL/ELECTRONIC SYSTEMS
Reading wiring diagrams and determining diagnostic procedures for the automotive electrical circuits. 3 1/2 credits

AT 156 ELECTRICAL/ELECTRONIC SYSTEMS DIAGNOSTICS
After completing the reading assignments, review questions, terms, study guide handouts and chapter test, the student will be able to identify, describe, and explain the operation of and/or the theoretical principles of the entire automotive Electrical and electronic system. 6 credits

AT 201 INTRODUCTION TO MANUAL TRANSMISSION/TRANSAXLE
This course is designed to help the students understand proper techniques and cognitive skills required to diagnosis, repair, and rebuild manual transmissions. These skills will be demonstrated and tested through both hands on experience in shop and structured lecture in theory. Information delivery for this course is provided through visual, auditory, physical aids. 2 credits

AT 202 INTRO TO LIGHT DUTY DRIVE TRAIN/TRANSAXLE
This course is designed to develop students ability to understand manual drive train construction, theory of operation, and to diagnose failures and make proper repairs. 2 credits

AT 204 LIGHT DUTY DRIVE TRAIN/TRANSAXLE DIAGNOSIS
This course covers proper techniques and cognitive skills required to diagnosis, repair, and rebuild manual transmissions. These skills will be demonstrated and tested through both hands-on experience in lab and structured lecture in theory. 2 credits

AT 205 INTRO TO ELECTRIC & HYBRID VEHICLES
Introduction to electric and hybrid vehicles to comply with personal and environmental safety practices. 1 credit

AT 208 DIAGNOSIS OF MANUAL TRANSMISSIONS/ TRANSAXLE
This course is designed to develop the student's ability to understand automatic transmission construction and theory of operation, diagnose failures, and make proper repairs. 2 credits

AT 211 INTRODUCTION TO ELECTRIC VEHICLES & HYBRID POWERTRAINS
Identify, name, and describe various components of the electric vehicle and Hybrid vehicles' automatic transmission and how they interact to create a single operating component. 3 credits

AT 212 INTRODUCTION TO AUTOMATIC TRANSMISSIONS/ TRANSAXLE
This course is designed to develop the student's ability to understand automatic transmission construction and theory of operation, diagnose failures and make proper repairs. 2 credits

AT 213 ELECTRIC VEHICLES & HYBRID POWERTRAIN DIAGNOSTICS
Recognize, identify, and interpret common electric vehicle and hybrid vehicles' transmission concerns and failures. 5 credits

AT 217 DIAGNOSIS OF AUTOMATIC TRANSMISSIONS/ TRANSAXLE
This course is designed to develop the student's ability to understand automatic transmission construction and theory of operation, diagnose failures and make proper repairs. 4 credits

AT 220 INTRO TO LIGHT DUTY AUTOMATIC TRANSMISSIONS/TRANSAXLE
This course is designed to develop the student's ability to understand automatic transmission construction and theory of operation, diagnose failures and make proper repairs. 2 credits

AT 221 INTRODUCTION TO ENGINE REPAIR
This course is designed to help the students understand proper techniques and cognitive skills required to diagnosis, repair, and rebuild modern and late model engines. These skills will be demonstrated and tested through both hands on experience in lab and structured lecture in theory. Information delivery for this course is provided through visual, auditory, physical aids. 2 credits

AT 222 LIGHT DUTY AUTOMATIC TRANSMISSIONS/ TRANSAXLE DIAGNOSTICS
This course covers proper techniques and cognitive skills required to diagnosis, repair, and rebuild automatic transmissions. These skills will be demonstrated and tested through both hands on experience in lab and structured lecture in theory. 4 credits

AT 223 INTRODUCTION TO REGEN BRAKING AND ELECTRIC POWER STEERING
Identify and describe the operation and theoretical principles of electric vehicles and hybrid automotive brake systems, steering suspension, and drive axle systems. 2 credits

AT 225 ENGINE REPAIR DIAGNOSTICS
This course is designed to expose the student to actual engine diagnosis, disassembly, measurements and reassembly. 3 credits

AT 226 INTRO TO LIGHT DUTY ENGINE REPAIR
This course is designed to help the students understand proper techniques and cognitive skills required to diagnosis, repair, and rebuild modern and late model diesel engines. These skills will be demonstrated and tested through both hands-on experience in lab and structured lecture in theory. 2 credits

AT 228 LIGHT DUTY ENGINE REPAIR DIAGNOSTICS
This course is designed to expose the student to actual engine diagnosis, disassembly, measurements and reassembly. 3 credits

AT 229 REGEN BRAKING & ELECTRIC POWER STEERING DIAGNOSTICS
Recognize, identify, and interpret the operation of EN and Hybrid automotive brake systems, steering suspension, and drive axle systems. 4 credits

AT 231 INTRODUCTION TO PLUG-IN ELECTRIC VEHICLES & HYBRID FUEL CELL TECHNOLOGY
Identify and describe the operation and theoretical principles of fuel cell size, combinations with additional power supply devices, and use as a secondary power source. 2 credits

AT 232 INTRO TO LIGHT DUTY ENGINE PERFORMANCE
This course exposes the students to proper techniques and cognitive skills required to diagnosis and repair engine performance related concerns on light duty diesel engines. These skills will be demonstrated and tested through both hands on experience in lab and structured lecture in theory. 4 credits

AT 234 LIGHT DUTY ENGINE PERFORMANCE DIAGNOSTICS
This course covers how to locate, identify, test, and remove and replace diesel engine performance components and automotive computer and computer components. 8 credits

AT 235 PLUG-IN ELECTRIC VEHICLES & HYBRID FUEL CELL TECHNOLOGY DIAGNOSTICS
Recognize, identify, and interpret the operation of fuel cell size, combining with additional power supply devices, and use as a secondary power source. 3 credits

AT 237 INTRODUCTION TO ELECTRICAL VEHICLES & HYBRID ANALYZING AND DIAGNOSTICS
Test, analyze, and interpret engine performance related concerns on electric vehicles and Hybrid automobiles. 4 credits

AT 240 ELECTRIC VEHICLES & HYBRID ANALYZING AND DIAGNOSIS DIAGNOSTICS I
Remove and replace electric vehicle and hybrid computer and computer components, ignition system components, and emission control systems on hybrid cars. 3 credits

AT 241 ELECTRIC VEHICLES & HYBRID ANALYZING AND DIAGNOSIS DIAGNOSTICS II
Remove and replace electric vehicle and hybrid computer and computer components, ignition system components, and emission control systems on hybrid cars. 3 credits

AT 259 INTRODUCTION TO ENGINE PERFORMANCE
After completing the reading assignments and study guide handouts, the student will be able to identify, describe, and explain the operation of and/or the theoretical principles of engine performance. 4 credits

AT 263 ENGINE PERFORMANCE DIAGNOSTICS
Students will test, analyze, interpret, remove and replace automotive computer and computer components, gasoline injection type fuel system components, gasoline injection type ignition system components and computer-controlled components of the emission control systems as they relate to driver, driveability, and emission concerns. 8 credits

AT 264 LIGHT DUTY AUTOMATIC TRANSMISSION/ TRANSAXLES A 1 credit

AT 266 LIGHT DUTY ENGINE REPAIR A 1 credit

AT 268 LIGHT DUTY ENGINE PERFORMANCE A 2 credits

AT 274 LIGHT DUTY ENGINE PERFORMANCE DIAGNOSTICS 5 credits

AT 277 LIGHT DUTY STEERING, SUSPENSION AND ALIGNMENT A 1 credit

AT 278 LIGHT DUTY SHOP PRODUCTION 2 credits

AT 280 LIGHT DUTY ADVANCED SHOP PRODUCTION 3 credits

AT 282 LIGHT DUTY AUTO TRANSMISSION/TRANSAXLE DIAGNOSTICS 3 credits

AVM 100 FEDERAL AVIATION REGULATION PUBLICATIONS
Exercise mechanic privileges within limitations; demonstrate ability to read, comprehend, and apply information contained in FAA and manufacturers aircraft maintenance specifications, data sheets, manuals, publications, and related federal aviation regulations, airworthiness directives, and advisory material; read

technical data; write descriptions of aircraft discrepancies and corrective actions using typical aircraft maintenance records; complete required maintenance forms, records, and inspection reports. 1 1/2 credits

AVM 103 APPLIED MATHEMATICS/AIRCRAFT WEIGHT AND BALANCE

This course will provide students with the knowledge and skills necessary to pass the FAA GENERAL written, Oral, and Practical tests. Students are encouraged to reference the latest revision of document FAA-S-8081-26A I-C and Section I-H to compare their progress through this course to their capability to pass the FAA certification tests. Students will apply required basic mathematics functions; weigh aircraft; perform complete weight forms, records, and inspection reports, and balance check and record data. 2 1/2 credits

AVM 106 PHYSICS/AERODYNAMICS

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of the FAA Mechanic General Practical Test Standard FAA-S-8081-26A area J, Basic Physics to compare their progress through this course to their capability to pass the FAA certification tests. 1 1/2 credits

AVM 109 GROUND OPERATIONS AND SERVICING

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical General tests for certification as an FAA mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-26A Section I-F to compare their progress through this course to their capability to pass the FAA certification tests. 1 credit

AVM 112 AIRCRAFT DRAWINGS

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-26A Section I-B to compare their progress through this course to their capability to pass the FAA certification tests. Students will use symbols and schematic diagrams; draw sketches of repairs and alterations; use blueprint information; use graphs and charts. 1 1/2 credits

AVM 115 MATERIALS AND PROCESSES

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-26A Section I-E to compare their progress through this course to their capability to pass the FAA certification tests. Students will identify and select appropriate nondestructive test methods; perform dye penetrant, eddy current, ultrasonic, magnetic, and particle inspection; perform basic heat-treating processes; identify and select aircraft hardware and materials; inspect and check welds; perform precision measurements. 2 credits

AVM 118 SHOP PRACTICES AND SAFETY

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical GENERAL tests. Students are encouraged to reference the latest revision of document FAA-S-8081-26A to compare their progress through this course to their capability to pass the FAA certification tests. Students will demonstrate safety-wiring bolts; wire a turnbuckle safely, identify and install cotter keys; remove and install a stud; install a helical; manufacture hammer head. 1.5 credits

AVM 121 BASIC ELECTRICITY

During this course you will establish a fundamental working knowledge of electricity that will be a basis for any future learning experience relating to electricity such as airframe electrical, powerplant electrical, ignition and starting systems, and communication/navigation. During this course students will establish a fundamental working knowledge of electricity that will be a basis for any future learning experience relating to electricity such as airframe electrical, powerplant electrical, ignition and starting systems, and communication/navigation. 2 1/2 credits

AVM 124 WELDING AND TUBULAR STRUCTURES

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe mechanic Students are encouraged to reference the latest revision of document FAA-S-8081-27A Section II-E to compare their progress through this course to their capability to pass the FAA certification tests. Students will weld magnesium, titanium, aluminum and stainless steel; fabricate tubular structures; solder, braze, gas-weld, and arc-weld steel. 1 credit

AVM 127 CORROSION CONTROL AND CLEANING

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe mechanic Students are encouraged to reference the latest revision of document FAA-S-8081-27A Section II-E to compare their progress through this course to their capability to pass the FAA certification tests. Students will identify and select cleaning materials; inspect, identify, remove and treat aircraft corrosion; perform aircraft cleaning. 2 credits

AVM 130 ASSEMBLY AND RIGGING

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-27A Section IIF to compare their progress through this course to their capability to pass the FAA certification tests. Students will rig rotary-wing aircraft; rig fixed-wing aircraft; check alignment of structures; assemble aircraft components, including flight-control surfaces; balance, rig, and inspect primary and secondary flight control surfaces; jack aircraft. 1 1/2 credits

AVM 133 AIRFRAME FUELS AND FUEL SYSTEMS

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-26A Section I F and FAA-S-8081-27A Section IIP to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect, service and repair all fuel systems and components; perform fuel management, transfer, and defueling; inspect and repair fluid quantity indication systems; troubleshoot, service, and repair fluid pressure and temperature warning systems. 1 credit

AVM 136 NON-METALLIC/COMPOSITE STRUCTURES

This course prepares students for the wood and non-metallic structures requirements of the FAA Airframe written, oral and practical tests. This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe Mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-27A, Section II A, B, and D to compare their progress through this course to their capability to pass the FAA certification tests. 3 credits

AVM 139 METALLIC STRUCTURES

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe Mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-27A, Section II D to compare their progress through this course to their capability to pass the FAA certification tests. Students will install conventional aircraft rivets; hand-form, lay

out and bend aircraft sheet metal; inspect and repair sheet metal aircraft structures. 3 credits

AVM 142 HYDRAULIC AND PNEUMATIC POWER SYSTEMS/ LINES AND FITTINGS

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe Mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-27A, Section II L to compare their progress through this course to their capability to pass the FAA certification tests. Students will fabricate, install, inspect, check, troubleshoot, and repair hydraulic and pneumatic power systems. 2 credits

AVM 145 LANDING GEAR SYSTEMS

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe Mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-27A, Section III K to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect, check, service and repair landing gear, retraction system, shock struts, brakes, wheels, tires and steering systems. 2 credits

AVM 148 AIRFRAME ELECTRICAL SYSTEMS

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe Mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-27A, Section III Q to compare their progress through this course to their capability to pass the FAA certification tests. Students will repair and inspect aircraft electrical system components. 3 credits

AVM 151 AIRFRAME INSTRUMENT SYSTEMS

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe Mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-27A, Section III N to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect, check, service, troubleshoot and repair electronic flight instrument systems; install instruments and perform a static-pressure leak test. 1 credit

AVM 154 COMMUNICATION AND NAVIGATION SYSTEMS

This course prepares students for the Communication/Navigation requirements of the FAA Airframe written, oral and practical tests. Students will inspect, check, troubleshoot auto-pilot servos and approach-coupling systems; inspect, check and service aircraft electronic communication and navigation systems, including VHF passenger interphones and static-discharge devices, aircraft COR, ILS, omega, flight-management computers, and GPWS. 2 credits

AVM 157 UTILITY SYSTEMS

During this course students will study position and warning systems, ice and rain protection systems, and fire protection systems. This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe Mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-27A, Section III R (Position & Warning), S (Ice & Rain Control Systems), and T (Fire Protection Systems) to compare their progress through this course to their capability to pass the FAA certification tests. 2 1/2 credits

AVM 160 ENVIRONMENTAL SYSTEMS

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe Mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-27A, Section III M to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect, check, troubleshoot, service and repair heating, cooling, pressurization systems, and air cycle machines; air conditioning, oxygen systems. 1 1/2 credits

AVM 163 AIRFRAME INSPECTIONS

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Airframe mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-27A, Section II G to compare their progress through this course to their capability to pass the FAA certification tests. Students will perform airframe conformity and airworthiness inspection. 2 credits

AVM 203 RECIPROCATING ENGINE TECHNOLOGY

This course teaches the student the fundamentals of reciprocating engine construction and operation. It includes knowledge of various engine configurations, performance and integrity assessment, and operational factors that affect engine dependability and longevity. 1 1/2 credits

AVM 206 RECIPROCATING ENGINE MAINTENANCE AND OVERHAUL

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section IV-A & C to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect and repair radial engines; overhaul reciprocating engines; inspect, check, service, and repair reciprocating engines and engine installations. 3 credits

AVM 209 ENGINE REMOVAL AND INSTALLATION

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A to compare their progress through this course to their capability to pass the FAA certification tests. Students will install, troubleshoot, and remove engines. 1 1/2 credits

AVM 212 GAS TURBINE ENGINE TECHNOLOGY

This course teaches the student the fundamentals of gas turbine engine construction and operation. It includes knowledge of various engine configurations, performance and integrity assessment, and operational factors that affect engine dependability and longevity. 1.5 credits

AVM 215 GAS TURBINE ENGINE SERVICE AND MAINTENANCE

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section IV-B to compare their progress through this course to their capability to pass the FAA certification tests. This course provides practical application of techniques learned in AVM 212. 3 credits

AVM 218 LUBRICANTS AND LUBRICATION SYSTEMS

This course prepares students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section V-K to compare their progress through this course to their capability to pass the FAA certification tests. Students will identify and select lubricants; repair engine lubrication system components; inspect, check, service, troubleshoot and repair engine lubrication systems. 2 credits

AVM 221 FUELS AND FUEL METERING SYSTEMS

This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for

certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section V M and N to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect, check, service, troubleshoot, and repair engine fuel systems and components; troubleshoot, repair and adjust fuel-metering systems and electronic engine fuel controls; overhaul carburetor systems. 2 credits

AVM 224 FIRE PROTECTION SYSTEMS
This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section V-I to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect, service, troubleshoot, and repair engine fire-detection and extinguishing systems. 1/2 credit

AVM 227 PROPELLER AND ROTOR SYSTEMS
This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section V R to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect, check, service, and repair propeller-synchronizing and ice-control systems; identify and select propeller lubricants; balance propellers; repair propeller-control system components; install, troubleshoot and remove propellers; repair aluminum-alloy propeller blades. 2 1/2 credits

AVM 230 IGNITION AND STARTING SYSTEMS
This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section 5-L to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect, service, troubleshoot, and repair reciprocating and turbine-engine ignition systems and components, and turbine-engine pneumatic starting systems. 2 1/2 credits

AVM 233 INDUCTION AND SUPER-CHARGER SYSTEMS
This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section 5-O to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect, check, troubleshoot, service and repair engine ice and rain-control systems; heat exchangers, superchargers, and temperature-control systems; carburetor air-intake and induction manifolds. 1 credit

AVM 236 POWERPLANT ELECTRICAL SYSTEMS
This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section IV-B to compare their progress through this course to their capability to pass the FAA certification tests. Students will repair engine electrical system components; install, check, and service electrical wiring, controls, switches, indicators, and protective devices. 3 credits

AVM 239 COOLING SYSTEMS
This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section V-P to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect, check, troubleshoot, service and repair engine cooling systems and components. 1/2 credit

AVM 242 EXHAUST AND THRUST REVERSER SYSTEMS
This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section V-Q to compare their progress through this course to their capability to pass the FAA certification tests. Students will inspect, check, troubleshoot, service, and repair engine exhaust systems, and components; troubleshoot and repair engine thrust-reverser systems and related components. 1/2 credit

AVM 245 POWERPLANT INSTRUMENT SYSTEMS
This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A Section V-H to compare their progress through this course to their capability to pass the FAA certification tests. Students will troubleshoot, service and repair fluid rate-of-flow indicating systems; inspect, check, service, troubleshoot, and repair electrical mechanical engine-temperature, pressure and RPM indicating systems. 1 credit

AVM 248 POWERPLANT INSPECTIONS
This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification as an FAA Powerplant mechanic. Students are encouraged to reference the latest revision of document FAA-S-8081-28A, Section C to compare their progress through this course to their capability to pass the FAA certification tests. Students will perform powerplant conformity and airworthiness inspections. 1 1/2 credits

BMT 200 INTRO TO BIOMEDICAL 3 credits

BMT 205 SAFETY IN HEALTHCARE FACILITIES 1 credit

BMT 210 BIOMED INTERNSHIP 6 credits

BSA 100 INTRODUCTION TO DIGITAL PHOTOGRAPHY
The class is designed as an Introduction to the DSLR camera and the use of Lightroom/Camera Raw/Photoshop software. Students will be required to bring their cameras and computers to each class meeting. Photography ethics including copyright laws will also be discussed. 3 credits

BSA 107 INTRO TO PHOTO STUDIO
Students will demonstrate their knowledge of camera settings through critiques/analysis of their photography. Students will begin creating a student portfolio. 1 credit

BSA 108 EMPLOYMENT LAW
This course introduces the principle laws and regulations affecting public and private organizations and their employees or prospective employees. Topics include fair employment practices, EEO, affirmative action, and employee rights and protections. Upon completion, students should be able to evaluate organization policy for compliance and assure that decisions are not contrary to law. 3 credits

BSA 114 DESIGN I
This class is an art course focusing on the elements and principles of design. These are interchangeable pieces of design that can be used in photography, interior design, graphic design, and visual merchandising courses. These elements and principles are found in all visual compositions and their arrangement determines both aesthetic looks and functional use. 3 credits

BSA 116 ADVANCED IMAGE PROCESSING
This course focuses on editing and creating images for a variety of purposes including web publication and present media. 3 credits

BSA 118 ADVANCED DIGITAL PHOTOGRAPHY& LIGHTING
The class is designed as an intensive photography class devoted

to advanced photography and processing of images using Adobe Camera Raw and Photoshop. The class is also designed as an intensive photography class devoted to practice all lighting techniques. Students will be required to bring
their cameras to each class meeting. Students must have a digital SLR and a Speedlite. This course is designed for students who have prior experience in photography. Prerequisites: Intro to Photography and Design 1. 3 credits

BSA 128 STUDIO LIGHTING
BSA 128 is taken in conjunction with BSA 118 1 credit

BSA 200 VIDEO/MEDIA
This course will focus on helping students develop skill and learn techniques to take images to be used for corporate promotion and production sales. 3 credits

BSA 202 PORTRAIT PHOTOGRAPHY
The class is designed as an intensive photography class devoted to practice all studio techniques. Students will be required to bring their cameras to each class meeting. This course is designed for students who have prior experience in photography. 3 credits

BSA 204 EVENT/CORPORATE PHOTOGRAPHY
The class is designed as an intensive photography class devoted to practice in all types of events. Students will be required to bring their cameras to each class meeting. This course is designed for students who have prior experience in photography. This course will begin to make the transition of working independently as a professional photographer. This course is taken as a prerequisite to Internship/Capstone. Students will research events and "key photos" attend events capturing "key moments" and process images to bring out the emotional story. 3 credits

BSA 210 COMPENSATION AND BENEFITS
Compensation and benefits programs need to reflect the changing business landscape and unprecedented organizational challenges. Study total compensation and rewards programs that address a range of monetary and nonmonetary options beyond salary compensation and benefits. Learn how to integrate total compensation packages with other basic human resources functions, including recruitment, performance contributions, development, and retention. 3 credits

BSA 212 RECRUITMENT, TRAINING AND DEVELOPMENT
This course offers an overview of the training and development component of Human Resource development. The course will also focus on providing the student with a working knowledge of the basic skills required to be skilled trainers in a current organizational environment. 3 credits

BSA 232 SOCIAL MEDIA MARKETING
The Social Media class will explore how businesses can
use sites like Instagram, Facebook, LinkedIn, etc. as effective marketing tools and as channels to maximize their online presence. 3 credits

BSA 235 BRANDING
This course explores the crucial role of brand management. This course will also focus on a brand's impact on business, its culture, operations and environment. Students will identify methods to measure brand performance and identify channels to build, shape and maintain brand equity. 3 credits

BTT 112 OSHA/SAFETY
This course will cover all aspects of safety for the job site. A written test will be given, as well as a hands-on performance test with the table and portable circular saw. Students may not use any tools or start projects until this safety course is completed. 1/2 credit

BTT 116 CONSTRUCTION TECHNOLOGY I
The course will establish safety procedures, shop and site operations, the proper use and maintenance of tools, sizing and description of building materials and construction methods. This course will introduce the Uniform Building Code and basic blueprint knowledge. 3 credits

BTT 117 BASIC CONSTRUCTION I A
A practical building application to BTT 116 with projects assigned during the semester. This will include the safe and proper use of tools in various construction projects. The semester will conclude with the framing and enclosure of a residential building. 4 credits

BTT 121 BASIC CONSTRUCTION I B A. Continuation of BTT 117. 7 credits

BTT 128 COMMERCIAL CONSTRUCTION 3 credits

BTT 131 INTERIOR FINISHING
Upon completion of this course, the student will perform the skills necessary to complete the interior finish for a residential building project. 2 credits

BTT 147 INTERMEDIATE CONSTRUCTION II A
Upon completion of this course, the student will perform skills necessary to complete the interior finish for a residential building project. 3 credits

BTT 148 INTERMEDIATE CONSTRUCTION II B A Continuation of BTT 147. 2 credits

BTT 156 RESIDENTIAL DRAFTING/CAD
This course shows how to use architectural drafting and computer aided drafting in defining needs in residential construction. 2 credits

BTT 158 BASIC WELDING 1 credit

BTT 202 SITE PREPARATION AND CONCRETE
After completing this unit, the student will have a better understanding of site preparation, site layout, concrete construction. 1 1/2 credits

BTT 204 CONSTRUCTION TECHNOLOGY II
After completing this unit, the student will have a better understanding of floor construction, and wall and roof construction. 1 1/2 credits

BTT 209 ADVANCED CONSTRUCTION III A
After completing this unit, the student should be able to place, test and finish concrete slabs. The student will demonstrate the ability to lay out and erect all framework and complete the exterior finish on a residential building. 12 credits

BTT 220 CONSTRUCTION ESTIMATING
Upon completion of this unit, the student will be able to prepare a detailed bill of materials sheet for a residential building project. 2 credits

BTT 235 ADVANCED CONSTRUCTION III B
After completing this unit, the student will have the practical experience to perform interior finish procedures to industry standards. 11 credits

BTT 252 ENERGY EFFICIENCY
After completing this unit, the student will have a better understanding of building codes, advanced stair construction and installation, how ventilation works, what green building is, and light commercial work. 2 credits

BUS 101 INTRODUCTION TO BUSINESS
Intro to Business covers all the basic material and principles of business in a changing world and introduces real-world examples of today's environment. This course will set the foundation for all other business courses. 3 credits

BUS 120 PRINCIPLES OF MARKETING
Policies and problems concerned with flow of goods and services to the consumer, including the study of pricing, advertising, consumer behavior, and the distribution of products. 3 credits

BUS 122 BUSINESS RELATIONSHIPS
Why do some businesses make it? And, others don't? Success could be based on relationships, personal and professional. Exceptional customer service, networking, recognition, negotiating and volunteering can help a business be even more successful. This course is designed to enlighten the student's understanding of the importance of positive business relationships in business and customer relationships. These relationships can affect the entire business and the bottom-line. The course will reflect on the human side of business and how to

create a positive workplace environment as well as overcoming negativity in the workplace. 3 credits

BUS 140 BUSINESS LAW
An important basic course in how laws affect businesses. Students gain broad general knowledge and learn when and where to seek specialized advice and/or legal assistance. 3 credits

BUS 150 ADVERTISING
How advertising works; its effectiveness in promoting products, services and ideas. Students will develop real coupon book and be involved in the total process. 3 credits

BUS 160 PRINCIPLES OF SELLING
An overview of the sales process: selling, buying, customer relations, strategies, legal and ethical considerations. 3 credits

BUS 162 RETAILING
A broad overview: general procedures, career choices, buying behavior, merchandise control and pricing, human resources and productivity, store development and management are some of the topics covered. 3 credits

BUS 170 HUMAN RESOURCES MANAGEMENT
This course is an introduction to the concepts of human resource management and an overview of how important human resources management is to business today. 3 credits

BUS 200 PRINCIPLES OF BANKING
This course is designed to give students the history of banking, fundamentals of banking, and a look at banking today. Students will see the whole picture of banking, not just the view from a teller window or bookkeeping desk! To succeed in a banking career, students should become well acquainted with all of the topics in this course and keep up with all the changes that occur in the banking industry. 3 credits

BUS 209 PRINCIPLES OF INSURANCE
This introductory course covers risk identification and evaluation, the need for insurance, the effects of limited liability, theory of moral hazard, and adverse selection. Both business and personal risk are addressed with emphasis on insurance as a risk management tool. 3 credits

BUS 210 SMALL BUSINESS DEVELOPMENT
How to start a business and manage it successfully. In addition to theory classes, computer-simulated business development will be utilized. Students must have successfully completed Accounting I and Accounting II of Financial Management before enrolling in this course. 3 credits

BUS 213 MARKETING FINANCIAL SERVICES
This course provides an overview of marketing concepts, strategies, and activities. Students are exposed to strategic planning, ethics and social responsibilities, determining target markets, consumer behavior, product and brand development, marketing channels and supply chain management, retailing, advertising and public relations, personal selling and sales management, pricing, and marketing on the Internet, including the use of social networking. To reinforce the content surveyed, students will participate in cases and a behavioral simulation. This class will be fast-paced, involvement-oriented, and should get students off to a good start by providing a strong foundation and appreciation of the importance of marketing in business and society. 3 credits

BUS 215 BUSINESS ETHICS
Provides an introduction to business related ethics. Students will receive the foundation and training to deal with ethical challenges and establish ethical business behavior and regulations. Subjects covered include corporate responsibility, corporate compliance, and ethnic sensitivity. 3 credits

BUS 219 FUNDAMENTALS OF LENDING I
This course will prepare the student for a job in lending in any business that extends credit. The student will acquire knowledge in the following areas: consumer credit history, consumer credit laws and regulations, the consumer credit market, the types of consumer credit, consumer applications, credit interviews, credit evaluations, and credit granting. 3 credits

BUS 220 PERSONAL FINANCE
The main purpose of this course is to help develop and implement short through long-range plans to achieve financial objectives. Achieving financial success requires that one practice effective personal financial management. 3 credits

BUS 222 FUNDAMENTALS OF LENDING II
Continuation of BUS 219. Evaluation of credit data, credit decision-making, completion of all documents required for consumer and real estate loans. 3 credits

BUS 226 WEALTH MANAGEMENT
The objective of this course is to familiarize the student with general financial principles concerning stocks, bonds, and investments. We will concentrate our studies on stocks, mutual funds, stock markets and the process of buying and selling stocks and mutual funds. 2 credits

BUS 230 MANAGEMENT POLICY
A comprehensive introduction to management theory and practice; designed to help the student meet the challenges of managing a contemporary business effectively. 3 credits

BUS 236 FINANCIAL MANAGEMENT
Emphasis is on determining the time value of money in decision-making, especially as applied to businesses. Students must have successfully completed ACCT 210 before enrolling in this course. 3 credits

BUS 238 BUSINESS INNOVATION
This course is designed to give students the opportunity to practice actual marketing business skills. The student will bring together all of the various theories and concepts learned in other business courses. Business Innovation will include community service, business decision making, problem solving, team building, and creative thinking. 3 credits

BUS 242 INTERNSHIP/CAPSTONE PROJECT
This course is designed to give the student practical experience of working in a successful business. The structure of the internship is flexible to accommodate the demands of the position and place of business. You must get prior approval on the internship site from your advisor. Please provide place of work, position and job responsibilities to your advisor when requesting approval. Students are expected to find their own internship. Instructor assistance is available for recommendations, leads, professional resources and direction. A capstone project is a multifaceted assignment that serves as a culminating academic and intellectual experience for students. This class is designed for each student to take what they have learned, research their personal interests, apply their research to previous learning, and report/demonstrate what they have learned. 3 credits

BUS 241 AG LENDING
Provide students with the basic skills needed to work in the field of ag lending. The class will focus on the key financial statements and ratio analysis for agriculture. Students will gain a basic understanding of loan structuring and documentation, as well as basic ag production and marketing topics. 3 credits

BUS 244 INTERNATIONAL BUSINESS
The importance of studying international business is varied for a number of reasons. The world is becoming increasingly complex and this course will answer any questions you have about business in different cultures, the impact of geography, why products are the same (or different) across cultures, why people have different practices and the effect of the Internet on international business. By examining all these issues we can better understand how interrelated our global economy and competition is. 3 credits

BUS 246 & 247 INTERNSHIP A & B

This course is designed to give the student practical experience of working in a successful business. Depending on the option selected, specific tasks will be outlined to complete within the assigned hours. Students must get prior approval on the internship site from their advisor. 3 credits each

CDL 100 WRITTEN TEST PREPARATION

This course will give students all the information needed to pass the CLP exam. It will cover general knowledge, air brakes, and combination vehicles. When passing these exams at the DVM office students will obtain their Class A CLP or learners permit. 1 credit

CDL 105 VEHICLE INSPECTION

This course will teach students how to complete the structured vehicle inspection as outlined in the CDL drivers manual. It will be an active participation class that will teach students what to inspect so vehicles can be safely driven. This required to pass the CDL exam. 1 credit

CDL 110 DRIVER TRAINING

This is a active participation class that will teach students the skills needed to pass the skills portion and road portion of the CDL exam. The behind the wheel time will include interstate and city driving. This will give students the basic knowledge needed to safely navigate a tractor/trailer on the road. Further OTJ training will be required to become proficient. 2 credits

CHEM 106 INORGANIC CHEMISTRY LECTURE (3 credits)* AND
CHEM 106L INORGANIC CHEMISTRY LAB (1 credit)*

This course is an introductory course designed to give the student a positive understanding and appreciation of the chemistry in their lives. Basic inorganic topics such as the study of atoms and molecules, chemical reactions, chemical equilibrium, states of matter and nuclear processes will be covered. The course will cover those chemical concepts necessary for the continued study of organic and biochemistry in Chemistry 108. *College transferable.

CHW 100 COMMUNITY HEALTH WORKER ROLE, ADVOCACY, OUTREACH AND RESOURCES

This course will review the basic core competencies of a Community Health Worker including the definition, roles, and boundaries. This course will also focus on personal safety, self-care, and personal wellness on the promotion of health and disease prevention for clients. 3 credits

CHW 105 HEALTH COMMUNICATIONS, TEACHING, AND CAPACITY BUILDING

This course will review the basic core competencies of a Community Health Worker including the definition, roles, and boundaries. This course will also focus on personal safety, self-care, and personal wellness on the promotion of health and disease prevention for clients. 3 credits

CHW 110 DOCUMENTATION, LEGAL, AND ETHICAL ISSUES IN COMMUNITY HEALTH WORKER

This course will review the basic core competencies of a Community Health Worker including the definition, roles, and boundaries. This course will also focus on personal safety, self-care, and personal wellness on the promotion of health and disease prevention for clients. 3 credits

CHW 115 HEALTH PROMOTION I

This course focuses on the knowledge and skills a Community Health Worker needs to assist clients in realizing and maintaining a healthy lifestyle. Emphasis will be on learning strategies that can be used to aid in client awareness, education and incorporation into daily living. This course will also provide information and activities in which a Community Health Worker can assimilate these concepts into their own lives. 3 credits

CHW 120 HEALTH PROMOTION II

This course will review the basic core competencies of a Community Healthcare Worker including the definition, roles, and boundaries. This course will also focus on personal safety, self-care, and personal wellness on the promotion of health and disease prevention for clients. 3 credits

CHW 125 COMMUNITY HEALTH WORKER INTERNSHIP

This course will review the basic core competencies of a Community Healthcare Worker including the definition, roles, and boundaries. This course will also focus on personal safety, self-care, and personal wellness on the promotion of health and disease prevention for clients. 1 credit

CIS 115 IT ESSENTIALS

This course prepares students for the CompTIA A+ certification exam. The student will be introduced to the fundamentals of PC hardware and software technologies with a hands-on approach. In the labs, students will learn how to disassemble, reassemble, and install PC hardware components, how to properly format and install a typical operating system, and how to connect the PC to a network and the Internet. 3 credits

CIS 132 INTRO TO COMPUTER PROGRAMMING

This course is an introductory course to the basic concepts and techniques used in programming. Writing, debugging, and testing business applications. This course will cover the creation, compilation, and execution of C#, Python, and HTML. 3 credits

CIS 133 INTRO TO C SHARP

This course is an introductory course to the basic concepts and techniques used in programming. Writing, debugging, and testing business applications. This course will cover the creation, compilation, and execution of C# programs using Visual Studio. Students will write and understand C# language constructs, syntax, logic, and semantics. 3 credits

CIS 136 JAVA ESSENTIALS

This course introduces the student to the Java programming language. Students will examine the concepts behind Object oriented programming (including but not limited to database and web capabilities). Students will examine the core features of the Java programming language. 3 credits

CIS 140 DATABASE DESIGN & MYSQL

The study of formalized database design. This course will focus on relational model design and the use of SQL. Students will use a modern relational database to implement designs and learn the basics of data management. 3 credits

CIS 141 WEB DESIGN AND MAINTENANCE

In this course, students will develop the fundamental skills required to create standards-based websites. The technologies include HTML, CSS, and JavaScript using jQuery. Along with writing and implementing in these languages, students will explore validating, troubleshooting, and improving their HTML and CSS. 3 credits

CIS 152 GRAPHIC AND LAYOUT DESIGN

This course is an introductory course in application of digital design, typographic principles, and type/image integration to communication design projects of moderate and increasing complexity. Emphasis is on development of concepts that communicate persuasively and effectively integrate type, image and layout. Students will create quality visual designs and layouts for print and web publications while demonstrating graphic design theory best practices. Prerequisite: CIS 173 & 253 3 credits

CIS 169 SOCIAL MEDIA CONTENT DEVELOPMENT AND DEPLOYMENT

In this course, students will learn how to create content for specific social media platforms, apply design fundamentals to create eye-catching visuals, develop content strategies, use design software for social media content development, and learn how to engage with social media audiences effectively. Prerequisite: CIS 173, 252 & 253 3 credits

CIS 170 WEB DEVELOPMENT & DEPLOYMENT

In this course, students will learn the fundamental theories of what it means to develop and deploy websites. Students

will explore search engine optimization (SEO) techniques along with exploring the most popular Content Management Systems, including but not limited to: WIX and WordPress. Students will go through the process of procuring a domain and secure hosting through GoDaddy where they deploy responsive front-end standards-based web content. Prerequisite: CIS 141, 173 & 253 3 credits

CIS 171 PROJECT MANAGEMENT WITH AGILE & SCRUM
This course is an introductory course to the basic concepts and techniques used in the Agile/Scrum project management methodologies. Students will understand the four values and twelve principles of Agile, as well as the three pillars of Scrum, and a broad comprehension of Scrum mastery. 3 credits

CIS 173 ELEMENTS AND PRINCIPLES OF DESIGN
This course is an introductory course focusing on the elements and principles of design and how they are the foundation to digital media creation. Students will demonstrate knowledge of the elements and principles of design through traditional art media and various creative productivity tools. The definitive goal is for students to transfer this knowledge and apply it in a digital realm. 3 credits

CIS 175 PHOTOGRAPHY FOR DIGITAL COMMUNICATIONS
Students will explore visual concepts, basic still image capture, lighting, and camera functions in this introductory course. They will gain proficiency in shooting photographs in diverse environments and mastering environmental control techniques. Special focus will be given to understanding how photography composition impacts cinematography and media design. 3 credits

CIS 180 INTRO TO C++
In this course, students will explore the fundamental principles of C++ programming. They will delve into the language's standard libraries to design and implement C++ programs. Additionally, students will learn to utilize classes and functions, as well as, various data structures within the object-oriented paradigm to enhance their programming skills. 3 credits

CIS 215 CYBER SECURITY & ETHICAL HACKING
This hands-on course will introduce students to many aspects of network security. Students will learn the skills necessary to perform and present network intrusions on a variety of different computing platforms. This includes the policies, procedures, and technology necessary to gather and analyze digital information in an authentic, accurate, and complete form for presentation as evidence in a business environment or a court of law. 3 credits

CIS 221 ADVANCED JAVASCRIPT
JavaScript is the highest requested development language for nine straight years. This course is a continuation from introduction to advanced use of JavaScript with node.js to expand front and back-end development. Students will expand heavily on the prior learned skills to develop a real understanding to industry standards while working with JavaScript and Node.js. Prerequisite: CIS 238 1.5 credits

CIS 222 INTRO TO PYTHON
This course is an introductory course in which students will develop the fundamental programming abilities necessary to code in the language of Python. Python is so widely used for a broad spectrum of applications. Python is a powerful language that provides all of the features that you need to master in any programming language. This course will teach the essential Python language that will get you off to a fast start with any other language. Prerequisite: CIS 132 1.5 credits

CIS 238 FULL STACK JAVASCRIPT FOR DEVELOPERS
This course will investigate skills necessary to create and publish front-end standards-based web content that is visually-compelling coupled with advanced back-end scripting that possess complex functionality. Students will develop and demonstrate required skills to plan, create and publish HTML, CSS, jQuery and JavaScript web content. Prerequisite: CIS 141 3 credits

CIS 239 FULL STACK JAVASCRIPT FOR DESIGNERS
In this course, students will continue to investigate skills necessary to create and publish responsive front-end standards-based web content that is visually-compelling using HTML and CSS coupled with advanced back-end scripting that possess complex functionality with JavaScript using jQuery and various jQuery plugins. Prerequisite: CIS 141 3 credits

CIS 240 JAVA FOR MOBILE APPS
In this course, students will begin to learn how to create mobile applications with Android Studio and the object-oriented programming language, Java. Students will learn how to create functional applications for phones and tablets utilizing various layouts and widgets to improve user experience. Prerequisite: CIS 136 3 credits

CIS 241 ADVANCED WEB DESIGN AND MAINTENANCE
This course will investigate the fundamental and advanced skills required to create and publish standards-based web sites that possess complex scripting functionality. Students will demonstrate the ability to plan, create, and publish HTML, CSS, and JavaScript content to local and host servers through a variety of imaging, prototyping, web production and file transfer software applications. 3 credits

CIS 244 ADVANCED PYTHON
In this course, students will dive deeper into the Python programming language and explore some of its more advanced features and capabilities while expanding their abilities better for industry use. Throughout the course, students will also cover best practices for Python development, including testing, debugging, and optimization. Prerequisite: CIS 222 3 credits

CIS 249 LAYOUT DESIGN AND PRINT PROCESSES
This is an advanced course in application of layout design in conjunction with raster and vector image and graphic manipulation and creation. Emphasis is on developing various kinds of print publications and documents while understanding the techniques, tools and hardware needed to manage print projects. Students will create draft and professional quality print layouts while demonstrating print management best practices and graphic design theory. 3 credits

CIS 251 MOTION GRAPHICS AND COMPOSITING
This course is an advanced course in putting graphics into motion and merging a variety of media such as live-action, raster images, vector art and visual FX into a cohesive whole. An efficient workflow using numerous software titles and hardware must be demonstrated to create high quality projects for but not limited to film, broadcast and the web. Students will apply graphic design principles and animation theory and best practices to create aesthetically pleasing two and three dimensional motion graphics. Prerequisite: CIS 152 & 254 3 credits

CIS 252 VIDEO AND AUDIO PRODUCTION
This course is an introductory course to methods of video and audio planning, production and editing. Students will plan, develop timelines, narrative scripts and storyboards, prepare shot locations for production, shoot and record media as well as edit and publish content. Students will become familiar with video and audio hardware and software to create professional media for publication. Prerequisite: CIS 175 3 credits.

CIS 253 GRAPHIC EDITING AND MANIPULATION
This course provides a comprehensive exploration of image editing and manipulation tools and techniques. It includes graphic manipulation to convey meaning, strategies for generating and developing unique concepts, and the designer's role as a visual storyteller. Students will learn essential skills in compositing, adjusting, enhancing, and publishing graphics for various digital and print applications. Through graphic compositions, students will effectively communicate aesthetic issues related to design principles, visual language, content, and formal concerns. Prerequisite: CIS 173 3 credits

CIS 254 ANIMATION AND MOTION GRAPHICS

This course is an introductory to animation course. 2D Animation includes script/story writing, production planning, drawing with traditional and digital tools to create 2D digital environments, objects and animations. The techniques, practices and media created will often find purpose in multiple applications and visual communication media designs. Students will exhibit the ability to create various types of two-dimensional animation. The fundamental knowledge gained during this course related to theory, practices and principles of animation are the building blocks for future Visual FX courses. Prerequisite: CIS 252 & 253 3 credits

CIS 255 APPLICATION SECURITY
This course is an introductory course to the security risks caused by web applications. The primary focus will be on Web Applications but many of the concepts can be applied to Desktop Applications. Students will develop fundamental skills in protecting application integrity and security. Prerequisites: CIS 272 3 credits

CIS 260 UNIX OS ADMINISTRATION
Students examine the concepts that are common to any UNIX / Linux system using a hands-on approach to explore the Linux file system, commands, application design and programming and an introduction to system management. This course utilizes the Red Hat Academy courses. An in-depth study of the Linux operating system and topics related to the administration and installation of a Linux computer system. Students will learn the necessary steps to administer the system, programs and users. Prerequisite: CIS 115 4 credits

CIS 265 VIRTUALIZATION
This course is an exploration and comparison of several types of hardware virtualizations utilizing VMware, VirtualBox and Microsoft virtualization products for operating systems, appliances, and virtual desktop environments. Students will know how to install and configure VMware ESXi hosts and VMware vCenter Server. Students must also know how to manage ESXi hosts and virtual machines. Students will gain the knowledge, skills, and abilities to build and run a virtualized environment. Prerequisites: CIS 115 & CIS 260 3 credits

CIS 270 MICROSOFT SQL
This course is designed to provide a comprehensive overview of the fundamental concepts and practices involved in working with Microsoft SQL, one of the most widely used relational database management systems in the world. Throughout the course, students will learn the basics of database design and management, including how to create tables, relationships, and queries using SQL syntax. Students will also explore the various tools and features available in SQL Server Management Studio, the primary interface used to manage SQL Server databases. Prerequisites: CIS 140 3 credits

CIS 272 CLIENT/SERVER PROGRAMMING
In this course, students will access data from a database server and incorporate it into C# client programs. Students will use CRUD fundamentals (create, read, update, delete) to manipulate data and even create their own databases. Card readers, speech synthesis, and recognition are also incorporated into various applications. Prerequisite: CIS 133, 140 & 141 3 credits

CIS 273 WEB APPLICATIONS - ASP
In this course, students gain experience in creating web-based, dynamic web applications with ASP.NET web forms and the .NET Framework using C#, HTML, CSS, and JavaScript. Students will learn how to use ASP.NET server controls combined with HTML/CSS to design web pages and provide both client-side and server-side data validation for user input. Students will learn how to use master pages to enforce a consistent look and feel across a set of web pages, as well as how to manipulate data to look appealing. Prerequisite: CIS 133, 140 & 141 3 credits

CIS 275 PHP FOR WEB DESIGNERS
This course is tailored to front-end web developers to work seamlessly with WordPress and other PHP-based platforms. Students will learn how to create dynamic web applications, acquire the skills to create custom WordPress themes and plugins, and enhance their web development skills to optimize their HTML, CSS, and PHP code. Prerequisite: CIS 141 3 credits

CIS 276 WEB APPLICATIONS - PHP
This course is a step-by-step introduction to Web Development using PHP and MySQL. The course will first look at PHP and MySQL as individual products and then combine the two to create dynamic web pages. Students will create database-driven web applications using the PHP scripting language. Prerequisite: CIS 140 & 141 3 credits

CIS 280 WINDOWS SERVER ADMINISTRATION
This course prepares student for the real-world challenges of a Microsoft networking professional. Students will install and configure Windows Server, use Active Directory, set up server resources for clients, create a virtual server, establish strong security, monitor a server, and create a reliable server environment. Prerequisite: CIS 115 3 credits

CIS 285 SYSTEMS ADMINISTRATION
This course focuses on advanced systems administration cybersecurity operations. Students will learn basic security practices in installing and setting up a server, as well as performing other system administrator tasks including: installing and maintaining an Exchange server, Active Directory and DNS, DHCP, and other server roles and services. This course covers hardening techniques for Linux and Windows servers. Students will also gain the knowledge and skills needed to successfully handle the tasks, duties, and responsibilities of an associate-level Security Analyst working in a Security Operations Center (SOC). Prerequisite: CIS 280 (3 credits)

CIS 290 SYSTEMS ANALYSIS AND DESIGN
This course introduces the concepts and methods used in the analysis and design of computer-based systems. The course covers the entire systems development life cycle, including feasibility studies, requirements gathering, design, implementation, testing, and maintenance. The course emphasizes the design phase which includes designing user interfaces, database structures, system architectures. Students will learn the importance of gathering requirements from stakeholders and demonstrate the professional skills required to develop and implement an entire project from scratch while working as member of a team. Prerequisite: Successful completion of all 1st, 2nd, and 3rd semester specialization courses is required. 3 credits

CIS 299 INTERNSHIP
This course requires students to complete 240 hours of specialization-related work while job shadowing, on or off-site intern employment, certification completion, or niche career content creation. The primary goal of the course is to participate in a real-life experience to better understand the needs and expectations required of them upon graduation. 4 credits

CMST 101 FUNDAMENTALS OF COMMUNICATION*
The course introduces the study of speech fundamentals and critical thinking through frequent public speaking practice, including setting, purpose, audience, and subject. 3 credits *College Transferable.

COMM 101 CONTEMPORARY COMMUNICATIONS
Emphasis on the essentials of written and oral communication; also covers effective communication during the job search process. 3 credits

COMM 105 BEGINNING SIGN LANGUAGE
In this course, students will gain an understanding of basic sign language skills. 1 credit

COS 156 PRE-CLINICAL LAB
This course prepares the student with the basic skill foundation

for the cosmetology program and is taught in multiple formats including: lecture, discussion, group learning projects, and presentations. Students will perform the manipulative skills in the areas of hair care, skin care, and nail care. 9 credits

COS 158 THEORY I

The student will identify haircutting as the basic foundational skill upon which all other hair design is built and how hairstyling is an important, foundational skill that allows the professional to articulate creativity and deliver a specific outcome desired by the guest. The student will also practice chemical texture services which allows stylists the opportunity to offer clients options to change the texture of their hair. Students will also learn the proper techniques for applying and removing nail tips and identifying the types and uses of nail wraps. Students will also learn how to properly work with Monomer Liquid and Polymer Powder Nail Enhancements along with Light Cured Gels. 7 credits

COS 160 CLINICAL FLOOR I

This in an introductory course which prepares students with entry-level skills in the cosmetology career. This course is taught in multiple formats including: lecture, discussion, group learning projects and presentations. 1 credit

COS 162 CLINICAL FLOOR II

This course is a continuation of COS 113 and prepares students with entry-level skills in the cosmetology career. Students will also have the opportunity to observe cosmetologists in the workplace. This course is taught in multiple formats including: lecture, discussion, group learning projects and presentations. 12 credits

COS 164 THEORY II

This course will teach students how to prepare and pass their state laws and rules portion of testing for licensure. Students will learn the proper hair removal techniques, how to perform them safely, and the basics of skin analysis. Students will also be able to recognize skin diseases, inflamed skin, and infectious skin disorders so they can refer clients to medical professionals for treatment when necessary. Students will also learn about braiding, hair extensions, additions, and customized wigs which can be some of the most lucrative services in the salon business and can provide an opportunity for stylists to express their artistic abilities. 4 credits

COS 166 CLINICAL FLOOR III

This is an advanced continuation of COS 119 and prepares students with entry-level skills in the cosmetology career. Students will perform the basic analytical skills to determine appropriate hair care, skin care, and nail care services to achieve the best total look for each client. 7 credits

COS 168 THEORY III

This course covers how hair color products employ strong chemical ingredients to accomplish services and why being aware of what these chemicals are and how they work will enable the student to safely provide color services. Students will also gain knowledge in how and why hair grows, how and why it falls out, the chemistry used in hairstyling, haircoloring, perms, facials, and mani-pedis. Students will also explore how electricity is used in cosmetology. 2 credits

COS 131 CLINICAL FLOOR

Clinic Floor prepares students with entry-level skills in the cosmetology career. Students will also have the opportunity to observe cosmetologists in the workplace and gain valuable experience working on-the-job with potential employers. 10 credits

COS 170 COSMETOLOGY BUSINESS THEORY

This course provides the student with basic cosmetology business information. .5 credit

CPR 110 CPR/AED FOR THE PROFESSIONAL RESCUER

At the completion of this course, the student will be able to provide the skills needed to respond appropriately to breathing and cardiac emergencies. This includes the use of an automated external defibrillator (AED), resuscitation masks, bag-valve mask resuscitators (BVMs) and emergency oxygen. 1 credit

CPR 112 BASIC LIFE SUPPORT (BLS) FOR HEALTHCARE WORKERS

This course is designed to train participants to save lives of victims in cardiac arrest through high-quality cardiopulmonary resuscitation (CPR) and know how to perform CPR in and out of hospital settings. Students will train to recognize cardiac arrest, give high-quality chest compressions, deliver appropriate ventilations, and provide early use of an automated external defibrillator (AED). The course also teaches how to relieve choking and includes adult, child, and infant rescue techniques. 1/2 credit

CSC 100 COMPUTER CONCEPTS

Using a Windows-based microcomputer and related software, you will gain an understanding and basic operational knowledge about the Windows 10 operating system, Microsoft Office 2016 word processing, spreadsheet, and presentation software. Student will demonstrate knowledge of these units by scoring at least 80% on assignments, related objective and performance tests. 1 credit

CSC 102 WINDOWS APPLICATIONS FOR TECHNICIANS

Using a Windows-based computer and related software, students will gain a basic operational knowledge of the Windows operating system, Microsoft Office 2021 word processing, spreadsheet, and presentation software. 3 credits

CSC 105 COMPUTER SOFTWARE APPLICATIONS*

Using a Windows-based microcomputer and related software, you will gain an understanding and basic operational knowledge about the Windows operating systems, Microsoft Office word processing, spreadsheets, database management, and presentation software. You will demonstrate this knowledge by scoring at least 80% on assignments and related objective and performance tests. 3 credits

CSC 125 ADVANCED COMPUTER APPLICATIONS

Students will gain advanced skills in word processing, spreadsheet applications, database management, and graphical presentations in the Windows environment. 3 credits

CSC 182 TECHNICIAN SOFTWARE

The student will develop skills appropriate to industry and ASE/VSO standards. These skills will include basic understanding of technician software including electronic service manuals, electronic parts manuals, and electronic troubleshooting programs being used in diesel industry. 2 credits

CSS 100 CAREER SEARCH STRATEGIES

Students will gain crucial job seeking skills, including training and experience with resume writing, letters of application, interviews, career search, networking and more. 1/2 credit

DA 105 PRECLINICAL SCIENCE

The study of microorganisms and diseases pertaining to dentistry and the techniques necessary to prevent the transmission of disease. 2 credits

DA 110 DENTAL AND ORAL ANATOMY

Study of the types of teeth, anatomical features, embryonic development and histology of the teeth and oral structures. Also covers the identification of the bones, muscles associated with oral structures, nerves and blood vessels of the head and neck region. Also discusses systems of the body and functions. 3 credits

DA 120 ORAL HEALTH

The study of oral health with emphasis on the identification of common dental emergencies, description and prevention of dental caries, periodontal disease, and other oral pathologic conditions through patient education in plaque removal, good oral habits, fluoride therapy and nutritional counseling as it relates to oral health. 3 credits

DA 126 INTRODUCTION TO PATIENT CARE

This course will provide an overview of the dental profession. It begins with a look at dentistry through the ages, introduces the members of the dental healthcare team, and discusses the legal

and ethical standards expected of a dental professional. This will also include the skills and knowledge needed to gather patient information, obtain vital signs, and to assist in and document the information gained during an oral exam. 2 credits

DA 135 DENTAL MATERIALS
A study of the various impression materials, dental waxes, and laboratory gypsum and resins. Emphasis will be on the manipulation of these materials in the fabrication of diagnostic and working models, custom trays and polishing prosthesis. 3 credits

DA 138 CLINICAL SKILLS
A study of the dental office and assisting to the delivery of treatment to include transferring instruments and maintaining moisture control. A study of the physical properties and manipulation of dental cement, liners, bonding and restorative materials as used in assisting to clinical dentistry. 4 credits

DA 141 PHARMACOLOGY AND MEDICAL EMERGENCIES
Through this course, the student will become familiar with commonly prescribed drugs used in dentistry and will recognize the various classifications of drugs, their indications, contraindications and potential side effects. Instruction will include requirements for administration and monitoring of nitrous oxide in South Dakota. The student will also identify the medically compromised patient and assist in emergency situations as needed. 2 credits

DA 148 ADVANCED CLINICAL SKILLS
This course is designed to provide the student instruction in the advanced clinical skills in the specialty areas of dentistry. Advanced functions include coronal polishing, pit and fissure sealants, placement of rubber dam, fabrication of temporary crowns and bridges, retraction cord, cementing of prosthesis, removal of cement, suture removal, and placement/ removal of perio packs. This course will also better prepare the student for the Dental Assisting National Board exam. 4 credits

DA 156 DEVELOPING PROFESSIONAL SKILLS
The student will be assigned to a general dental office and perform operative dental assisting duties, will have the opportunity to observe in specialty practices and gain techniques in providing care for the developmental disabled under the direction of clinical supervisors. The student will also provide community service and attend other professional functions. 2 credits

DA 165 DENTAL RADIOGRAPHY I
This course will provide information needed to understand radiation physics, equipment, characteristics, and safety. Students will be instructed in exposing, processing/scanning, and mounting diagnostically acceptable radiographs on mannequins and patients. Procedures to verify quality in radiography will also be included. 2 1/2 credits

DA 167 DENTAL RADIOGRAPHY II
This course will provide information needed to understand radiation physics, equipment, characteristics, and safety. Students will be instructed in exposing, processing/scanning, and mounting diagnostically acceptable radiographs on mannequins and patients. Procedures to verify quality in radiography will also be included. 2 credits

DA 176 DENTAL OFFICE ADMINISTRATION
Manual and computerized methods of record keeping, appointment scheduling, billing, insurance, collections and upkeep of dental records. 1 1/2 credits

DA 190 ORTHODONTICS
Orthodontics offers more opportunities for expanded auxiliary practice than any other specialty area. At the completion of this course the student will understand why as well as how to perform many of the orthodontic functions routinely delegated to a "Registered Dental Assistant" in the state of South Dakota. 2 credits

DA 210 CLINICAL PRACTICE
At the completion of this course, the student will perform all duties designated to a chair side assistant in a variety of general dentistry and/or specialty practices. Emphasis is on all aspects of clinical chair side assisting and performance of expanded functions. 4 credits

DCAT 110 CAT ENGINE FUNDAMENTALS
At the completion of this course, the student will be able to identify and inspect major diesel engine components and understand the principle of operation of diesel engines and there systems. 4 credits

DCAT 111 INTRODUCTION TO CAT SERVICE
At the completion of this course, the student will be able to identify and perform different service procedures used in Caterpillar shops including service procedures, contamination control, parts and service information program operation. 2 credits

DCAT 112 FUNDAMENTALS OF HYDRAULICS
At the completion of this course, the student will have working knowledge of Caterpillar fuel systems. Using the appropriate service literature the student will be able to; identify the components specific to each type of fuel system, explain their system operation and perform testing and adjusting procedures as outlined in this course. 3 credits

DCAT 113 CATERPILLAR FUEL SYSTEMS
At the completion of this course, the student will be able to identify and perform different service procedures used in Caterpillar shops including service procedures, contamination control, parts and service information program operation. 3 credits

DCAT 114 FUNDAMENTALS OF ELECTRICITY
At the completion of this course, the student will be able to understand basic electrical/electronic fundamentals and properly diagnose and repair basic and complex electrical systems on Caterpillar Machines. 3 credits

DCAT 115 FUNDAMENTALS OF AIR CONDITIONING
At the completion of this course, the student will be able to describe the basic parts of an air conditioning systems and the theory of its operation. 2 credits

DCAT 116 FUNDAMENTALS OF TRANSMISSIONS AND TORQUE CONVERTERS
At the completion of this course, the student will be able to demonstrate basic power train components and operation, identify and explain operation of flywheel clutches, torque converters, torque dividers, manual transmissions, power shift transmissions, transmission control systems, and disassemble and assemble all mentioned components. 3 credits

DCAT 118 MSHA CERTIFICATION
1 credit

DCAT 150 INTERNSHIP I
The student will be assigned a mentor and will work with them closely to observe and demonstrate proper troubleshooting, inspection, disassembly, assembly, and service procedures. 5 credits

DCAT 151 INTERNSHIP II
The student will be assigned a mentor and will work with them closely to observe and demonstrate proper troubleshooting, inspection, disassembly, assembly, and service procedures. 5 credits

DCAT 200 UNDERCARRIAGE/FINAL DRIVES
At the completion of this course, the student will be able to demonstrate the use and disassembly and assembly of differentials, differential steering, steering clutches and brakes, undercarriage components there wear and operation, track and shoe options, final drives, and chain drives and tires. 3 credits

DCAT 201 CAT MACHINE ELECTRONICS
At the completion of this course, the student will be able to explain and test electronic components in Caterpillar electronic control systems, identify components and explain the operation

of Caterpillar electronically controlled engines, connect Cat ET to a machine or engine to view system status, perform diagnostic tests and calibrate, and use DataView for machine diagnostics. 3 credits

DCAT 202 ENGINE PERFORMANCE
At the completion of this course, the student will be able to use Caterpillar service literature and diagnostic tooling to trouble shoot diesel engine problems. Students will be able to select proper oil grades, measure and evaluate temperatures and pressures throughout the oil and air systems, calculate coolant temp and pressure differentials, evaluate horsepower and fuel rates, the effects of changing fuel settings, and measure and adjust dynamic timing. 2 credits

DCAT 203 DIAGNOSTIC TESTING
At the completion of this course, the student will be able to use Caterpillar service literature and diagnostic tooling to troubleshoot and repair problems in the following machine systems: power trains, hydraulic and electrical systems. 2 credits

DCAT 204 MACHINE SPECIFIC SYSTEMS
At the completion of this course, the student will have a working knowledge of chosen Caterpillar Machine Specific Systems. 3 credits

DCAT 210 MACHINE HYDRAULIC SYSTEMS
At the completion of this course, the student will be able to inspect, test, service, and diagnose Caterpillar hydraulic systems and components. Students will conduct testing and adjusting procedures on Caterpillar equipment. 3 credits

DCAT 235 APPLIED FAILURE ANALYSIS
This course teaches students to think in a consequential and organized manner so that they learn to work in a consequential and organized manner. Failure Analysis is the thoughtful review of product and environment facts which leads to identification of root causes of failures. 1 credit

DCAT 250 INTERNSHIP III
The student will be assigned a mentor and will work with them closely to observe and demonstrate proper troubleshooting, inspection, disassembly, assembly, and service procedures. 5 credits

DCAT 251 INTERNSHIP IV
The student will be assigned a mentor and will work with them closely to observe and demonstrate proper troubleshooting, inspection, disassembly, assembly, and service procedures. 5 credits

DMAX 100 DIESEL ENGINE FUNDAMENTALS
At the completion of this course, the student will be able to identify and inspect major diesel engine components and understand the principle of operation of diesel engines and their systems. 4 credits

DMAX 105 BUTLER AG SERVICE SYSTEMS
At the completion of this course, the student will be able to identify and perform different service procedures used in Butler stores including service procedures, contamination control, parts and service information/ program operation. 2 credits

DMAX 110 MSHA CERTIFICATION
At the completion of this course, the student will be able to identify and perform the day to day safety regulations according to MSHA 30 CFR Part 48. 1 credit

DMAX 115 INTERNSHIP I
The student will be assigned a mentor and will work with them closely to observe and demonstrate proper troubleshooting, inspection, disassembly, assembly, and service procedures. 5 credits

DMAX 120 FUNDAMENTALS OF HYDRAULICS 3 credits

DMAX 125 DIESEL FUEL SYSTEMS 3 credits

DMAX 130 FUNDAMENTALS OF ELECTRICITY 3 credits

DMAX 135 INTERNSHIP II 5 credits

DMAX 140 FUNDAMENTALS OF AIR CONDITIONING 2 credits

DMAX 145 FUNDAMENTALS OF TRANSMISSIONS AND FINAL DRIVES 3 credits

DMAX 200 AGRICULTURE UNDERCARRIAGE 1 credit

DMAX 205 AGRICULTURE ELECTRONICS AND CAT COMMUNICATIONS 4 credits

DMAX 210 AGRICULTURE HYDRAULIC SYSTEMS 4 credits

DMAX 215 APPLIED FAILURE ANALYSIS 1 credit

DMAX 220 INTERNSHIP III 5 credits

DMAX 225 AGRICULTURE IMPLEMENT FUNDAMENTALS
2 credits

DMAX 230 MACHINE OPERATION, DIAGNOSTIC, AND TESTING
2 credits

DMAX 235 AGRICULTURE TECHNOLOGY AND PRECISION
3 credits

DMAX 240 INTERNSHIP IV 5 credits

DT 107 WELDING TECHNOLOGIES
This course will provide hands-on practice using gas and arc welding equipment. 1 credit

DT 116 METALLURGY
2 credits

DT 117 SHOP MANAGEMENT
An introduction to the time service management technique and procedures used by a service manager in managing time in a service department dealership. 1 credit

DT 126 MULTI-CYLINDER ENGINE OVERHAUL
The student will develop skills appropriate to industry and ASE/ VSO standards. These skills will include operational theory of multi-cylinder engines and associated components. Including engine rebuilding and cylinder head reconditioning. 3 credits.

DT 137 POWER TRAINS I
This course covers the theory of operation of mechanically controlled and operated power trains used on light/medium duty trucks, heavy duty trucks, farm equipment, and construction equipment. Students will learn the proper procedures used to diagnose, inspect, and overhaul mechanical power trains including transmissions, differentials, and final drives. 3 credits.

DT 144 ELECTRICAL SYSTEMS
Students will develop skills appropriate to industry/ASE/ VSO standards and examine the principles of basic electricity including the theory of operation of batteries, starting systems, charging systems. These skills will include servicing and troubleshooting batteries, starting systems, and charging systems; which are frequently used in a typical farm equipment or truck shop. 3 credits

DT 147 HYDRAULICS
This course will introduce hydraulic theory, any components that might be found in a hydraulic system, their purpose, and how they work. Students will also gain hands-on experience with hydraulic systems and their individual components. These skills are frequently used in a typical truck or farm equipment shop and can also be used in a vocational student organization. 3 credits

DT 149 HYDRAULIC BRAKES
This course provides the student with practical "hands on" learning experiences in hydraulic brake systems and their individual components function and operation. 1 credit

DT 152 POWER TRAINS II
This course provides the student with practical "hands on" learning experiences in the proper procedures used

to diagnose, inspect, and overhaul hydraulic power trains including hydraulic assist transmissions, torque converters, and hydrostatic transmissions. 2 credits

DT 155 PREVENTIVE MAINTENANCE & INSPECTION
This course explains the value of a good maintenance program, covers various state and federal inspection procedures, and describes the various lubricants used in PM programs. This course also provides the student with practical "hands-on" learning experience and to assist the learner in developing the skills necessary to become a successful technician. These skills are frequently used in a typical truck or farm equipment shop. These skills can also be used in vocational student organizations. 3 credits

DT 165 HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)
The student will become familiar with the basic parts of air conditioning systems and the theory of its operation. The student will also become competent in reclaiming, evacuating, charging, and performance testing air conditioning systems. These skills are frequently used in a typical truck or farm equipment shop. These skills can also be used in vocational student organizations. 3 credits

DT 179 DIESEL ENGINES I A
This course provides the students with the basic knowledge dealing with the fundamentals of how a diesel engine operates 1.5 credits

DT 184 DIESEL ENGINES I B
Continuation of DT 179. 1 1/2 credits

DT 210 DIESEL ENGINES II
The student will understand how to disassemble and assemble diesel engines and discuss all the component parts and how they can be reconditioned, replaced, or adjusted. Students will also disassemble and assemble a diesel engine, understand what the component parts that make up the engine, and make all the required measurements of component parts. 3 credits

DT 216 TRUCK SUSPENSION AND STEERING
This course provides the student with the information needed to inspect, diagnose, and repair problems with steering gears, front axles, alignment, suspensions, wheels and wheel bearings, tires, fifth wheels, and related components used on medium to heavy-duty trucks. 4 credits

DT 217 TRUCK BRAKE SYSTEMS
This course provides the student with the information needed to adjust, diagnose, and repair truck brake systems. 4 credits

DT 229 ENGINE DIAGNOSTICS & REPAIR
This course provides the student with the information needed to test, diagnose, and repair electronic controlled fuel systems. 4 credits

DT 231 TRUCK DRIVETRAINS
The course provides the student with the information needed to inspect, diagnose, and repair clutches, transmissions, drive shafts, and drive axles used on medium to heavy-duty trucks. 2.5 credits

DT 237 FUEL SYSTEMS TUNE UP & TROUBLESHOOTING
This course is designed to enable the student to become skilled at testing, adjusting and diagnosis of diesel fuel injection system components. The students will perform actual "hands-on" fuel system adjustments on various diesel engines. In addition, the student will perform valve adjustment and injection timing on five (5) different diesel engines. 3 credits

DT 238 ELECTRICAL TESTING
This course provides the student with practical "hands on" learning experiences in testing, diagnosing, and repairing truck and tractor electrical systems 3 credits

DT 245 HYDRAULIC SYSTEM DIAGNOSTICS
Given handouts, demonstration and slide presentation, the student will become familiar with the operation and hook up of a flow meter, gauge set, electronic analyzer, and the correct method of diagnosing and repairing hydraulic system malfunctions. The students will then be able to test and adjust all parts of the hydraulic system. 4 credits

DT 246 HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) TESTING
The student will become familiar with the basic parts of air conditioning systems, the theory of its operation, and diagnosing problems associated with HVAC systems. The student will also become competent in reclaiming, evacuating, charging, and performance testing air conditioning systems. These skills are frequently used in a typical truck or farm equipment shop. These skills can also be used in vocational student organizations. 1 credit

DT 247 EMISSION SYSTEMS
This course provides the student with practical "hands on" learning experiences in familiarization testing, diagnosing, and repairing of Heavy Duty Diesel Engines/Emission systems. 3 credits

DT 278 COMBINE HYDRAULIC AND ELECTRICAL FAMILIARIZATION
Given one each of modern combines, the student will become familiar with the location of hydraulic test ports, hydraulic component location, electrical component location and proceedings for testing new combines. 2 credits

DT 282 TRACTOR SHOP PRODUCTION
The practical application of technical skills demonstrated by reconditioning production (customer owned) equipment, including engine and power train rebuilding. 6 credits

DT 291 TRACTOR ELECTRONIC CONTROLS/GLOBAL POSITIONING SYSTEMS AND AUTO STEER
This course is designed to provide the student with information and diagnostic techniques that will enable them to test and diagnose global positioning systems, auto steer, and electronic control systems on Ag equipment. 3 credits

DTBH 100 ELECTRICAL SYSTEMS I
This course provides the student with practical "hands on" learning experiences in developing skills appropriate to industry/ASE/VSO standards and examine the principles of basic electricity including the theory of operation of batteries, starting systems, charging systems. These skills will include servicing and troubleshooting batteries, starting systems, and charging systems. 3 credits

DTBH 105 HYDRAULICS I
This course will introduce hydraulic theory, any components that might be found in a hydraulic system, their purpose, and how they work. Students will also gain hands-on experience with hydraulic systems and their individual components. 3 credits

DTBH 110 SERVICE SYSTEMS AND PROCESSES
This course is designed to provide the student with information and operating techniques that will help him/her interact with a service manager and provide a complete record of time for a full day of service and how to properly charge out the time. 2 credits

DTBH 120 INTERNSHIP I
The student will be assigned a mentor and will work with them closely to observe and demonstrate proper troubleshooting, inspection, disassembly, assembly, and service procedures. 5 credits

DTBH 125 ELECTRICAL SYSTEMS II & SERVICE ADVISOR CORE
This course provides the student with practical "hands on" learning experiences in developing skills appropriate to industry/ASE/VSO standards and examine the principles of basic electricity including the theory of CAN-BUS system, connector repair, and operation of the digital multi meter. 2 credits

DTBH 135 DIESEL ENGINES
At the completion of this course, the student will be able to

identify and inspect major diesel engine components and understand the principle of operation of diesel engines and their systems. 4 credits

DTBH 140 INTERNSHIP II
A continuation of DTBH 120. The student will be assigned a mentor and will work with them closely to observe and demonstrate proper troubleshooting, inspection, disassembly, assembly, and service procedures. 5 credits

DTBH 145 HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) TESTING
The student will become familiar with the basic parts of air conditioning systems and the theory of its operation. The student will also become competent in reclaiming, evacuating, charging, and performance testing air conditioning systems. 2 credits

DTBH 200 ELECTRICAL TESTING DIAGNOSTICS & ELECTRICAL CORE
This course provides the student with practical "hands on" learning experiences in testing, diagnosing, and repairing electrical systems. 3 credits

DTBH 205 POWER TRAINS
This course provides the student with practical "hands on" learning experiences in the proper procedures used to diagnose, inspect, and overhaul mechanical power trains 4 credits

DTBH 210 HYDRAULICS II
At the completion of this course, the student will be able to inspect, test, service, and diagnose John Deere hydraulic systems and components. Students will conduct testing and adjusting procedures on John Deere equipment. 2 credits

DTBH 220 INTERNSHIP III
A continuation of DTBH 140. The student will be assigned a mentor and will work with them closely to observe and demonstrate proper troubleshooting, inspection, disassembly, assembly, and service procedures. 5 credits

DTBH 225 TECHNICAL SOFTWARE INTERNSHIP
2 credits

DTBH 230 COMBINE/TRACTOR/PLANTER OPTIMIZATIONS
2 credits

DTBH 235 HYDRAULIC SYSTEM DIAGNOSTICS & HYDRAULIC CORE
Given handouts, demonstration and slide presentations, the student will become familiar with the operation and hook up of a flow meter, gauge set, electronic analyzer, and the correct method of diagnosing and repairing hydraulic system malfunctions. The students will then be able to test and adjust all parts of the hydraulic system. 2 credits

DTBH 240 MACHINE TECHNOLOGY SYSTEMS
This course is designed to provide the student with information and diagnostic techniques that will enable them to test and diagnose global positioning systems, auto steer, and electronic control systems on Ag equipment. 2 credits

DTBH 245 FUEL SYSTEMS & ENGINE EMISSIONS
This course is designed to enable the student to become skilled at testing, adjusting and diagnosis of diesel fuel injection system components. The students will perform actual "hands-on" fuel system adjustments on various diesel engines. 2 credits

DTBH 250 INTERNSHIP IV
A continuation of DTBH 220. The student will be assigned a mentor and will work with them closely to observe and demonstrate proper troubleshooting, inspection, disassembly, assembly, and service procedures. 5 credits

ECON 105 LEADERSHIP IN THE GLOBAL WORKPLACE
The study of traditional theories of leadership, as well as the most recently developed leadership philosophies. This course will focus on the application of leadership concepts through critical thinking and the development of critical leadership skills needed in the global workplace. Leadership traits, ethics, changing demographics, workforce diversity, and financial planning are also included. Upon successful completion of this course, the student will be able to relate to the importance of leadership both personal and professional. 3 credits

ECON 201 PRINCIPLES OF MICROECONOMICS I*
Studies the basic economic concepts as they relate to consumer, worker and business decisions. Emphasis is given to satisfaction maximizing behavior by individuals and profit maximization by firms. Market structures are thoroughly analyzed regarding their effect on price, output and competitiveness. 3 credits *College transferable

ECON 202 PRINCIPLES OF MACROECONOMICS II*
Principles of macroeconomics considers the economy as a whole, how its sectors interact and how monetary and fiscal policy can influence output, inflation, interest rates, unemployment, poverty, debt and other factors. 3 credits *College transferable

ELL 090 ENGLISH LANGUAGE LEARNER
Coursework provides knowledge and practice of academic reading, grammar, listening/speaking and composition for English Language Learners as well as provides guidance on study and life skills to support student success in technical programs. 1 credit

EMT 100 EMERGENCY MEDICAL TECHNICIAN (EMT BASIC)
The EMT Basic class is a South Dakota approved training course consisting of 100 hours of classroom/practical training and 20 hours of clinical observation. The training focuses on caring for life threatening and non-life threatening situations and conditions, as well as other issues related to the sick and injured. Ultimately, the course is designed to prepare students for successful completion of the National Registry Exam. 6 credits

EMT 110 PATHOPHYSIOLOGY
Lectures, lab work and demonstrations of human physiological processes both normal and abnormal. 2 credits

EN 100 PRACTICAL WRITING
Practical Writing is an introduction to basic writing skills needed for successful academic writing. This course is designed to prepare students for ENGL 101 by helping them become more capable, confident writers. Students will gain the skills and knowledge necessary to write clear, interesting, and accurate sentences and to write developed and coherent paragraphs. These skills will prepare students to write college-level essays. 3 credits

ENGL 101 COMPOSITION*
This course concentrates on all phases of the writing/communication process. Prewriting, drafting, revising and editing are used to help students develop clear, concise and unified writing styles that will serve them well in their chosen career areas. (Pre-requisite: EN 100 with a "C" or higher, an English ACT score 18+, and/or an ACCUPLACER score in Sentence Skills of 86+ and/or a Next-Generation ACCUPLACER score of 263+) 3 credits *College transferable.

ENGL 201 TECHNICAL WRITING
This course will include instruction in the writing of procedural manuals, administrative reports, scientific papers, and pre-employment materials. 1 credit

ENT 101 INTRODUCTION TO ENTREPRENEURSHIP
Topics covered in this course are definition of entrepreneurship, are you an entrepreneur, how to develop entrepreneur skills, and defining your dream business. Students will create a business plan from start to finish which will focus on the business concept and marketplace section. 3 credits

ENT 130 FINANCING/SMALL BUSINESS FUNDING
This course covers how small businesses receive financing and how to go about getting it. Students will develop the financial section of their business plan. Guest speakers in the banking/financing profession will speak about lending practices and what they expect from small business owners starting out. 3

credits

ENT 135 COMPETITIVE ANALYSIS
This course covers Complete Competitive Analysis-evaluation of regional competition, market analysis and odds for survival-for their dream business and final submission of their business plan. 2 credits

ENT 205 STRATEGIC ELEMENTS
Students will be preparing their business plan to be entered in the Giant Vision competition. 3 credits

ENT 210 ENTREPRENEURSHIP CAPSTONE
This course entails-reviewing your business plan with professionals, identifying weaknesses, competing in Giant Vision, finalizing business plan, and launching it. 3 credits

ENT 220 BUSINESS TEAM DEVELOPMENT
A strong business team and entrepreneurial leadership will determine how far your vision goes. This course trains students in effective decision-making and leadership skills, the art of guiding and motivating employees, and how to build a team-environment. 3 credits

EO 103 FUNDAMENTALS OF MAINTENANCE OPERATIONS
A basic introduction to the field of maintenance operations. 3 credits

EO 110 FUNDAMENTALS OF THERMODYNAMICS THEORY AND LAB
The objective of this course is to explain the principles and basic concepts of thermodynamics and its relevance in the energy production and processing industries. 3 credits

EO 202 INTRODUCTION TO THE ELECTRIC INDUSTRY
This course is intended to give students an in-depth look at the rapidly evolving electric industry including an overview of U.S. and global electricity usage and some history on how we've gotten to where we are today. Students will study electric market structures and explore how these market participants are organized and interact. Regulation and deregulation is studied as well as how participants attempt to make money and manage risk. 3 credits

EO 206 GAS PROCESSING
This course introduces students to the fundamental steps of natural gas processing. Course content will include properties of fluids, absorption, demethanation, refrigerated absorbers and associated equipment utilized in the gas processing industry. 3 credits

EO 208 ETHANOL BIOFUELS PRODUCTION
The objective of this course is to study the design, operation, equipment, and process flows of ethanol plants and biofuel facilities. 3 credits

EO 211 POWER GENERATION, TRANSMISSION AND DISTRIBUTION
This course is intended to give students a fundamental understanding of large, interconnected electrical power systems with regard to terminology, electrical concepts, design considerations, construction practices, industry standards, and control room operations for both normal and emergency conditions. Maintenance duties, power consumption, telecommunications, and safety techniques will also be covered within the framework of our energy operations curriculum. 3 credits

EO 212 BOILER OPERATIONS & REFRIGERATION
The objective of this course is to explain the principles and basic concepts involved in the operation, maintenance, and safety of boilers. 3 credits

EO 214 INSTRUMENTATION AND CONTROLS SIMULATIONS
Students will use specifically designed computerized software simulations to run control systems involved with the operation of energy facilities. 3 credits

EO 216 INTERNSHIP/CAPSTONE PROJECT
This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers in the energy field. This course is a required course in the Energy Operations / Energy Technology degree programs. 5 credits

EST 115 ELECTRONICS SYSTEMS
This course will take DC/AC Theory to the next level combining both theories used in transistor amplifiers. The application of transistors in switching circuits, inductors and capacitors being used together as filters and the wide variety of common semi-conductors are also introduced and practiced in lab experiments. 4 credits

EST 116 DC/AC ELECTRONICS
The student will be introduced to the study of electronics through this introductory class. Voltage, current and resistance will be defined in theory and practiced in lab experiments. The use of test equipment related to DC measurement is applied. Students will apply the theory associated to DC electronics and recognize its changes in an AC environment. The introduction to inductors, capacitors transformers and power supplies will be presented in the classroom and practiced in lab situations. 4 credits

EST 121 DIGITAL SYSTEMS A
This course will provide students with hands-on and research experience in the application of Digital Electronics; binary counting, logic gates, encoding, decoding, seven-segment displays and flip-flops. 3 credits

EST 123 DIGITAL SYSTEMS B
Continuation of EST 121. 1 credit

EST 219 3D PRINTER BUILD
Computer Control Systems is a project based course. Students will be building a 3D printer, soldering the control board, flashing the bios, programming the board, setting up the software, and printing 3D objects. This is the introductory into axis controlled machines. 3 credits

EST 232 ELECTRONIC TROUBLESHOOTING FOR COMPUTER SCIENCE
This course will expose students to the fundamentals of electronics. By course completion, students will be proficient in identifying electricity units and metric prefixes, employing solder equipment safely, interpreting electronic schematics, troubleshooting circuit faults, and utilizing multi-meters. Additionally, they will gain expertise in wiring schematics and proper crimp methods for various cabling connections. 2 credits

EST 246 CIRCUIT BOARD DESIGN
Circuit Board Design requires the use of symbols, components and soldering skills learned in prior classes. Students create schematic drawings that are used to design circuit boards containing through-hole and SMT components. 3 credits

EST 247 MICROCONTROLLERS
Microcontrollers is a C base programming class. Students will learn to program Arduino microcontrollers. Using basic programming skills, libraries, and extensions students will be able to program their microcontrollers. Students will also start their robot design for Robotic Engineering by designing and programming the Arduinos for their controllers 3 credits

EST 253 ADVANCE MICROCONTROLLERS
Continuation of EST 247. 3 credits

EST 262 ADVANCED DIGITAL SYSTEMS
This course will provide students with hands-on and research experience in the application of Digital Electronics; binary counting, logic gates, encoding, decoding, seven-segment displays and flip-flops. 3 credits

EST 267 REWORK, REPAIR AND SURFACE MOUNT SOLDERING
This course will instruct students to proper care of soldering equipment used in Electronics. Proper IPC handling and

soldering procedures will be introduced and practiced with surface and through-hole technology. 2 credits

EST 271 ADVANCED ELECTRONIC SYSTEMS
Advanced Electronic Systems will introduce many new components and technology used in today's circuitry. Students will work with OP Amps, Oscillators, different amplifier configurations and receiver circuits. 3 credits

ET 105 OSHA, TORQUE CERTIFICATIONS, VALVES, AND LIFTS
This course will cover OSHA laws, rules and regulations for the industrial construction industry, torque certifications, valves, and lifts. Possible hazards in the work place. Preventive measures that can be taken to ensure your safety, and the safety of those around you. 2 credits

ET 110 PLANT BLUEPRINTS AND DRAWINGS
This course will cover basic knowledge of heavy commercial construction plans and drawings to help build and maintain industrial plants. 1 1/2 credits

ET 150 MECHANICAL DRIVES AND PUMPS
This course will enable students to understand the safety procedures, components, and applications of mechanical drives and pump systems. 3 credits

ET 185 FLUID POWER
This course will enable students to understand the components, applications and physical properties of hydraulic and pneumatic systems. 3 credits

ET 201 MACHINE TOOL TECHNOLOGY
4 credits

ET 204 BASIC PIPE FITTING
This course investigates piping schematics and isometric drawings, determining cut lengths, and understanding the different connections and fittings associated with pipe fitting operations. 3 credits

ET 215 PLANT OPERATION AND TROUBLESHOOTING
The objective of this course is to understand the importance of troubleshooting and learn how a typical maintenance organization works. Students will study and use the four (4) main troubleshooting aids. They will also learn the correct methods of communicating with co-workers. 2 credits

ET 255 INTERMEDIATE MECHANICAL DRIVES
This course will enable students to understand the safety procedures, components, and applications of mechanical drives and pump systems. 3 credits

FLT 102 INTRO TO UNMANNED AERIAL SYSTEMS
In this Intro to sUAS course, students will learn the basics of flying sUAS (drones) while discussing topics that will prepare students to take the FAA written Exam and become a certified FAA Part 107 Pilot. Students will learn to fly safely and legally, understand the UAS workforce and business models, while learning to get the most out of their drones. Topics covered in the course will include the history of drones, sUAS terminology, drones in the workplace, recreational vs. Part 107, and understanding the applicable sUAS rules, FAA regulations, and flight operations for a sUAS. 3 credits 84 clock hours

FLT 105 AVIATION METEOROLOGY
During this course the student will learn about weather patterns and development with an emphasis on aviation weather as it affects safety of flight. The student will gain extensive knowledge and practical use of aviation weather products and resources to develop go/no go and other weather-related decision-making skills required for pre-flight planning and in-flight risk management. 3 credits

FLT 107 RECIPROCATING ENGINE TECHNOLOGY
This course teaches the student the fundamentals of reciprocating engine construction and operation. It includes knowledge of various engine configurations, performance and integrity assessment, and operational factors that affect engine dependability and longevity. 2 credits

FLT 110 PRIVATE PILOT GROUND SCHOOL
This course includes instructor-supervised on-line FAA Private Pilot ground school, Private Pilot Written Test prep, and Private Pilot Check Ride prep. 3 credits

FLT 115 PRIVATE PILOT FLIGHT
During this course the student will complete all of the solo, cross-country, instrument, towered airport, and night flying requirements for the FAA single engine land airplane Private Pilot rating. 3 credits

FLT 120 HUMAN FACTORS IN AVIATION
During this course, students learn human factors concepts and how to integrate them into their professional pilot careers as a tool to increase safety. Emphasis is placed on human factors training as being fundamental to other aviation safety-related topics such as cockpit resource management, risk management, and breaking chains of events that could lead to accidents. 1 credit

FLT 125 PRIVATE PILOT CHECK RIDE
During this course the student will make final preparations for and complete all regulatory requirements associated with FAA Private Pilot testing. This will include final instruction, documentation, written tests, oral, and practical tests. 1/2 credit

FLT 132 ADVANCED UNMANNED AERIAL SYSTEMS
In this Advanced sUAS course, students will take a deeper look at sUAS systems while learning advanced topics that will prepare students to take the FAA written exam and become a certified FAA part 107 Pilot. Topics covered include national airspace systems, airport operations, reading sectional charts, weather, knowledge of systems such as PIX4D 3D mapping, photography, surveying, Ag systems, and evaluating data. 3 credits 84 clock hours

FLT 135 INSTRUMENT GROUND
This course provides students the knowledge to fly aircraft in instrument meteorological conditions (IMC). It includes an instructor-supervised on-line ground school along with the pre and post flight ground instruction in conjunction with logged instrument flight instruction. Completion of this course prepares students for the FAA Instrument Pilot written exam and Instrument oral test. 3 credits

FLT 140 INSTRUMENT FLIGHT
This course provides students with the aeronautical skills and experience to fly aircraft in instrument meteorological conditions (IMC). It includes the pre and post flight ground instruction time IAW 61.65(c) required towards an FAA Instrument rating. It additionally includes 28 hours of log able airplane flight time acting as Second in Command (SIC) safety pilot IAW FAR 91.109 and 20 hours of time with an Advanced Aviation Training Device (AATD). 4 credits

FLT 145 AVIATION SAFETY
This is an introductory course that gives students an overview of the theories, concepts, and applications of the field of aerospace safety. It covers topics of human factors, aircraft systems factors, accident investigation, safety programs and safety statistics. 2 credits

FLT 150 AVIATION LAW
This course introduces students to federal, state, and local statutes, familiarizing them with case law and common law as it applies to aviation. Criminal law and government, airman, and operator rights and liabilities will also be studied. 2 credits

FLT 155 AIRSPACE SYSTEMS AND OPERATIONS
This course begins with an introduction of the complex array of components in the National Airspace System by analyzing its history and development. The student will then gain a comprehensive understanding and working knowledge of

present day systems including ADS-B, RVSM, WAAS, GPS, and RNP-RNAV, among other emerging technologies. 2 credits

FLT 160 INSTRUMENT PILOT CHECK RIDE
During this course the student will make final preparations for and complete all regulatory requirements associated with FAA Instrument Pilot Testing. This will include final instruction, documentation, written tests, oral, and practical tests. 1/2 credit

FLT 165 INTRODUCTION TO UNMANNED FLIGHT
This course will provide students with the knowledge and skills necessary to pass the FAA written, Oral, and Practical tests for certification with Airplane Instrument Rating. Students are encouraged to reference the latest revision of document FAA-S-ACS-8A to compare their progress through this course to their capability to pass the FAA certification tests. 1 credit

FLT 200 AVIATION SEMINAR
This course instills a culture of safety, community, and continuing education that is meant to have a positive impact that continues for the length of a career. The student is required to participate In the FAA "Wings" program. Other activities may include but are not limited to workshops, seminars, aviation industry work experiences, and aviation promotional or charitable events. Instructor preapproval of creditable events and documentation of attendance is required. 4 credits

FLT 215 COMMERCIAL CROSS-COUNTRY FLIGHT
During this course, students will have the opportunity to advance their airmanship skills while flying an assortment of aircraft with unique handling characteristics. Additionally the student will build cross-country time with extensive flight through a multitude of various airspaces. Course includes pre/post flight ground training required by FAR 61.127. 6 credits

FLT 220 COMMERCIAL PILOT GROUND SCHOOL
This course provides the student with the opportunity to develop proficiency and gain experience in the operation of communication/navigation systems in the National Airspace System that include ADS-B, WAAS, GPS, and RNP-RNAV, among other emerging technologies. The course also includes an instructor-supervised on-line ground school course that prepares the student to take the FAA Commercial Pilot Knowledge test. 2 credits

FLT 225 ADVANCED AIRCRAFT SYSTEMS
During this course, students will learn about aircraft systems that include glass cockpits, turbocharger systems, pressurization systems, propeller systems, and landing gear included in complex aircraft. 3 credits

FLT 255 MULTI ENGINE FLIGHT
This course provides the pre and post flight ground instruction associated with CFI commercial maneuvers training flights. 1 credit

FLT 260 CHECK RIDE PREP
During this course the student develops teaching skills by flying from the right seat, "instructing" the instructor. 1/2 credit

FLT 265 MULTI-ENGINE PILOT COMMERCIAL CHECK RIDE
This course provides the pre and post flight ground instruction associated with multi-engine aircraft training flights that will prepare the student for the oral portion of an FAA Multi-engine Commercial Pilot test. .5 credit

FLT 276 CFI SEL MANEUVERS
During this course the instructor works with the student to identify and correct knowledge and/or skill deficiencies in preparation for FAA Commercial and/or Certified Flight Instructor check rides. 1.5 credits

FLT 277 SPECIALIZED FLIGHT OPERATIONS
1 credit

FLT 279 EXPLORING PROFESSIONAL AERIAL SERVICES
1 credit

FLT 280 CFI I CHECK RIDE
.5 credit

FLT 281 HISTORY AND DEVELOPMENT OF BEYOND VISUAL LINE OF SIGHT (BVLOS)
1 credit

FLT 283 BEYOND VISUAL LINE OF SIGHT (BVLOS) OPS LAB
2.5 credits

FLT 287 CFI II CHECK RIDE
1 credit

FLT 290 FUNDAMENTALS OF INSTRUCTION
This course provides the knowledge and skills for the student to teach flight and ground school instruction. It prepares students for the FAA's Fundamentals of Instruction Written, Oral, and Practical tests associated with the Certified Flight Instructor check ride. 3 credits

HAZ 100 HAZARDOUS MATERIALS SAFETY
This course covers hazard communication and identifies workplace safety procedures, blood-borne pathogens, and describes fire and disaster procedures. .5 credit

HEO 100 HEAVY EQUIPMENT OPERATIONS I
Students will learn to identify the major types of heavy equipment and describe safe usage, as well as explore the foundational responsibilities of an operator and recognize successful characteristics. 3 credits

HEO 105 EQUIPMENT SIMULATORS 2 credits

HEO 110 SITE ENGINEERING AND LAYOUT THEORY
Students will be introduced to construction site land surfaces including soil types, slope, and terrain as it relates to the work site area. 2 credits

HEO 115 HEAVY EQUIPMENT OPERATOR SAFETY
Students will gain a comprehensive overview of safety requirement on job sites with emphasis on OSHA requirements. The course also presents basic safety requirements for personal protection on the job site, on and off the equipment, along with HAZCOM. This course also includes safety techniques required for heavy equipment operators, with emphasis on organizing and conducting safety meetings, performing safety inspections/investigations, and proper inspection reporting. 1 credit

HEO 120 SITE MODIFICATION
The objectives for this course include a study of soil composition, soil types, maps, test boring, soil compaction, asphalt compaction, soil and erosion control practices, and the equipment required for heavy construction equipment operations. Students will also gain an understanding of government regulations at the federal, state, and county levels as related to construction sites. 2 credits

HEO 130 MSHA CERTIFICATION
This course will provide students with a minimum of 24 hours of required MSHA training for certification. 1 credit

HEO 140 BACKHOE AND FRONT END LOADER
At the completion of this course, students will learn to properly operate this equipment; be able to operate a truck; be able to work as a team; and move materials in the proper manner. Some simulators will be involved. 3 credits

HEO 145 EARTHMOVING BLUEPRINTS AND GRADE STAKES THEORY
This course will introduce the basic skills of reading blueprints. Students will practice problem-solving at job sites, utilizing these blueprint reading skills. Student will also learn and demonstrate the grade staking process for job sites. 2 credits

HEO 150 EQUIPMENT PREVENTIVE MAINTENANCE
This course provides the students with knowledge related to preventive maintenance. 2 credits

HEO 163 EQUIPMENT OPERATIONS II
Students will learn to identify grading systems and will complete a grading project. 3 credits

HEO 170 CRANE CERTIFICATION
Students shall complete classroom study of crane types and components, proper setup as well as crane safety, rigging, hand signals and learn how to read load charts. Testing will be onsite for the written examination. Under the supervision of the instructor, students will take their knowledge to hands-on training with a crane, gaining the skills necessary to complete the practical examination. 2 credits

HEO 201 HEAVY EQUIPMENT OPERATIONS III
Through teamwork and machine operations students will complete a grading project. 5 credits

HEO 202 ADVANCED EQUIPMENT PREVENTIVE MAINTENANCE
Students will perform proper maintenance and ensure daily operation of equipment. 1 credit

HEO 203 BASE AND ROVER FOR CONSTRUCTION
This course will Introduce and expand the students' knowledge of Trimble Data Collector TSC-7, tablet and SCS 900 software. 3 credits

HEO 205 GRADER OPERATIONS
Demonstrate knowledge of grading systems while completing a grading project. 3 credits

HEO 210 DEMOLITION AND ESTIMATING THEORY
Students will discuss the history and origins of demolition, explain and estimate the origins of salvage materials, analyze the effect of removing and handling hazardous materials, and describe different types of equipment used in demolition. 1 credit

HEO 215 GPS FOR FIELD MACHINES
This course will provide the students with the knowledge of the installation procedure, terminology, component identification, set up and operations of GPS on construction equipment. 2 credits

HEO 225 SOILS AND COMPACTION
The student will learn about soil compaction, foundations and be able to properly take a gradation sample and be able to run compaction tests. 1.5 credits

HEO 230 BUDGETING FOR SEASONAL WORKERS
The course will give students knowledge on how to budget with seasonal income and the basics of finances. 1 credit

HEO 233 HEAVY EQUIPMENT OPERATIONS IV
Demonstrate operation skills by completing a grading project. 3 credits

HEO 237 HYDRAULIC SYSTEMS
This course provides the students with knowledge dealing with hydraulic systems. 1 credit

HEO 242 PROJECT MANAGEMENT
Students will correctly plan, survey and estimate earthwork project and build efficient production plan and have a basic understanding of Trimble Business Center HCE. 2 credits

HEO 250 INTERNSHIP
The students will take their knowledge into the fields and work for an employer and better themselves for their future. 4 credits

HEO 255 ELECTRICAL SYSTEMS
This course provides the students with knowledge dealing with Electrical systems. 1 credit

HST 108 GUIDING CHILDREN'S BEHAVIOR
Students will become proficient in recognizing the natural progression of children's emotional and social behavior, become proactive in teaching children the skills needed to develop self-control and problem solving abilities in accordance with their developmental level, learn and practice the skills needed to teach children to develop socially appropriate behavior in order to allow them to develop self-esteem, develop strong friendships and treat others with dignity and respect throughout their lifetime. 2 credits

HST 115 EARLY EDUCATION CURRICULUM I
In this course, students will become familiar with the essentials of Early Childhood Education and will develop a portfolio containing a variety of infant/toddler activities. 3 credits

HST 117 MEDICAL TERMINOLOGY
This course represents a study of basic medical terminology. Prefixes, suffixes, word roots, combining forms, special endings, plural forms, abbreviations, and symbols are included in the content. 1 credit

HST 118 EARLY EDUCATION CURRICULUM II
Continuation of HST 115. 3 credits

HST 119 GROUP TECHNIQUES
This course will provide an opportunity for the students to plan and carry out group activities for a wide range of people. 1 credit

HST 125 ON-THE-JOB TRAINING I
This course is designed to provide hands on experience for students entering the human services field. This second hands-on course is designed to be a more in-depth experience with a specific employer or in a similar job setting the student may wish to work upon graduation. 2 credits

HST 127 PERSONAL CARE ASSISTANT (NUTRITIONAL DIET)
This course will train the students in the appropriate techniques for providing excellent, compassionate care to clients with very different needs. 2 credits

HST 131 HEALTH, SAFETY, AND NUTRITION
This course will discuss the basic nutritional needs and safety of infants, toddlers and preschoolers, as well as current trends and concerns in early childhood education. 3 credits

HST 132 SEXUAL OFFENDING AND PEOPLE WITH DISABILITIES
This is a course that will discuss a myriad of topics relating to sexual offenders who have developmental disabilities including causes, treatments for, and self care for health service professionals who choose to work with sexual offenders. It may include material that some people would find offensive and/or disturbing. Students concerned that this may pose a difficulty, please discuss the concerns with the instructor within the first week of class. 2 credits

HST 133 CHILD GROWTH & DEVELOPMENT I
This course will allow students to explore the developmental process of children pre-birth-12. 1.5 credits

HST 134 CHILD GROWTH & DEVELOPMENT II
This course will allow students to explore the developmental process of children pre-birth-12. 1.5 credits

HST 135 PRINCIPLES AND PRACTICES OF EARLY CHILDHOOD EDUCATION
Students will review and master Early Childhood Education skills completing their preparation to succeed in the Early Childhood industry. 3 credits

HST 136 MEDICATION ADMINISTRATION
This course will provide an introduction to the skills needed to safely administer medications under the supervision of a licensed nurse. Students will be required to demonstrate dosing up skills and to be knowledgeable of basic medication safety. 1/2 credit

HST 137 FAMILIES
Topics covered will include family dynamics, birth order, abuse and neglect, adoption and foster parenting and poverty in the field of human services. 2 credits

HST 139 DEATH AND DYING
The student will develop skills in caring physically and mentally for the dying and their family. 1 credit

HST 141 CHILDREN WITH SPECIAL NEEDS
Students will learn to work effectively with young children with disabilities or special needs. They will learn to apply the developmental behavioral approach to make their classroom management effective and positive and to arrange optimal learning activities at both the individual and group level. Students will understand the importance of including and

communicating with the parents or caregivers to maintain the optimum learning experience for the children in their care. 2 credits

HST 143 DEVELOPMENTAL DISABILITIES
Developmental Disabilities will provide the student with a thorough background in the types, causes and classifications of developmental disabilities, cognitive disabilities, psychiatric disabilities as well as various physical disabilities. 3 credits

HST 149 BEHAVIOR SUPPORT TRAINING
This course will provide the student with a basic understanding of behavior intervention techniques, behavior supports, positive and negative reinforcement, behavior analysis and baseline measurement procedures. An emphasis will be placed on verbal de-escalation techniques in order to decrease the need for physical interventions. 3 credits

HST 156 ON-THE-JOB TRAINING II
Actual experience working with children at various sites. 2 1/2 credits

HST 159 DIVERSITY STUDIES
This course is designed to expose the student planning a career in the human services field to race, cultural, religious, gender, sexuality and other biases generally held by society. 2 credits

HST 160 CLINICAL EXPERIENCE
This course is designed to provide hands on experience in a variety of settings for students entering the human services field. 1.5 credits

HST 164 PROGRAM PLANNING
This course is designed to enhance professionalism in a student through exposure to the team process, evaluation/ assessments of various populations, and developing and monitoring a plan while adhering to human rights procedures. 2 credits

HST 173 SPECIAL TOPICS IN HUMAN SERVICES
Current events and topics of special interest to the student will be researched and presented. 1 credit

HST 176 CASEWORK SKILLS AND RESOURCES
This course will provide the students with a working knowledge of the case management process, from referral to termination, within various populations served by a human services worker. Both the theory of case management as well as hands on practice will be experienced. 3 credits

HST 177 ETHICS AND ISSUES IN HUMAN SERVICES
This class will cover topics to include confidentiality, ethical treatment, rights and responsibilities, appropriate care, professional liability, and any other topics relating ethical behaviors in the field of human services. 3 credits

HST 178 ETHICS AND ISSUES IN CHILD DEVELOPMENT
This class will cover topics to include confidentiality, ethical treatment, rights and responsibilities, appropriate care, professional liability, and any other topics relating ethical behaviors in the field of child development. 3 credits

HST 179 INTRODUCTION TO CRIMINAL JUSTICE
This course will provide the student with a basic understanding of the Criminal Justice System and their functions. This course will also explore the constitutional rights of offenders within the Criminal Justice System. We will discuss the process of arrest, court proceedings and sentencing, which will include the police, court as well as the rehabilitation of offenders from Probation, Prison and Parole. 3 credits

HST 183 JUVENILE DELINQUENCY
Introduces the student to challenges facing adolescents in today's world and the potential outcomes when there is a lack of support in the home and community. 3 credits

HST 188 ADDICTIONS
This course will address the fundamentals of addiction to both natural and manufactured chemicals. It will also address treatment and prevention. 3 credits

HST 192 POLICE ACADEMY
This course is offered in conjunction with the Watertown Police Department. Students participate interactively on topics such as department investigations, Internet crimes, patrol operations, crime scene investigations, K-9 operations, SWAT, domestic violence and DUI investigations. 1 credit.

HST 195 LIFESPAN DEVELOPMENT
Topics covered will include development of middle childhood, adolescence, early adulthood, middle and late adulthood. 3 credits

HST 201 ON-THE-JOB TRAINING IN THE DEVELOPMENTAL DISABILITIES SETTING
This course is designed to provide an extended hands on experience in one area of human services in order to fully appreciate the process of delivery. 2 1/2 credits

HST 203 ON-THE-JOB TRAINING IN THE MENTAL HEALTH SETTING
This course is designed to provide an extended hands on experience in one area of human services in order to fully appreciate the process of delivery. 2 1/2 credits

LE 100 FITNESS FOR LIFE I
Students will gain an understanding of how to apply methods for managing and evaluating their physical fitness for a healthy lifestyle necessary for safely and effectively performing the duties of a law enforcement professional. There will be pre- and post-physical fitness assessments. The pre and post fitness tests may consist of any of the following activities: 1 1/2 mile run, flexibility, one minute sit-ups, one minute pushups, blood pressure, pulse, body composition, and waist circumference measurement. Students will engage in class fitness activities throughout LATC Law Enforcement and required standards of performance will be reviewed weekly. 1 credit

LE 105 FIRST RESPONDER
This course will provide students with the basic knowledge and skills needed to assess injuries, provide first aid for acute medical problems, and ensure on-scene safety for rescue personnel. 1.5 credits

LE 110 INTRO TO LAW ENFORCEMENT
An introductory course into the history of policing in America and basic functions of law enforcement in America. This course will also provide the student with information and tools to aid them in making the proper decision when faced with an ethical dilemma. 3 credits

LE 115 DIVERSITY TRAINING
This course will provide students with an understanding of the need for Law Enforcement professionals to recognize and respect the complexities of cultural diversity and to develop skills necessary for identifying and responding to our changing communities. The student will gain an understanding of illegal profiling and the characteristics of professional law enforcement. 1 credit

LE 120 MECHANICS OF ARREST
The course will introduce students to lawful detention, arrest and search procedures that support successful prosecutions. Students will gain an understanding of the Response to Resistance Continuum and proper handcuffing and transportation procedures for detainees. 1 credit

LE 125 TECHNOLOGY IN LAW ENFORCEMENT
Students will be introduced and exposed to Zuercher Technologies Public Safety Software to include Computer Aided Dispatch, Computer Aided Dispatch Mapping, Records Management System, Mobile and E-Ticketing which is used by law enforcement personnel to combat crime, the fear of crime, to maintain civil order, and to enhance the quality of life in their communities. Students will learn the significance of aligning

information systems to support community policing initiatives and proactive problem solving. Advancements in technology will be integrated into the class as it evolves in the world of law enforcement. 1 credit

LE 130 CONSTITUTIONAL LAW

The student will gain an understanding of the U.S. Constitution, Declaration of Independence, and provisions of the Bill of Rights which pertain to criminal justice. Topics include: historical overview of Constitutional Law and our legal system, the Supreme Court, guarantees of the Constitution to citizens, impact of specific amendments on the criminal justice system, studies of Supreme Court decisions. 3 credits

LE 135 CRIMINAL LAW PROCEDURES

The student will gain an understanding of the origins of current law in relationship to the role of law enforcement today. The criminal code 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. 3 credits

LE 140 FITNESS FOR LIFE II

The student will gain an understanding of how to apply methods for managing and evaluating their physical fitness for a healthy lifestyle necessary for safely and effectively performing the duties of a law enforcement professional. There will be pre- and post-physical fitness assessments. The pre and post fitness tests may consist of any of the following activities: 1 1/2 mile run, flexibility, one minute sit-ups, one minute pushups, blood pressure, pulse, body composition, and waist circumference measurement. Students will engage in class fitness activities throughout LATC Law Enforcement and required standards of performance will be reviewed weekly. 1 credit

LE 145 PATROL PROCEDURES I

Students will gain an understanding of a police officer's role in the community which includes working in partnership with community members to resolve or reduce problems for the benefit of those who live, visit, and work there. Students will also obtain certification in National Incident Management System training. 3 credits

LE 150 INTERROGATION AND DOCUMENTATION

Students will gain an understanding of how to interview victims, witnesses and suspects. Students will learn the legal issues that define the interviewing of subjects, either in consensual encounters or in custody, and various techniques to enhance information obtained including analysis of verbal and non-verbal actions and how they relate to truth or deception of persons during the interview process. Documentation of encounters to include field interviews will be addressed. 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. 3 credits

LE 155 JUVENILE METHODS

Students will gain an understanding of the policies, programs and services that comprise the juvenile justice system. The course will provide the student with a comprehensive overview of the processing and treatment of juvenile offenders, descriptions and definitions of offender types and the subsystems that play a role in the care and control of juvenile delinquents. 2 credits

LE 160 VIRTUAL ACADEMY I

An introductory course to the LATC Law Enforcement Virtual Academy—a hybrid program created to benefit working law enforcement graduates of the South Dakota Law Enforcement Academy. Students will be introduced to LATC Law Enforcement mission, vision, and core values and modern day policing concepts and ideals. 1 credit

LE 200 FITNESS FOR LIFE III

Students will continue to enhance their understanding of how to apply methods for managing and evaluating their physical fitness for a healthy lifestyle necessary for safely and effectively performing the duties of a law enforcement professional. There will be pre- and post-physical fitness assessments. The pre and post fitness tests may consist of any of the following activities: 1 1/2 mile run, flexibility, one minute sit-ups, one minute pushups, blood pressure, pulse, body composition, and waist circumference measurement. Students will engage in class fitness activities throughout LATC Law Enforcement and required standards of performance will be reviewed weekly. 1 credit

LE 205 LAW ENFORCEMENT SURVIVAL

This course is designed to familiarize the student in the escalation of force model and in basic offender confrontation concepts. Students will be introduced to tactical techniques to include professional communication skills. Students will gain an understanding of how to deal with physical situations and the ability to respond with swift and efficient solutions whether physical or verbal. Students will be required to properly demonstrate arrest, handcuff, control techniques, and how to conduct a safe and thorough search incident to arrest of compliant and non-compliant suspects. Techniques covered will include the proper use of handcuffs, police baton, and oleoresin capsicum (OC) spray. 3 credits

LE 210 ACCIDENT INVESTIGATIONS

Students will gain an understanding of how to effectively investigate and manage traffic collision scenes to ensure their safety, the safety of others, and protect the integrity of the collision scene. 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. 2 credits

LE 215 FIREARMS TRAINING

Students will gain an understanding of why a law enforcement officer must know and practice all procedures for the safe handling of all firearms while on and off duty to include: identifying the capabilities, and limitations of ammunition and firearms in order to operate them safely and effectively; demonstrating how to properly inspect, clean, and care for their firearms to ensure that they function safely and effectively; and successfully mastering and demonstrating the fundamental skills of firing firearms to be effective in reactive and precision situations during live fire exercises. 2 credits

LE 220 CRIMINAL INVESTIGATIONS

This course gives an in depth examination of the complex, sophisticated field of criminal investigation. Students will gain an understanding of the investigative aspect of police work. Students will learn to identify the major goals in a criminal investigation and understand the fundamentals of preliminary and follow-up investigations. Students will be responsible for learning the importance of conducting a thorough criminal investigation, recording information in their notes and later taking the notes and turning them into a narrative that can be used to prosecute the suspect. 3 credits

LE 225 EVIDENCE

This course provides a brief historical survey of crime scene investigation as well as familiarizes students with the methodologies and skills of crime scene evaluation, evidence collection, documentation, and preservation, as well as various forensic techniques used by investigators and lab analysts to evaluate such evidence. 2 credits

LE 230 FITNESS FOR LIFE IV

Students will continue to enhance the understanding of how to apply methods for managing and evaluating their physical fitness for a healthy lifestyle necessary for safely and effectively performing the duties of a law enforcement professional.

There will be pre- and post-physical fitness assessments. The pre and post fitness tests may consist of any of the following activities: 1 1/2 mile run, flexibility, one minute sit-ups, one minute pushups, blood pressure, pulse, body composition, and waist circumference measurement. Students will engage in class fitness activities throughout LATC Law Enforcement and required standards of performance will be reviewed weekly. 1 credit

LE 235 PATROL PROCEDURES II

Students will gain an understanding of how to safely and effectively fulfill their duties of public protection and service as police officers. Students will learn to develop appropriate law enforcement patrol strategies under a wide variety of circumstances and conditions. 3 credits

LE 240 ADVANCED FIREARMS TRAINING

Students will demonstrate and practice all procedures learned during firearms training for the safe handling of all firearms while on and off duty, to include: knowing the workings, the capabilities, and limitations of firearms in order to operate them safely and effectively; knowing the capabilities and limitations of the ammunition they use in their firearms to operate them safely and effectively; knowing how to properly inspect, clean, and care for their firearms to ensure that they function safely and effectively; and comprehending and practicing the fundamental skills of firing firearms to be effective in reactive and precision situations during live fire exercises. 2 credits

LE 245 EMERGENCY VEHICLE OPERATIONS

Students will learn the importance of defensive driving principles and techniques in order to develop safe driving habits. Students will learn to recognize that emergency response driving demands a high level of concentration and instant reactions. Students will learn that law enforcement emergency vehicles must recognize that even though the purpose of pursuit driving is the apprehension of a suspect who is using a vehicle to flee, the vehicle pursuit is never more important than the safety of officers and the public. Students will complete an EVOC course and demonstrate proficiency in the operation of the vehicle, and know the dynamic forces at work to include: proper steering control, throttle control, speed judgment, and brake use. 3 credits

LE 250 CORRECTIONS

Students will gain an understanding of Institutional and Community Corrections systems, the operation of jails and prisons, contemporary national and state issues and practices in probation, parole and community corrections alternatives. Students will be introduced to the history of corrections and its competing purposes of retribution and protection of the public. 1 credit

LE 255 LAW ENFORCEMENT PRACTICUM

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 at least two shifts per week for a period of several weeks at the direction of the instructor. Students may be assigned a variety of law enforcement tasks working with officers during their duty shifts. Additionally, students will receive 12 hours of Domestic Violence instruction and 8 hours of Basic Radar instruction. 2 credits

LE 260 CERTIFICATION

Students will prepare for and take the State Boards to become a certified Law Enforcement Officer. 1 credit

LE 265 LAW ENFORCEMENT SPANISH

This course will provide students with basic communication skills in Spanish that will enable them to communicate with the Spanish-speaking population they may encounter through their daily work in law enforcement. 1 credit

LE 270 ISSUES IN POLICING

Students will be introduced and exposed to a variety of issues in policing to includes but not limited to: liability areas of policing: building trust with the community; excessive use of force by the police; sexual misconduct by the police; perjury by the police; drug and alcohol misuse by police; police and suicide; other unethical behaviors by the police; and maneuvering successfully in the political environment. Students will be introduced to new issues as they evolve in modern day policing. 2 credits

LE 275 DOMESTIC VIOLENCE CERTIFICATION

This course will provide students with tools and strategies about the dynamics of domestic violence, laws pertaining to domestic violence, officer and victim safety, holding the perpetrator accountable, and forming a community coordinated response. 1/2 credit

LE 280 RADAR CERTIFICATION

This course will help students gain an understanding of the association between speed offenses and motor vehicle accidents and injuries; major types of speed regulations, including the origin, development and scope of these regulations; safety benefits of effective speed enforcement; the origin and history of RADAR equipment; frequency and wavelength of a RADAR signal and the relationship governing frequency, wavelength and RADAR signal speed; Doppler Principle; basic operation of a stationary and a moving RADAR instrument; case law affecting the use of RADAR for speed measurement and enforcement; preparing and presenting evidence and testimony on RADAR speed measurement; functional components of the RADAR unit; and operate a RADAR unit in a practical exercise. .5 credit

LE 285 IMPAIRED DRIVER DETECTION AND APPREHENSION

The Standardized Field Sobriety Testing (SFST) training curriculum collectively, prepares law enforcement students to conduct the SFST's for use in DUI investigations. 2 credits

LE 290 DIVERSITY

This course will provide students with an understanding of the need for Law Enforcement Professionals to recognize and respect the complexities of cultural diversity and to develop skills necessary for identifying and responding to our changing communities. The student will gain an understanding of illegal profiling and the characteristics of professional law enforcement. 2 credits

LE 295 VIRTUAL ACADEMY II

This course will support the student in the second semester. The hybrid courses can become overwhelming, this one-to-one contact and support will ensure that students are making adequate progress and feel the support that they need as they are completing their studies as well as working full-time. 1 credit

MA 105 INTRODUCTION TO MEDICAL ASSISTING

Upon successful completion of this course, the student will be able to identify the roles and responsibilities of a medical assistant. The student will also be able process professional communications to include verbal and nonverbal as well as apply the communication skills in various settings. The student will also be able to perform various duties with office computers and equipment. 3 credits

MA 115 MEDICAL TERMINOLOGY

This course presents a study of basic medical terminology which will be helpful as the students progress in their course of study. Prefixes, suffixes, word roots, combining forms, special endings, plural forms, abbreviations, and symbols are included in the content. A programmed learning word building systems approach is used to learn word parts for constructing or analyzing new terms. This provides students the opportunity to decipher unfamiliar terms and check their spelling. Emphasis is placed on spelling, definition, usage, and pronunciation. Abbreviations are introduced as related terms and presented with each unit. 3 credits

MA 125 MEDICAL LAW AND ETHICS

This course explains how to navigate the numerous legal and ethical issues that health care professionals face every day. Topics are based upon real-world scenarios and dilemmas from

a variety of health care practitioners. 3 credits

MA 165 PHARMACOLOGY AND ADMINISTRATION OF MEDICATIONS
In this course, students will learn the various classifications of medications, pharmacology fundamentals, basic dosage calculations, and methods of medication administration. 3 credits

MA 168 PATHOLOGY
In this course, students will learn the common diseases and disorders affecting each body system and major organs within the body systems. 2 credits

MA 172 MEDICAL LABORATORY PROCEDURES
This course consists of the study of the need for safety at all times and the use of the microscope and glassware. Once these basic techniques are learned, the student will perform tests in the areas of hematology, chemistry, microbiology, immunology, blood banking, and urinalysis. 3 1/2 credits

MA 173 INSURANCE, MEDICAL CODING, ELECTRONIC HEALTH RECORD (EHR) AND PRACTICE MANAGEMENT
This course emphasizes the medical billing cycle. Studying this cycle shows how administrative and medical assistants must first collect accurate patient information and then be familiar with the rules and guidelines and follow up on payments. This ensures that the offices receive maximum, appropriate reimbursement for services provided. Students will also be introduced to the Electronic Health Record (EHR) and practice management software integrating clinical, administrative, insurance, and billing. 2 credits

MA 175 CLINICAL OFFICE PROCEDURES I
This course includes instruction in patient preparation, obtaining and recording information, assisting the physician with examinations, and caring for the examination room before and after patient care. The course is also designed to familiarize the student with various types of microorganisms found around us, their usefulness as well as their disease producing abilities, including methods to control microscopic agents and methods of health promotion and disease prevention. 3 credits

MA 205 CLINICAL OFFICE PROCEDURES II
This course includes preparing for and assisting specialty examinations and diagnostic procedures. Students will also learn about diet and nutrition. 3 credits

MA 214 EMERGENCY PREPAREDNESS
In this course students develop skills and knowledge through class instruction, hands-on-activities, and class exercises. The student will learn basic principles of first aid, how to respond to natural disasters in the clinic and common medical emergencies within the clinic setting. .5 credit

MA 240 ADMINISTRATIVE AND CLINICAL EXTERNSHIP
Students are placed in the medical facilities of Watertown and the surrounding area for continued education and work experience. The student is required to be in attendance during the normal working hours of the medical facility on Monday through Friday. Students are under the immediate supervision of the training facility, do not receive remuneration and are periodically evaluated by the training facility and the supervisor. 240 hours, 4 credits

MATH 100 APPLIED GENERAL MATH
This course will provide emphasis on the ability to understand and apply math skills to solve problems in the world of work. 3 credits

MATH 101 INTERMEDIATE ALGEBRA
This course will enhance students' problem-solving skills and prepare them for mathematical problems to be faced in future courses and careers. 3 credits

MATH 103 MATHEMATICAL REASONING
This course incorporates mathematical reasoning as it applies to dimensional analysis, equations, exponents, basic statistics, concepts related to financial security and other mathematical topics deemed necessary. The financial security portion of the course includes but is not limited to: financial planning, managing your money, putting together a budget plan, calculating compound interest, comparing interest rates and calculating loan payments with regards to student and consumer loans. These are all taught with an emphasis on practical application and problem solving. 3 credits

MATH 114 COLLEGE ALGEBRA*
This course includes a study of the theory and application of functions including function notation, graphs, inverses, polynomial, rational, exponential, logarithmic, and other functions. May also include additional topics such as sequences, series, the binomial theorem, linear systems, matrices, or complex numbers. (Pre-requisite: MATH 101 with a "C" or higher, a Math ACT score of 20+ and/or an ACCUPLACER score in elementary algebra of 76+ and/or a Next-Generation ACCUPLACER QAS score of 255+) 3 credits *College transferable.

MATH 117 FOUNDATIONS OF TRIGONOMETRY
The practical application of trigonometry as it applies to the shop setting. 1 credit

MED 105 INTRODUCTION TO HEALTH PROFESSIONS
This course will feature a variety of different topics and speakers. It has been designed to give first-year students exposure to the various health professions offered at LATC. 1 1/2 credits

MFR 100 PATIENT ASSESSMENT
This course will expand upon the knowledge and skill set learned in Trauma Assessment & Treatment. Students will start with patient history and proceed into physical exam and assessment techniques. Students will analyze and assess clinical decision making, communications, and documentation for the EMS occupation. 3 credits

MFR 105 AIRWAY/IV MANAGEMENT
This class addresses two of the most important skills required by paramedics. Students will learn the art of intravenous (IV) placement, drug therapies, medical mathematics and drug dose calculations. Also covered in the class is advanced airway management and ventilation, where the student will learn methods used to control a patient's airway and breathe for them. 4 credits

MFR 110 TRAUMA ASSESSMENT AND TREATMENT
This class focuses on the subject that causes an adrenaline rush in virtually every paramedic, "TRAUMA." If you like the CSI shows on TV, this will be your favorite class. Students learn about the different types and classes of injuries, as well as related problems, allowing them to put the pieces of the puzzle together, enabling them to administer life saving treatments. 4 credits

MFR 115 PHARMACOLOGY
The study of drugs, methods of administration and dosage computation. It provides information on classifications, therapeutic action and side effects of drugs. Students have experience giving medications throughout the program. 1 credit

MFR 120 CLINICAL OBSERVATION I
This observation period is designed to meet the requirements set by the State of South Dakota. This observation/interaction time will take place in an approved hospital, in an emergency department, critical care unit, operating room and an obstetrics unit. Students are encouraged to utilize the knowledge and skills developed in other classes to use as much as possible, but most important, students will see first-hand how sick and injured patients benefit from high quality care and that what they do can and will make a difference in the lives of others. 1 credit

MFR 125 MEDICAL ASSESSMENT AND TREATMENT
This class will focus on solving problems and treating those things that make people "SICK." Students will learn the anatomy, physiology and pathophysiology of the human body,

which makes it function and what causes it to fail, from head to toe, and inside/outside. Some of the subjects included in this class include cardiology, pulmonology, endocrinology, neurology, toxicology and environmental emergencies.
5 credits

MFR 130 CLINICAL OBSERVATION II
This observation period is designed to meet the requirements set by the State of South Dakota. This observation/interaction time will take place in an approved hospital, in an emergency department, critical care unit, operating room and an obstetrics unit. Students are encouraged to utilize the knowledge and skills developed in other classes to use as much as possible, but most important, students will see first-hand how sick and injured patients benefit from high quality medical care and that what they do can and will make a difference in the lives of others. 5 credits

MFR 135 CERTIFICATIONS
This class consists of three specialized training sessions taught by outside instructors. The three areas provide student certification in Advanced Cardiac Life Support (ACLS), Pre-Hospital Trauma Life Support (PHTLS), and Pediatric Education for Pre-Hospital Professionals (PEPP). This provides excellent benchmarks to gauge mastery of knowledge and skills, but also produces credibility for students and their education through examination and certification from skilled professionals outside the MFR staff. 2 credits

MFR 203 MED/FIRE RESCUE
This class will focus on ambulance operations, incident management, crime scene awareness and rural EMS. Since the world around us continues to become increasingly complex, this class will also address issues related to rescue awareness and operations, hazardous materials incidents, as well as responding to terrorist incidents. 2 credits

MFR 205 FIREFIGHTER I
Through classroom and hands-on experience, students will learn the essentials of firefighting. Beginning with an overview of the history and traditions associated with the fire service, students will progress into developing the knowledge and skills associated with behavior, safety and personal protective equipment. From there, the next step will involve water supplies and equipment, building construction, ladders and ropes. Students will then move into rescue operations, forcible entry and ventilation techniques, fire suppression, firefighter survival, as well as fire prevention, education and incident planning. Another area and perhaps the most important is the need for students physical and mental health. 5 credits

MFR 210 HAZARDOUS MATERIALS AWARENESS AND COMPLIANCE
HAZMAT teams are rapidly becoming a basic component of every fire department in the United States and the initial certification required for these teams is the awareness level. This class is designed to provide the knowledge and skills required to allow students to function as an integral part of a HAZMAT team. Subjects covered in the class include recognition and identification, information resources, personal protective equipment, protective actions, product control and air monitoring and terrorism awareness. 3 credits

MFR 215 CLINICAL OBSERVATION III
This observation period is designed to meet the requirements set by the State of South Dakota. This observation/interaction time will take place in an approved hospital, in an emergency department, critical care unit, operating room and an obstetrics unit. Students are encouraged to utilize the knowledge and skills developed in other classes to use as much as possible, but most important, students will see first-hand how sick and injured patients benefit from high quality medical care and that what they do can and will make a difference in the lives of others. 4 credits

MFR 220 FIREFIGHTER II
Through classroom and hands-on experience, students will learn the essentials of firefighting. Beginning with an overview of the proud history and traditions associated with the fire service, students will progress into developing the knowledge and skills associated with fire behavior, safety and personal protective equipment. From there, the next step will involve water supplies and equipment, building construction, ladders and ropes. At this point, students will move into rescue operations, forcible entry and ventilation techniques, fire suppression, firefighter survival, as well as fire prevention, education and incident planning. Another area and perhaps the most important subject addressed in this class, as well as every other class in the program, is the need for students to actively pursue current and life-long physical and mental health. 5 credits

MFR 225 AIRPORT RESCUE FIREFIGHTING "ARFF"
Every type of fire has its own characteristics, concerns and methods of control. Building upon knowledge gained in Firefighter I and II, students will learn basic airport awareness, airplane construction and fuels, fire suppression, occupant protection and extrication, as well as crash truck operation and tactics. 3 credits

MFR 237 PARAMEDIC PREPARATION
Paramedic Preparation is an introduction into the world of advanced pre-hospital care. Topics included in the class include the well being of the paramedic, roles and responsibilities of the paramedic, illness and injury prevention, as well as ethical and legal issues related to modern medicine and pre-hospital care. 3 credits

MICRO 231 GENERAL MICROBIOLOGY*
Study of microorganisms emphasizing structure, metabolism, diseases, disease prevention and cure, immune systems and microbial ecology. 4 credits *College transferable.

MLT 101 INTRODUCTION TO MEDICAL LABORATORY
This course focuses on the basic principles and procedures used in all laboratory courses. Areas such as safety, equipment usage, areas of the lab and testing involved, quality control/quality assurance, lab math, professionalism, employment opportunities, self exploration and career goals are covered. 2 credits

MLT 105 URINALYSIS AND BODY FLUIDS
This course consists of the study of urinalysis to include the physical, chemical and microscopic examination of urine and the special screening tests that may be employed for the detection of metabolic or renal disorders. Body fluids such as amniotic, serous, seminal, synovial and cerebral spinal fluid will be covered. The student will be able to analyze and interpret lab data results. 3.5 credits

MLT 116 HEMATOLOGY I
This course involves a study of blood cells (quantitative and qualitative) and includes a study of development, recognition of normal and abnormal cell morphology, alterations present in disease, studies of anemias, recognition of normal white blood cell morphology, and tests employed in the hematology laboratory. 2 credits

MLT 118 CLINICAL MICROBIOLOGY I
This course provides classroom and laboratory study of microorganisms that may cause clinical infections including staining, culturing, incubation, isolation, identification, sterilization, and media preparation. 3 credits

MLT 125 SEMINAR
This course will broaden the perspective of the second year MLT student as they prepare for their clinical internship and continue with their career of choice. Topics covered will include HIPAA, professionalism, educational methodology, teaching others, and the importance of sharing their profession. 1/2 credit

MLT 135 PRINCIPLES OF PHLEBOTOMY
Student instruction will include type of tube utilized for phlebotomy based on the additive in each, supplies required for

the phlebotomy, proper technique to maintain sample integrity and prevent preanalytical errors. The student will practice venipuncture and capillary puncture techniques on classmates and volunteers. This will prepare them for their applied phlebotomy and clinical practicum experiences. 2 credits

MLT 201 IMMUNOLOGY
The student will learn of the human immune response (both cellular and humoral). Students will focus on antigens and antibodies and their importance in lab testing and patient diagnosis. The theory of each type of test will be covered, patient specimens tested and results interpreted. Infectious diseases detected in immunology and the various disorders of the immune system such as the autoimmune response, hypersensitivity, and transplant immunology will also be covered. 4 credits

MLT 205 APPLIED PHLEBOTOMY
Students will spend 30 hours in an assigned clinical facility collecting blood from patients. 1 credit

MLT 212 HEMATOLOGY II
This course builds on concepts learned in MLT 116 and focuses on abnormal white cell morphology, studies of leukemias, studies of platelet and coagulation factors, the coagulation mechanism, cellular elements in body fluids, hematology and coagulation analyzers, as well as microscopic analysis of blood cells and body fluids. 3 credits

MLT 215 CLINICAL CHEMISTRY
This course includes didactic and laboratory instruction on the chemical constituents of blood in health and disease. The methods of analysis for the chemicals, principles of these methods, correlation of abnormal findings with disease, basic mathematics, and quality control/quality assurance are stressed. 4 credits

MLT 217 CLINICAL MICROBIOLOGY II
This course delves further into concepts learned in MLT 118 with an emphasis on normal flora and pathogens found in various body sites. This course also includes a study of viruses, fungi, and parasites and techniques employed in clinical laboratories for their identification. 2 credits

MLT 221 IMMUNOHEMATOLOGY (Blood Banking)
The Immunohematology course consists of tests of blood and serum to determine patient blood type, detection and identification of antibodies, autocontrol, crossmatch and problem solving, all of which are required to find units of blood compatible for patient transfusion. 4 credits

MLT 226 PRACTICUM I: GENERAL LAB PRACTICE, PHLEBOTOMY, HEMATOLOGY, CHEMISTRY, URINALYSIS
The student will spend approximately 9 weeks in the chemistry, hematology, urinalysis and phlebotomy sections of the laboratory at a hospital or clinic laboratory during this clinical training period. 6 credits

MLT 231 PRACTICUM II: MICROBIOLOGY, IMMUNOLOGY, IMMUNOHEMATOLOGY
The student will spend approximately 9 weeks in the microbiology, immunohematology and immunology sections of the laboratory during the clinical training period. This practicum includes Sim Lab for 3 weeks. 6 credits

MLT 236 PRACTICUM CORRELATION
This course will be taken throughout the student's practicum experience. It will help the student relate the theory of the lab tests and the results obtained. This will be accomplished through quizzes, student forums including weekly reports/ sharing and student case studies. 1 credit

NET 115 NETWORKING I
Introduction to Networks covers the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. Students will be able to build local area networks (LANs), configure basic settings on routers and switches, and implement internet protocol (IP). 4 credits

NET 121 NETWORKING II
This course covers the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Students learn how to configure and troubleshoot routers and switches for advanced functionality using security best practices and resolve common issues with protocols in both IPv4 and IPv6 networks. This course utilizes the Cisco Networking Academy CCNA curriculum. Prerequisite: NET 115 4 credits

NET 131 NETWORKING III
This course describes the architecture, components, operations, and security to scale for large, complex networks, including wide area network (WAN) technologies. The course emphasizes network security concepts and introduces network virtualization and automation. Students learn how to configure, troubleshoot, and secure enterprise network devices and understand how application programming interfaces (API) and configuration management tools enable network automation. This course utilizes the Cisco Networking Academy CCNA curriculum. Prerequisite: NET 121 4 credits

NET 215 SECURITY APPLIANCES & FIREWALLS
The goal of this course is to develop a detailed understanding of network security principles as well as the tools and configurations available. This course materials will assist you in developing the skills necessary to design and support network security. Students will learn the theory and configuration steps for setting up the security, networking, threat prevention, logging, and reporting features of next generation firewall technologies. This course utilizes the Palo Alto Networks Academy and Cisco Networking Academy curriculums. Prerequisite: NET 131 3 credits

NET 275 ADVANCED NETWORKING I
Advanced Networking I provides students with a broad scope of architectural understanding and implementation skills required by enterprise networks. The course covers switching, routing, wireless, and related security topics along with the technologies that support software-defined, programmable networks. This course utilizes the Cisco Networking Academy CCNP curriculum. Prerequisite: NET 131 4 credits

NET 278 ADVANCED NETWORKING II
This course will examine advanced routing topics including VPN services, EIGRP, OSPF, BGP, infrastructure security and Infrastructure services. This course utilizes the Cisco Networking Academy CCNP curriculum. Prerequisite: NET 275 2 credits

NRM 100 WATER QUALITY
This course includes the study of basic water properties, characteristics, and pollution as they relate to ponds, lakes, rivers, and aquifer systems. Introduction to basic hydrology and hydrogeology affecting water quality issues. 3 credits

NRM 105 BIOLOGICAL PRINCIPLES
Includes the study of basic concepts and practices involved in environmental technology, as well as applying that knowledge in critical thinking and problem solving. 2 credits

NRM 110 INSTRUMENTATION
This course includes the study of common laboratory instrumentation used by technicians in related fields. Safety, use of microscopes, calculations, pH meters, scales, nephelometers, pipetting, titration, and other wet chemistry instrumentation, spectrophotometry, colorimeters, and an introduction to basic field testing kits. 1 credit

NRM 115 ENVIRONMENTAL STUDIES AND BOTANY
This course is classified as a branch of biology focused on the study of the relationships of the natural world and the

relationships between organisms and their environments. 4 credits

NRM 120 REGULATORY COMPLIANCE I
Introductory course dealing with the Federal regulations pertaining to environmental health and safety. Regulations looked at include fire protection, confined space entry, personal protective equipment, grain handling, fall protection and emergency action plans. 2 credits.

NRM 125 INTRODUCTION TO WILDLIFE FISHERIES
1 credit

NRM 130 SOIL SCIENCE
This course will investigate soil and water interactions, soil classifications; pollutions issues related to soils, and measures to prevent contamination both agricultural and industrial. 3 credits

NRM 135 ENVIRONMENTAL ANALYSIS
This course will investigate various introductory issues and topics as they pertain to Environmental Technology. 3 credits

NRM 140 WATER AND WASTEWATER TECHNOLOGY
This course will discuss the development, design, and operation of water treatment systems and pollution-control facilities. 3 credits

NRM 145 REGULATORY COMPLIANCE II
This course is a continuation of ENV 235-Regulatory Compliance I. ENV 237 will continue to study rules and regulations pertaining to Environmental Health and Safety. 1 credit

NRM 150 PARKS AND HABITAT I
3 credits

NRM 155 INTERNSHIP I
300 hours (seven weeks) of training at a wastewater treatment facility, or in a water-quality monitoring laboratory, or in a field-service setting. 5 credits

NRM 200 ECOLOGY
Discussion of ecology, land-use management, biodiversity and wildlife conservation, as well as related economics, policy, planning, and administration. 3 credits

NRM 205 GEOGRAPHY
This course will describe the spatial aspects of interactions between humans and the natural world and will develop an understanding of the dynamics of geology, meterology, hydrology, biogeography, and geomorphology, as well as the ways in which human societies conceptualize the environment. 4 credits

NRM 210 PERMITS AND GRANT WRITING
An introductory course of basic permits and grant writing currently used in government and industry related to environmental issues and projects. 1 credit

NRM 215 PARKS AND HABITAT II
3 credits

NRM 220 INTRODUCTION TO WILDLIFE FISHERIES LAWS AND POLICIES
3 credits

NRM 225 STATISTICS
A study of descriptive and inferential statistics especially related to research problems and quality control/assurance in the laboratory or field. 1 credit

NRM 230 ENVIRONMENTAL HEALTH
This course addresses a branch of public health concerned with all aspects of the natural and built environments and how they impact human health. 3 credits

NRM 235 INTERNSHIP II
360 hours (nine weeks) of training in advanced testing and control techniques at a treatment facility or water-quality monitoring laboratory or in a field-service setting. 3 credits

NRM 240 CAPSTONE PROJECT
A self-study project demonstrating the educational and personal development received at Lake Area Tech. Credit assigned by instructor. 2 credits

OTA 100 FOUNDATIONAL CONCEPTS FOR THE OCCUPATIONAL THERAPY ASSISTANT
This course introduces and examines the profession of Occupational Therapy, the role of the student in the learning process and the use of technology within the program and profession of Occupational Therapy. In addition, international healthcare issues, related professional discipline roles, and teaching and learning strategies are addressed. 3 credits

OTA 105 ACTIVITY ANALYSIS
Occupation and activities are introduced to the student as treatment techniques and are analyzed using current activity analysis techniques and AOTA's Practice Framework: Domain and Process. The student develops the knowledge and skills of adaptation and gradation for achieving therapeutic use of activities and for learning and teaching styles through reinforcement and participation. 2 1/2 credits

OTA 111 KINESIOLOGY/NEUROLOGY FOR THE OCCUPATIONAL THERAPY ASSISTANT
This course addresses basic kinesiological and neurological structures and principles involved in occupational performance related to "normal movement," assessment of joint range of motion and instructional use of exercise as an adjunct to intervention. 5 credits

OTA 120 HUMAN DEVELOPMENT: PRENATAL THROUGH ADOLESCENCE
This course emphasizes developmental theories and issues from birth through adolescence. By providing exposure to basic physical, motor, psychosocial, moral and communication development of infants, toddlers, pre-school-age children, school-age children and adolescents it will focus on the sequence of normal development 2 credits

OTA 125 OCCUPATIONAL THERAPY APPLICATION I - PEDIATRIC PRACTICE
This course addresses issues related to occupational therapy services provided for individuals from birth through adolescence. 4 credits

OTA 131 ADAPTATIONS FOR DAILY TASKS
This course exposes students to clinical skills, remediation and adaptation of various areas of occupation (ADL, IADL, work, play, leisure and social participation) through exposure to and practice with medical equipment, adaptive equipment and alternative techniques. This course emphasizes average performance procedures prior to applying therapeutic adaptation strategies. Respect for the client, safety and adherence to universal precautions are emphasized. 3 credits

OTA 133 DOCUMENTATION FOR THE OCCUPATIONAL THERAPY ASSISTANT
This course exposes students to the introductory documentation skills expected of an Occupational Therapy Assistant. Progress note documentation and intervention planning using AOTA's Practice Framework will be emphasized. 1 credit

OTA 135 DYNAMICS OF INTERACTION
This course will address the principles of group dynamics and interpersonal skills used with groups. The fundamentals of therapeutic communication techniques and observation skill will be emphasized. 2 credits

OTA 140 ETHICS AND ISSUES IN OCCUPATIONAL THERAPY
This course includes classroom instruction and discussion of legal and ethical decision-making and other imperative issues facing the Occupational Therapy Assistant practitioner within

the healthcare environment. 2 credits

OTA 145 OCCUPATIONAL THERAPY APPLICATIONS III - PSYCHOSOCIAL PRACTICE
This course presents theories of mental health practice as well as the use of many Occupational Therapy frames of reference in treatment of occupational performance deficits in individuals diagnosed with mental health impairment. It will familiarize students with assessment tools, intervention strategies, medication side effects and safety techniques utilized in various settings. 3 credits

OTA 150 FIELDWORK I-A
A one-week fieldwork placement will be completed to allow students to observe and apply critical thinking skills based on previous academic information obtained and to apply observations to future academic courses. 1/2 credit

OTA 155 FIELDWORK I-B
Out of the classroom experiences will be completed with the geriatric and mental health populations to allow students to observe and apply critical thinking skills based on previous academic information obtained and to apply observations to future academic courses. 1/2 credit

OTA 200 HUMAN DEVELOPMENT: ADULT TO DEATH
This course will present theories of physical, cognitive, social and emotional development for the young adult to death. Cultural, ethnic, socioeconomic and sexual diversity will be discussed. Also, concepts and theories of death and dying will be presented. 1 credit

OTA 205 OCCUPATIONAL THERAPY APPLICATIONS II - ADULT PRACTICE
This course addresses documentation skills and builds on previous documentation experience. Assessments used and settings in which adult populations may receive occupational therapy services will be presented and remediation techniques for sensory, motor, perceptual and cognitive deficits will be explored. 3 credits

OTA 210 CONDITION-SPECIFIC EVIDENCED-BASED INTERVENTION
This course will present the pathophysiology, etiology, clinical signs and management strategies for various pathological diseases. Emphasis will include Occupational Therapy rehabilitation and adaptation intervention modalities incorporating activity analysis and equipment research. 2 1/2 credits

OTA 220 OCCUPATIONAL THERAPY APPLICATIONS IV - REHABILITATION PRACTICE
The course presents theories and application of intervention techniques used in physical disabilities practice. It will familiarize students with rehabilitation equipment and tools utilized with specific physical disabilities diagnoses. The importance of continued professional competency and its relation to the student's future career will be discussed. 5 credits

OTA 231 ENTERING THE OCCUPATIONAL THERAPY ASSISTANT PROFESSION
This course will address professional advocacy to state or federal legislators and the promotion of occupational therapy services to the general public. Students will also investigate their own personality type to determine how communication is affected "on the job" while participating in Fieldwork Level II. Students will also describe department responsibilities of the occupational therapy assistant while in real life situations and reflect on the importance of communication with the dying client and the issue of continued competency and life-long learning. 1 credit

OTA 236 FIELDWORK II-A
Following successful completion of all academic courses, the student will complete two eight-week fieldwork placements at different sites, which allows them to apply theory and skills acquired during their education at Lake Area Tech. 5 1/2 credits

OTA 241 FIELDWORK II-B
Following successful completion of all academic courses, the student will complete two eight-week fieldwork placements at different sites, which allows them to apply theory and skills acquired during their education at Lake Area Tech. 5 1/2 credits

PHGY 210 INTRODUCTION TO HUMAN PHYSIOLOGY*
Physiology teaches fundamental biochemical and physical concepts that explain the workings and regulation of all body functions in animals from molecular to organism level. The course examines the coordinated activities within the hierarchy of body organization and how these activities contribute to the overall homeostasis of the internal environment of the body. 4 credits *College transferable.

PM 106 BLUEPRINT READING
This course introduces the student to the basics of interpreting working drawings, blueprints, and tolerances. 1 credit

PM 107 COMPUTER NUMERICAL CONTROL (CNC) OPERATIONS I
2 credits

PM 110 PRECISION MEASURING
This course will cover a variety of tools used for measuring or inspecting a part. The course will include inspection and measuring fractions, decimal, and metric. 1 credit

PM 117 APPLIED TRIGONOMETRY
This course expands the use of trigonometry to determine measurements, tool paths, and machine set-up coordinates. 2 credits

PM 131 MILL AND LATHE OPERATIONS I
This course provides the student with hands-on experience in basic machine controls, set up, operation, and maintenance of manual milling machines and engine lathes. 2 credits

PM 133 MILL AND LATHE OPERATIONS II
This course provides the student with hands-on experience in basic machine controls, setting up, operation, and maintenance of manual milling machines and engine lathes. 4 credits

PM 134 MACHINE TOOL FUNDAMENTALS
This course provides hands-on shop time to develop safe work habits using general shop tools and equipment; also basic competency on pedestal grinders. 1 credit

PM 152 ADVANCED MILL AND LATHE THEORY
This course expands on operation of engine lathe, vertical and horizontal milling machines. 1 credit

PM 154 COMPUTER NUMERICAL CONTROL (CNC) OPERATIONS II
5 credits

PM 160 ADVANCED MILL AND LATHE OPERATIONS I
This course provides the student with hands-on experience in operating and setting up engine lathes and vertical milling machines, for advanced operations. 1 credit

PM 162 ADVANCED MILL AND LATHE OPERATIONS II
This course provides the student with hands-on experience in operating and setting up engine lathes and vertical milling machines, for advanced operations. 5 1/2 credits

PM 167 INTRODUCTION TO COMPUTER NUMERICAL CONTROLS (CNC)
This course introduces the student to the operation and programming of computer numerically controlled lathes and mills, using G & M Codes. 1 credit

PM 168 PRECISION GRINDING
This course introduces precision grinding, use and care of horizontal-spindle surface grinders, and includes basic

operations such as grinding parallel and perpendicular surfaces flat. 2 credits

PM 201 ADVANCED COMPUTER NUMERICAL CONTROL (CNC) I
This course exposes the student to in-depth programming techniques on the CNC milling and turning centers. 3.5 credits

PM 203 ELECTRICAL DISCHARGE MACHINING
This course provides the student with theory and basic operations of sinker EDM machines and provides the students with the theory and basic operations of the wire EDM machines and Mitsubishi 4 Axis Wire EDM. 2 credit

PM 205 INTRO TO COMPUTER-AIDED DESIGN (CAD)
1 credit

PM 210 JIG & FIXTURE MAKING
This course introduces the student to basic jig and fixture design and concepts and provides the student the opportunity to apply principles of jig and fixture design, construction, and application by designing and constructing jigs or fixtures themselves. 3 credits

PM 212 ADVANCED CAD AND CAM
This course introduces the student to Virtual Gibbs Cad or possible multiple cam software systems. 1 credit

PM 214 TOOL & DIE MAKING
This course introduces the student to basic construction, components, and design of stamping die sets. 4 credit

PM 216 BASIC MOLD MAKING
This course introduces the student to the basic molding processes and design and provides the student time to design, manufacture and run an injection mold. 4 credits

PM 219 ADVANCED CNC OPERATIONS II
This course allows time for the student to use the CNC milling and turning centers 5 credits

PM 220 ROBOT INTEGRATION
1 credit

PM 228 INTRODUCTION TO PRECISION MACHINING
This course is an introductory course covering the basic hand tools and machine tools used to support manufacturing and toolmaking processes. 4 credits

PM 236 MEASUREMENT INSPECTION TECHNIQUES
This course introduces the student to the coordinate measuring machine and geometric dimensioning and tolerancing. 1 credit

PM 277 PRECISION MACHINING CLASS PROJECT
This course provides the student time to gain more machining experience thru a final project. 3 credits

PN 104 FUNDAMENTAL SKILLS OF NURSING PRACTICE
This course focuses on the introduction to the role of the professional nurse as a provider of patient-centered care, patient safety advocate, and member of health care team. Content includes the fundamental concepts of nursing practice, a systematic framework for decision-making and critical thinking, and introduction to nursing skills. 6 credits

PN 107 FOUNDATIONS OF NURSING PRACTICE
This course is a study of fundamental principles influencing factors related to direct patient care. It is an introductory course to numerous aspects of nursing as a profession. A wide variety of topics are included that provide a foundation of knowledge to build upon in future courses. 4 credits

PN 110 MEDICAL TERMINOLOGY
This course prepares nursing students with the essential information necessary to build, define, recognize, and utilize medical terminology used in nursing practice. 1 credit

PN 111 MATERNITY NURSING
The student will be introduced to the physiology of pregnancy, labor and delivery, and the puerperium; and to the nursing needs and care of the mother prenatally following and during the postpartum period. A study of fetal growth and development, and the needs and nursing care of the newborn infant will also be included. 2 credits

PN 112 NURSING CARE OF CHILDREN
This is an introduction to human growth and development from infancy to adolescence. Health problems of each age group are explored. The role of the LPN in meeting the health needs of children in a variety of settings is included. 2 1/2 credits

PN 113 NURSING CARE OF THE ADULT I
This course will introduce the student, in theory and practice, to the physical, emotional, cultural, and spiritual needs of clients with common health conditions. The role of the practical nurse will be described in relation to meeting the basic needs of those clients in all stages of health and illness. Integrated throughout the course are basic concepts of nutrition and drug therapy used in the treatment/management of different disease processes. Clinical practice in various settings provides the student with the opportunity to gain competence in skills and nursing care. 5 credits

PN 114 NURSING CARE OF THE ADULT II
This course is an extension of PN 113. The focus is the clinical practice where students complete some of the clinical independently in various settings. The student has the opportunity to enhance their skills and to progress towards the role of the nurse in various settings. 7.5 credits

PN 201 APPLIED CLINICAL PRACTICE
The course is a continuation of PN 113, PN 114 in the clinical setting. It will provide student exposure to increasingly complex nursing situations with assignments of groups of clients. A long-term care preceptorship will accompany this course. 4 credits

PSYC 100 PSYCHOLOGY OF HUMAN RELATIONS
Human relations is a practical course that presents the interpersonal "people skills" that are important in the modern workplace. Topics include communicating effectively, assertive behavior, teamwork, conflict resolution, and work ethics. Students will gain awareness of their individual work styles and how to work effectively with people with different styles in a diverse workplace. Specific techniques for coping with job stress and managing anger will also be emphasized. Class activities and assignments will stress practical application of skills. Course is also applicable in personal settings, such as family, social, and school. 3 credits

PSYC 101 GENERAL PSYCHOLOGY*
This course is an introduction survey to 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. 3 credits
*College transferable.

PSYC 111 APPLIED PSYCHOLOGY
This course helps a student learn how to be a team member in a work environment. 1 credit

PSYC 251 ABNORMAL PSYCHOLOGY
A comprehensive study of abnormal personality behavior. Detailed examination of the origin, symptoms and treatments of psychological disorders. 3 credit

PTA 100 INTRODUCTION TO PHYSICAL THERAPIST ASSISTING
This course will introduce students to the field of physical therapy. Topics will include history of the physical therapy profession, role and scope of PT/PTA, professional organization, educational and job opportunities, career decisions, basic research procedures, multi-disciplinary

team approach, communication within the health-care fields, reimbursement, professionalism and service learning. 1 credit

PTA 106 KINESIOLOGY

This course includes classroom and laboratory instruction on basic kinesiological and biomechanical principles related to normal movement and their importance in understanding and implementing treatment programs. The course will provide an in-depth anatomy review with emphasis placed on laboratory application of musculoskeletal and neuromuscular relationships and function. 3 credits

PTA 110 FUNDAMENTALS OF PHYSICAL THERAPIST ASSISTING

This course will include lecture and classroom instruction on the fundamental skills of physical therapist assisting required for patient care and treatment. These skills include documentation of patient care; universal precautions; preparation of the patient, treatment areas, and equipment; posture and body mechanics; patient transfers; gait training with or without assistive devices; wheelchairs and wheelchair mobility; emergency procedures, and activities of daily living. The primary focus of this class will be the lab; most of the skills are hands-on. 3 credits

PTA 116 ETHICS AND ISSUES IN PHYSICAL THERAPY

This course includes classroom instruction and discussion in ethics and important issues facing the physical therapy profession and health care in general. Topics will include medical law and ethics, multi- disciplinary team approach, standards for practice and ethical conduct, professional liability, medical malpractice, confidentiality, quality assurance, employment issues, fiscal considerations, and third-party payers, bio ethics, professional duty and standards. 2 credits

PTA 120 OBSERVATION AND MEASUREMENT

This course will include classroom and laboratory instruction on the basic examination skills necessary for monitoring patient progress and safety, and for making recommendations for treatment modification. Examination techniques include goniometry, manual muscle testing, segmental length, girth and volume, skin and sensory examination and environmental examination. 3 credits

PTA 125 PHYSICAL AGENTS AND MASSAGE

This course will include classroom and laboratory instruction on the theory and techniques of applying physical therapy modalities including therapeutic heat and cold, ultrasound, hydrotherapy, soft tissue mobilization, massage, intermittent compression pump, and traction. Students will also be exposed to proper positioning and draping techniques for treatment to various body regions. This course will also introduce the topics of universal precautions, sterile techniques, wound care, burn care, dressings, and bandaging of burns and wounds. 4 credits

PTA 136 ELECTROTHERAPY

This course will include classroom and laboratory instruction on the theory and application of therapeutic electrical current and biofeedback for pain modulation and neuromuscular facilitation and re-education as well as the use of electrical stimulation in combination with other therapeutic agents. 2 credits

PTA 145 THEORIES OF THERAPEUTIC EXERCISE

Includes classroom and laboratory instruction on the theory and technique of basic therapeutic exercises. Students will receive instruction in theories, stretching, strengthening and balance. 1 1/2 credits

PTA 150 PATHOLOGY FOR THE PTA

This course will provide students with the basic knowledge of diseases of the human body. Emphasis will be put on the description, etiology, clinical manifestations, treatment, prognosis and prevention of pathology. The primary focus will be the implications that each pathology has on physical therapy treatments. 2 credits

PTA 216 APPLICATIONS IN THERAPEUTIC EXERCISE

This course will include classroom and laboratory instruction on the theory and technique of therapeutic exercises and equipment. Students will develop home exercise programs. Emphasis is placed on appropriate exercise prescription. 2 credits

PTA 220 MUSCULOSKELETAL DISORDERS AND TREATMENT

This course will consist of classroom and laboratory instruction on the management of common musculoskeletal disorders with emphasis on physical therapy treatment protocols. This course will also include a review of basic assessment and treatment procedures. 4 credits

PTA 228 NEUROANATOMY AND NEUROLOGICAL DYSFUNCTION

This course includes classroom instruction on basic neuroanatomy, review of sensory and motor systems, higher cognitive processes, autonomic nervous systems, and adult neurological disorders. 3 credits

PTA 229 HUMAN DEVELOPMENT AND PEDIATRIC DISORDERS

This course includes classroom instruction on: embryology, neurodevelopmental sequences, reflexes, critical competencies and pediatric disability. Students will become familiar with normal and abnormal development. This course will give students an opportunity to interact with children and understand the importance of play. 1 1/2 credits

PTA 231 SPECIAL TOPICS

This course includes classroom and laboratory instruction in a variety of topics considered specialties in the practice of physical therapy. Students will be exposed to the following: orthotics, kinesiotaping and instrument assisted soft tissue mobilization, blood flow restriction cuffs, geriatric disease processes and PT management, and business management practices . 1 1/2 credits

PTA 241 CLINICAL AFFILIATION I

This course is a clinical practicum learning experience that takes place in a community-based physical therapy setting over a period of four consecutive weeks. The student attends the clinic setting each day for a full workday. While in the clinic setting, the student practices physical therapist assistant procedures necessary for patient care. The clinical instructor provides opportunities for the students to observe and implement therapist assistant standards of practice. 3 credits

PTA 242 REHABILITATION PROCEDURES

This course includes classroom and laboratory instruction on rehabilitation procedures used specifically for CVA, amputee, Multiple Sclerosis, Parkinson's disease, brain tumors, cerebellar disorders, Guillian Barre', and peripheral neuropathies. We will discuss specific techniques for head injury and spinal cord injury, as well. 4 credits

PTA 245 CLINICAL AFFILIATION II

This course is a clinical practicum learning experience that takes place in a community-based physical therapy setting over a period of six consecutive weeks. It occurs after the completion of the first and second year of coursework and the Clinical Affiliation I. The student attends the clinic setting each day for a full workday. While in the clinic setting, the student practices physical therapist assistant procedures necessary for patient care. The clinical instructor provides opportunities for the student to observe and implement physical therapist assistant standards of practice. 4 credits

PTA 250 CLINICAL AFFILIATION III

This course is a clinical practicum learning experience that takes place in a community-based physical therapy setting over a period of six consecutive weeks. It occurs after the

completion of the first and second year of coursework and Clinical Affiliations I and II. The student attends the clinic setting each day for a full workday. While in the clinic setting, the student practices physical therapist assistant procedures necessary for patient care. The clinical instructor provides opportunities for the students to observe and implement therapist assistant standards of practice. 4 credits

RBTC 175 BASIC MOTOR CONTROLS
Basic Motor Controls provides an overview of electric motor operation, selection, installation, control and maintenance. Students will learn basic Electrical Code references applicable to the installation of new control systems and motors, as well as information on maintenance and troubleshooting techniques. Topics covered range from motor types and controls to installing and maintaining conventional controllers, electronic motor drives and programmable logic controllers. 3 credits

RBTC 200 MECHANICAL DESIGN AND 3-D MODELING A
This course will cover print reading skills for individuals who will enter into the world of manufacturing. Emphasis is placed in the areas of orthographic views, isometric views and detailed and assembly prints. Engineering and Technical Designing using Autodesk Inventor will be introduced. 2 credits

RBTC 202 ROBOTIC ENGINEERING
Robotic Engineering is the capstone project for Robotics and Electronic Systems Technology students. Student teams must design, build, and program a robot to complete specific tasks. 6 credits

RBTC 203 MECHANICAL DESIGN AND 3D MODELING B
This course will cover print reading skills for individuals who will enter into the world of manufacturing. Emphasis is placed in the areas of orthographic views, isometric views and detailed and assembly prints. Engineering and Technical Designing using Autodesk Inventor will be introduced. 1 credit

RBTC 205 PROGRAMMABLE LOGIC CONTROLLERS
PLC's is the introduction to programming for students. Students will learn networking skill, logical programming, and reading ladder diagrams. 3 credits

RBTC 207 FLUID POWER
Students will learn symbols to help in construction of hydraulic/pneumatic circuits. Students will use different valves and actuators to help calculate forces using fluid power. 2 credits

RBTC 210 MECHANICAL SYSTEMS A
Students will learn the basics of mechanics. Students will learn safety around mechanical equipment, lockout/tag out procedures, ratios, alignment, tensioning, and motor installation. 1 credit

RBTC 212 MECHANICAL SYSTEMS B
Continuation of RBTC 210. 1 credit

RBTC 219 PLC INTEGRATION
Robot Operation and Programming will use some of the same robot programming as used in process class. Students will now learn how the vision systems tie into the robots control and programming. The last project will incorporate robot programming, vision systems, PLCs, and HMIs. 3 credits

RBTC 227 ROBOT OPERATION AND PROGRAMMING
Robotic Operation and Programming is the basics of programming for different robots that students could encounter out in industry. This course is designed to build off of previously learned material. 3 credits

RBTC 238 ADVANCED ROBOT OPERATION
Advanced Robot Operation and Programming will have students doing multiple projects with robotic systems. Students will use vision, hmi, plc, and robot programming knowledge to completer tasks in an automated line. 3 credits

RN 206 PROFESSIONAL CONCEPTS IN NURSING
This course introduces the student to the professional career as an RN. The course is designed to expand the knowledge and skills of the LPN as they transition to the role of the RN. The course provides an overview of the role of an RN, including the professional nurse responsibilities such as delegation, health promotion, informatics, and utilizing evidence-based teamwork to improve communication among healthcare professionals. 1 credit

RN 223 HEALTH PROMOTION AND CLINICAL CONCEPTS IN NURSING
This course focuses on the advanced assessment and health promotion for the adult client. The course will accentuate the assessment of objective and subjective indicators of common acute and chronic health conditions while providing a foundation for nursing care. This course will introduce a holistic perspective of the pathophysiological process of nursing care of adult clients who experience common disorders of various body systems. Students will provide care to clients in complex situations using an understanding of holism, advanced assessment, and basic pathophysiology. Evidence based practice is used to support appropriate assessments and safe and effective nursing interventions. 4 credits

RN 227 NURSING CARE OF THE CHILD AND FAMILY
This course focuses on the special health care needs of the childbearing family and the pediatric client. The student will have the opportunity to integrate prior learning about obstetrics and pediatric care with an increased knowledge of family dynamics and cultural influences. Course content includes antepartal, intrapartal, and postpartal care, complications of pregnancy, newborn care, human growth and development, pediatric care, and selected pediatric alterations. Nutrition, pharmacology, use of technology, communication, critical thinking, and application of the nursing process are integrated throughout this course. Upon completion of this course, students will be able to provide and manage care for maternal and pediatric clients in a variety of settings. 4 credits

RN 228 NURSING IN THE COMMUNITY
This course is the study of the dynamics of clients in the community. The students will gain an understanding of community resources and the health care needs of those with illness and end of life concerns from a home and community setting. The student will study the functions of all facets of public health and will partner with the community in prevention practices and serve those at risk. Multidisciplinary collaboration will be visited. This course complements the course, RN 240 Applied Pathophysiology in Clinical Nursing, to provide an inclusive understanding of disease processes. 1.5 credits

RN 230 PHARMACOLOGY FOR THE REGISTERED NURSE
This course expands the nursing student's knowledge on the concepts of pharmacology and medication administration, with an emphasis on clinical applications within the context of the nursing process. This course covers major drug classifications, including indications, modes of actions, effects, contraindications, and drug interactions. Pharmacology concepts are integrated throughout the course relevant to cultural, ethical, population considerations, medication safety, and dosage calculations. 2.5 credits

RN 236 MENTAL HEALTH NURSING
This course studies the understanding and the application of nursing and psychiatric-mental health concepts. It has a focus on promoting the mental wellness of individuals and groups. The course is designed to increase awareness in nursing of issues in mental health with an emphasis on psychiatric disorders. 2 credits

RN 240 APPLIED PATHOPHYSIOLOGY IN CLINICAL NURSING

This course is designed to build and expand on current knowledge of nursing care and pathophysiology related to various complex medical-surgical conditions/illnesses. The course will emphasize the etiology, pathophysiology and the nursing care of adult clients experiencing common disorders of body systems. Students will provide care to clients in complex situations using an understanding of the pathophysiology of such conditions. Evidenced based practice is used to support appropriate assessments and safe and effective nursing interventions. Understanding the client as a whole person will be emphasized. 4 credits

RN 242 APPLIED NURSING CONCEPTS
Emphasis is placed on utilization of the nursing process to assist with clinical judgment when caring for individuals in all stages of development as they progress along the wellness-illness continuum. An understanding of the pathophysiology of conditions, application of knowledge in complex and or unstable nursing situations, communication skills, delegation, cultural awareness, and utilization of technology are integrated throughout this course. 4 credits

SCT 100 SOLAR CAR TEAM
This elective class will be a cross-discipline team-based course where the goal is to design and fabricate a solar car, which will eventually be used for national competition. The class is a hybrid class with on-line theory and hands-on weekly labs. Solar Car Team project is open to any student and credits are offered for those in related programs. 6 credits

SOC 100 INTRODUCTION TO SOCIOLOGY*
Comprehensive study of society, with analysis of group life and other forces shaping human behavior. 3 credits *College Transferable.

SOC 105 SOCIOLOGY AND ETHICS FOR SURGICAL TECHNOLOGY
3 credits

SOC 110 SOCIAL ISSUES
This course will cover the various dynamic and complex social issues that the provider and their clientele may encounter in the human service industry and provide a deeper understanding of this subject matter. 3 credits

SOC 118 SOCIOLOGY IN HEALTHCARE
This course will consist of classroom instruction and discussion on topics such as qualities of a leader, therapist/patient/family response to illness/disability, justice, equality, diversity, inclusivity, death and dying, the grieving process, and appropriate interaction between the PTA and the patient/family. Discussion of professional traits and behaviors will reinforce the student's understanding of their role in healthcare. 3 credits

SPSH 100 SPANISH FOR THE HEALTHCARE WORKER
Students will learn fundamentals of the Spanish language that will be helpful when encountering Spanish-speaking individuals in a medical setting. 1/2 - 3 credits

SURG 100 INTRODUCTION TO SURGICAL TECHNOLOGY
This course will include the introduction of Asepsis and Sterile techniques to establish and maintain a sterile field used in surgery; dissection of the main components of a surgical case, including instrumentation, duties performed during the phases of surgery, environment of a surgical suite, safety considerations, wound healing and suture; and observation in a surgery department, at a healthcare facility, for the visualization of a sterile technique. This will be the first real "hands on" introduction to an operating room with emphasis on instrumentation, sterile techniques, basic suture, sponge, sharp and instrument counts. Students will practice skills and technique in a lab setting. 4 credits

SURG 105 INTRODUCTION TO STERILIZATION
This course will include the introduction of the principals of sterilization and the importance of this for the surgical technologist. Also included will be discussion on decontamination, the different types of sterilization, and terminal cleaning in the operating room. 1 credit

SURG 110 SURGICAL FOUNDATIONS
Discussion of surgical practices are critical, historical perspective of the Surgical Technologist and the effective and safe care of the patient. Legal responsibilities of the health care worker will be discussed. An understanding of diagnostic studies to assist in the determination of the best course of care of the patient. Job duties of the surgical technologist when working with operating room equipment, exploration of biomedical science and minimally invasive surgeries. 2 credits

SURG 115 SURGICAL PRACTICES I
Getting the student ready for essential skills in preparation of the patient, instrumentation and supplies in surgery. This will take place in a Sims surgical mock operating room here on campus. This will be a theory/lab based class. 3 credits

SURG 120 SURGICAL PROCEDURES I
The introduction of surgical procedures. This will be in the specialty area's such as Gastrointestinal(general), liver & biliary tract, hernia repair, Obstetrics and gynecological (OBGYN) and Orthopedics. Discussion in the areas of anatomy, diagnostic testing, patient positioning, instrumentation, equipment and supplies. These are all vital to the actual sequence of procedures. 5 credits

SURG 125 PROFESSIONAL PREP FOR SURGICAL TECHNOLOGY
This is the beginning orientation into a surgical department. Students will spend time with a surgical technologist learning how to read a surgeon's preference card, pulling cases, understanding supplies and equipment. Students will assist the surgical technologist with opening supplies onto a sterile field. Once the procedure has started the student will observe or scrub into the procedure and perform the duties of the surgical technologist in the second scrub role. Students will also spend time following other team members, circulating nurse, sterile processing, transport, "turn over team". This will allow the student to learn the importance of each team member associated with surgery. 2 credits

SURG 130 SURGICAL PRACTICES II
Discussion will continue on concepts from Surgical Practices 1. Getting the student ready for essential skills in preparation of the patient, instrumentation and supplies in surgery. This will take place in a Sims surgical mock operating room here on campus. This will be a theory/lab-based class. 2 credits

SURG 200 SURGICAL PROCEDURES II
Discussion will continue on concepts from Surgical Procedures 1. Surgical procedures in the following surgical specialties, genitourinary, neurosurgery, thoracic and vascular. Discussion in the areas of anatomy, diagnostic testing, patient positioning, instrumentation, equipment and supplies. These are all actual sequence of procedures. 5 credits

SURG 205 CLINICAL I
This course consists of 16 hours of surgical technology practice in operating rooms at local hospitals. Students will gain essential skills in preparation of the patient, instrumentation and supplies necessary for surgery. Students will be directly involved with numerous surgical procedures. 4 credits

SURG 210 SURGICAL PHARMACOLOGY & ANESTHESIA
Students will learn drug classifications, side effects, interactions and dosages associated with the surgical procedure and or administrated to the patient during the procedure. 3 credits

SURG 215 ENTERING THE SURGICAL TECHNOLOGY PROFESSION
This course consists of getting the student ready for the profession of being a Surgical Technologist. 2 credits

SURG 220 SURGICAL TECHNOLOGY SEMINAR
Preparing the student for the Association of Surgical Technology National Certification test. Analyzing Surgical

Cases with the students. 1 credit

SURG 225 CLINICAL II
It consists of a minimum of 36-40 hours per week of surgical technology practice in operating rooms setting at a hospital in the Midwest region. Students will apply their knowledge of surgical techniques and procedures, equipment, instruments, and supplies and increasingly develop skills. Students will also continue to build on the number of surgical cases. Please see appendix for Core curriculum requirements regarding number of Surgical Cases needed to complete the Surgical Technology Program at Lake Area Technical College. Students will complete the following Surgical Specialties units as a self-study: Cardiothoracic, Oral Maxillofacial, Ophthalmic, Otorhinolaryngology, and Plastics & reconstructive. 6 credits

WLD 105 OXYACETYLENE SAFETY
Safety with oxyacetylene equipment and set-up. 1 credit

WLD 110 PROPER USE OF THE CUTTING TORCH
This course covers safety, identification of equipment and hands-on skills. 1/2 credit

WLD 111 SHOP ORIENTATION MAINTENANCE & SAFETY
Introduction, general shop safety, and fire safety. 1 credit

WLD 113 SHIELDED-METAL ARC WELDING I
Includes safety involving SMAW, identification of equipment, and hands-on skills for striking and maintaining an arc. 1 1/2 credits

WLD 114 FERROUS METALLURGY
Identification of different ferrous and non-ferrous metals. Determine proper alloys and heat ranges to apply to different ferrous materials. 1/2 credit

WLD 115 SHIELDED METAL ARC WELDING II
Includes advanced instruction and hands-on training in shielded-metal arc welding. 3.75 credits

WLD 120 METAL FABRICATION
Students will become familiar with the basic operation of fabrication equipment, equipment safety, and preventive maintenance. 1 credit

WLD 123 BLUEPRINT READING
Students will identify components of a blueprint, interpret the welding symbol, and interpret the welding prints. 1 credit

WLD 130 INTRO TO STICK WELDING
Students will learn the basic fundamentals of stick welding and practice hands-on skills. 1 credit

WLD 140 FLUX-CORED ARC WELDING
Includes identification of equipment used, identification of consumables used, and hands-on skills required for FCAW. 1 credit

WLD 141 GAS METAL ARC WELDING A
Students will demonstrate safety techniques/procedures involving GMAW, identify equipment used in GMAW, and produce quality welds in all position on all weld joints. 1 1/2 credits

WLD 143 GAS METAL ARC WELDING B
Students will demonstrate safety techniques/procedures involving GMAW, identify equipment used in GMAW, and produce quality welds in all position on all weld joints. 3 credits

WLD 145 GAS METAL ARC WELDING C
Students will demonstrate safety techniques/procedures involving GMAW, identify equipment used in GMAW, and produce quality welds in all position on all weld joints. 3 credits

WLD 147 GAS METAL ARC WELDING D
Students will demonstrate safety techniques/procedures involving GMAW, identify equipment used in GMAW, and produce quality welds in all position on all weld joints. 4 1/4 credits

WLD 151 SHOP MATH
The student will learn the use of measuring tool and the use of formulas. 2 credits

WLD 161 GAS TUNGSTEN ARC WELDING
Includes safety involving GTAW, identification of equipment and hands-on skills. 3 credits

WLD 200 CUSTOM WELDING APPLICATIONS I
Students will prepare the pipe for 1G roll out, 2G, 5G, 6G, 2F, 4F, 5F, to be welded uphand. 5 credits

WLD 203 ADVANCED ARC WELDING TECHNOLOGIES I
Students will learn to choose the correct welding process, demonstrate welding capstone projects, examine welds for quality, and prepare welded joints before welding. 3 credits

WLD 206 ADVANCED ARC WELDING TECHNOLOGIES II
Students will learn how to weld out of position and weld a 4G test plate using SMAW and FCAW. 2 credits

WLD 207 ADVANCED ARC WELDING TECHNOLOGIES III
Students will learn to choose the correct welding process, demonstrate welding capstone projects, examine welds for quality, and prepare welded joints before welding. 5.5 credits

WLD 210 CUSTOM WELDING APPLICATIONS II
Continuation of WLD 200. Students will prepare the pipe for 1G roll out, 2G, 5G, 6G, 2F, 4F, 5F, to be welded uphand. 5 credits

WLD 212 WELDING CAPSTONE PROJECT I
Students will begin and process through a welding capstone project. The goal is for students to address a practical, real world project using the skills and knowledge they have gained throughout the program of study. 3 credits

WLD 214 ROBOTIC PROGRAMMING AND WELDING
Students will explain general safety information on the robot, setup equipment, tools, and materials, demonstrate maintenance and servicing, and basic programming and welding. 1 credit

WLD 215 WELDING CAPSTONE PROJECT II
The capstone project is an opportunity for students to complete their Associate of Applied Science degree for Welding Technology. The goal of the project is to demonstrate fluency with the tools of the trade in the welding field, an ability to independently plan and carry out a piece of work, and an ability to present the work in written and oral formats. The capstone project can take many forms, depending on the interests of the student. 3 credits

WLD 217 ADVANCED ROBOTIC PROGRAMMING AND WELDING
This course will illustrate using the weld library, apply using auxiliary programs, and demonstrate knowledge of proper welding process. .5 credit

WLD 230 STRUCTURAL MATERIAL WELDING
2 credits

WLD 232 WELDING PROCESS
Instruction and hands-on exposure to basic welding.
2 credits

General Education Requirement Courses

In programs indicated, students will select a course in each of the areas listed to meet general education requirements. Courses marked with an asterisk can be transferred directly to the South Dakota university system under the terms of articulation agreements.

Behavioral Science

* PSYC 101	General Psychology
PSYC 100	Psychology of Human Relations

Communications

* CMST 101	Foundations of Communication
* ENGL 101	Composition
* ENGL 210	Intro to Literature
COMM 101	Contemporary Communication

Mathematics

MATH 100	Applied General Math
MATH 101	Intermediate Algebra
MATH 103	Mathematical Reasoning
* MATH 114	College Algebra

Social Science

* ECON 201	Principles of Microeconomics I
* ECON 202	Principles of Macroeconomics II
* SOC 100	Introduction to Sociology
ECON 105	Leadership in the Global Workplace

Additional Transferable Courses

PHGY 210	Introduction to Human Physiology
ANAT 142	Anatomy
CHEM 106	Inorganic Chemistry
CHEM 106L	Inorganic Chemistry Lab - 1 credit
MICRO 231	General Microbiology
CSC 105	Computer Software Applications

Click to view our Faculty and Staff

Locator Map

1201 Arrow Ave. Watertown, SD

Visitors are always welcome at Lake Area Tech.

Office hours are Monday through Friday from 7:30 a.m. to 5:00 p.m. Summer hours may vary. It is recommended that you contact Lake Area Tech at 605-882-5284 prior to your visit to arrange an appointment with our admissions team.

Visitor parking is located near the main entrance. Enter through the doors facing Arrow Avenue and the Admissions Office is to your left.

Virtual campus maps can be viewed on our website 24/7.

We are looking forward to your visit at Lake Area Tech!

www.lakeareatech.edu