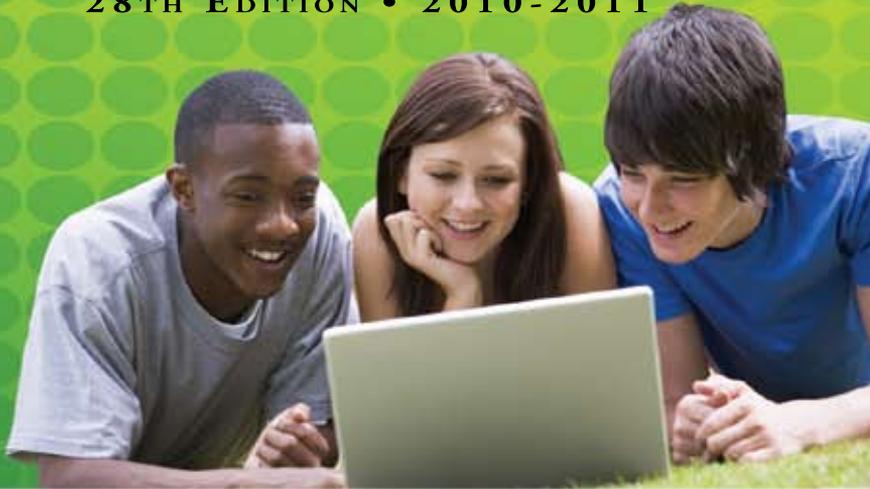


NORTH DAKOTA CAREER RESOURCE NETWORK

CAREER

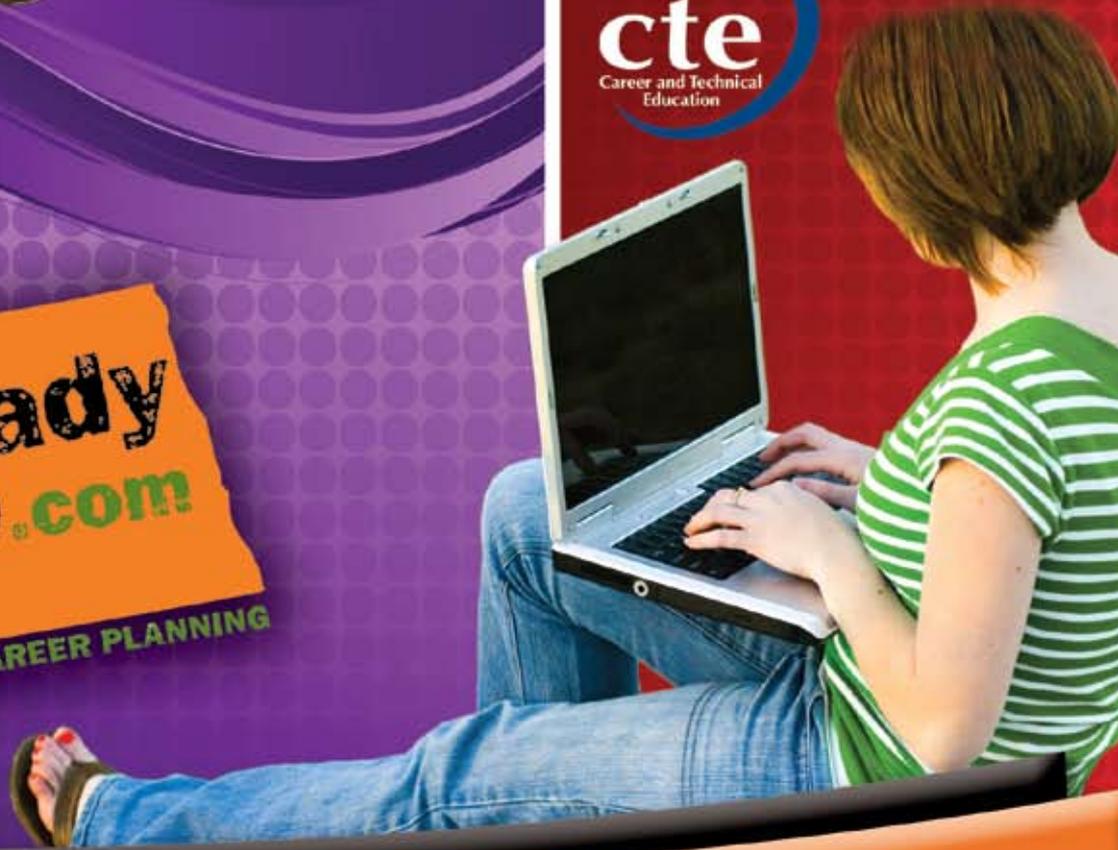
OUTLOOK

28TH EDITION • 2010-2011



North Dakota
cte
Career and Technical
Education

RU Ready
ND.com
EDUCATION & CAREER PLANNING



Dear Readers:

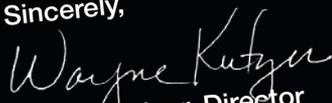
Whether you are a student, educator, parent or someone who is ready to head your career in a different direction, this magazine can help you take the first steps in setting your career goals. Charting the course to a career – for the first time or later in life – can seem overwhelming. It is through careful planning and a variety of experiences that we are able to find the work that we are best suited for. While it is important to create a plan, be prepared to change and adapt to new ideas and opportunities as you move forward.

The goal of Career and Technical Education is to prepare students for success in life. CTE courses offer students the opportunity to explore a wide range of careers through hands-on classroom activities and related work experiences. By enrolling in these and other courses in school, not only are you gaining knowledge, but you are building on the workplace readiness skills necessary to be successful in your chosen career field.

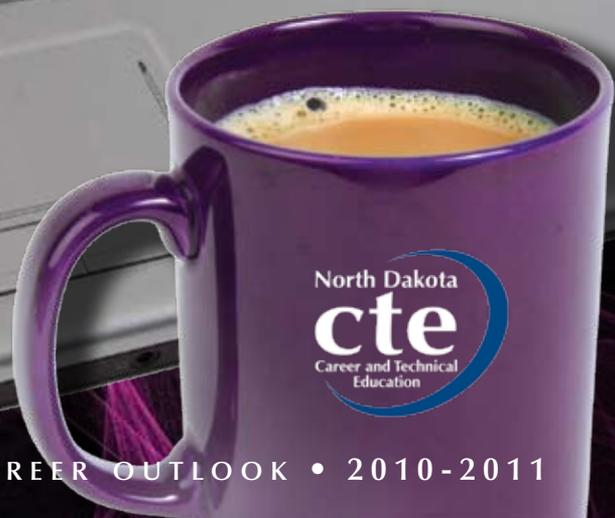
This magazine is your window to the resources available to you in our great state of North Dakota. These resources will help guide you in the process of setting goals as well as planning and preparing for a lifetime of successful learning and earning.

I wish you the best as you continue to prepare yourself for your future. Give yourself the competitive edge by planning for success.

Sincerely,



Wayne Kutzer, Director
North Dakota Department of Career and Technical Education



ACKNOWLEDGEMENTS

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North Dakota Department of
Career and Technical Education**

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Permission to Reprint:

Reference to the North Dakota
Department of Career and Technical
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and the Career Outlook is requested.

Distribution

North Dakota Army National Guard

*Thank you to all who have
contributed to the production of
this year's Career Outlook.*

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What's New at the NORTH DAKOTA Community Colleges?

CHECKING OUT COMMUNITY
COLLEGES? GOOD MOVE!

By exploring the technical and transfer programs at North Dakota's five community colleges, you are already on the right track. You'll save money and be ready to make more money in today's hottest jobs. Here is some of the latest information from those schools. For more information, visit www.ndcommunitycolleges.com.



Lake Region State College

WIND ENERGY TECHNICIAN

By the end of 2008 North Dakota alone had 480 wind turbines with the capacity to produce 714 megawatts. The North Dakota Public Service Commission is projecting a need for at least 200 wind energy technicians by 2012 to maintain the turbines. Wages for wind energy technicians are generally high-paying. Becoming a wind turbine technician is a wonderful career opportunity for men and women. Although a high percentage of technicians are men, more women are entering the profession. If you'd like more information on the program, visit www.lrsc.edu.

Dakota College at Bottineau

ENTREPRENEURIAL CENTER FOR HORTICULTURE (ECH)

The ECH exists to assist small to mid-size farmers and gardeners produce organic and specialty vegetables for sale. Some of our clients sell their vegetables direct to customers through farmers markets, grocery stores and restaurants, while others grow vegetables on a larger scale and sell to wholesalers or on commodity markets. The ECH is also well on its way to becoming a demonstration site for production and growing techniques. The college runs a "community supported agriculture" program where community members are involved in the production and sale of produce. For additional details on this program, visit www.dakotacollege.edu/ech.shtml.



Williston State College

PETROLEUM PRODUCTION TECHNOLOGY

Williston State College provides many options in the Petroleum Production Technology Program: Commercial Driver's License, Industrial Safety, Lease Operator, and Service Rig. Curriculum, developed in collaboration with the oil and gas industry, focuses on understanding petroleum technology and its principles of operation and control. Students will understand the technical aspects of the work, the responsibilities of the work, and the importance of safety. Petroleum Production Technology options, ranging from a four credit certificate of completion to a 63 credit Associate of Applied Science degree, prepare students for entry level employment in the oil field. Visit www.wsc.nodak.edu.



There are over 100 drilling rigs operating in the area. Each drilling rig results in approximately 120 direct and indirect jobs. North Dakota Job Service reports the average yearly wage in the oil and gas extraction industry is over \$79,000. That wage is 139% above the statewide average wage.

Bismarck State College

RENEWABLE GENERATION TECHNOLOGY

The National Energy Center of Excellence at BSC is offering a new energy technology program focused on Renewable Generation Technology. The program, available on campus and online, is designed for entry-level employment in the areas of wind, solar, geothermal, fuel cell, biomass, hydro and tidal generation. Graduates of the program will have the technical skills and knowledge needed to prepare them for high-paying positions in this rapidly developing industry. For more information, contact Daniel.J.Schmidt@bsc.nodak.edu or visit www.bismarckstate.edu/energy/students/renewable/.



North Dakota State College of Science

CONSTRUCTION MANAGEMENT TECHNOLOGY

The construction industry has a high demand for individuals with an education in construction management both regionally and nationally. This program will prepare students for a career in construction as a general contractor, construction manager, project manager, project engineer, job site superintendent, estimator, scheduler, quality control and many other managerial positions whose duties and responsibilities ensure construction projects are completed on-time, on-budget and of the desired quality. It also provides transfer options to other colleges and universities. To get the latest on this and other architecture and construction programs, visit www.ndscs.edu.



NOW YOU'RE GETTING SOMEWHERE!

EXTENDED LEARNING EXPERIENCES

Extended learning experiences in the community allow you to connect with prospective employers as well as “try out” various career options.

...> **COOPERATIVE (CO-OP) EDUCATION**
Cooperative education is a short-term job placement directly related to a student’s classroom instruction in career and technical education. It is usually the final experience for the student who has “majored” in one occupational preparation program.

...> **INTERNSHIPS**
Like Cooperative Education, an internship is a work experience with academic credit, but internships are generally at the post-secondary level. Some internship experiences are paid positions.

...> **JOB SHADOWING/MENTORING**
A Job Shadowing or Mentoring opportunity pairs a student with a person who does the kind of work the student wants to explore. While job shadows generally last 2-8 hours and are typically limited to observing the worker, mentoring is an ongoing relationship between a worker and a student.

...> **PART-TIME JOBS/SUMMER EMPLOYMENT**
Work during the summer? Or, work part-time during the school year? Look for work that allows you to try out a career of interest to you.

SERVICE LEARNING/VOLUNTEER SERVICE
Service Learning and Volunteer Service are unpaid work experiences that focus on meeting a community need.

SUMMER CAREER EXPLORATION OPPORTUNITIES
Each summer career exploration opportunities are offered by business and industry in partnership with secondary and post-secondary institutions.

**WORK SIMULATIONS/
SCHOOL-BASED BUSINESSES**
Work Simulations and School-Based Businesses copy the environment and experiences a person might have on the job.

**WHICH OF THESE EXPERIENCES ARE OF
INTEREST TO YOU?** For more information, visit www.nd.gov/cte/crn and click on Extended Learning Experiences in the Student column. What are you waiting for?

GO EXPLORE! ...>

Support Your Career

1,000 career opportunities with more than **250,000** employers nationwide.

Call your state apprenticeship office at (701) 250-4700 or visit ndapprenticeship.com, doleta.gov/oa, or <http://21stcenturyapprenticeship.workforce3one.org> to learn more about apprenticeship.

Earn. Learn. Succeed.

**Want a successful career?
Want to further your education without racking up debt?**

Get started on your path to a successful career and enroll* in a Registered Apprenticeship program.



**REGISTERED
APPRENTICESHIP**
Earn. Learn. Succeed.

TAKING THE NEXT STEP

Assisting High School Students Transition from High School to College or the World of Work



The decisions you are making concerning your future could have a life-long impact. Don't let a permanent injury, illness or impairment stop you from pursuing your goals. You should, however, consider certain issues when selecting and planning for your future goals after high school:

- Knowing when and how to discuss your disability with an instructor or employer.
- Determining what questions are appropriate on an application or during an interview.
- Knowing what your rights are under the Americans with Disabilities Act (ADA) or Section 504.
- Determining whether modifications or accommodations are needed at school or work, and who is responsible for the cost of these items.

Rehabilitation Consulting & Services (RCS) can help you make an informed choice about your future career plans. To be *eligible* for RCS services, you must:

- Have a permanent injury, illness or impairment that affects your ability to find or maintain employment.
- Be able to benefit from services that lead to employment.

If you are eligible, Vocational Rehabilitation will help you to determine an appropriate employment goal. You and your consultant will work together to develop an Individual Plan for Employment (IPE), which identifies the services you need to achieve your goal.

RCS may be able to help you transition from high school to college:

- By advocating for the services you will need to succeed in college
- By assisting with services you need that are not provided by the institution (i.e., personal aids and assistive technology devices) and
- By assisting you with school costs if there is a financial need.

If you are transitioning from high school to work, RCS may provide:

- Job search assistance
- Job coaching and placement
- On-the-job training
- Tools or clothing associated with your employment goal.

Refer to page 55 (resources page) for contact information and locations of the eight RCS regional offices.



WWW.ND.GOV/DHS/RCS

JOB SERVICE North Dakota

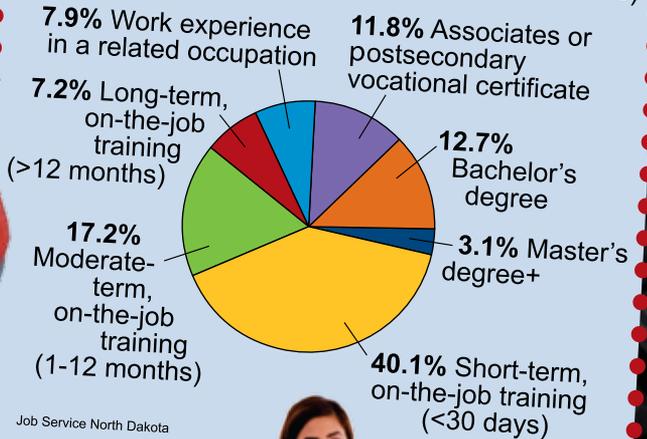


DISTRIBUTION OF NORTH DAKOTA JOB WAGES (by Training, Experience, and Education)



Job Service North Dakota

PERCENTAGE OF NORTH DAKOTA JOBS (by Training, Experience, or Education requirements)



Job Service North Dakota



According to the publication **The Investment Payoff** benefits of a college education include:

- Higher salaries and benefits
- More employment options and reduced unemployment
- Higher savings levels
- Improved working conditions
- Increased personal and professional mobility
- Improved health and life expectancy
- Improved quality of life for offspring

Specifically in North Dakota, the benefits of a bachelor's degree compared to a high school education include the following:

- A 70 percent higher income level
- Five times less likely to be unemployed
- Five times less likely to need public assistance



Part-time Service as A CITIZEN SOLDIER



Members of the North Dakota Army National Guard are ordinary people just like you. Most serve one weekend a month and two weeks a year. They are able to serve their state, country and community while working another full-time job or attending school.

The Guard is a disciplined and organized force ready to respond to local and state emergencies and natural disasters as called upon by the Governor of North Dakota. They are also subject to activation by the President of the United States as they are the reserve fighting force for the US Army.



VISIT
NDARMYGUARD.com
TO DISCOVER HOW
YOU CAN MAKE A
DIFFERENCE IN YOUR
COMMUNITY!

DID YOU KNOW?

YOU MAY BE ELIGIBLE TO RECEIVE UP TO \$12,500 IN ENLISTMENT BONUSES. Depending on what Military Occupational Specialty (MOS) you enlist into, you may be eligible for up to \$12,500 in enlistment bonuses.

YOU CAN ATTEND COLLEGE TUITION FREE. The combined federal and state tuition assistance programs will cover up to 100% tuition at a North Dakota state supported school. Federal tuition assistance will be paid directly to the school and will cover a maximum of \$250 per semester hour, plus fees, up to a total of \$4,500 per fiscal year. No funding will be paid on failed, dropped, incomplete classes or cumulative GPA below 2.0. After all federal tuition assistance funds have been utilized, state reimbursement will be available to cover remaining tuition costs. State funded reimbursement will be paid after each semester based on the number of successfully completed credits with a "C" grade (2.0 GPA) or higher. Tuition assistance is subject to the availability of funds.

YOU CAN RECEIVE A PAYCHECK FOR SIMPLY GOING TO COLLEGE. Students who are eligible can earn up to \$11,988, as a full-time student, under the Montgomery GI Bill. That's \$333 per month. Upon application to the Veterans Administration office, you will be certified to receive non-taxable monthly checks.

YOU CAN RECEIVE AN ADDITIONAL PAY CHECK FOR ATTENDING COLLEGE. Students who are eligible can earn up to \$7,200 (\$200 per month) under the Montgomery GI Bill Kicker, along with the Montgomery GI Bill. The GI Bill Kicker is available only if you choose to enlist into a critical skill and is good for 36 months of study. This money is non-taxable and you are entitled to use this program for up to 14 years.

YOU MAY BE ELIGIBLE FOR STUDENT LOAN REPAYMENT. This program allows non-prior service and prior service applicants who are eligible to earn up to \$50,000 in student loan repayment.

YOU WILL RECEIVE A MONTHLY PAY CHECK FOR ATTENDING DRILLS. Get paid for attending monthly unit training assemblies. This part-time job can bring you a starting wage between \$11.16 and \$15.75 per hour (E-1 – E-4 rank with less than two years time in service). Working one weekend a month and two weeks a year can really add up!

YOU WILL LEARN A VOCATIONAL SKILL. Receive a vocational education while earning a monthly salary in one of the many career fields the North Dakota Army National Guard has to offer. Some of your military training may even count towards college credits.* You will also learn leadership skills that will help you succeed in your military and civilian careers.
*Check with your North Dakota Army National Guard representative for more details.

YOU WILL HAVE ADVENTURES AND TRAVEL. Gas chamber, weapons and grenade training, night infiltration and helicopter rides are just a few of the many adventures you can experience in the North Dakota Army National Guard. See where you can go with new and exciting opportunities such as land navigation and rappelling all while learning team building exercises that will challenge you mentally and physically.

YOU CAN SPLIT YOUR TRAINING. High School Juniors who are at least 17 years of age may enlist and attend Basic Combat Training between their junior and senior year. After graduation you would then complete Advanced Individual Training. Seniors, graduates and seasonal workers may also utilize this program.

NATIONAL GUARD 
North Dakota

1-888-ND-GUARD NDARMYGUARD.com

All information is current
as of 16 MAR 10

CAREER OUTLOOK • 2010-2011

Learn ABOUT THE Military

The Army, Navy, Air Force, Marines and Coast Guard are all active duty segments of the military. Active duty soldiers serve full-time, similar to working a full-time civilian job. Assignments are available in all 50 states and in countries all over the world. For an active duty soldier/airman/sailor, length of service can range from two to six years.

What careers and jobs are available?

What are the enlistment benefits?

How do you join?

Find out the basics of each branch of the service by visiting the following websites:

- **Army:** www.goarmy.com • **Navy:** www.navy.com • **Air Force:** www.airforce.com
- **Marines:** www.marines.com • **Coast Guard:** www.uscg.mil

MILITARY RECRUITERS

AIR FORCE

Bismarck • 701-258-5163
Fargo • 701-277-1818
Grand Forks • 701-775-9361
Minot • 701-839-4635

AIR NATIONAL GUARD

1-800-972-8825

ARMY & ARMY RESERVE

Bismarck • 701-223-5455
Dickinson • 701-227-8669
Fargo • 701-277-1299
Grand Forks • 701-772-2171
Minot • 701-838-7919

ARMY NATIONAL GUARD

www.ndguard.com
1-888-ND-GUARD
(1-888-634-8273)
Bismarck • 701-328-9630
Bottineau/Rugby • 701-228-3716
Devils Lake • 701-662-4648
Dickinson • 701-227-7442
Fargo • 701-451-6030
Grand Forks • 701-795-3848
Jamestown • 701-253-3977
Mandan • 701-667-3208

Minot • 701-857-7650
Valley City • 701-845-6762
Wahpeton • 701-671-1507
Williston • 701-774-4327

ASVAB CAREER EXPLORATION PROGRAM

Fargo • 701-234-0072
or 1-800-323-0513

COAST GUARD

1-800-NOW-USCG
(1-877-669-8724)
Fargo • 701-235-0954

MARINES

1-800-345-8762
Bismarck • 701-223-3019
Fargo • 701-277-8403
Grand Forks • 701-772-3627
Minot • 701-839-2091

NAVY

1-800-USA-NAVY (1-800-872-6289)
Bismarck • 701-255-4572
Fargo • 701-277-1096
Grand Forks • 701-775-5281
Minot • 701-838-9612



Attention: current and former military personnel (Active Duty, National Guard, and Reserves) – the Troops to Teachers (TTT) program offers advising, financial aid, and assistance in identifying teaching vacancies for persons preparing to teach or to add endorsements in critical teaching fields. For further information, consult the Lewis & Clark Region TTT website at www.montana.edu/ttt.

BELIEVE! ACHIEVE! ! SUCCEED! ! !



Job Corps is the nation's oldest and most successful job training program for young adults ages 16 through 24. Job Corps has 50 years of success. With career and technical education, high school GED programs, Career Success Standards training and special arrangements for single parents, the Quentin Burdick Job Corps Center serves 250 student employees on an ongoing basis. Students enroll in Job Corps at any time during the year and it's **FREE** to those who qualify.

At Quentin Burdick Job Corps Center student employees join other young adults from North Dakota to learn marketable job skills. During training, student employees receive a modest living allowance, room and board and basic medical and dental care. After graduation, Job Corps staff will help student employees find a job in their chosen field.

So start on the path to your career today.

BELIEVE!
ACHIEVE! !
SUCCEED! ! !



Career and Technical Training

- Advanced Career Training at Minot State University
- Advanced Automotive Repair
- Office Administration
- Carpentry (UBCJA)
- Culinary Arts/Food Service
- Facilities Maintenance
- Health Occupations Training (CNA, LPN and now RN)
- Medical Office Support
- Welding

Academic Training

Students who attend Job Corps can obtain their GED and/or High School Diploma. In addition, courses in preparing resumes and sharpening interviewing skills are offered as well as Career Success Standards training and independent living skills. All of the training is aimed at making students employable and promotable.

Single Parent Program

Burdick Job Corps is one of only a handful of Centers nationwide to offer a single parent program. A dorm designed specifically for single parents and their children is right on campus. It allows parents to receive their education while their children are cared for in the Center's Child Development Center, also located right on campus.

For More Information

For more information contact the Outreach and Admissions Office at Burdick Job Corps Center in Minot, ND at 1-701-857-9671 or 701-857-9611, or visit www.burdickjobcorps.com.

Adult Education and Family Literacy ...gives you a second chance!



Adult Learning Centers (ALCs) provide services to help North Dakotans increase knowledge and improve skills essential in today's world. Although services may vary slightly from site to site, most centers have flexible scheduling and some technical training classes are available. See page 54 for Adult Learning Centers in your area.

GED

Prepare for the General Educational Development (GED) tests to acquire a high school equivalency diploma.

Academic Skills Review

Learn basic math, reading, writing and computer skills needed for the workplace, family and society.

English Language Learners

Communicative English classes are available to enable immigrants to function in family, community and work environments.

Career Planning

Most ALCs feature employability skills classes for career and further education planning.



NORTH DAKOTA ACADEMIC AND CAREER AND TECHNICAL SCHOLARSHIP PROGRAMS

In 2009 the State Legislature showed its support for North Dakota youth by creating the “North Dakota Scholarship Program.” This program rewards high school graduates who meet the specific coursework, grade point average, and test score requirements for either the North Dakota Academic Scholarship or the North Dakota Career and Technical Education Scholarship. Qualified students may be eligible for up to \$6,000 to be used for undergraduate study after graduation from high school. Some of the scholarship eligibility criteria are listed below.

A STUDENT MUST:

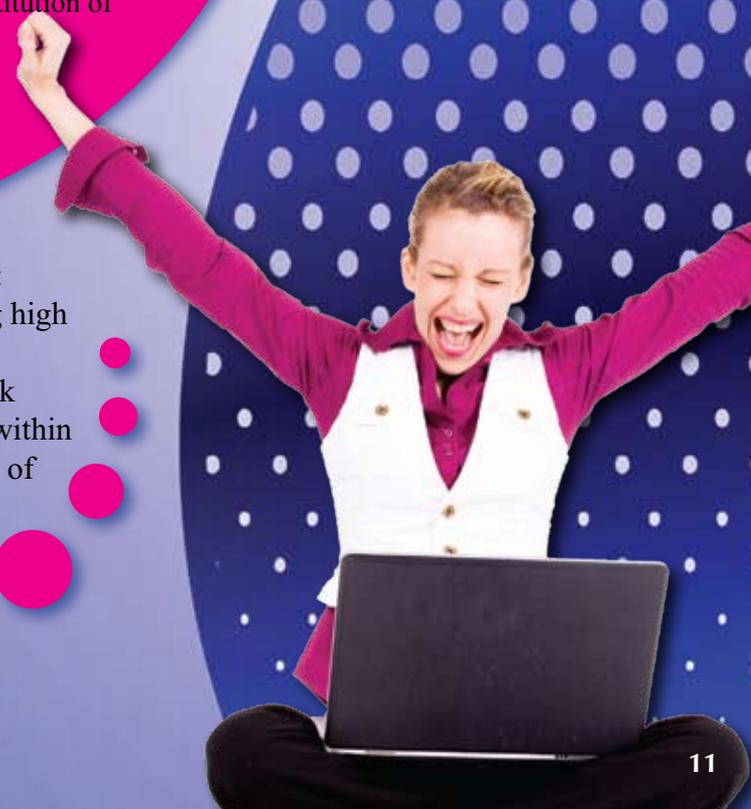
1. be a North Dakota resident
2. graduate from high school in North Dakota or a bordering state
3. have obtained a grade of at least a “C” in each 1/2 unit or unit required for a high school diploma
4. have a cumulative GPA of at least a “B” (3.0) on a 4.0 scale
5. have completed 1 unit of Algebra II and meet other course requirements as specified
6. earn a 24 on the ACT or, for the CTE Scholarship, three 5s on the WorkKeys assessments

SCHOLARSHIP/S:

7. awards are \$750 per semester or \$1,500 for the academic year
8. may be used at an accredited public or private institution of higher education in North Dakota
9. are renewable provided the student maintains a 2.75 grade point average on a 4.0 scale

To establish eligibility, 2011 North Dakota seniors must apply by June 7, 2011; recipients have six years following high school graduation to utilize their scholarship award.

Students will need to select their high school coursework carefully in order to meet all the eligibility requirements within the usual four years of high school. For a complete listing of eligibility requirements for both scholarship programs, or for an application, visit www.dpi.state.nd.us/resource/act/act.shtm or call 701-328-2755.



Available 24/7—North Dakota's Career Information System:

RUReadyND.com

The premier online tool for

▶▶ Students ▶▶ Educators ▶▶ Parents

WHAT CAN YOU DO AT **RUReadyND.com**

EXPLORE HUNDREDS OF OCCUPATIONS

- ▶▶ What careers fit me best? (take many interesting self-assessments)
- ▶▶ What do they do?
- ▶▶ How much money do they make?
- ▶▶ How many jobs are there going to be?
- ▶▶ What education is needed and where can I get it?
- ▶▶ What are the latest trends in a particular occupation?
- ▶▶ Link to current job openings to see what skills employers expect

BUILD A MEANINGFUL PLAN TO REALIZE YOUR GOALS

- ▶▶ What courses do I need to succeed?
- ▶▶ Compare your options after high school
- ▶▶ Create a plan, then create a back-up plan, change as often as you like

RAISE YOUR ACT SCORES

- ▶▶ Improve subject area skills using testGEAR
- ▶▶ Develop test taking skills
- ▶▶ Complete practice ACT tests

And what else? **LOTS, Lots More** —
check it out for yourself at

RUReadyND.com

STUDENTS: Your future is in your hands! Reach your full potential with help from **RUReadyND.com**

PARENTS: Use this site to inform yourself and to assist your children with career decisions.

EDUCATORS: Free training and support is available to all North Dakota educators for grades 6-12 through the North Dakota Career Resource Network.

Visit www.nd.gov/cte/crn/crc for more information and to contact your regional coordinator.

HOW to access RUReadyND, a password protected site, sponsored by The Bank of North Dakota, Student Loans Division:

IF YOU ALREADY HAVE AN ACCOUNT, sign in using your portfolio name and password, wherever you have internet access.

IF YOU HAVE FORGOTTEN YOUR PASSWORD, click on "Forgot your password?" to receive an email with your password. Or you may contact your school counselor, who should be able to help you.

IF YOU ARE A FIRST TIME VISITOR, click on "Create a new portfolio" and from the drop-down menus, select your town and your school.

THE OCCUPATIONAL SECTION *How To Use*

1 Occupational Title/Description
2 Related Occupations
3 Nat'l Employment ND Employment \$ND Earnings
4 Holland Type
5 Rating
6 Hiring Practices

Postsecondary Programs – Associate Degree Or Less					
Agriculture	Agricultural Inspectors (M) Inspect agricultural commodities, processing equipment, and facilities, and fish and logging operations, to ensure compliance with regulations and laws governing health, quality, and safety.	Consumer Safety Inspectors, Food & Drug Inspectors	16,600 ↘ 116/4 → \$20,800-35,200	Realistic HS	Many require a college degree in addition to experience and successful scores on an examination. Knowledge of horticulture, livestock, and commodities helpful. Hired by federal, state and local governments. Not an entry level position.
	Farmers and Ranchers Plan and direct livestock production and/or crop rotation practices to maximize production. Plant, cultivate, and market crops. Care for and market livestock, supervise farm workers. Own or rent land for farming operation.	Park Rangers, Wildlife Biologists, Foresters, Farm Manager	985,900 ↘ 26,900/164 ↘ \$NA-NA	Realistic HD HS	Past experience and growing up on a farm enhance success in the occupation. Some larger farms hire farm managers to oversee farm operations. Many farms and ranches are managed by several family members.

- Occupational Title** - the most commonly used title for the occupation and a description that provides a general idea of the tasks associated with this occupation. The (M), just after the title, indicates this occupation exists in the military.
- Related Occupations** - A listing of occupations that are similar in work performed on the job.
- Nat'l Employment ND Employment \$ND Earnings** - National Employment indicates the number of persons employed in this occupation in the United States. ND Employment indicates the number of persons employed in this occupation in North Dakota with the projected number of job openings each year shown after the slash. The arrows indicate the projected growth of this occupation for the nation and for North Dakota:
 Much faster than average ↑ (Over 3.6% per year); Stable → (0-1.9% per year); and
 Faster than average ↗ (2-3.5% per year); Declining in employment ↘ (Less than 0% per year).
 ND Earnings is a range of salaries for those employed in the occupation in the State. Some salaries will have a "US" at the end, which indicates North Dakota salaries were not available, so a national average was used. **The salaries shown reflect a 40 hour work week for many occupations. Be aware it is possible to earn a considerably higher salary in those occupations where overtime wages are paid.**
- Holland Type Rating**
Artistic: Artistic occupations frequently involve working with forms, designs and patterns. They often require self-expression, and the work can be done without following a clear set of rules.
Conventional: Conventional occupations frequently involve following set procedure and routines. These occupations can include working with data and details more than ideas. Usually there is a clear line of authority to follow.
Enterprising: Enterprising occupations frequently involve starting and carrying out projects. These occupations can involve leading people and making decisions. Sometime they require risk taking and often deal with business.
Investigative: Investigative occupations frequently involve working with ideas and require an extensive amount of thinking. These occupations can involve searching for the facts and figuring out problems mentally.
Realistic: Realistic occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals and real-world materials like wood, tools and machinery. Many of the occupations require working outside and do not involve a lot of paperwork or working closely with others.
Social: Social occupations frequently involve working with, communicating with, and teaching people. These occupations often involve helping or providing service to others.
- Rating**
HW: High Wage - North Dakota entry annual salary at least \$45,000.
HD: High Demand - Occupation has a very high number of annual openings and/or is a fast growing occupation in North Dakota.
HS: High Skill - Occupation requires at least one year of post high school education or training.
- Hiring Practices** - Information or hints to enhance opportunities for entering this occupation. Preferred specific training, minimum requirements, preferred experiences, required licensing, and types of businesses employing the occupation are given. Three cross-references are provided to assist in locating additional information on the occupation.

Career Clusters The occupational and related information in the Career Outlook is broken into sixteen Career Clusters, listed below. You are encouraged to use the Career Clusters Interest Survey on pages 14 and 15 or in RUREadyND.com to help identify the cluster or clusters most closely related to your personal preferences and interests.

Career Cluster	PG	Career Cluster	PG	Career Cluster	PG
1. Agriculture, Food & Natural Resources	P. 17	7. Government & Public Administration	P. 24	13. Manufacturing	P. 31
2. Architecture & Construction	P. 18	8. Health Science	P. 24	14. Marketing	P. 32
3. Arts, A/V Technology & Comm.	P. 20	9. Hospitality & Tourism	P. 27	15. Science, Technology, Engineering & Mathematics	P. 33
4. Business Management & Administration	P. 21	10. Human Services	P. 28	16. Transportation, Distribution & Logistics	P. 35
5. Education & Training	P. 22	11. Information Technology	P. 29		
6. Finance	P. 23	12. Law, Public Safety, Corrections & Security	P. 30		

CAREER CLUSTERS INTEREST SURVEY

Directions: Check the items in each box that best describe you. You may make as many or as few checks as you choose. Add up the number of checkmarks in each row and place the total in the box at the end of the row. Look to see which three have the highest numbers. Find the corresponding Career Clusters on page 13 to see which Career Clusters you may want to explore.

	Activities that describe what I like to do:	Personal qualities that describe me:	School subjects that I like:	Total number checked
1	<input type="checkbox"/> Learn how things grow and stay alive. <input type="checkbox"/> Make the best use of the earth's natural resources. <input type="checkbox"/> Hunt and/or fish. <input type="checkbox"/> Protect the environment. <input type="checkbox"/> Be outdoors in all kinds of weather. <input type="checkbox"/> Plan, budget, and keep records. <input type="checkbox"/> Operate machines and keep them in good repair.	<input type="checkbox"/> Self-reliant (able to do it yourself) <input type="checkbox"/> Nature lover <input type="checkbox"/> Physically active <input type="checkbox"/> Planner <input type="checkbox"/> Creative problem solver	<input type="checkbox"/> Math <input type="checkbox"/> Life Sciences <input type="checkbox"/> Earth Sciences <input type="checkbox"/> Chemistry <input type="checkbox"/> Agriculture	
2	<input type="checkbox"/> Read and follow instructions and/or blueprints. <input type="checkbox"/> Picture in my mind what a finished product looks like. <input type="checkbox"/> Work with my hands. <input type="checkbox"/> Perform work that requires precise results. <input type="checkbox"/> Solve technical problems. <input type="checkbox"/> Visit and learn from beautiful, historic, or interesting buildings. <input type="checkbox"/> Follow logical, step-by-step procedures.	<input type="checkbox"/> Curious <input type="checkbox"/> Good at following directions <input type="checkbox"/> Pay attention to detail <input type="checkbox"/> Good at visualizing possibilities <input type="checkbox"/> Patient and persistent (stick to it)	<input type="checkbox"/> Math <input type="checkbox"/> Drafting <input type="checkbox"/> Physical Sciences <input type="checkbox"/> Construction Trades <input type="checkbox"/> Electrical Trades/Heat, Air Conditioning and Refrigeration/Technology Education	
3	<input type="checkbox"/> Use my imagination to communicate new information to others. <input type="checkbox"/> Perform in front of others. <input type="checkbox"/> Read and write. <input type="checkbox"/> Play a musical instrument. <input type="checkbox"/> Perform creative, artistic activities. <input type="checkbox"/> Use video and recording technology. <input type="checkbox"/> Design brochures and posters.	<input type="checkbox"/> Creative and imaginative <input type="checkbox"/> Good communicator/good vocabulary <input type="checkbox"/> Curious about new technology <input type="checkbox"/> Relate well to feelings and thoughts of others <input type="checkbox"/> Determined/tenacious (stick with it)	<input type="checkbox"/> Art/Graphic design <input type="checkbox"/> Music <input type="checkbox"/> Speech and Drama <input type="checkbox"/> Journalism/Literature <input type="checkbox"/> Audiovisual Technologies	
4	<input type="checkbox"/> Perform routine, organized activities but can be flexible. <input type="checkbox"/> Work with numbers and detailed information. <input type="checkbox"/> Be the leader in a group. <input type="checkbox"/> Make business contact with people. <input type="checkbox"/> Work with computer programs. <input type="checkbox"/> Create reports and communicate ideas. <input type="checkbox"/> Plan my work and follow instructions without close supervision.	<input type="checkbox"/> Organized <input type="checkbox"/> Practical and logical <input type="checkbox"/> Patient <input type="checkbox"/> Tactful <input type="checkbox"/> Responsible	<input type="checkbox"/> Computer Applications/Business and Information Technology <input type="checkbox"/> Accounting <input type="checkbox"/> Math <input type="checkbox"/> English/Language Arts <input type="checkbox"/> Economics	
5	<input type="checkbox"/> Communicate with different types of people. <input type="checkbox"/> Help others with their homework or to learn new things. <input type="checkbox"/> Go to school. <input type="checkbox"/> Direct and plan activities for others. <input type="checkbox"/> Handle several responsibilities at once. <input type="checkbox"/> Acquire new information. <input type="checkbox"/> Help people overcome their challenges.	<input type="checkbox"/> Friendly <input type="checkbox"/> Decision maker <input type="checkbox"/> Helpful <input type="checkbox"/> Innovative/Inquisitive <input type="checkbox"/> Good listener	<input type="checkbox"/> English/Language Arts <input type="checkbox"/> Social Studies <input type="checkbox"/> Math <input type="checkbox"/> Science <input type="checkbox"/> Psychology	
6	<input type="checkbox"/> Work with numbers. <input type="checkbox"/> Work to meet a deadline. <input type="checkbox"/> Make predictions based on existing facts. <input type="checkbox"/> Have a clear set of rules to follow. <input type="checkbox"/> Analyze financial information and interpret it to others. <input type="checkbox"/> Handle money with accuracy and reliability. <input type="checkbox"/> Take pride in the way I dress and look	<input type="checkbox"/> Trustworthy <input type="checkbox"/> Orderly <input type="checkbox"/> Self-confident <input type="checkbox"/> Logical <input type="checkbox"/> Methodical or efficient	<input type="checkbox"/> Accounting <input type="checkbox"/> Math <input type="checkbox"/> Economics <input type="checkbox"/> Banking/Financial Services <input type="checkbox"/> Business Law	
7	<input type="checkbox"/> Be involved in politics. <input type="checkbox"/> Negotiate, defend, and debate ideas and topics. <input type="checkbox"/> Plan activities and work cooperatively with others. <input type="checkbox"/> Work with details. <input type="checkbox"/> Perform a variety of duties that may change often. <input type="checkbox"/> Analyze information and interpret it to others. <input type="checkbox"/> Travel and see things that are new to me.	<input type="checkbox"/> Good communicator <input type="checkbox"/> Competitive <input type="checkbox"/> Service minded <input type="checkbox"/> Well organized <input type="checkbox"/> Problem solver	<input type="checkbox"/> Government <input type="checkbox"/> English/Language Arts <input type="checkbox"/> Social Studies <input type="checkbox"/> Math <input type="checkbox"/> Foreign Language	
8	<input type="checkbox"/> Work under pressure. <input type="checkbox"/> Help sick people and animals. <input type="checkbox"/> Make decisions based on logic and information. <input type="checkbox"/> Participate in health and science classes. <input type="checkbox"/> Respond quickly and calmly in emergencies. <input type="checkbox"/> Work as a member of a team. <input type="checkbox"/> Follow guidelines precisely and meet strict standards of accuracy.	<input type="checkbox"/> Compassionate and caring <input type="checkbox"/> Good at following directions <input type="checkbox"/> Conscientious and careful <input type="checkbox"/> Patient <input type="checkbox"/> Good listener	<input type="checkbox"/> Biological Sciences <input type="checkbox"/> Chemistry <input type="checkbox"/> Math <input type="checkbox"/> Health-Related Careers Classes <input type="checkbox"/> English/Language Arts	

Source: Adapted from the Guidance Division Survey, Oklahoma Department of Career and Technology Education (2005)

Note: This survey does not make any claims of statistical reliability and has not been normed. It is intended for use as a guidance tool to generate discussion regarding careers and is valid for that purpose.

Disclaimer: Your interests may change over time. These survey results are intended to assist you with informal career exploration. Consider more formal assessments and other resources or services to help you plan your career.

	Activities that describe what I like to do:	Personal qualities that describe me:	School subjects that I like:	Total number checked <input checked="" type="checkbox"/>
9	<input type="checkbox"/> Investigate new places and activities. <input type="checkbox"/> Work with all ages and types of people. <input type="checkbox"/> Organize activities in which other people enjoy themselves. <input type="checkbox"/> Have a flexible schedule. <input type="checkbox"/> Help people make up their minds. <input type="checkbox"/> Communicate easily, tactfully, and courteously. <input type="checkbox"/> Learn about other cultures.	<input type="checkbox"/> Tactful <input type="checkbox"/> Self-motivated <input type="checkbox"/> Works well with others <input type="checkbox"/> Outgoing <input type="checkbox"/> Slow to anger	<input type="checkbox"/> English/Language Arts/Speech <input type="checkbox"/> Foreign Language <input type="checkbox"/> Social Sciences <input type="checkbox"/> Marketing <input type="checkbox"/> Food Services	
10	<input type="checkbox"/> Care about people, their needs, and their problems. <input type="checkbox"/> Volunteer my services for the good of the community. <input type="checkbox"/> Listen to other people's viewpoints. <input type="checkbox"/> Help people be at their best. <input type="checkbox"/> Work with people from preschool age to old age. <input type="checkbox"/> Think of new ways to do things. <input type="checkbox"/> Make friends with different kinds of people.	<input type="checkbox"/> Good communicator/good listener <input type="checkbox"/> Caring <input type="checkbox"/> Non-materialistic <input type="checkbox"/> Uses intuition (instinct) and logic <input type="checkbox"/> Non-judgmental	<input type="checkbox"/> English/Language Arts <input type="checkbox"/> Psychology/Sociology <input type="checkbox"/> Family and Consumer Sciences <input type="checkbox"/> Finance <input type="checkbox"/> Foreign Language	
11	<input type="checkbox"/> Work with computers. <input type="checkbox"/> Reason clearly and logically to solve complex problems. <input type="checkbox"/> Use machines, techniques, and processes. <input type="checkbox"/> Read technical materials and diagrams and solve technical problems. <input type="checkbox"/> Adapt to change. <input type="checkbox"/> Play video games and figure out how they work. <input type="checkbox"/> Concentrate for long periods without being distracted.	<input type="checkbox"/> Logic/analytical thinker <input type="checkbox"/> See details in the big picture <input type="checkbox"/> Persistent <input type="checkbox"/> Good concentration skills <input type="checkbox"/> Precise and accurate	<input type="checkbox"/> Math <input type="checkbox"/> Science <input type="checkbox"/> Computer Tech/Applications <input type="checkbox"/> Communications <input type="checkbox"/> Graphic Design	
12	<input type="checkbox"/> Work under pressure or in the face of danger. <input type="checkbox"/> Make decisions based on my own observations. <input type="checkbox"/> Interact with other people. <input type="checkbox"/> Be in positions of authority. <input type="checkbox"/> Respect rules and regulations. <input type="checkbox"/> Debate and win arguments. <input type="checkbox"/> Observe and analyze people's behavior.	<input type="checkbox"/> Adventurous <input type="checkbox"/> Dependable <input type="checkbox"/> Community-minded <input type="checkbox"/> Decisive <input type="checkbox"/> Optimistic	<input type="checkbox"/> English/Language Arts <input type="checkbox"/> Psychology/Sociology <input type="checkbox"/> Government/Social Studies <input type="checkbox"/> Law Enforcement <input type="checkbox"/> First Aid/First Responder	
13	<input type="checkbox"/> Work with hands and learn that way. <input type="checkbox"/> Put things together. <input type="checkbox"/> Do routine, organized and accurate work. <input type="checkbox"/> Perform activities that produce real, concrete results. <input type="checkbox"/> Apply math to work out solutions. <input type="checkbox"/> Use hand and power tools and operate equipment machinery. <input type="checkbox"/> Visualize objects in three dimensions from flat drawings.	<input type="checkbox"/> Practical <input type="checkbox"/> Observant <input type="checkbox"/> Physically active <input type="checkbox"/> Step-by-step thinker <input type="checkbox"/> Coordinated	<input type="checkbox"/> Math-Geometry <input type="checkbox"/> Chemistry <input type="checkbox"/> Trade and Industry courses <input type="checkbox"/> Physics <input type="checkbox"/> English/Language Arts	
14	<input type="checkbox"/> Shop and go to the mall. <input type="checkbox"/> Be in charge. <input type="checkbox"/> Make displays and promote ideas. <input type="checkbox"/> Give presentations and enjoy public speaking. <input type="checkbox"/> Persuade people to buy products or to participate in activities. <input type="checkbox"/> Communicate my ideas to other people. <input type="checkbox"/> Take advantage of opportunities to make extra money.	<input type="checkbox"/> Enthusiastic <input type="checkbox"/> Competitive <input type="checkbox"/> Creative <input type="checkbox"/> Self-motivated <input type="checkbox"/> Persuasive	<input type="checkbox"/> English/Language Arts <input type="checkbox"/> Math <input type="checkbox"/> Business Education/Marketing <input type="checkbox"/> Economics <input type="checkbox"/> Computer Applications	
15	<input type="checkbox"/> Interpret formulas. <input type="checkbox"/> Find the answers to questions. <input type="checkbox"/> Work in a laboratory. <input type="checkbox"/> Figure out how things work and investigate new things. <input type="checkbox"/> Explore new technology. <input type="checkbox"/> Experiment to find the best way to do something. <input type="checkbox"/> Pay attention to details and be precise.	<input type="checkbox"/> Detail oriented <input type="checkbox"/> Inquisitive <input type="checkbox"/> Objective <input type="checkbox"/> Methodical <input type="checkbox"/> Mechanically inclined	<input type="checkbox"/> Math <input type="checkbox"/> Science <input type="checkbox"/> Drafting/Computer-Aided Drafting <input type="checkbox"/> Electronics/Computer Networking <input type="checkbox"/> Technical Classes/Technology Education	
16	<input type="checkbox"/> Travel. <input type="checkbox"/> See well and have quick reflexes. <input type="checkbox"/> Solve mechanical problems. <input type="checkbox"/> Design efficient processes. <input type="checkbox"/> Anticipate needs and prepare to meet them. <input type="checkbox"/> Drive or ride. <input type="checkbox"/> Move things from one place to another.	<input type="checkbox"/> Realistic <input type="checkbox"/> Mechanical <input type="checkbox"/> Coordinated <input type="checkbox"/> Observant <input type="checkbox"/> Planner	<input type="checkbox"/> Math <input type="checkbox"/> Trade and Industry courses <input type="checkbox"/> Physical Sciences <input type="checkbox"/> Economics <input type="checkbox"/> Foreign Language	

List your top three Career Clusters of interest (refer to the chart on page 13 for the corresponding Career Clusters):

- 1) _____
- 2) _____
- 3) _____

For more information see your career or school counselor, career and technical center, an institution of higher education, Job Service North Dakota, or go to

RUReadyND.com

OCCUPATIONAL SECTION INDEX

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Air Traffic Control Specialists (M)	35	Dispensing Opticians (M)	25	Legal Assistants (paralegal) (M)...	30	Public Relations Specialists (M) ...	20
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Airplane Pilots (M)	35	Drivers, Truck (M).....	35	Librarians	20	Radio & Television Announcers (M)	20
Architects (M).....	19	Dry Wall Installers.....	19	Library Assistants.....	20	Radiologic Technologists (M).....	25
Architects, Landscape	19			Livestock Sales Representatives..	17	Real Estate Agents	32
Auctioneers.....	32	Education Administrators	22	Loan Officers	24	Receptionists (M).....	21
Auto Body Repairers (M).....	35	Electrical & Electronic Engineering Technicians (M).....	31	Lodging Managers	27	Recreation Workers.....	27
Automotive Service Technicians (M).....	35	Electric Utility Worker (Electrical Power-Line Installers & Repairers) (M)	19	Machinists (M)	31	Respiratory Therapists (M).....	25
		Electricians (M)	19	Maids & Housekeeping Cleaners..	27	Retail Florist (Floral Designer).....	32
		Electro-Mechanical Technicians... 31		Mail Carriers (M)	35	Retail Store Managers (M)	32
		Emergency Medical Technicians (M).....	25	Management Analysts.....	22	Roustabouts	17
		Energy Industry Manager (Managers of Production & Operating Workers).....	31	Marketing Managers	33		
		Engineers, Agricultural	34	Massage Therapists	25	Sales Agent, Advertising.....	32
		Engineers, Chemical	34	Mechanical Engineering Technicians	31	Sales Agents, Securities	24
		Engineers, Civil (M).....	34	Medical & Public Health Social Workers.....	28	Sales Managers	33
		Engineers, Computer Applications (M).....	29	Medical & Clinical Laboratory Technicians (M).....	25	Sales Representatives.....	32
		Engineers, Electrical (M)	34	Medical Assistants (M)	25	Sales Route Drivers.....	33
		Engineers, Energy	34	Medical & Clinical Laboratory Technologists (M)	26	Salespersons, Parts	33
		Engineers, Industrial (M)	34	Medical Records & Health Information Technicians (M).....	25	Salespersons, Retail Trade	33
		Engineers, Mechanical (M).....	34	Medical Secretaries.....	21	Scientists, Animal.....	18
		Engineers, Physics Applications .. 34		Medical Transcriptionists (M).....	25	Secretaries, Except Legal, Medical & Executive.....	21
		Environmental Scientists & Specialists	34	Meteorologists (M).....	34	Security Guards (M).....	30
		Excavating & Loading Machine Operators.....	19			Self-Enrichment Education Teachers.....	22
		Executive Secretaries & Administrative Assistants (M)	21	Network & Computer Systems Administrators	29	Sheet Metal Workers (M).....	19
				Network & Data Communications Analysts	29	Simulator Maintenance Technician (M).....	33
		Faculty Members, Colleges & Universities (M)	22	News Analysts, Reporters & Correspondents (M).....	20	Small Engine Mechanics (M).....	35
		Farm & Home Management Advisors	22	Nuclear Operator (non-licensed) .. 17		Social & Community Service Managers	24
		Farm Equipment Mechanics.....	35	Nurse Practitioners (M)	26	Social & Human Service Assistants	28
		Farmers & Ranchers.....	17	Nursery & Greenhouse Managers	17	Social Workers (M)	28
		Farmworkers.....	17	Nurses Aides, Orderlies, Including Cert. Nurse Aide (M)	25	Soil & Plant Scientists	18
		Financial Managers	23	Nurses, Licensed Practical (M)	25	Speech-Language Pathologists (M).....	26
		Fire Chiefs (M).....	30	Nurses, Registered (M).....	25	Stationary Engineers (M).....	19
		Fire Fighters (M).....	30			Structural Metal Workers	19
		Flight Attendants, Airplane (M)	35	Occupational Therapists (M).....	26	Surgical Technologists (M).....	26
		Food Services Managers (M)	27	Occupational Therapy Assistants (M)	25	Surveying & Mapping Technicians (M).....	34
		Forest & Conservation Technicians	17	Office Managers (M).....	21	System Operator (Power Distributors & Dispatchers).....	17
		Funeral Directors	32	Operating Engineers/Construction Equipment Operators (M).....	??		
				Optometrists (M).....	26	Teacher Assistants	22
		Gaming Dealers.....	27			Teachers, Vocational Education Secondary School	23
		Grain Elevator Superintendents....	17	Personal & Home Care Aides.....	28	Teachers, Elementary.....	23
		Graphic Designers (M).....	20	Pharmacists (M).....	26	Teachers, Secondary.....	23
				Pharmacy Technicians (M)	25	Teachers, Special Education.....	23
		Health Services Managers (M)	26	Photographers (M).....	20	Telecommunications Line Installers & Repairers (M)	20
		Health Unit Coordinators (M)	25	Physical Therapists (M).....	26	Tellers	23
		Heating & Air Conditioning Mechanics (M)	19	Physical Therapy Aides & Assistants (M)	25	Tool & Die Makers (M)	31
		Heavy Equipment Mechanics (M)	35	Physician Assistants (M)	26	Training & Development Specialists	22
		Home Health Aides.....	25	Physicians (M)	26	Travel Agents	27
		Hosts & Hostesses	27	Plumbers & Pipefitters (M)	19		
		Hotel Desk Clerks (M).....	27	Police & Sheriff's Patrol Officers... 30		Veterinarians (M).....	26
		Human Resource Managers (M) ...	22	Police Chiefs (M).....	30	Veterinary Technicians & Technologists.....	26
				Postmasters (M)	35		
		Industrial Machinery Mechanics & Maintenance Workers	31	Power Plant Operators (M).....	17	Waiters & Waitresses.....	27
		Inspectors & Compliance Officers Except Construction (M)	24	Prepress Occupations (M)	20	Water Treatment Plant Operators (M).....	18
		Instructors, Sports {Coaches} (M).....	27	Preschool Teachers: Except Special Ed.....	23	Welders & Cutters (M)	31
		Insurance Sales Agents	23	Printing Press Operators (M)	20	Writers & Editors (M)	20
		Interior Designers	33				

AGRICULTURE, FOOD & NATURAL RESOURCES



The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Agricultural Inspectors (M) Inspect agricultural commodities, processing equipment, and facilities, and fish and logging operations, to ensure compliance with regulations and laws governing health, quality, and safety.	Consumer Safety Inspectors, Food and Drug Inspectors	16,600 ↘ 116/4 → \$20,800-35,200	Realistic HS	Many require a college degree in addition to experience and successful scores on an examination. Knowledge of horticulture, livestock, and commodities helpful. Hired by federal, state and local governments. Not an entry level position.
Farmers and Ranchers Plan and direct livestock production and/or crop rotation practices to maximize production. Plant, cultivate, and market crops. Care for and market livestock, supervise farm workers. Own or rent land for farming operation.	Park Rangers, Wildlife Biologists, Foresters, Farm Manager	985,900 ↘ 26,900/164 ↘ \$NA-NA	Realistic HD HS	Past experience and growing up on a farm enhance success in the occupation. Some larger farms hire farm managers to oversee farm operations. Many farms and ranches are managed by several family members.
Farmworkers Plant, cultivate, spray, irrigate, and harvest crops. Care for animals and poultry. Operate farm machinery. Prepare crops for marketing. Repair farm buildings and fences.	Groundskeepers, Park Rangers, Wildlife Technicians, Farmers	807,000 ↘ 4,596/163 → \$16,800-23,800	Realistic HD	Many are trained on the job. Can be seasonal work in North Dakota. Must be able to do work that requires lifting, climbing, and bending.
Forest and Conservation Technicians Compile data on characteristics of forest tracts, under direction of forester; train and lead forest workers in tree propagation, fire prevention and suppression. May assist conservation scientists in managing rangelands and wildlife habitats.	Park Rangers, Foresters, Farmers, Ranchers, Fish and Wildlife Technicians	34,000 → 229/10 → \$28,400-43,600	Realistic HS	Most employers require vocational training. Must like working outdoors. Hired by the federal, state, or local government.
Grain Elevator Superintendents Coordinate and supervise workers in loading, storing, unloading, cleaning, and blending grains for milling and shipment. Inspect grain.	Purchasing Agents, Grain Buyers	14,100 ↘ 272/7 → \$41,500-62,000	Enterprising HS	Most superintendents have 15 or more years experience in elevator work as assistants or laborers before becoming superintendents. Wages vary depending upon size and location of elevator and whether it is privately owned or a co-op.
Landscaping and Groundskeeping Workers Landscape or maintain grounds of property using hand or power tools or equipment. Work may include: sod laying, mowing, trimming, planting, watering, fertilizing, digging, raking, sprinkler installation, and installation of mortarless segmental concrete masonry wall units.	Farm Workers, Farmers, Forestry Technicians	1,205,800 → 2,492/67 → \$17,249-29,800	Realistic HD	Training is available on the job or through a vocational program. Knowledge of horticulture is helpful. Must like working outdoors and be able to do physical labor.
Livestock Sales Representatives Sell cattle, horses, hogs, and other livestock to packing houses, farmers, or other purchasers. Review current market, and inspect livestock to determine value.	Grain Buyers, Real Estate Agents, Insurance Agents	NA N/A/N/A \$N/A-N/A	Enterprising HS	Training ranges from high school diploma to a four-year college degree. Experience working with cattle and knowledge of various breeds necessary. Good communication skills essential.
Nuclear Operator (non-licensed) Service and calibrate radiation protection instruments and equipment, monitor plant performance, measure and records plant chemistry and radioactivity levels, and operates chemical and radiochemical instrumentation and equipment.	Maintenance Technician, Chemistry Technician and Health Physics Technician	6,000 → NA/NA → \$54,600-100,300(US)	Realistic HW HS	Preference is given to those who have completed formal apprenticeship or vocational training. Good problem solving, mathematical and science skills are necessary. Must be able to lift 50+ lbs, be in confined spaces, heights, climb stairs and ladders. Ability to visualize color is required at some facilities. Hired by nuclear power generation facilities.
Nursery and Greenhouse Managers Plan, organize, direct, control, and coordinate activities of workers engaged in propagating, cultivating, and harvesting horticultural specialties, such as trees, shrubs, flowers, mushrooms, and other plants.	Forestry Technicians, Lawn Service Workers, Groundskeepers	21,790 → 430/10 → \$25,800-47,500	Enterprising HS	Training is available on the job or through a vocational program. Knowledge of horticulture important. Must like working outdoors.
Power Plant Operators (M) Control, operate or maintain machinery to generate electrical power.	Boiler Operators, Stationary Engineers, Water Treatment Plant Operators	35,400 → 140/NA → \$54,100-80,000	Realistic HW HS	Preference is given to those who have completed formal apprenticeship or vocational training. Good mechanical aptitude and mathematics skills are necessary. Hired by generating plants.
Roustabouts Assemble and repair oilfield machinery and equipment. Dig holes, set forms, pour cement to make derrick foundations. Dismantle and assemble boilers. Use handtools and power tools.	Derrick Operators, Rotary Drillers	65,700 ↘ 1,162/79 ↑ \$33,700-49,600	Realistic HD HS	Trained on the job. Working in heights in excess of 15 feet may be necessary. Shift work common. Must be able to lift heavy objects and work outdoors. Hired by oil drilling companies.
System Operator (Power Distributors and Dispatchers) Control the flow of power on the grid, ensure safe and reliable power is delivered to customers.	Transmission Operator, Transmission System Operator, Generation Coordinator	10,000 → NA/NA → \$46,100-89,500(US)	Realistic HW HS	Preference is given to those who have completed formal apprenticeship or vocational training. Good mechanical aptitude and mathematics skills are necessary. Must be able to lift 50+ lbs, be in confined spaces, heights, climb stairs and ladders. Ability to visualize color is required at some facilities. Hired by control centers.

AGRICULTURE, FOOD & NATURAL RESOURCES

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Water Treatment Plant Operators (M) Operate or control an entire process or system of machines, often through control boards, to transfer or treat water or liquid waste.	Boiler Operators, Powerplant Operators, Stationary Engineers	113,400 → 471/21 ↗ \$27,200-45,500	Realistic HD HS	Need mechanical aptitude and basic math skills. Many are trained on the job; however, formal training may increase job opportunities. Hired by local government or chemical manufacturing companies.
Postsecondary Programs – Bachelors Degree or More				
Biologists (M) Conduct research to gain information about the origin, development, anatomy, and other basic principles of plant and animal life. May specialize in one aspect of biology, such as embryology, botany, microbiology, wildlife, etc.	Environmental Scientist, Foresters, Range Managers, Soil Scientists	19,500 → 102/3 → \$42,300-62,400	Investigative HS	A four-year degree or a graduate degree is required. May sell, inspect, conduct research, or teach. Nationally over one-half are hired by the government. A Ph.D. is generally required for college teaching and independent research.
Conservationist Scientists Manage, improve and protect natural resources to maximize their use without damaging the environment. May conduct soil surveys and develop plans to reduce soil erosion.	Agricultural Scientists, Agronomists, Horticulturists, Soil Scientists, Farmers	18,300 → NA/NA → \$33,200-86,900 (US)	Investigative HS	Minimum requirement is four-year degree. Some are hired by extension services or local and state government. Others may teach at universities or work in private industry.
Scientists, Animal Conduct research in selection, breeding, feeding, management and marketing of beef, horses, and other animals. Develop improved practices in feeding, housing, sanitation, and disease control. Control breeding practices to improve strains of animals.	Soil Scientists, Biochemists, Environmental Scientist, Animal Health Technologist	4,000 → NA/NA \$31,700-107,700 (US)	Investigative HS	Minimum of B.S. and a higher degree (M.S. or Ph.D.) required for advancement and administrative positions. Ability to work independently and communicate effectively essential. May be hired by private or government sector.
Soil and Plant Scientists Conduct research in breeding, physiology, production, yield, and management of crops and agricultural plants, their growth and control of pests or study the chemical, physical, biological, and mineralogical composition of soils. May classify and map soils and investigate effects of alternative practices on soil and crop productivity.	Biochemists, Life Scientists, Foresters, Plant Physiologist, Environmental Scientist	13,900 → 140/7 → \$37,000-66,700	Investigative HS	Education requirements range from four-year degree to Ph.D. depending on the employment needs and industry. Nationally over one-half are hired by the government. Must be able to work independently or as part of a team. Written and oral communications essential. Hired by extension service.

ARCHITECTURE & CONSTRUCTION



Careers in designing, planning, managing, building and maintaining the built environment.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Bricklayers and Stonemasons (M) Lay bricks, stone, concrete and set cinder blocks to build and repair walls, boilers, furnaces, and other structures. Use chisels, hammers, trowels, levels, and other tools.	Cement Masons, Plasterers, Tilersetters	135,800 → 313/12 → \$35,600-55,500	Realistic HS	Employers prefer applicants with formal, apprenticeship training, or experience. Ability to visualize objects in 2 or 3 dimensions is necessary. Seasonal work. Hired by contractors. May be self-employed.
Carpenters (M) Build and install structures and frameworks made mainly of wood. May build houses, barns, and other buildings. May do the finish work or may do the rough carpentry work. Use a variety of power and hand tools. May do repair work.	Cabinet Makers, Electricians, Plasterers, Plumbers	1,284,900 → 3,406/84 → \$24,300-37,100	Realistic HD HS	Preference may be given to applicants who have completed vocational or apprenticeship training program. The demand for carpenters is dependent on the construction activity. In North Dakota, carpentry work can be seasonal. May be self-employed.
Construction Laborers Perform tasks involving physical labor at building, highway, and heavy construction projects, tunnel and shaft excavations, and demolition sites. May operate hand and power tools. May clean and prepare sites.	Carpenter, Brick Mason	1,248,700 ↗ 3,049/75 → \$22,800-32,000	Realistic	For some construction laborer jobs, employers hire people without experience or specific training. However, the work requires more strength and stamina than most occupations.
Construction Managers Plan, organize, direct, and coordinate through subordinate personnel activities concerned with erection, alteration, maintenance, and repair of structures, facilities, and systems such as houses, office buildings, bridges, roads, and similar structures.	Construction and Building Inspectors, Civil Engineers, Architects	551,000 → 1,000/21 → \$47,200-98,400	Enterprising HD HW HS	B.S. degree in construction management can greatly enhance one's opportunities in this occupation. Experience in construction trades is also important.
Drafters (M) Prepare drawings from designers' sketches and specifications for purposes such as manufacture and installation of machinery and equipment or for construction of buildings, dams, bridges, roads, and other projects. Prepare maps and charts.	Architects, Engineering Technicians, Landscape Architects	230,700 ↘ 484/16 → \$25,500-40,600	Realistic HS	Employers prefer formal drafting training. Good finger dexterity and visual perception are important. Must be able to communicate with others and follow verbal and written instructions. Computer skills essential.

ARCHITECTURE & CONSTRUCTION

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Dry Wall Installers Apply plasterboard or other wallboard sheets to ceiling and interior walls. Fill the joints between dry-wall sheets with plaster and prepare the walls for painting. Work from ladders, scaffolds, or stilts.	Carpenters, Insulation Workers, Floor Covering Installers	153,300 → 335/9 → \$26,500-41,000	Realistic	Employers seek applicants who have completed apprenticeship training or have experience. Some may train on the job. This occupation is dependent on the construction industry and may be seasonal. Employers look for experienced workers. May be self-employed.
Electric Utility Worker (Electrical Power-Line Installers and Repairers) (M) Inspect, operate and repair electrical equipment in substations, in-service relays, and with distribution systems.	Transmission Designer, Lineworker, Relay Apparatus Technician, Substation Electrician Technician, System Protection Technician, Substation Operator, Metering Technician	113,900 → 610/6 → \$35,000-84,200	Realistic HD HS	Preference is given to those who have completed formal apprenticeship or vocational training. Good mechanical aptitude, mathematical and communication skills are necessary. Must be able to lift 50+ lbs, be in confined spaces, heights, climb stairs and ladders. Ability to visualize color is required at some facilities. Hired by public utilities and power distribution facilities.
Electricians (M) Install, maintain and repair electrical wiring, equipment and fixtures. Ensure that work is in accordance with relevant codes.	Air Conditioning Mechanics, Telephone/Cable TV Installers/Repairers	694,900 → 2,082/82 → \$30,700-52,900	Realistic HD HS	Many employers prefer a graduate of a vocational or apprenticeship program. Must be able to read blueprints and use tools required in electrical circuit installation and repair. Hired by contractors, utility companies, and government. May be self-employed.
Excavating and Loading Machine Operators Operate or tend machinery equipped with scoops, shovels or buckets to excavate and load loose materials.	Maintenance Mechanics, Truck Drivers, Operating Engineers	75,700 → 390/NA → \$27,100-72,500	Realistic	Trained on the job or through vocational or apprenticeship programs. Should have average mechanical ability. Must be willing to work outdoors and work irregular hours.
Heating and Air Conditioning Mechanics (M) Install or repair heating, central air conditioning or refrigeration systems, including oil burners, hot-air furnace and heating stoves.	Boilermakers, Electrical Appliance Servicers, Plumbers, Sheet Metal Workers	308,200 ↗ 699/32 ↗ \$32,800-54,100	Realistic HD HS	Employers prefer applicants with vocational training or apprenticeship program completion. Mechanical ability and the ability to make decisions accurately are important. Hired by contractors. May be self-employed.
Operating Engineers/Construction Equipment Operators (M) Operate construction equipment, such as graders, bulldozers, scrapers, pumps, derricks and front-end loaders.	Mining Machine Operators, Truck Drivers	424,200 → 2,790/75 → \$28,000-47,100	Realistic HD HS	Trained on the job or through vocational programs. Should have average mechanical ability. Must be willing to work outdoors and work irregular hours.
Plumbers and Pipefitters (M) Build and repair water, waste disposal, and gas systems in homes and other buildings. Install plumbing fixtures, appliances, and heating and cooling systems. Use hand and power tools.	Heating and Air Conditioning Mechanics, Carpenters	494,700 → 1,035/40 → \$30,500-53,200	Realistic HD HS	Many employers require either past experience or formal apprenticeship training. Hired by construction companies. May be self-employed. License required.
Sheet Metal Workers (M) Fabricate, assemble, install and repair sheet metal products and equipment, such as ducts, drainpipes and furnace casings.	Heating and Air Conditioning Mechanics, Iron Workers	170,700 → 456/16 → \$28,300-44,400	Realistic HD HS	Employers prefer applicants who have completed an apprenticeship or vocational training. Should have above average ability to visualize objects of 2 or 3 dimensions and mechanical ability. Hired by air conditioning and heating contractors.
Stationary Engineers (M) Operate and maintain stationary engines and mechanical equipment such as steam engines, air compressors, generator turbines, and steam boilers that provide power for heating, cooling, and ventilation in factories and buildings.	Power Station Operators, Refinery Operators, Water Treatment Plant Operators	41,600 → 161/5 → \$31,400-51,700	Realistic HS	Employers prefer applicants from formal vocational or apprenticeship programs. May receive training on the job and move up to stationary engineers from boiler operating position. Hired by factories, hospitals, schools, and power stations.
Structural Metal Workers Raise, place and unite iron or steel girders, columns and other structural members to form structures or structural frameworks.	Form Builders, Carpenters, Welders	70,200 → 260/8 → \$27,000-43,100	Realistic HS	Employers prefer applicants with formal apprenticeship training. Some may train on the job. Most work outside in all kinds of weather. Hired by general contractors, steel erection contractors, and ornamental iron contractors.
Postsecondary Programs – Bachelors Degree or More				
Architects (M) Design buildings, develop plans, specifications and detailed drawings. Prepare scale and full size drawings. Arrange contracts and exercise supervision over construction. Consult with engineers and other specialists.	Mechanical Engineer, Architectural Drafter, Landscape Architect	141,200 → 301/11 ↗ \$40,000-71,000	Artistic HD HS	Graduation from a five-year program in architecture is the minimum requirement for employment. Job availability depends on the construction industry. Must be creative, artistic, perceptive, and be able to work independently. Must be licensed.
Architects, Landscape Design housing areas, public parks, shopping centers, etc., so that areas are useful and beautiful. Plan location of buildings, roads, walks, and arrangement of vegetation and open space. Prepare site plans, specifications and cost estimates.	Landscape Drafter, Architect, Golf Course Designer	26,700 ↗ N/A/N/A → \$37,000-60,000 (US)	Artistic HS	Graduation from five-year program is the minimum requirement. Must be creative and have artistic talent. This occupation is dependent upon the construction industry. Must be able to work independently.
Cost Estimators Prepare cost estimates for product manufacturing, construction projects or services to aid management in bidding or determining price of product or service.	Construction Managers; Architectural Drafters	217,800 ↗ 679/36 ↗ \$31,700-54,200	Conventional HD HS	Over half work in the construction industry. Job prospects should be best for those with industry work experience and a bachelor's degree in a related field.
Land Surveyors (M) Make exact measurements and determine property boundaries. Provide data relevant to shape, contour, gravitation, location, elevation, or dimension of land or land features.	GIS Specialist, Geologists, Civil Engineer, Engineering Technician	57,600 → 256/13 ↗ \$21,500-57,900	Investigative HS	Training may range from two to four-year degree. Must be able to visualize and understand objects, distances, sizes and other abstract forms. Must be accurate and quick with mathematical calculations.

ARTS, A/V TECHNOLOGY & COMMUNICATIONS



Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Broadcast Technicians (M) Operates and maintains radio transmitter to broadcast radio and television programs. Monitors signal transmission. Test, repair, and maintain broadcast equipment.	Engineering Technicians, Electronic Technologist	38,800 → 164/5 ↘ \$19,900-43,700	Realistic HS	Most employers prefer formal training in communications. A wide knowledge of electronic principles and the ability to use test equipment is necessary. Must pass a written examination.
Library Assistants Compiles records, and sorts and shelves books. Issues and receives library material such as books, films, periodicals and records, assists patrons in finding selections.	Title Searchers, Reservation Clerks, Secretaries	120,600 → 297/13 → \$17,600-28,000	Conventional HS	Increasingly more libraries are hiring assistants with some college training due to the need to hire technically trained individuals. Some require an associate degree in library science.
Photographers (M) Use artistic and special effects. Arrange and prepare subject matter. Set-up photographic equipment. Photograph subject using still camera and a variety of photographic accessories.	Floral Designers, Graphic Designers	152,000 → 346/10 → \$18,500-34,700	Artistic HS	Training ranges from high school to four-year degree. Technical understanding of photography necessary. Hired by commercial art studios, newspapers, magazines, or may be self-employed.
Prepress Occupations (M) Skills include paste-up, electronic page layout, camera operation, typesetting, and platemaking. Workers may specialize in one skill, but most employers require skills in all areas.	Graphic Designer, Computer Operators, Printing Press Operators	61,200 ↘ 154/2 ↘ \$15,900-29,600	Realistic HS	Employers prefer postsecondary (vocational-technical) training. Must be in good physical condition. Manual dexterity and ability to pay attention to detail are important qualities.
Printing Press Operators (M) Set up or operate various types of printing machines, such as offset, letterset, or screen printers to print on paper or other materials.	Photoengravers, Electrotypers, Pre-Press Occupations	195,600 ↘ 241/6 → \$22,100-39,000	Realistic	Mechanical aptitude is important in making machine adjustments. Ability to visualize color is essential for work on color presses.
Radio and Television Announcers (M) Introduce various types of programs. Interview guests. Act as a master of ceremonies. Read news bulletins and make other announcements. Broadcast weather, traffic conditions, and other information.	Sportscasters, Narrators, Disc Jockey	55,100 ↘ 412/12 ↘ \$17,900-37,000	Artistic HS	Particular attention is given to taped auditions, appearance, style on television, and voice quality. Correct English usage is essential and knowledge of current events is important.
Telecommunications Line Installers and Repairers (M) String and repair telephone and cable television cable, including fiber optics and other equipment for transmitting messages or television programming.	LAN Technicians, Electricians, Sound Technicians, Electronics Technicians	171,000 → 343/5 ↘ \$27,800-46,500	Realistic HS	Good eyesight and color discrimination necessary. Mechanical, electronic, and computer background essential. Most are hired by telephone and cable TV companies.
Postsecondary Programs – Bachelors Degree or More				
Graphic Designers (M) Design or create graphics to meet a client's specific commercial or promotional needs, such as packaging, displays or logos.	Webpage Designers, Photographers, Medical Illustrator	286,100 → 624/24 → \$25,600-37,600	Artistic HS	Most employers prefer training in art illustration and design. Further education may increase your advancement options in this field. Hired by advertising agencies and graphic art studios. May be self-employed. Computer graphics training essential.
Librarians Maintain library collections of books, publications, documents, audio visual and other materials. Assist groups and individuals in locating and obtaining materials.	Internet Researchers, Archivists, Museum Curators	158,400 → 520/13 → \$24,000-47,600	Artistic HS	Increasing numbers of employers require a masters degree for entry into this occupation. Must be able to present ideas and information clearly and communicate with people. Computer literacy important.
News Analysts, Reporters and Correspondents (M) Collect and analyze facts about newsworthy events. Conduct interviews and investigations. Write newspaper, magazine, and television stories. Refer stories to the publication or broadcasting editor for approval.	Technical Writers, Public Relations Workers	61,600 ↘ 253/7 ↘ \$17,300-31,000	Artistic HS	Foreign language proficiency a plus. Verbal and written skills essential. Degree in journalism may be required by some employers. Must be curious, persistent, and remember facts accurately. Hired by newspapers, magazines radio and television.
Public Relations Specialists (M) Promote ideas, services, or products. Build a good public image. Plan, organize, and carry out a program to influence and inform the public. May work with press or consumer relations.	Account Executives, Promotion Managers, Advertising Managers	275,200 ↗ 482/21 ↗ \$32,500-53,000	Enterprising HD HS	A four-year degree in public relations, journalism, marketing or communications is necessary for most entry level positions. Some employers prefer a graduate degree. Creativity and past success in extracurricular activities preferred. Must have above average communication skills.
Writers and Editors (M) Write or edit technical manuals, such as equipment manuals or operating and maintenance instructions or stories, advertisements or scripts.	Internet Researcher, Reporters, Public Relations Workers	330,200 → 399/12 → \$23,200-44,600	Artistic HS	A college degree generally is required for a position as a writer or editor. Although some employers look for a broad liberal arts background, most prefer to hire people with degrees in communications, journalism, or English.

BUSINESS MANAGEMENT & ADMINISTRATION



Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Clerks, General Office (M) Perform many different tasks in support of general office, business, or administrative procedures. May file, maintain financial records, operate word processing software, or other office equipment.	File Clerks, Real Estate Clerks	3,024,400 → 9,468/245 → \$16,400-26,600	Conventional HD	A high school diploma is usually required. Employers require typing, word processing, and other general office skills.
Clerks, Shipping and Receiving (M) Verify and keep records on incoming and outgoing shipments. Prepare items for shipping and determine the best methods of shipping. Route incoming shipments to proper departments.	Stock Clerks, Routing Clerks, Order Fillers	750,500 ↘ 1,471/37 ↘ \$21,000-34,800	Conventional	High school graduate and some experience is often required. Must be able to write legibly and keep orderly records. Willingness to work at repetitive tasks and dependability are qualities employers look for.
Customer Service Representatives Interact with customers to provide information in response to inquiries about products and services and to handle and resolve complaints.	Retail Salespersons; Wholesale Sales Representative	2,252,400 → 5,744/303 ↗ \$20,700-31,700	Conventional HD	Hiring requirements for customer service representatives vary from business to business, however a high school diploma is the most common educational requirement. Good interpersonal skills are important to employers.
Executive Secretaries and Administrative Assistants (M) Provide administrative support by performing clerical and administrative tasks. Higher-level assistants may also conduct independent projects and assume some training responsibilities.	Office Managers, Legal or Medical Secretaries	1,594,400 → 4,027/105 → \$26,500-41,804	Conventional HD	Employers may require vocational training. Must be able to meet the public, and have accuracy in word processing. Employers are seeking applicants with good knowledge of spelling, punctuation, and English.
Janitors and Cleaners Keep buildings in clean and orderly condition. Clean floors, shampoo rugs, washing windows.	Window Cleaners, Hotel Maids, Gardeners	2,375,300 → 7,624/157 → \$16,900-26,400	Realistic HD	Employers may prefer applicants with past experience, but most are willing to hire inexperienced people with a steady work record and a neat appearance. Most skills are learned on the job.
Legal Secretaries Perform secretarial duties, utilizing legal terminology and procedures. Prepares legal papers and correspondence of legal nature, such as summonses, complaints, motions, and subpoenas.	Administrative Assistants, Legal Assistants, Medical Secretaries	262,699 → 614/9 → \$22,800-33,800	Conventional HS	Most employers require 60-70 words per minute typing and accuracy in transcription. Knowledge of legal terminology necessary. Experience in word processing necessary.
Medical Secretaries Perform secretarial duties utilizing knowledge of medical terminology and hospital, clinic, or laboratory procedures. Schedule appointments, bill patients and compile medical charts.	Legal Secretaries, Administrative Assistants	471,100 ↗ 814/26 → \$22,200-32,800	Conventional HS	Employers require vocational training. Employers require an accurate typing speed of 50-80 words per minute and familiarity with medical terminology. Good spelling, punctuation, grammar, and vocabulary usage necessary.
Office Managers (M) Supervise and coordinate the activities of clerical and administrative support workers.	Department Store Managers, Sales Managers, Food Service Managers	1,457,200 → 3,150/107 → \$28,300-48,700	Enterprising HS	A four-year degree is preferred by some employers and others require some vocational training. Experience and familiarity with the organization activities are necessary. Promotion within the company is common.
Receptionists (M) Receive clients, customers, and others in offices and establishments. Make appointments. Provide information and answer inquiries by telephone or in person. May perform a variety of clerical duties such as typing, filing, and distributing mail.	Information Clerks, General Office Clerk	1,139,200 → 2,811/103 → \$17,600-25,800	Conventional HD	Employers may prefer vocational training. Applicants must have knowledge of general office procedures. Must enjoy working with people and have a desire to be helpful. Neat appearance essential.
Secretaries, Except Legal, Medical, and Executive Perform routine clerical and administrative functions such as drafting correspondence, scheduling appointments, organizing and maintaining paper and electronic files, or providing information to callers.	General Office Clerks, Legal or Medical Secretaries	2,020,000 → 4,054/55 ↘ \$23,000-33,200	Conventional	Training ranges from high school career and technical education that teach office skills, to one to two year postsecondary training. Many temporary placement agencies provide training in computer and office skills.
Postsecondary Programs – Bachelors Degree or More				
Accountants and Auditors Prepare and analyze individual, division, or consolidated balance sheets to reflect company's assets, liabilities and capital. Plan and administer accounting services. Advise on accounting problems, plan and conduct audits of accounts.	Tax Accountants, Property Accountants, County/City Auditors	1,290,600 ↗ 2,869/110 ↗ \$33,800-58,900	Conventional HD HS	A four year degree is required, and often a higher degree and/or experience is preferred. Good communication skills are essential as well as computer skills. Many accountants pass an exam to become certified public accountants (CPA'S).
Administrative Service Managers (M) Aid executives by coordinating services such as personnel, budget, housekeeping, records control, and special management studies. Make recommendations for solution of administrative problems.	Executive Secretaries, Business Managers, Medical Assistants	259,400 → 455/14 → \$39,700-76,200	Enterprising HS	Technical training and experience required. Management, supervisory, and planning ability essential. Knowledge of spelling, grammar and punctuation, and good written and verbal communication skills necessary.

BUSINESS MANAGEMENT & ADMINISTRATION

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Human Resource Managers (M) Manage programs, set company policy on the employment, pay, and training of workers. May direct employee relations, benefits, and staff development.	Counselors, Sociologists, Teachers, Industrial Psychologists	133,900 → 309/9 → \$45,600-81,800	Enterprising HW HS	College graduate in business or public administration usually required. Some prefer masters degree. Good communication skills, ability to analyze information and work independently necessary. Ability to function under pressure important.
Management Analysts Conduct organizational studies and evaluations, design systems and procedures, conduct work simplifications and measurement studies and prepare operations/procedures manuals.	Human Resource Manager; Accountants	746,900 ↗ 558/18 → \$44,000-77,900	Conventional HD HS	Despite projected rapid employment growth, keen competition is expected for jobs as management analysts. Because analysts can come from such diverse educational backgrounds, the pool of applicants from which employers can draw is quite large.
Public Relations Managers Plan and direct public relations programs to create and maintain favorable public image for client or employer.	Marketing Managers; Sales Managers	56,700 → 154/6 → \$40,500-83,700	Enterprising HS	College graduates with related experience, high level of creativity and strong communication skills needed. Keen competition for jobs expected.
Training and Development Specialists Conduct training and development for employees.	Human Resource Manager; Teacher	216,600 ↗ 502/25 ↗ \$31,100-56,300	Social HD HS	Entry-level jobs are filled by college graduates who have majored in a wide range of fields. Keen competition for jobs is expected due to the abundant supply of qualified college graduates and experienced workers.

EDUCATION & TRAINING



Planning, managing and providing education and training services, and related learning support services.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Self-Enrichment Education Teachers Teach courses other than those that normally lead to an occupational objective or degree. Includes self-improvement, nonvocational, non-academic subjects.	Secondary School Teachers; Elementary School Teachers	253,600 ↗ 172/7 ↗ \$15,200-31,800	Social HS	Job opportunities for teachers will vary from good to excellent. Most job openings will be attributable to the expected retirement of a large number of teachers.
Teacher Assistants Perform duties that are instructional in nature or deliver direct services to students or parents. Serve in a position for which a teacher or another professional has ultimate responsibility for the design and implementation of educational programs and services.	Child Care Attendants, Home Health Aides, Librarian Attendants	1,312,700 → 4,480/85 → \$20,400-29,600	Social	Some employers prefer applicants with formal training; however, others train their workers on the job. Emphasis is placed on experience in working with young people. May be part-time workers.
Postsecondary Programs – Bachelors Degree or More				
Counselors, Education and Vocational (M) Counsel individuals and provide group educational and career guidance services.	Clinical Psychologists, School Social Workers, Employment Counselors	275,800 → 690/23 → \$33,300-53,000	Social HS	Must have a masters degree in counseling and guidance and be certified by the state of North Dakota to work in secondary schools in North Dakota. May work in employment agencies or private practice.
Education Administrators Plan, direct, and coordinate the educational activities of colleges, universities, and elementary and secondary schools. Work with financial budgets. Review programs to insure conformance to standards.	Vocational Educ. Director, Corrections Education Supervisor, Dean of Students	414,100 → 709/24 → \$39,900-82,400	Social HS	Masters degree or Ph.D. required for many positions, especially at the college level. Teaching experience, leadership, organizational and communication skills important. Not an entry level position.
Faculty Members, Colleges and Universities (M) Teach subjects within a prescribed curriculum. Prepare and deliver lectures. Conduct seminars or lab sessions. Stimulate and guide class discussions. Prepare, administer, and grade exams. Assign and mark essays. Publish research findings.	Writers, Consultants, Social Scientists, Mathematicians	1,699,200 ↗ 3875/143 ↗ \$32,800-65,800	Investigative HS	Must have at least a masters degree. Some universities require a Ph.D. Must have good communication skills and need inquiring, analytical mind, good written and oral communication skills essential. Hired by college and universities.
Farm and Home Management Advisors Advise, instruct, and assist individuals and families engaged in agriculture, agricultural-related processes, or home economics activities. Includes county agricultural agents, home economists, and extension service advisors.	Adult and Vocational Education Teachers, Plant Physiologists	13,100 → 131/3 ↘ \$27,300-48,800	Social HS	Minimum requirement is a B.S. degree in agriculture or home economics. Must be able to work with people. Hired by federal or state government and extension service.

EDUCATION & TRAINING

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Preschool Teachers: Except Special Ed Instruct children (normally up to 5 years of age) in activities designed to promote social, physical and intellectual growth.	Elementary School Teachers; Day Care Center Workers	457,200 → 526/19 → \$19,200-29,000	Social HS	Job opportunities for teachers will vary from good to excellent. Most job openings will be attributable to the expected retirement of a large number of teachers.
Teachers, Vocational Education Secondary School Teach or instruct technical subjects at the secondary school level.	Secondary Teachers, Vocational Counselors, Software Trainer	99,400 → 535/17 → \$30,500-48,900	Social HS	Educational requirements may vary from apprenticeship to college training depending upon on the level of instruction. Work experience may be required as well as knowledge and skills needed to teach at a postsecondary, technical, or vocational institution.
Teachers, Elementary Teach pupils in public or private schools at the elementary level - basic academic, social and other formative skills.	High School Teachers, Counselors, Personnel Managers	1,549,500 → 5,480/173 → \$32,200-48,200	Social HS	A degree in elementary education is required. Must be certified by the state. Positions may be part-time in rural North Dakota. For kindergarten teaching, a minor in early childhood education is required.
Teachers, Secondary Instruct students in secondary schools in one or more subject areas, such as English, math or social studies. May be designated according to subject matter specialty.	Vocational Counselors, School Administrators, Sales Representatives	1,087,700 → 2,818/88 → \$31,200-46,400	Social HD HS	Minimum of a four-year degree required. Employers prefer teachers certified in multiple subject areas. Ability to communicate with youth. Hired by public and private schools. Must be certified by the state.
Teachers, Special Education Teach school subjects and social skills to children and adults with special needs. Adapt teaching methods and materials for individual use with blind, hearing impaired, mentally or physically handicapped, and learning disabled students.	Elementary Teachers, Counselors, Social Workers	473,000 → 1,250/50 → \$34,900-52,000	Social HD HS	Must hold a special education credential in a chosen field such as learning disabilities, mental retardation, visually impaired, etc., as well as teacher's certificate. Rural positions may require traveling to several schools.

FINANCE



Planning, services for financial and investment planning, banking, insurance, and business financial management.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Bill and Account Collectors Locate and contact people to collect payments on accounts and bills. Visits or telephones customer and attempts to persuade customer to pay amount due. Maintain records and perform general clerical duties.	Credit Analysts, Credit Reporters, Loan Counselors	411,000 → 709/23 → \$19,900-31,500	Conventional HD	A vocational degree in financial management may be preferred by some employers, others train on the job. Above average telephone communication essential. This job demands persistence and aggressiveness.
Bookkeeping and Accounting Clerks (M) Compute, classify and record numerical data to keep financial records complete. Calculating, posting and verifying duties may be included.	Bank Tellers, Statistical Clerks, Accounting Technician	2,063,800 → 7,241/166 → \$23,000-34,800	Conventional	Some employers require formal vocational training. Knowledge of business arithmetic and bookkeeping are necessary. Employers may train their personnel on the job.
Claims Adjusters, Examiners, Investigators Review settled claims to determine that payments and settlements have been made in accordance with company procedures. Report over or under payments and other irregularities.	Loan Officers, Real Estate Appraisers	294,600 → 1,080/47 → \$35,250-57,300	Conventional HD HS	A four-year degree is preferred and further training provided on the job by the company that hires them. A background in business and knowledge of law may be helpful. Ability to work with people essential.
Tellers Receive and pay out money for financial institutions. Keep records of money and negotiable instruments involved in various transactions.	Cashiers, Post Office Clerks, Travel Agents	600,500 → 2,526/146 → \$19,400-27,700	Conventional HD	Chances of employment may be enhanced through vocational training and on-the-job training.
Postsecondary Programs – Bachelors Degree or More				
Financial Managers Determines budgets, what programs to offer, and make sure programs are carried out effectively. Prepare financial reports required by firm to conduct its operations and satisfy tax and regulatory requirements.	Loan Officers, Accountants and Auditors	539,300 → 1,293/37 → \$53,300-102,500	Enterprising HD HW HS	College graduate in business or economics usually required. Some prefer masters degree. Good communications skills, ability to analyze information, and work independently is necessary. Not an entry level position.
Insurance Sales Agents Sell life, casualty, health, automotive or other types of insurance.	Real Estate Agents, Securities Sales Workers, Financial Advisors	434,800 → 1,955/79 → \$28,800-91,500	Enterprising HD HS	Some employers prefer applicants with formal training and experience; however, others will train on the job. Must display sales and leadership. License required.

FINANCE

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Loan Officers Examines, evaluates, authorizes or recommends approval of customer application for real estate, commercial loans or credit card accounts. May supervise loan personnel.	Accountants and Auditors, Financial Managers	327,800 → 1,237/36 → \$37,309-64,243	Enterprising HD HS	College degree in business, finance or accounting and economics background preferred. Must have good judgment and communications skills, and be able to analyze detailed information.
Sales Agents, Securities Buy and sell stocks and bonds based on customers' orders. Give advice and furnish client with information regarding possible purchases, market conditions, and prospects.	Commodities Brokers, Insurance Agents, Real Estate Agents	317,200 ↗ 465/21 → \$31,700-82,400	Enterprising HD HS	A college degree is increasing in importance. The ability to motivate people and work independently is essential. Must pass an examination for state license.

GOVERNMENT & PUBLIC ADMINISTRATION



Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Inspectors and Compliance Officers except Construction (M) Enforce adherence to laws and regulations and standards of production, safety, and service, assure observance of policies and procedures in organizations such as customs offices, chain stores, and transportation companies.	Agric. Commodities Inspectors, Occupational Health and Safety Inspector	260,200 ↗ 924/31 ↗ \$32,000-57,700	Conventional HS	Many require a college degree in addition to experience and successful scores on an examination. Masters degree is becoming necessary to compete for jobs. Hired by federal, state and local government. Not an entry level position.
Postsecondary Programs – Bachelors Degree or More				
Social and Community Service Managers Plan, organize or coordinate the activities of a social service program or community outreach organization. Oversee program, budget and policies.	Social Worker; Marketing Manager; Public Relations Manager	130,600 → 543/18 → \$32,900-55,500	Social HS	Work may involve directing social workers, counselors or probation officers.

HEALTH SCIENCE



Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Cardiovascular Technologists (M) Conducts tests on pulmonary and/or cardiovascular systems of patients for diagnostic purposes. May conduct or assist in electrocardiograms and cardiac catheterizations.	Electrocardiogram Technicians, Radiological Technologists	49,500 ↗ 75/3 ↗ \$27,500-46,200	Investigative HS	Employers favor those who have had formal training. Most work in hospital cardiology departments, while some worked in cardiologists' offices, cardiac rehabilitation centers, or health maintenance organizations. Must like to work with people.
Dental Assistants (M) Assist dentist, set up patient and equipment and keep records.	Medical Assistants, Optometric Assistants, Chiropractor Assistants	295,300 ↗ 595/24 ↗ \$26,700-35,700	Social HD	Preference is given to graduates of vocational and associate programs. Some assistants are trained on the job. Hired by dentist offices, hospitals and government.
Dental Hygienists (M) Clean teeth and examine oral areas, head and neck for signs of oral disease.	Dental Assistants, Nurses, Radiological Technologists	174,100 ↑ 553/24 ↗ \$46,200-64,500	Social HD HW HS	Must be a graduate of an approved training program. License required. Hired by dental offices, public health offices, hospitals or clinics.
Dietetic Technicians Assist dietitians in the providing of food service and nutritional programs.	Dieticians, Home Economist, Food Service Managers	25,200 → 102/4 → \$18,200-26,200	Social	Most employers seek applicants who have completed vocational training. Candidate should have supervisory potential and ability to work with people. Hired by hospitals, nursing homes, colleges, public health services, and clinics.

HEALTH SCIENCE

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Dispensing Opticians (M) Design, measure, fit and adapt frames according to written optical prescription or specification. Prepare work order of optical lab for grinding lens and mounting in frames.	Dental Laboratory Technicians, Instrument Repairers	59,800 → 414/10 → \$21,400-31,400	Enterprising HS	Employers look for high school graduates who have had courses in the science and experience dealing with marketing. Good communication skills essential. Hired by optometrists and ophthalmologists.
Emergency Medical Technicians (M) Administer first-aid treatment and transport sick or injured persons to a medical facility. May administer drugs and intravenous therapy. Many are volunteer workers, especially in rural areas.	Certified Nurse Aides, Surgical Technicians, Licensed Practical Nurses	210,700 → 611/16 → \$17,100-35,000	Social HS	There are three levels of trained EMTs ranging in responsibility from administering immediate first aid to more sophisticated care techniques, such as intravenous therapy. Hired by hospitals, private firms, police and fire departments.
Health Unit Coordinators (M) Keep track of the activities that converge at nursing stations in hospitals and clinics. They must understand medical terminology, have familiarity with many drugs that are given, and medical procedures that are to be scheduled.	Ward Clerk, Medical Assistant	483,600 ↗ 583/21 ↗ \$21,400-29,200	Conventional HD	Employers prefer applicants with a one-year diploma from a technical college Health Unit Coordinator program or National HUC certification. They must have good communication skills, accuracy, dependability, and enjoy working with others and be able to work under stress.
Home Health Aides Care for patient's needs in the patient's home by changing linens and doing laundry. Purchase, prepare, and serve meals. Assist patient with bathing, dressing, and other personal needs after major surgery or illness.	Nurse Aides, Physical Therapy Aides, Occupational Therapy Aides	921,700 ↑ 2,077/88 ↗ \$17,900-23,400	Social HD	Employers may prefer a high school graduate. Employers seek individuals who exhibit warmth, dependability, and level headedness. May be part-time work. Some agencies require certified nurses aide training.
Massage Therapists Manipulation of soft tissue for therapeutic purposes by hand or with mechanical or electrical apparatus for the purpose of body massage. May include the use of oil, hot and cold packs, and other recognized forms of massage therapy.	Licensed Practical Nurses, Chiropractors, Physical Therapy Assistant	122,400 ↗ 270/6 → \$16,900-28,500	Social HS	750 hours of instruction from an accredited massage therapy school. License required.
Medical and Clinical Laboratory Technicians (M) Perform routine tests in medical laboratory. Prepare tissues, draw blood samples, do urinalysis and blood counts. Work under the direction of a medical technologist.	Chemical Laboratory Technicians, Criminalists	155,600 → 497/14 → \$24,000-37,100	Investigative HD HS	Most have an associate degree since preference is given to those who have formal training. Most are employed by hospitals. Work under the supervision of a medical technologist. Certification required.
Medical Assistants (M) Perform administrative and certain clinical duties under the direction of physician. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood.	Dental Assistants, Certified Nurses Aides, Licensed Practical Nurse	483,600 ↗ 583/21 ↗ \$21,400-29,200	Social HD	Employers prefer vocational training. Graduates may become certified. Hired by large and small clinics, various medical offices, and various departments within hospitals. Internship necessary.
Medical Records and Health Information Technicians (M) Maintain medical records of patients in a hospital, clinic, or doctor's office. Process, maintain, compile and report patient information for health requirements and standards.	Insurance Clerks, Medical Secretaries	172,500 ↗ 515/19 → \$22,200-35,000	Conventional HD HS	Work in hospitals, clinics, nursing homes, or other related institutions. Employers prefer graduates of a two-year associate degree or vocational program.
Medical Transcriptionists (M) Use transcribing machines to listen to recordings by physicians and other healthcare professionals dictating medical reports. Translate medical jargon and abbreviations into expanded forms.	Medical Secretaries, Court Reporters	105,200 ↑ 752/13 → \$22,000-30,600	Conventional HS	Employers require vocational training. Must have accurate typing speed of 60 to 80 words per minute. Must have knowledge of medical terminology, anatomy, and physiology; correct grammar; accurate spelling; and good general office practices.
Nurses Aides, Orderlies, including Cert. Nurse Aide (M) Provide basic patient care under direction of nursing staff. Perform duties as feeding, bathe, dress, group or move patients or change linens.	Home Health Aides, Nurses Aides, Psychiatric Aides	1,469,800 → 6,719/166 → \$20,200-25,600	Social HD HS	Must complete an approved program and pass a written and manual skills competency examination to be placed on the State Registry and be employed in long-term care facilities or home health agencies.
Nurses, Licensed Practical (M) Care of ill, injured, convalescent or disabled persons in hospitals, nursing homes, clinics, private homes, group homes and other similar settings.	Emergency Medical Technicians, Certified Nurses Aides	753,600 ↗ 3,268/152 → \$29,100-37,700	Social HD HS	Must graduate from an approved educational program and pass an examination given by the state board of nursing. Employed by nursing homes, hospitals, clinics, and other related institutions.
Nurses, Registered (M) Assess patient health problems and needs, develop and implement nursing care plans and maintain medical records. Administer nursing care to ill, injured, convalescent or disabled patients. May specialize in areas as profusionist, nurse anesthetist and other areas.	Occupational Therapists, Physical Therapists, Physician Assistants	2,618,700 ↗ 6,363/248 ↗ \$42,000-63,200	Social HD HS	Nursing degree can be obtained in two years or four years of college. Must pass examination given by State Board of Nursing in order to be licensed.
Occupational Therapy Assistants (M) Assist occupational therapists in providing occupational therapy treatments and procedures.	Physical Therapist Assistants, Occupational Therapists	26,600 ↗ 62/2 → \$31,000-45,100	Social HS	An associate degree is required. Must write a proficiency exam. Must be able to work with people. Hired by hospitals, schools, private agencies.
Pharmacy Technicians (M) Prepare medications under the direction of a pharmacist.	Dental Assistant, Certified Nurse Aide, Surgical Technician	326,300 ↗ 506/28 ↗ \$23,200-34,000	Conventional HD HS	Two year degree in pharmacy technology.
Physical Therapy Aides and Assistants (M) Assist physical therapists in providing physical therapy treatments and procedures.	Occupational Therapy assistants, Physical Therapists	109,900 ↗ 242/7 → \$23,100-30,700	Social HS	An associate degree is required. Satisfactory score on a written licensure exam is also required. Must be able to work with people. Hired by hospitals, clinics, and other health care facilities.
Radiologic Technologists (M) Take X-Rays and CAT scans or administer nonradioactive materials into patient's blood stream for diagnostic purposes. Also may operate computed topography or magnetic resonance.	Dental Hygienists, Cardiovascular Technologists	214,700 → 487/14 → \$33,800-50,700	Realistic HD HS	Successful completion of two-four years of formal training is necessary. Ability to deal with people essential. Hired by hospitals, clinics, and dental offices. Certification required.
Respiratory Therapists (M) Following a doctor's orders, administers treatment to patients suffering from asthma, emphysema, drowning, stroke, etc. Use special equipment such as ventilators and breathing machines to restore and aid in breathing. Instruct patient in performing breathing exercises.	Dialysis Technicians, Licensed Practical Nurses	105,900 ↗ 206/9 ↗ \$36,000-47,700	Investigative HD HS	Training ranges from one-four years. Shift work is common. Must be able to deal with people while under stress. Must be licensed in North Dakota.

HEALTH SCIENCE

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Surgical Technologists (M) Assist in operations, under supervision of surgeons, registered nurses or other surgical personnel.	Licensed Practical Nurses, Medical Assistants, Certified Nurses Aides	91,500 ↗ 177/10 ↗ \$28,000-38,100	Realistic HS	Most are trained at technical schools or colleges. Must be conscientious, orderly, emotionally stable, and have good manual dexterity. Hired by hospitals or directly by surgeons.
Postsecondary Programs – Bachelors Degree or More				
Chiropractors Adjust spinal column and other articulations of the body to correct abnormalities of the human body believed to be caused by interference with the nervous system. Examine patient to determine nature and extent of disorder.	Osteopaths, Physical Therapists and Assistants	49,100 → 160/5 → \$42,400-101,400	Investigative HS	Most students enroll in two-four year pre-med curriculum then transfer to a chiropractic school. Most are engaged in independent practice. License required.
Dentists (M) Diagnose and treat diseases, injuries and malformations of teeth, gums and related oral structures.	Psychologist, Optometrists, Physicians, Veterinarians, Podiatrists	120,200 → 271/10 → \$111,800-238,800	Investigative HW HS	A four-year program after completion of a four-year degree is common. More opportunities in the rural communities in North Dakota. Most are self-employed. License required.
Dietitians and Nutritionists (M) Plan and conduct food service or nutritional programs to assist in the promotion of health and control of disease.	Food Technologists, Home Economists, Food Service Managers, Dietetics Assistant	60,300 → 226/9 → \$36,100-53,830	Investigative HS	A four-year degree with a major in food and nutrition is required plus an internship. Masters degree requirements are becoming more common. May work early morning or late night hours. Work at medical facilities, schools.
Health Services Managers (M) Manages medical and health services in hospitals, businesses or schools. May run health care facility. Prepares budgets, hires staff, plans and directs health care services.	Community Health Nursing Director, Emergency Medical Services Coordinator	283,500 ↗ 647/20 → \$47,100-79,200	Enterprising HD HW HS	Employers seek applicants who have had clinical experience (as nurses or therapists, for example) as well as academic preparation in business or health services administration.
Medical and Clinical Laboratory Technologists (M) Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff.	Biologist, Chemical Laboratory Technicians, Criminologists	172,400 → 539/16 → \$38,100-54,000	Investigative HD HS	A four-year college degree is the minimum requirement. Accuracy, dependability and the ability to work under pressure necessary. May supervise work of medical laboratory technicians. Certification required.
Nurse Practitioners (M) Provide specialized nursing care and treatment. Perform physical examinations and preventive health measures within prescribed guidelines. May evaluate tests, recommend other therapies and treatments. Most work directly with a physician, but may be employed by health department or other agencies.	Physician Assistants, Registered Nurses, Nurse Anesthetist	49,000 NA/NA \$NA-NA	Social HD HW HS	One-year continuing education program or masters level program. A preceptorship with a practicing physician may be required. Must pass a certification examination in order to be eligible for advanced license. Most work in specialized areas such as pediatrics or orthopedics or work in general physician offices.
Occupational Therapists (M) Assess, plan, organize and participate in rehabilitative programs that help restore vocational, homemaking and daily living skills, as well as general independence, to disabled persons.	Physical Therapists, Music Therapists, Occupational Therapy Assistants	104,500 ↗ 230/8 → \$40,700-62,600	Social HS	May work in hospitals, nursing homes, rehabilitation institutions, schools and other related sites. OT graduates complete a Masters degree. License required.
Optometrists (M) Diagnose, manage, and treat conditions and diseases of the human eye and visual system. Examine eyes and visual system, diagnose problems or impairments, prescribe corrective lenses, and provide treatment.	Chiropractors, Dentists, Physicians, Nurse Practitioner	34,800 ↗ 119/6 → \$52,500-142,700	Investigative HW HS	A four-year degree plus two-three years of pre-optometric study required. Business ability and self-discipline are necessary, as well as ability to deal with people. High aptitude in science and math. Most are self-employed.
Pharmacists (M) Dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medication and their use.	Pharmacologist, Pharmaceutical Chemist, Pharmaceutical Bacteriologist	269,900 → 876/35 → \$64,900-103,500	Investigative HD HW HS	A five-year program of study required. Employers may require completion of a residency program at an accredited hospital or several years of experience. Willingness to work evenings and weekends necessary. License required.
Physical Therapists (M) Assess, plan, organize and participate in rehabilitative programs that improve mobility, relieve pain, increase strength and decrease or prevent deformity of patients suffering from disease or injury.	Occupational Therapists, Orthotists, Prosthetists, Physical Therapy Assistants	185,500 ↗ 431/13 → \$51,100-71,600	Social HD HW HS	A four-year degree is required; however, masters degrees are becoming increasingly important. Competition is keen. Hired by medical care facilities, schools, and other related facilities. Licensure required.
Physician Assistants (M) Provide healthcare services typically performed by a physician, under the supervision of a physician. Conduct complete physicals, provide treatment and counsel patients.	Registered Nurse, Nurse Practitioner, Physical Therapist	74,800 ↑ 309/14 ↗ \$54,900-84,900	Investigative HD HW HS	Must have worked at least four years as a registered nurse to enter the training program. Work in health facilities. Ability to work with people essential. License required.
Physicians (M) Diagnose, treat and help prevent diseases and injuries that commonly occur in the general population. May specialize in specific areas of medicine.	Dentists, Optometrists, Chiropractors, Veterinarians	661,400 ↗ 1020/27 → \$109,100-210,000	Investigative HW HS	Cost of schooling can be extremely high. Must exercise good judgment and act quickly. High aptitude in sciences and math necessary. License required.
Speech-Language Pathologists (M) Assess and treat patients with speech, language, voice and fluency disorders.	Occupational Therapists, Physical Therapists, Physical Therapists	119,300 → 400/9 → \$39,300-57,200	Social HS	Masters degree is required by many employers. May work in hospitals, nursing homes, schools, or private practice. Must be able to work with people in an encouraging manner. Patience and persistence advantageous qualities.
Veterinarians (M) Diagnose and treat diseases and dysfunctions of animals. May engage in a particular function, such as research and development, consultation, technical writing, sale or production of commercial products or rendering technical services.	Dentists, Optometrists, Physicians, Animal Health Technologist	59,700 ↗ 163/7 ↗ \$51,600-77,800	Investigative HW HS	Two-years of pre-veterinary study and a four-year professional degree essential. May choose to work with small animals (cats, dogs, etc.) or large animals (cows, pigs, horses, etc.). High aptitude in sciences and math. License required.
Veterinary Technicians and Technologists Perform medical tests in a laboratory environment for use in the treatment and diagnosis of diseases in animals. Prepare vaccines and serums for prevention of diseases. Prepare tissue samples, take blood and execute laboratory tests such as urinalysis and blood counts.	Registered Nurses, Surgical Technicians, Medical Technologists, Medical Assistants	79,600 ↑ 167/9 ↗ \$22,600-30,400	Realistic HS	Certified veterinary technicians must graduate from a two or four-year veterinary technology program. Veterinary technicians work in veterinary clinics, zoos, research clinics, colleges, and private businesses such as pet stores, boarding and grooming facilities.

HOSPITALITY & TOURISM



Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events and travel related services.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Agricultural and Food Science Technicians Work with agricultural scientists in food, fiber and animal research, production and processing; assist with animal breeding and nutrition work; assist with crop research.	Agricultural Scientists; Farm and Home Management Specialist	21,900 → 175/9 → \$NA-NA	Realistic HD HW HS	Many employers prefer applicants who have at least 2 years of specialized training or an associate degree in applied science or science-related technology.
Chefs and Head Cooks (M) Direct the preparation, seasoning and cooking of salads, soups, fish, meats, vegetables, desserts or other foods.	Caterers, Bakers, Decorators	2,247,600 → 6744/202 → \$18,300-26,700	Realistic HD HS	Most employers prefer applicants with past experience, vocational training, or completion of an apprenticeship program.
Food Services Managers (M) Manages businesses that serve food such as cafeterias and restaurants. Determines the types, prices and amounts of goods and services sold. Hires and supervises staff, plans budgets.	Hotel/Motel Manager, Department Store Managers, Sales Managers	338,700 → 562/15 → \$29,600-51,600	Enterprising HS	Many positions filled with experienced food service workers. Employers prefer two and four-year graduates of food services management programs. Good communications skills essential.
Gaming Dealers Operate table games. Stand or sit behind table and operate games of chance by dispensing the appropriate number of cards or blocks to players, or operating other gaming equipment. Compare the house's hand against players' hands and payoff or collect players' money or chips.	Tellers, Waiter/ Waitresses	91,100 → 1,153/60 → \$15,200-23,400	Realistic HS	Training obtained through a vocational school or may receive training on the job. Must have neat appearance, work well with people, and be 21 years old. Must work rapidly and accurately with arithmetic.
Hosts and Hostesses Welcome patrons, seat them at table or in lounge, and help ensure quality of facilities and service.	Waiters/Waitresses, Flight Attendants	350,700 → 1,079/89 → \$15,100-17,100	Enterprising HD	Most are trained on the job. Must be able to work in a rapid and cordial manner. A clean, neat appearance and pleasant manner is necessary. Hired by restaurants, hotels, and bars.
Hotel Desk Clerks (M) Register guests and assign rooms in hotels and similar establishments. Receive telephone messages for guests. Collect payment for room charges when guests leave.	Receptionists, Sales Clerks	230,200 → 1,066/54 → \$15,380-19,600	Conventional	Employers prefer applicants with clerical ability and a knowledge of bookkeeping. Must enjoy working with people and display a courteous and friendly manner.
Instructors, Sports {Coaches} (M) Teach sport activity to individuals or groups at private recreational facility or school. Explain, demonstrate, observe, lecture, and motivate participants. Organizes and conducts competition and tournaments.	Recreation Programmers, Athletic Trainer, Golf Club Professional	225,700 ↗ 584/26 ↗ \$15,900-35,700	Social HS	May instruct at park and recreation facilities, camps, or schools. Must be able to work with children and adults. Good communication skills and athletic ability necessary. Those who teach in schools must hold a teacher's certificate.
Lodging Managers Plan, organize, direct and control the operation of hotels and motels. Set policies, hire personnel and determine work schedules. Handle customer and worker complaints.	Restaurant Managers, Apartment Building Managers	59,800 → 191/5 → \$27,300-43,800	Enterprising HS	Employers look for an individual with management skills that can be gained either in formal training or through experience. Must be able to organize and direct the work of others. Employers may require graduates of 2 and 4 year hotel/motel management program.
Maids and Housekeeping Cleaners Make beds, replenish linens, clean and vacuum rooms and halls, and perform related services in hotels, motels, tourist homes, and other lodging facilities.	Janitors, Maintenance Engineers	1,498,200 → 5,000/89 ↘ \$15,700-20,200	Realistic HD	Employers may prefer a high school graduate. Must be able to deal effectively with people.
Recreation Workers Plan and organize public recreation programs, playgrounds, camps, etc. Coordinate programs for children and adults. Promote interest in crafts, games, and organized recreation.	Sports Statistician, Coaches	327,500 → 1,232/34 → \$15,900-25,900	Social	Training range is from high school graduate to four-year degree. A number of these positions are part-time, seasonal, and volunteer. Work in hospitals, prisons, private and public recreation facilities.
Travel Agents Plan itineraries and arrange accommodations and other travel services for customers. May plan and sell package tours. Compute costs, make hotel reservations, obtain collect payment.	Tour Guides, Reservation Agents, Cruise Director	105,300 ↘ 616/5 ↘ \$17,500-25,900	Enterprising HS	Employers prefer vocational training and experience. Pleasant manner and sales ability necessary. Hired by travel agents, airlines, or are self-employed.
Waiters and Waitresses Take orders and serve food and beverages to patrons at tables in dining establishment.	Flight Attendants, Counter Workers, Hosts and Hostesses	2,381,600 → 7,036/472 → \$15,200-18,400	Social	Most learn their skills on the job. Many are students working part-time. Must be at least 21 if alcoholic beverages are served.

HUMAN SERVICES



Preparing individuals for employment in career pathways that relate to families and human needs.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Child Care Workers Attend to children at schools, businesses, private households and child care institutions.	Teachers Aides, Home Care Aides	1,301,900 → 4,283/141 → \$15,300-18,500	Social HD	Employers may prefer vocational training. Must have the desire and ability to work with small children.
Personal and Home Care Aides Assist elderly or disabled adults with daily living activities at the person's home or in a daytime non-residential facility. Duties performed at a place of residence may include keeping house (making beds, doing laundry, washing dishes) and preparing meals.	Occupational therapist assistants; Physical therapist assistants; Nurse Assistant	817,200 ↑ 1,513/58 ↗ \$16,500-22,400	Social HD	Postsecondary training is very helpful, however on-the-job training is usually provided. The National Association for Home Care offers national certification for personal and home care aides.
Social and Human Service Assistants Assist professionals from a wide variety of fields, such as psychology, rehabilitation, or social work, to provide client services, as well as support for families. May assist clients in identifying available benefits and social and community services and help clients obtain them. May assist social workers.	Child, Family, and School Social Workers; Personal and Home Care Aides	352,000 ↗ 1,370/55 → \$19,500-30,400	Social HD	While a bachelor's degree usually is not required for this occupation, employers increasingly seek individuals with relevant work experience or education beyond high school.
Postsecondary Programs – Bachelors Degree or More				
Clergy (M) Conduct religious worship and perform other spiritual functions associated with beliefs and practices of religious faith or denomination. Provide spiritual and moral guidance and assistance to members.	Social Workers, Clinical Psychologists, Teachers, Counselors	670,100 → 1,349/33 → \$23,000-44,900	Social HS	Clergy work in religious, educational, medical, and social agencies. In addition to salary, a residence or housing allowance may be provided. Shortage in rural areas.
Counselors, Rehabilitation Assist people in overcoming mental, physical, or emotional handicaps. Help clients to adjust to the disability, social and work environment. Determine suitable occupations, based on interests and aptitudes. Assist with training and job placement.	Placement Counselors, Social Workers, Music Therapists	129,500 → 242/8 → \$21,200-40,900	Social HS	Generally a masters degree in rehabilitation counseling, counseling and guidance, or counseling psychology is required. Experience in employment counseling or job development helpful. Hired by government agencies, hospitals, and private business.
Medical and Public Health Social Workers Provide persons, families or vulnerable populations with psychosocial support needed to cope with chronic, acute or terminal illnesses.	Social Workers; Clergy	138,700 ↗ 408/17 → \$28,500-41,800	Social HS	A bachelor's degree in social work (BSW) degree is the most common minimum requirement to qualify for a job as a social worker; however, majors in psychology, sociology, and related fields may be adequate to qualify for some entry-level jobs.
Psychologists (M) Plan and carry out experiments. Observe human beings and animals. Give psychological tests and provide group and individual counseling. May specialize in educational, developmental, or social psychology.	Social Workers, Counselors, Clergy, Industrial Psychologist	154,300 → 300/10 → \$32,000-65,700	Investigative	Doctorate degree is required for private practice, college positions, and administrative type work. License required for private practice. Hired by schools, hospitals, and private industry. Competition is keen.
Social Workers (M) Help individuals and families cope with such problems as inadequate housing, unemployment, lack of job skills, financial management, serious illness, or substance abuse. Also work with family conflicts.	Clergy, Counselors, Industrial Psychologists	292,600 → 597/22 → \$30,500-44,000	Social HD HS	Employers require a four-year degree and an increasing number are requiring a graduate degree with a specialization in criminal justice, psychology, geriatrics, pediatrics, etc. Work in government, schools, private agencies.

INFORMATION TECHNOLOGY



Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Computer and Office Machine Repairers (M) Repair, maintain, or install computers, word processing systems, automated teller machines, and electronic office machines, such as duplicating and fax machines.	Electronic Repairers, LAN Technicians, Data Recovery Specialists	152,900 ↘ 464/8 ↘ \$20,900-39,300	Realistic HS	Requires vocational training in electronics. Must have good vision, normal hearing, and color perception. Hired by computer manufacturers and retail stores.
Computer Operators (M) Monitor and control computer and peripheral equipment to process business, scientific, engineering and other data according to instructions.	Systems Analysts, Computer Service Tech, Webmasters	110,000 ↘ 341/4 ↘ \$20,000-35,500	Conventional	High school diploma required. Employers prefer applicants with experience in computer operation or those formally trained. Must be adaptable and willing to learn.
Computer Support Specialist (M) Provide technical assistance and training to computer system users. Investigate and resolve computer software and hardware problems of users. Answer client's questions concerning the use of computer hardware and software.	LAN Technicians, Data Recovery Specialists, Computer Repairers	565,700 → 1,515/69 → \$23,900-44,000	Investigative HD HS	Preference is given to persons who are vocationally trained or have a BS degree in computer related science. Must be capable of exacting analytical work.
Postsecondary Programs – Bachelors Degree or More				
Computer and Information Systems Managers Plan, direct or coordinate activities in electronic data processing, information systems, systems analysis and computer programming.	Computer Systems Analysts; Computer Programmers	293,000 → 487/17 → \$53,700-93,200	Enterprising HD HW HS	Strong technical knowledge is essential. Must understand and guide the work of their subordinates, yet also explain the work in nontechnical terms to senior management and potential customers.
Computer Programmers (M) Develops and writes computer programs to store, locate, and retrieve specific data, information and documents. Writes programs for classifying, indexing, input storage and retrieval of data.	Data Recovery Specialists, Systems Analysts, Webmaster	426,700 ↘ 540/10 ↘ \$34,400-58,700	Investigative HS	Many employers require applicants to have a four-year degree; however, certain entry level jobs may require an associate or vocational degree/certification in computer science. Must be capable of exacting analytical work.
Computer Systems Analysts (M) Plan ways to use computers to solve scientific, engineering, and technical problems. Determine data to collect, equipment needed, and steps to follow in processing information.	Computer Hardware Designer, Webmaster, Engineers	532,200 ↗ 883/38 ↗ \$42,800-72,100	Investigative HD HS	Preference is given to individuals with a B.S. degree. Some employers require a masters. Depending on the specific job, employers seek backgrounds in accounting, business management, physical sciences, computer science, engineering, etc.
Database Administrators (M) Coordinate changes to computer databases, test and implement the database, applying knowledge of database management systems.	Computer Programmers, Data Recovery Specialists	120,400 ↗ 256/13 ↑ \$39,600-71,100	Investigative HD HS	Many employers seek applicants who have a bachelor's degree in computer science, computer information systems. Certain entry level jobs may require an associate or vocational degree in computer science. Must be capable of exacting analytical work.
Engineers, Computer Applications (M) Plan, design, and help build computers and related equipment. Help companies decide what computer equipment they need. Solve computer problems using math models, charts, and reports.	Engineers (Industrial, Agricultural, Mechanical), Computer Engineering Tech, Computer Hardware Designer	514,800 ↗ 675/26 ↗ \$44,800-76,000	Investigative HD HS	Employers may prefer applicants with a graduate degree. Must have creative, analytical minds and capacity for detail. Communication essential. Must be licensed. Hired by research laboratories, industrial plants, and government.
Network and Computer Systems Administrators Install, configure and support local area networks (LAN), wide area networks (WAN) and Internet system. Maintain and monitor network software and hardware.	Computer Systems Analysts; Computer Support Specialist	339,500 ↗ 471/18 ↗ \$38,800-58,100	Conventional HD HS	Strong technical knowledge is essential for computer and information systems managers, who must understand and guide the work of their subordinates, yet also explain the work in non-technical terms to senior management and potential customers.
Network and Data Communications Analysts Analyze, design and evaluate network systems such as LAN or WAN and Internet. Perform network modeling, analysis and planning.	Computer System Analysts; Database Administrators	292,000 ↑ 311/21 ↑ \$40,400-68,500	Investigative HD HS	Rapidly changing technology requires an increasing level of skill and education on the part of employees. Professionals with an ever-broader background and range of skills, including technical knowledge, communication and other interpersonal skills are needed.

LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY



Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Correctional Officers (M) Guard inmates in penal or rehabilitative institutions.	Bailiffs, Store Detectives, Security Guards, Probation Officers	454,500 → 623/19 → \$24,700-36,100	Realistic	Employers may prefer persons with one or two years of college in law enforcement.
Dispatchers (M) Send out workers, materials, and equipment as required by work settings and jobs. Dispatch buses and taxicabs in response to requests for service. Maintain a log of scheduled runs.	General Clerk	295,600 ↘ 668/17 → \$26,500-41,100	Conventional	Must have good record keeping skills and good verbal skills. Some employers prefer high school graduates. Course work in communications and transportation may increase job opportunities.
Fire Chiefs (M) Supervise and coordinate activities of workers engaged in fire fighting and fire prevention and control.	Fire fighters, Police officers, EMT	55,200 → 46/2 → \$44,100-70,300	Realistic HS	Extensive knowledge and experience in fire fighting and investigation. Good oral and written communication skills. Must have good management skills. Not an entry level position.
Fire Fighters (M) Fight fires, protect lives, and property. Inspect fire-fighting equipment for serviceability. Detect fire hazards. Recommend appropriate fire prevention measures. May administer emergency first aid.	Police Officers, Emergency Medical Technicians, Fire Rangers	310,400 → 500/24 → \$31,100-49,100	Realistic HS	A competency exam is required and hiring is done as a result of scores received on the exam. On-the-job training consists of 600-700 hours. Continual training is given. Hired by state and local government.
Legal Assistants (paralegal) (M) Assist lawyers by researching legal precedent, investigating facts or preparing legal documents. Conduct research to support a legal proceeding to formulate a defense or initiate legal action.	Abstractors, Claims Examiners, Legal Secretaries	263,800 ↗ 383/9 → \$28,500-44,900	Enterprising HD HS	Some lawyers hire legal secretaries and train them on the job, whereas others prefer a two-year or four-year degree. Must understand legal terminology. Use of word processing programs essential.
Police and Sheriff's Patrol Officers Maintain order, enforce laws and ordinances and protect life and property. May direct traffic, serve as an escort, appear in court as a witness, and render first aid.	FBI Agents, Secret Service Agents, Fish and Game Warden, Correctional Officers	661,500 → 1,053/37 → \$31,200-48,400	Social HS	May require two to four-year degree with emphasis on criminal justice or law enforcement. Must meet rigorous physical and personal qualifications. Must pass competitive exams which test aptitudes, strengths and attitudes. Ability to exercise good judgment essential.
Police Chiefs (M) Supervise and coordinate activities of members of police force.	Correctional Officers, Fish and Game Wardens, Police Officers	97,300 → 193/10 → \$48,000-76,000	Enterprising HW HS	Extensive knowledge and experience in criminal justice. Good oral and written communication skills. Larger cities prefer a graduate degree. Must have good management skills. Not an entry level position.
Security Guards (M) Guard, patrol or monitor premises to prevent theft, violence or infractions of rules.	Border Guards, Correctional Officers, Fish and Game Wardens	1,040,300 → 1,310/28 ↘ \$17,124-30,191	Social	High school diploma preferred. Applicants must have good vision and hearing and the ability to work with and relate to others. Often applicants must go through a background investigation.
Postsecondary Programs – Bachelors Degree or More				
Detectives and Criminal Investigators (M) Conduct investigations related to suspected violations of federal, state or local laws to prevent or solve crimes.	Police Officers; Correctional Officers	112,200 → 252/8 → \$39,100-69,200	Enterprising HS	Civil service regulations govern the appointment of police and detectives in most all instances. Candidates must be U.S. citizens, usually at least 20 years of age, and must meet rigorous physical and personal qualifications.
Lawyers (M) Represent clients in criminal and civil litigation and other legal proceedings, draw up legal documents and manage or advise clients on legal transactions.	FBI Special Agents, Tax Attorney, Judges	759,200 → 1,237/29 → \$49,500-117,800	Enterprising HD HW HS	Three years of graduate study after completion of B.S. degree is required. Must pass a written exam to be admitted to the bar. Communication skills are essential.

MANUFACTURING



Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Bakers (M) Mix and bake ingredients according to recipes to produce breads, rolls, cookies, cakes, pies, pastries and other baked goods.	Caterers, Cooks or Chefs, Food Service Directors	151,600 → 443/11 → \$16,800-24,600	Realistic HD HS	Training ranges from on-the-job to vocational program completion. Hired by wholesale and retail bakers, grocery stores, government, and other institutions.
Cabinetmakers Fabricate, assemble and repair wooden articles such as cabinets and furniture. Assemble, fit, fasten, and glue materials. Operate, manipulate and tend woodworking machines. Use hand and power tools.	Carpenters, Furniture Refinishers	131,700 → 407/13 → \$24,300-36,200	Realistic HD HS	Most employers prefer applicants who have completed vocational training or apprenticeship training or have experience. Hired by construction companies and cabinet makers. May be self-employed.
Civil Engineering Technicians Apply theory and principles of civil engineering in planning, designing and overseeing construction and maintenance of structures and facilities under the direction of a civil engineer.	Civil Engineers; Drafters; Construction Managers	91,700 → 399/18 → \$30,400-45,800	Realistic HS	Although it may be possible to qualify for certain engineering technician jobs without formal training, most employers prefer to hire someone with at least a 2-year associate degree in engineering technology.
Dental Laboratory Technicians (M) Construct and repair full or partial dentures or dental appliances.	Orthotics and Prosthetics Technicians, Opticians	46,000 → 184/5 → \$24,200-33,000	Realistic HS	Employers may prefer an employee with vocational or apprenticeship training. Must have artistic ability and be able to work with minute detail and work under stress. Hired by dental laboratories and dentists.
Electrical and Electronic Engineering Technicians (M) Apply electrical and electronic theory and related knowledge to design, build, test, and modify electrical or electronic equipment. Work under direction of electrical or electronic engineer.	Broadcast Technicians, Bio-Medical Equipment Technicians	164,000 ↘ 242/5 → \$35,900-59,400	Realistic HS	Employers prefer applicants with technical training. Must have ability to do detail work with high degree of accuracy. Hired by manufacturers and public utilities.
Electro-Mechanical Technicians Operate, test and maintain unmanned, automated, servo-mechanical or electro-mechanical equipment. May assist engineers with robotics equipment.	Electronics Technicians; Mechanical Engineering Technicians	16,400 ↘ N/A/N/A \$34,600-48,700	Realistic HS	Although it may be possible to qualify for certain engineering technician jobs without formal training, most employers prefer to hire someone with at least a 2-year associate degree in engineering technology.
Energy Industry Manager (Managers of Production and Operating Workers) Plan, direct or coordinate operations of energy facilities. Duties and responsibilities include formulating policies, managing daily operations and planning the use of materials and human resources.	Plant Manager, Production Supervisor	681,000 → 1,530/NA → \$88,700- 133,600(US)	Enterprising HW HS	Preference is given to those with several years of previous energy industry experience. Good communication, leadership and organizational skills are necessary. Hired by various energy facilities.
Industrial Machinery Mechanics and Maintenance Workers Repair, install, adjust, lubricate or maintain industrial production machinery and processing machinery or refinery and pipeline distribution systems.	Heavy Equipment Mechanics, Diesel Mechanics, Machinist	1,769,600 → 3,754/113 → \$25,700-44,100	Realistic HD HS	Completion of a formal apprenticeship program often required. Openings filled by employees within an industry based on seniority and past experience. Not an entry level position.
Machinists (M) Set up and operate a variety of machine tools to produce precision parts and instruments.	Blacksmiths, Gunsmiths, Locksmiths, Welders	421,500 ↘ 549/10 → \$29,000-45,400	Realistic HD HS	Completion of apprenticeship, vocational, or on-the-job training necessary. Mechanical ability essential. Hired by manufacturers and federal government.
Mechanical Engineering Technicians Develop and test machinery and equipment. Review blueprints. Draft detail drawings. Assemble modified mechanical components. Work directly under a mechanical engineer.	Drafters, Mechanical Engineers	46,100 ↘ 72/1 → \$36,500-58,400	Realistic HS	Employers seek applicants with technical degrees and some require experience. Must have the ability to do detail work with a high degree of accuracy. Creative talent is desirable for design work. Hired by manufacturing companies.
Process Plant Operator (Chemical Plant System Operators) Operate, control or maintain process facility to create various types of fuel, food products, or any other product requiring processing.	Process Technician, Process Operator, Plant Operator, Operations Technician	45,000 → NA/NA → \$54,600- 74,100(US)	Realistic HW HS	Preference is given to those who have completed formal apprenticeship or vocational training. Good mechanical aptitude and mathematics skills are necessary. Must be able to lift 50+ lbs, be in confined spaces, heights, climb stairs and ladders. Ability to visualize color is required at some facilities. Hired by refineries, gasification plants, ethanol and biodiesel plants or power generation facilities.
Tool and Die Makers (M) Make and repair custom-made tools, dies, jigs, fixtures, or gauges. Study blueprints, compute dimensions, and plan layout when fitting and assembling work pieces. Set up and operate tools to machine parts to specifications.	Machinists, Instrument Makers, Millwright, Gunsmith	84,300 ↘ 103/1 → \$34,100-52,200	Realistic HD HS	Those hired are apprenticed or are trained on the job. Persons must follow strict safety requirements because of potential danger of machines.
Welders and Cutters (M) Join, cut, and prepare surface metal parts or structures. Use welding, brazing, soldering, lead-burning or flame-cutting techniques.	Maintenance Mechanics, Machinists, Machine Tool Operators, Iron Workers	412,300 ↘ 2,550/80 → \$26,500-40,800	Realistic HD HS	Training can be done informally on the job, through apprenticeships or formal training at secondary and postsecondary vocational technical schools. May become certified.

MARKETING



Planning, managing, and performing marketing activities to reach organizational objectives.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Auctioneers Sell articles at auction to the highest bidder, decide value of items, describe merchandise, and select the order of the items to be sold. Closes sale to the highest bidder. May write advertising copy.	Real Estate Agents, Appraisers	NA NA/NA \$NA-NA	Enterprising	Must have a diploma from an accredited school and be licensed and bonded. Training for this occupation is a two-week program of coursework and practicum. Many are self-employed or employed part-time as auctioneers.
Barbers Shampoo, color, cut, perm, and style hair using clippers, comb, curling iron, blow dryers, and scissors. May offer scalp treatments, facial, face massages, and shaves. License required.	Estheticians, Cosmetologists, Makeup Artists, Manicurists	53,500 → 143/3 → \$15,700-40,600 (US)	Realistic HS	Must complete a designated training program. Those who are versatile and able to work with many different styles and cuts have the best opportunities for employment. License required.
Butchers and Meat Cutters (M) Cut, trim or prepare consumer-sized portions of meat for use or sale in retail establishments.	Bakers, Cooks, Kitchen Supervisors	129,100 → 513/17 → \$16,700-27,600	Realistic HS	Preference is given to high school graduates. Ability to communicate with the public and strength is required to move and lift heavy pieces of meat. Hired by grocery and meat markets.
Buyers and Purchasing Agents Purchase merchandise or commodities for resale or processing. Inspects and grades or appraises agricultural commodities, durable goods, apparel, furniture, livestock, or other merchandise offered for sale to determine value and yield.	Sales Representatives, Retail Sales Workers, Sales Managers	442,900 → 800/32 → \$34,032-58,113	Enterprising HS	Businesses prefer to hire applicants who are familiar with the merchandise they sell as well as with wholesaling and retailing practices.
Cashiers and Checkers (M) Receive and disburse money in establishments other than financial institutions. Use electronic scanners, cash registers or related equipment.	Bank Tellers, Post Office Clerks, Sales Clerks	3,500,000 → 10,478/526 → \$15,000-18,200	Conventional HD	Employers prefer high school graduates. Many are part-time high school and college students. Must be able to do repetitive work accurately.
Clerks, Counter and Rental Handle transactions of renting such items as videos, cars, or equipment. Must be knowledgeable of products to assist customers in making selection.	Real Estate Agents, Cashiers, Sales Workers	448,200 → 1,291/42 → \$15,300-21,000	Conventional HD	Employers prefer applicants with a pleasant personality and a neat appearance. Some sales clerks are commissioned, others are salaried. Many are part-time workers.
Clerks, Stock (M) Receive, store and distribute supplies, material, and equipment and other items from stockroom to shelves or to customers.	Shipping and Receiving Clerks, Routing Clerks	1,858,800 → 4,022/118 → \$16,500-25,800	Conventional	Many employers prefer high school graduates. Must be able to read and write legibly and perform simple arithmetic. Additional skills acquired through on the job training.
Cosmetologists and Hairstylists Cut, style, color and perm hair. Advise patrons on how to care for their hair. May suggest cosmetics for skin conditions. Give manicures, facials, and scalp treatments.	Estheticians, Barbers, Manicurists	630,700 ↗ 2,140/48 → \$16,400-26,700	Enterprising HS	Must complete a state approved training program. Must be willing to work weekends and evenings and stand for long periods of time. It may take some time to build up a clientele. License required.
Funeral Directors Arrange and direct funerals and burials. Embalm bodies. Help families select urn or casket, make arrangements for burial plot, and place obituary notices in newspapers. Direct pallbearers in placement and removal of casket from hearse.	Embalmer, Funeral Attendant, Counselors	30,000 → 101/2 → \$37,400-74,300	Enterprising HS	An associate degree is required prior to one year's training at a school of mortuary science, then a 12-month apprenticeship is required before taking national and state board examinations. Some have a four-year degree prior to mortuary science school.
Real Estate Agents Buy, sell, and rent property for clients. Review trade journals, interview prospective clients. Show property. Draw up real estate contracts. Negotiate contracts with sellers and buyers.	Security Sales People, Insurance Agents, Real Estate Appraisers	394,400 → 914/25 → \$27,100-61,300	Enterprising HS	Must pass a written exam to become a sales agent. Works under the direction of a licensed broker. Broker must be licensed and must have completed 90 hours of real estate coursework and have two years real estate sales experience. May be self-employed.
Retail Florist (Floral Designer) Design, cut and arrange live, dried or artificial flowers or foliage.	Retail Salesperson, Store Manager, Horticulturist	76,100 ↘ 243/8 ↘ \$16,600-22,700	Artistic	Some employers prefer or require technical training. Must like working with flowers and plants. Long hours at holidays.
Retail Store Managers (M) Manage retail store engaged in selling various merchandise. Plan and prepare work schedules, formulas, and pricing policies. Coordinate sales activities and supervise employees in a retail store.	Restaurant Managers, Personnel Directors	1,685,500 → 3,541/97 → \$22,805-41,100	Enterprising HS	Some employers prefer a four-year degree, others require vocational training. Experience may increase job opportunities. Some managers are hired through internal promotion.
Sales Agent, Advertising Sell or solicit advertising, including graphic art, advertising space in publications, custom made signs or TV/radio advertising time.	Insurance Agents, Real Estate Agents, Public Relations Workers	166,800 ↗ 542/11 → \$22,800-54,500	Enterprising	Training ranges from high school to a 4-year degree depending on the product complexity and company policies. Must be outgoing, enthusiastic, and persuasive. Good communication skills essential.
Sales Representatives Sell goods on a wholesale basis to wholesale, retail, industrial, professional, or other businesses. Show samples, explain their value and take orders. Develop new customers.	Sales-Service Promoters, Manufacturing Sales Workers	1,973,200 → 4,671/159 → \$31,100-64,400	Enterprising HD HS	Employers prefer formal training in marketing, sales, or business, others may hire high school graduates and train them over a two-year period. Hired by manufacturers.

MARKETING

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Sales Route Drivers Drive trucks or other vehicles on a specified route. Deliver and sell goods such as dairy and bakery products. Collect and deliver items such as laundry and dry-cleaned garments.	Truck Drivers, Sales Representative	406,400 ↘ NA/NA → \$15,100-28,600	Enterprising	Driver's license required. Preference is given to persons who have a good driving record, are good sale persons, and display a neat appearance.
Salespersons, Parts Sell spare and replacement parts and equipment in repair shop of parts store.	Auto Mechanic, Sales Representatives	227,500 → 1,332/55 → \$19,800-33,700	Enterprising	Many parts salespeople are trained on the job. They first may work as stock clerks before moving up to parts sales. Knowledge of automotive mechanics or electricity may increase job possibilities.
Salespersons, Retail Trade Sell merchandise, such as furniture, cars, appliances and apparel in a retail store.	Sales Route Drivers, Real Estate Agents, Insurance Agents	4,489,200 → 12,078/456 → \$15,900-30,500	Enterprising HD	Postsecondary training may improve chances for advancement into managerial positions. Must have an interest in people, and enjoy sales work. Many sales people are working part-time. Hired by retail stores.
Postsecondary Programs – Bachelors Degree or More				
Interior Designers Plan, design and furnish interiors of residential, commercial or industrial buildings. Formulate design which is practical, aesthetic and conducive to intended purposes.	Floral Designers, Fashion Designers	71,700 → 105/4 → \$29,900-43,600	Artistic HD HS	Many employers prefer a four-year degree plus experience. Must be able to work with clients, and sell merchandise. Artistic talent is crucial. Work for rental firms or may be self-employed.
Marketing Managers Determine demand for products and services offered by a business and its competitors and identify potential customers. Develop pricing strategies to maximize profits or share of market.	Advertising Managers; Sales Managers; Public Relations Managers	175,600 → 360/NA → \$40,200-128,300	Enterprising HD HS	College graduates with related experience, high level of creativity and strong communication skills needed. Keen competition for jobs expected.
Property and Real Estate Managers Manages apartments and office complexes, buys and sells real estate. Shows property to clients, arranges loans, and signs lease payments and sales contracts.	Restaurant Managers, Education Administrators, Real Estate Appraisers	304,100 → 435/12 → \$29,600-55,100	Enterprising HS	Employers prefer college graduates in business administration, finance, real estate or public administration. Good speaking and writing skills and ability to deal tactfully with people are essential. Experience in real estate sales helpful.
Sales Managers Direct distribution of product or service to the customer, establishing sales territories, quotas and goals. Analyze sales statistics.	Public Relations Managers; Marketing Managers	346,900 → 831/35 ↗ \$47,900-100,700	Enterprising HD HW HS	College graduates with related experience, high level of creativity and strong communication skills needed. Keen competition for jobs expected.

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS



Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Biological Technicians and Technologists (M) Assist biological and medical scientists in laboratories. Set up, operate, and maintain laboratory instruments and equipment, monitor experiments, make observations, and calculate and record results.	Fish and Wildlife Tech., Forestry Tech., Environmental Science Tech.	79,500 → NA/NA ↗ \$NA-NA	Realistic HS	Most employers prefer applicants with at least two years of specialized training. Must have aptitude for math and science and enjoy technical work. Ability to work with detail necessary. Work under the direction of experienced scientists. Hired by laboratories.
Chemical Technicians (M) Conduct chemical tests making qualitative and quantitative analysis. May work in the area of criminology, environment, or health. May analyze foods, drugs, dyes, paints, detergents, petroleum, and other products.	Medical Laboratory Technicians, Medical Laboratory Technologists	66,100 ↘ 245/9 → \$18,100-28,600	Realistic HS	Many employers prefer formal training in chemical technology, others hire high school graduates and train them on the job. A good background in the sciences is essential. May work for state labs, hospitals, private industry, that test liquid, solid, or gaseous materials.
Simulator Maintenance Technician (M) Troubleshoot, repair, and maintain the electronic, visual, and mechanical components of simulator trainers used in pilot training. They analyze simulator malfunctions, using appropriate tools and technical data, to determine and correct system malfunctions.	Electronic Repair Technicians, Computer Repairers, Bio-Medical Equipment Technicians	NA NA/NA \$38,000-45,000 (US)	Realistic HS	Employers require two years of vocational training. Must have ability to do detail work with a high degree of accuracy. Verbal and written communication skills are very important. Good eyesight and color discrimination necessary. Work for airlines and aerospace manufacturers.

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Surveying and Mapping Technicians (M) Help surveyors determine the locations and boundaries of land areas for construction, mining, and other purposes. Study field notes and photographs. Prepare information for mapmaking.	Cartographers, Geotechnician, Map Editors, GIS Technician	77,000 ↗ 204/9 ↗ \$25,100-42,100	Realistic	Most employers prefer applicants with vocational training; however, some are trained on the job. Must be able to visualize and understand objects, distance, sizes, and other abstract forms. Mathematical ability essential. Hired by government construction firms, engineering companies.
Postsecondary Programs – Bachelors Degree or More				
Chemists (M) Conduct qualitative and quantitative analyses or chemical experiments in laboratories for quality or process control or to develop new product knowledge.	Chemical Engineers, Food Technologists, Chemical Technologists	84,300 → NA/NA → \$37,800-113,100 (US)	Investigative HS	B.S. degree is adequate preparation for some entry level jobs; however, a higher degree is required for college teaching and independent research. Must have the knowledge and ability to apply scientific theories.
Engineers, Agricultural Solve farming problems and find ways to make farms run more efficiently. Design farm machines and equipment. Work to improve conservation of energy, soil, and water resources.	GIS Technician, Land Surveyor, Animal Scientist, Mechanical Engineer	2,700 → 46/1 ↗ \$51,800-74,700	Investigative HW HS	Work for manufacturers of farm equipment, electric utility companies, federal and state soil and water management agencies. Must be able to work as part of a team and be creative and have an analytical mind and capacity for detail.
Engineers, Chemical Develop processes for manufacturing chemicals. Design equipment and test methods of manufacturing the products. May specialize in preventing pollution, or refining oil and metal.	Chemist, Engineers (Aeronautical, Civil, Mechanical), Chemical Engineering Tech, Biochemist	31,700 ↘ 30/1 → \$63,900-93,600	Investigative HW HS	A four-year degree is required; however, some employers require a masters degree. Many are hired by manufacturing industries, primarily in chemical and petroleum refining. Also employed by consulting firms. Must be licensed.
Engineers, Civil (M) Plan, design and supervise the construction, maintenance and repair of buildings, bridges, dams, tunnels, ports, water supply systems, and transportation facilities.	Architects, Engineers (Mining, Petroleum, Agricultural), Civil Engineering Technician	278,400 → 644/29 ↗ \$47,700-76,700	Realistic HD HW HS	An increasing number of employers are requiring a masters degree or above. Employed by federal, state and local governments and in construction industries. Generally in or near industrial and commercial centers. Must be licensed.
Engineers, Electrical (M) Design, develop, and test electrical components, equipment, and systems in the generation of power used by electric utilities, electric motors, radar computers, and communication equipment.	Computer Applications Engineer, Electrical Engineering Tech	157,800 → 239/9 → \$55,500-84,000	Investigative HD HW HS	Employed by manufacturers of electrical and electronic equipment, aircraft, and business machines. Some work for public utilities, government agencies, and universities. Must be licensed.
Engineers, Energy Design and develop devices for the transformation of energy sources such as fossil and nuclear fuels, wind, and the sun into conveniently useful forms of energy.	Architects, Engineers (Chemical, Civil, Electrical, Mechanical)	NA → N/A/N/A → \$27,000-116,100	Investigative HS	Employers generally prefer applicants with a graduate degree. Employed by federal and private research laboratories, universities, and power companies.
Engineers, Industrial (M) Design and develop ways for an organization to use people, machines, and materials, consider product quality, production costs, and worker safety. May specialize in processing systems design, cost control, or safety.	Safety Engineer, Mechanical Engineer, Industrial Engineering Technician	214,800 → 404/17 → \$51,900-77,100	Enterprising HD HW HS	Some employers prefer applicants with a graduate degree. Over two-thirds of the industrial engineers work in the manufacturing industries. Industrial engineers are more widely distributed among industries than other engineers. Must be licensed.
Engineers, Mechanical (M) Supervise the operation and maintenance of machines that produce, transmit, or consume energy. Supervise the repair of tools with which these machines are made. Evaluate plant operations related to these machines.	Engineers (Agricultural, Electrical, Industrial), Drafter, Mechanical Engineering Tech	238,700 → 473/17 → \$47,800-78,800	Realistic HD HW HS	Most mechanical engineers are employed in manufacturing; therefore, opportunities may be better outside the state of North Dakota. Some work for government agencies, educational institutions, and private firms. Drafting and design experience helpful. May be licensed.
Engineers, Physics Applications Design advanced components and instrumentation for space exploration, environmental monitoring, medical applications, and scientific research activities.	Engineers (Electrical, Mechanical), Physical Scientists	NA N/A/N/A \$N/A-N/A	Investigative HW HS	Employed by component and instrument manufacturers, aircraft companies, federal agencies, and national scientific laboratories. Some pursue advanced degrees. May be licensed.
Environmental Scientists and Specialists Conduct research or perform investigation to identify, abate or eliminate sources of pollutants or hazards that affect either the environment or public health.	Conservation Scientists; Forest and Conservation Technicians	85,900 ↗ 132/6 → \$38,200-76,400	Investigative HS	A bachelor's degree is adequate for a few entry-level positions, but environmental scientists and geoscientists increasingly need a master's degree in a natural science.
Meteorologists (M) Study the atmosphere to increase knowledge about weather, and how it affects the environment. Develop methods and techniques for making more accurate weather forecasts. Report weather conditions to the public.	Geologist, Environmental Scientist, Hydrologists	9,400 → 61/1 ↘ \$34,300-67,400	Investigative HS	A masters degree is being required by an increasing number of employers. The national weather service employs one-half of all meteorologists.

TRANSPORTATION, DISTRIBUTION & LOGISTICS



Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment \$ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Air Traffic Control Specialists (M) Control air traffic on and within vicinity of airport and movement of air traffic between altitude and control sectors, according to established procedures and policies. Authorize and control commercial airline flights.	Airline-Radio Operators, Airplane Dispatchers, Pilot	26,200 → 90/3 → \$55,200-91,800	Conventional HW HS	Must pass a written examination, a rigid physical exam and be under 31 years old. After formal training controllers are trained on the job and in the classroom. Very competitive. Hired by federal government and airports.
Aircraft Mechanics (M) Diagnose, adjust, repair or overhaul aircraft engines and assemblies, such as hydraulic and pneumatic systems.	Auto Mechanics, Electricians, Diesel Mechanics	121,500 → 11/0 → \$33,100-54,800	Realistic HD HS	Graduation from an FAA approved school is required by all employers. Certification required. Hired by airlines or federal government.
Auto Body Repairers (M) Repair and refinish automotive vehicle bodies and straighten vehicle frames.	Painters, Truck and Bus Mechanics, Auto Detailer	186,000 → 681/22 → \$23,400-41,700	Realistic HS	Completion of training program is necessary. Hired by repair shops and automobile dealers. May be self-employed.
Automotive Service Technicians (M) Diagnose, adjust, repair or overhaul automotive vehicles.	Autobody Repairers, Diesel Mechanics, Farm Equipment Mechanics	763,700 → 2,339/53 → \$19,300-38,300	Realistic HD HS	Preference given to an apprenticeship or vocational trained applicant. Hired by repair shops, government and supply shops. May be self-employed.
Bus Drivers (M) Drive bus or motor coach, including regular route operations, charters and private carriage.	Truck Drivers, Taxi Drivers	193,900 → 266/9 → \$20,700-29,700	Realistic	Ability to work with people improves chances for employment. A good driving record is essential. Must be licensed. Hired by school and private transit systems.
Diesel Mechanics/Bus and Truck Mechanics (M) Diagnose, adjust, repair or overhaul trucks, buses and all types of diesel engines.	Autobody Repairers, Auto Mechanics, Aircraft Mechanics	263,100 → 1,227/42 → \$28,300-43,500	Realistic HD HS	High school graduation is required and vocational or apprenticeship training preferred by employers. Hired by construction companies, bakeries, dairies, schools, and government.
Drivers, Truck (M) Operate trucks, tractor-trailers and similar vehicles powered by gasoline or diesel engines. Travel short or long distances to transport goods and materials.	Bus Drivers, Chauffeurs, Taxi Drivers	2,782,900 → 11,610/385 → \$24,300-41,500	Realistic HD HS	Employers prefer high school graduates. Ability to judge distances accurately, to operate safely and efficiently, and to prepare delivery forms and other driving records is essential. Must be able to work with little supervision.
Farm Equipment Mechanics Diagnose, adjust, repair or overhaul farm machinery and vehicles, such as tractors, harvesters and related equipment.	Machinists, Auto Mechanics, Diesel Mechanics, Welders	31,200 → 678/28 → \$26,300-36,700	Realistic HS	Prefer high school graduate with past experience, vocational, or apprenticeship training. Farm background an advantage.
Flight Attendants, Airplane (M) Greet passengers, verify tickets and help locate seats, serve meals and beverages. Observe passengers to detect signs of discomfort.	Gate Agents, Host/Hostesses	98,700 → NA/NA \$28,900-81,000 (US)	Enterprising HS	Preference is given to those with two years of college or experience dealing with the public. Must have excellent health, good vision, and good communication skills. Fluency in foreign language necessary for overseas travel.
Heavy Equipment Mechanics (M) Repair and service a wide variety of construction and mining equipment. Diagnose, disassemble, replace parts and assemble, recondition, align, fit and reassemble equipment.	Diesel Mechanics, Aircraft Mechanics, Auto mechanics	136,300 → 748/25 → \$31,200-53,300	Realistic HD HS	Prefer high school graduate with past experience, vocational, military or apprenticeship training. Must have an aptitude for mechanical work. Hired by mining companies and heavy equipment dealers.
Mail Carriers (M) Sort mail for delivery. Deliver mail on established route by vehicle or on foot.	Delivery-Route Truck Drivers, Newspaper Carriers	343,300 ↘ 890/NA ↘ \$37,400-52,400	Conventional	Must take an examination and names are listed according to the scores of the exam. When a vacancy appears, one of the top three names on the list is chosen. Work for the federal government.
Postmasters (M) Coordinate activities of workers engaged in postal work. Set up work schedules, handle customer complaints, hire and train managers. Direct safety, finance, and maintenance for post office.	Postal Inspector, Postal Worker	25,600 ↘ 311/6 ↘ \$29,400-53,900	Enterprising HS	Postmasters are appointed from within the postal service. Appointees should have good communication, managerial and finance coordination skills, and demonstrate initiative.
Small Engine Mechanics (M) Service and repair lawn mowers, chain saws, outboard motors, and motorcycles. May adjust clutches and brakes. Provide tune-ups. May rebuild entire engine.	Aircraft Mechanics, Auto Mechanics, Motorcycle Mechanics	70,300 → NA/NA → \$19,200-32,400	Realistic HS	Employers may prefer applicants with vocational training or train on the job. Employers look for applicants with mechanical ability as well as an ability to meet and work in the public. Hired by shops and retail.
Postsecondary Programs – Bachelors Degree or More				
Airplane Pilots (M) Fly planes and helicopters to transport passengers, mail, or freight or for other commercial purposes. Use radar, compasses and direct vision. May spray crops. May test new aircraft.	Air Traffic Controllers, Helicopter Pilots	115,100 → 309/10 → \$44,700-74,700	Realistic HS	Pilots, other than private pilots, must have a commercial license from the FAA which includes at least 250 hours of flight experience. Must pass a strict physical exam, have 20/20 vision, good hearing, etc. Very competitive occupation. Must be certified.

NORTH DAKOTA POSTSECONDARY EDUCATION/TRAINING PROGRAMS

The tables on pp. 37-44 can help you match a campus with your career goals. AA and AS programs are general transfer programs to BS and BA programs. An “A” in the table indicates that the institution has a recommended AA or AS course of study for students planning on transferring to a bachelor’s degree program in this specific field. A student who plans to transfer to another college or university should verify that the institutions have transfer agreements in place and have outlined a recommended course of study in the college course catalog.

PROGRAM LENGTH IS INDICATED BY:

- | | | | |
|------------|--------------------|-----------|---|
| 1 | less than one year | 4G | four years or a graduate program |
| 1-2 | one to two years | C | upper-level certificate program |
| 2 | two years | A | AA/AS programs are general transfer program |
| 4 | four years | M | Military |
| 4+ | more than 4 years | * | may be offered through distance education |
| G | graduate school | | |

BJCC	Burdick Job Corps Center
BSC	Bismarck State College
CCCC	Cankdeska Cikana Community College
DCB	Dakota College at Bottineau
DSU	Dickinson State University
EATC	Executive Air Taxi Corporation
FBCC	Fort Berthold Community College
FFS	Fargo Flight School
GFKFS	GFK Flight Support
HAHD	Headquarters Academy of Hair Design
JC	Jamestown College
JSHDF	Josef’s School of Hair Design Fargo
JSHDGF	Josef’s School of Hair Design Grand Forks
JZT	JZ Trend Academy
LRSC	Lake Region State College
MIL	Military
MaSU	Mayville State University
MBC	Moler Barber College

MiSU	Minot State University
MOCN	Medcenter One College of Nursing
NDCS	North Dakota State College of Science
NDSU	North Dakota State University
PARR	Pietsch Aircraft and Restoration
RCB	Rasmussen College Bismarck
RCF	Rasmussen College Fargo
SBC	Sitting Bull College
SRGSM	Sister Rosalind Gefre Schools and Clinics of Massage
TBC	Trinity Bible College
THA	The Hair Academy
TMCC	Turtle Mountain Community College
TSPA	The Salon Professional Academy
UM	University of Mary
UND	University of North Dakota
UTTC	United Tribes Technical College
VCSU	Valley City State University
WSC	Williston State College

	BJCC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GFKFS	HAHD	JC	JSHD-F	JSHD-GF	JZT	LRSC	MIL	MaSU	MBC	MISU	MOCN	NDSUS	NDSU	PARR	RCB	RCF	SBC	SRGSM	TBC	THA	TMCC	TSPA	UM	UND	UTTC	VCSU	WSC		
Education, Social Science/Social Studies		4*A			4												4		4			4									4	4		4				
Education, Speech and Theater					4																												4					
Education, Technology					4																													G		4G		
Education, Vocational-Technical																																				4		
eLearning																																			C*			
English											4																					4						
English Language Learners																																		G*		G*		
English/Practical Writing/Rhetoric, Writing, Culture			A		4									A		4		4					4G										4G	4	A			
Food and Nutrition/Community Nutrition																							G										4					
General Studies			2	A	4												4		4								2,4*						4		4	A		
Health Ed/Community; School																																						
Humanities																																						
K-12 Technology Integration ITD																																			G,C			
Language, Foreign & Classical					4					4								4																4		4		
Library and Information Technologies																																				G		
Linguistics																																				G		
Mathematics for Middle School Teachers											4																									C		
Middle School Science & Engineering for Teachers																																				C*		
Paraeducation					1-2*																																	
Physical Education, Exercise Science and Wellness			A							4					A																			4	4			
Physics for Teachers																																				C		
School Psychology																																						
Science, Technology, Engineering, Mathematics																																				G		
Social Science			A		4									A		4		4																4	4	4		
Speech, Debate & Forensics					4																																	
Speech-Language Pathology																																				G		
Speech-Language Pathology Assistant														2																								
Studies, Gender/Women's																																					2*	
Studies, Indian			2																																	4		
Studies, International																																				4		
Teacher Education										4																												
Teaching & Learning																																					G	
Teaching English Language Learners																																				G	4G	
Transfer/Pre-Professional/University Parallel		2,A		2	2									2																							2	
SPECIAL EDUCATION																																						
Autistic Spectrum Disorder																																				C		
Communication Disorders/Sciences and Disorders																																				4	A	
Developmental Disabilities																																						
Early Childhood/Special Education			2	A						4			1-2		2,4							A												4	4G	2	A	
Education, Deaf																																					4	
Education, Mental Retardation																																					4	
Special Education/Early Childhood										4																	4									4	G	
Special Education/Emotional																																				4	G	
Special Education/Learning Disabilities																																				4	G	
Special Education/Visual																																				G		
EDUCATION ADMINISTRATION																																						
Administration/Leadership, Educational																																				G	4G	G
FINANCE																																						
Accountancy					2																															4		
Accounting			2	A	4					4			2		A		4																	4	4G		2,A	
Accounting & Computing		4*,A		2*		1-2							2	M																					4			
Banking & Finance										4																										4	A	
Bookkeeping		1		1*																																		
Business Econ/Econ/Applied Econ				A																																4-G	A	
Economics/Applied Economics																																				4G	A	
Family Financial Planning										4																												
Finance																																						
Financial Accounting																																					4	
Financial Investigation																																						
Investments																																						
Managerial Finance and Accounting										4																										4		
GOVERNMENT & PUBLIC ADMINISTRATION																																						
MANAGEMENT AND BUSINESS ADMINISTRATION																																						
Administrative Assistant		1	1-2	2	2*	2								1-2	M																			2		2	1-2*	
Legal			1-2											1-2	M																							
Medical		1	1-2		2*										M																							
Accountancy					2																																4G	
Accounting					A	4				4				2		A		4																	4	4G	2,A	
Accounting & Computing		4*,A			2*									2																								
Administrative Asst/Health Info Mgmt					2																																1-2*	
Advertising and Marketing					1-2					4																											A	

	BJCC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GFKFS	HAHD	JC	JSHD-F	JSHD-GF	JZT	LRSC	MIL	MaSU	MBC	MiSU	MOCN	NDCS	NDSU	PARR	RCB	RCF	SBC	SRGSM	TBC	THA	TMCC	TSPA	UM	UND	UTTC	VCSU	WSC	
Gerontology																						C															
Health Administration										4								4					2*											C			
Health Information Technology																																		2			
Health Information/Technician/Management	1-2															M					2*		2*	2*												1-2	
Health Science				A											A																				4		
Histotechnician																																		C			
Massage Therapy												1	1														1-2			1						1-2*	
Medical Assistant		2*	1-2	2*												M																					
Medical Coding	1			1*																		1*														1*	
Medical Secretary	1																		2*			2															
Medical Transcription				1*																		1*												2		1-2*	
Medicine (Physicians)															A																			G		A	
Mental Health Care Associate																						2														1-2*	
Mental Health/Addiction Technician																																				1-2*	
Nurse Assistant	1	1	2				1									1																					
Nurse Practitioner/Specialist																																	4G	C,G			
Nursing Administration																																	G				
Nursing, Practical	1	1		1	2	1-2									2							2*			2								2		1*		
Nursing, Registered	2	2A		2	4	2				4					A				4	4	2	4G									4G	4G			2*		
Nutrition & Foodservice																																		2			
Occupational Safety & Environmental Health																M																	4				
Occupational Therapy										4						M																4G	G		A		
Occupational Therapy Assistant																M						2															
Paramedic (EMT) Technology				1-2*																		1-2*															
Pharmaceutical Sciences															A							4G														A	
Pharmacy Doctorate																							G													A	
Pharmacy Technician																M						1-2															
Phlebotomy Technician		1														M													1								
Physical Therapy										4						M																4G	4G			A	
Physical Therapy Assistant																M																				2	
Physician Assistant Studies																																		C,G			
Psychology, Clinical										4																							G			A	
Psychology, Counseling										4									G													G	G			A	
Psychology/Applied Psychology/Experimental				4						4					A	4	4				A	4G									4	4G		4			
Public Health																							C,G										C,G				
Radiologic Technology/Sciences										4						M			4													4					
Recreation Mgmt, Sports & Recreational Studies				1-2*						4													4										4			A	
Rehabilitation & Human Services																																		4			
Respiratory Care																							4										4				
School Psychology																																					
Speech-Language Pathology																																		G			
Speech-Language Pathology Assistant															2																					2*	
Surgical Technology		2																																			
Veterinary Technology																							4														A
HOSPITALITY AND TOURISM																																					
Athletic Training/Corp Fitness/Human Performance & Fitness																M		4		A	4G											4	4			A	
Culinary Arts	1-2																				1-2																
Exercise Science/Leisure Studies/Sports Mgmt										4																							4			4	
Hotel/Restaurant/Hospitality/Tourism Mgmt										4						M					2	4															
Recreation Management, Sports and Recreational Leadership				1-2*						4												4												4		A	
HUMAN SERVICES																																					
Addiction Studies						2				4						M			4*													4				A	
Anthropology																							G														
Behavioral Statistics																							4														
Catholic Studies																																4					
Community Management/Development																							G														
Conflict Transformation																																		C			
Couple and Family Therapy																							4G														
Eligibility Worker		C																																			
Forensic Psychology																																		G			
Gerontology																							C														
Human Services		2																																			

	BJCC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GFKFS	HAHD	JC	JSHD-F	JSHD-GF	JZT	LRSC	MIL	MaSU	MBC	MISU	MOCN	NDSCS	NDSU	PARR	RCB	RCF	SBC	SRGSM	TBC	THA	TMCC	TSPA	UM	UND	UTTC	VCSU	WSC	
School Psychology																			G																		
Social Work		4*,A													A				4	A											4	4G			A		
Sociology				A											A				4			4G										4	4G			A	
INFORMATION TECHNOLOGY																																					
Application Software Specialists																			C																		
Computer Information Systems				2,A		2									2		4				1-2										4				4		
Computer Information Technology			2									4												2*										2			
Computer Science/Programming		4*,A			4							4			A				C,4		2,A	4G											4G			1-2,A	
Computer Support Specialist		2*																		2								1-2							2		
Computer Systems Tech																					1														2		
Computer Technology Management					4																																
Computerized Office Management				2																																	
Customer Relationship Management																																				C	
Database Administration																								2*													
Database Technology				2																																	
Engineering, Computer																						4G															
Enterprise Applications																																				C*	
Graphic Design Technology/New Art Media																			4					2									4				
Information Assurance/Network Security				2																	1			2*													
Information Processing Technician				2		2																														1-2	
Information Systems																				G																	
Information Technology				2						4							C								2							4					
Knowledge Management																				C																	
Management Information Systems/Information Tech											4				1-2				4	A	4			2							4	4			1-2		
Multimedia Technologies/Web Design																								2*													
Network Administration																								2													
Network Engineering				2																																	
Office Technology																									1-2												
Operating System Tech				1-2																																	
Petroleum Production Technology																																				C	
Software Engineering																						C,G		2													
Virtual Business																			4																		
Web Development																				C																	
Webmaster/Web Designer/Development & Design		1-2*		1-2															4		1-2			2*												1-2	
LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY																																					
Criminal Justice/Studies		2-4,A								4					A				4G	A	4G		2,4*	2,4*	2					4	4G	2			A		
Emergency Management																					A	4G															
Fire Technology		1-2*																																			
Forensic Psychology																																				G	
Forensic Science																M																			4		
Law (J.D.)															A						A													G	A		
Law Enforcement															2						A																
Paralegal/Legal Assistant															2						A								1-2								
Peace Officer															1																						
Police Management & Investigation																																					
Private Security Officer															1																						
MANUFACTURING																																					
Apparel & Textiles/Merchandising																						4G															
Auto Body Repair		1-2																			2																
Automotive Technology		1-2	1-2	2											1-2						1-2													2		2	
Building Construction Technology		1-2																			2								1-2					2			
Building Maintenance							1-2																														
Building Trades																										1-2											
Carpentry, Residential		1	1-2*																																	1-2*	
Caterpillar Dealer Service																					2																
Construction Management																						4															
Diesel Technology														1-2							2															2	
Electrical Technology		1-2*														M					2																
Electronics/Telecommunications Technology		1-2																																			
Emergency Management																						A	4G														
Engineering & Surveying Technology, Civil																																					
Engineering Technician		2																																			
Fire Technology		1-2				</																															

	BICC	BSC	CCCC	DCB	DSU	EATC	FBCB	FFS	GFKFS	HAHD	JC	JSHD-F	JSHD-GF	JZT	LRSC	MIL	MaSU	MBC	MISU	MOCN	NDSCS	NDSU	PARR	RCB	RCF	SBC	SRGSM	TBC	THA	TMCC	TSPA	UM	UND	UTTC	VCSU	WSC	
General & Technical Studies															2						1-2															1-2	
Genomics and Bioinformatics																							G														
Geographic Information Science															2							1-2											C			1-2	
Geography																																		4G			
Geology																			4				4											4G			
Gerontology																							C														
Greenhouse Technology				1-2*																																	
Heating, Ventilation, Air Cond & Refrigeration Technology		1-2																				1-2															
History				A	4					4					A			4					4G								4	4G		4	A		
Industrial Technology/Mechanical Maintenance Technology			1-2																															4G			
Instrumentation & Control Technology			1-2*																																		
John Deere Ag Technology																						2															
Landscape Design/Technology				1-2*																																	
Materials and Nanotechnology																							G														
Mathematics				A	4		2			4					A		4*	4					4G							4	4G		4	A			
Microbiology																							4G											G			
Microelectronics Technology																						1-2															
Micromanufacturing Technology																						1-2															
Molecular & Integrative Biology																																			4		
Molecular Pathogenesis																							G												G		
Nanoscience Technology																						2															
Nuclear Power Technology		1-2																																			
Petroleum Production Technology																																					1-2
Pharmacology, Physiology & Therapeutics				A																															G		
Physical Science																			4		A													4		A	
Physics																A		4					4G											4G		A	
Plant Pathology																							4G														
Political Science					4					4					A								4											4		A	
Power Plant Technology		1-2*																												1-2							
Process Plant Technology			1-2*																																		
Recreational Engines Technology																						2															
Renewable Generation Technology			1-2*																																		
Science, General							2												G																		
Scientific Computing																																				G	
Simulator Maintenance Technology															2																						
Social Science				A	4										A		4	4					4G									4	4		4		
Space Studies																																			G		
Statistics																							C,4G														
Transfer/Pre-Professional/University Parallel		2,A		2	2										2							2														2	
Tribal Environmental Science							2																													2	
Urban Forestry Technology				1-2*																																	
Veterinary Technology																								4													A
Wildlife & Fisheries Technology/Science					2																															4	
Zoology																							4G														
TRANSPORTATION, DISTRIBUTION & LOGISTICS																																					
Aeronautics																																				4	
Airport/Aviation Technology Management																																			4		A
Auto Body Repair		1-2																				2															
Automotive Technology		1-2													1-2							1-2															2
Aviation						2		2							A									2											G		
Caterpillar Dealer Service																							2														
Commercial Pilot						2		2	2							M								2													
Diesel Technology															1-2	M						2															2
Industrial Technology/Mechanical Maintenance Technology		1-2																																		4G	
John Deere Ag Technology																						2															
Recreational Engines Technology																						2															
Simulator Maintenance Technology															2																						
Space Studies																																				G	
Supply Chain Management		2																					G												4		
Transportation & Urban Systems																							1-2,G														
Truck Driving																M							C														
Unmanned Aircraft Systems Operations																							4														

RU Ready for Life After High School?

This college readiness survey is designed to help you take a closer look at your academic maturity, motivation, learning styles, assertiveness, social skills, advice seeking and planning and goal setting.

Instructions:

Don't dwell on these questions. Answer quickly and honestly. The quality of the results depends on your responses. Please focus on the present, not the future. When you have completed the checklist, take some time to reflect on your responses and what you might do to prepare yourself for your postsecondary life!

Rating Scale: 4 = Excellent (Strong) 3 = Adequate 2 = Marginal 1 = Poor (Weak)

- | | | |
|---|---|---|
| <input type="checkbox"/> Time management skills (overall) | <input type="checkbox"/> Writing interest | <input type="checkbox"/> Willing to compromise |
| <input type="checkbox"/> Study habits | <input type="checkbox"/> Reading interest | <input type="checkbox"/> Socialize |
| <input type="checkbox"/> Effort | <input type="checkbox"/> Creative ideas and tasks | <input type="checkbox"/> Join teams and clubs |
| <input type="checkbox"/> Comfort with testing | <input type="checkbox"/> Interest in science and math | <input type="checkbox"/> Value close friendships |
| <input type="checkbox"/> Work under pressure | <input type="checkbox"/> Class participation | <input type="checkbox"/> Leadership skills |
| <input type="checkbox"/> Goal focus and completion | <input type="checkbox"/> Work beyond assignments | <input type="checkbox"/> Seek help from friends |
| <input type="checkbox"/> Problem-solving skills | <input type="checkbox"/> Ability to study alone | <input type="checkbox"/> Ability to make decisions |
| <input type="checkbox"/> Perseverance | <input type="checkbox"/> Tasks done promptly | <input type="checkbox"/> Value parental/adult advice |
| <input type="checkbox"/> Ability to self-direct | <input type="checkbox"/> Use of library and computers | <input type="checkbox"/> Seek college planning advice |
| <input type="checkbox"/> Work-play balance | <input type="checkbox"/> Comfort with strangers | <input type="checkbox"/> Seek teacher feedback |
| <input type="checkbox"/> Critical thinking skills | <input type="checkbox"/> Speak your opinion | <input type="checkbox"/> College goals defined |
| <input type="checkbox"/> Thirst for knowledge | <input type="checkbox"/> Competitive | <input type="checkbox"/> Listen and take notes |
| <input type="checkbox"/> Interest in attending college | <input type="checkbox"/> Proactive (not reactive) | <input type="checkbox"/> Career goals defined |
| <input type="checkbox"/> Reasons for attending college | <input type="checkbox"/> Self-confidence | <input type="checkbox"/> Have plans for future |

Jump Start Your College Education

See your school counselor about Dual Credit (DC) or Advanced Placement (AP) courses that are available to you.

PREPARE

FOR COLLEGE



Bank of North Dakota (BND) and Student Loans of North Dakota (SLND) are a one-stop college planning resource with a long tradition of helping students to reach their higher education goals. Over the years, BND and SLND have built partnerships with schools, teachers, counselors and other organizations to ensure North Dakota students and their families are getting the help they need.

How can BND and SLND help you?

- *College Bound Family Calendar* – Find out what to do each month of the year to prepare for college.
- *Life 101* magazine – Learn about financial aid and helpful tips for college.
- *College People* magazine – Read celebrity profiles and college tips.
- College Planning Web sites – Get information anytime, anywhere.
 - Check out BND at mystudentloanonline.nd.gov to learn about student loans and paying for college.
 - Discover more about financial literacy, college planning and types of financial aid at starthere4loans.nd.gov, SLND's website.
- College Information Service toll-free hotline – Everyone has questions from time to time. Call 800-554-2717 to get answers from an expert.



Show Me the MONEY



How to Pay for College

Filling Out the Forms

Financial aid funds can be limited, so it's important to apply early. The first step is to apply for admission to the campus(s) of your choice and then complete the U.S. Department of Education's Free Application for Federal Student Aid (FAFSA) as soon after January 1 as possible. With this application you are applying for all federal and some state aid programs.

The FAFSA is free and may be obtained either at your high school guidance counselor's office, the college admission or financial aid office, or on-line at www.fafsa.gov. Read the instructions carefully and keep copies of everything you send. Information from federal tax returns should be used to complete the form. Clearly indicate which institution(s) should receive your financial information and use the appropriate federal school code(s). You may list up to 10 schools.

Once your FAFSA form is processed, you will receive a Student Aid Report (SAR) that summarizes the information you submitted. The college(s) you listed will receive the same information.

The campus financial aid office then will determine the amount and type of aid it can offer you and will send you an award letter. Award letters are usually sent in the late spring or early summer.

Remember to contact your school counselor's office to pursue other aid programs. Some school counselors in the state recommend using FastWeb at fastweb.com to search for scholarships.

To receive more information about tax credits, the FAFSA application and the U.S. Department of Education's Student Aid Program, visit studentaid.ed.gov or starthere4loans.nd.gov.

Need More Help Filling Out the Forms?

Attend College Goal Sunday on February 20, 2011! At this free event, prospective college students and their families will receive help in completing the FAFSA. They also will be eligible for a prize drawing. This program is coordinated by the North Dakota Association of Student



Deadlines

Deadlines for financial aid applications are important and sometimes very strict. Each postsecondary institution will have its own deadline for admissions, applications, and required tests. March 15 is the North Dakota University System priority FAFSA deadline. Contact any postsecondary institution you are interested in to find out their admissions and financial aid deadlines.

How Much Can I Get?

The cost of education at postsecondary institutions includes such things as tuition, fees, room, board, supplies, transportation, loan fees and miscellaneous expenses. Financial aid may be available to cover all or part of these expenses. Financial aid can include: scholarships, grants, loans and jobs. The campus financial aid office will use the FAFSA and other information to determine your eligibility and need for financial aid. The type and amount you receive can vary between schools and is based on factors such as grade level, family size, income and assets.

How Much Should I Borrow?

Many students have to take out student loans to pay college expenses. How much should you borrow? This is an important question. To come up with an answer you should consider what your income will be after college. Your total student loan payments should not exceed 10 percent of your income. Higher payments could mean you will have trouble making your monthly student loan payment in addition to rent, utilities, car payment and other expenses. Before accepting a student loan, estimate what your monthly payment will be after graduation to determine if it is an affordable choice. Check out "What a Student Loan Costs" chart for standard monthly payments.

MAJOR SOURCES OF FINANCIAL AID



Grants:

(Money awarded which does not need to be repaid)

Type of Aid	Need Based	Non-Need Based	SOURCE OF FUNDS
Federal Pell Grant.....	X		Federal
Federal Supplemental Education Opportunity Grant (SEOG)	X		Federal/Institutional
Academic Competitiveness Grant.....	X		Federal
National Science and Mathematic Access to Retain Talent Grant (SMART).....	X		Federal
State Student Incentive Grant (SSIG or State Grant).....	X		Federal/State
Bureau of Indian Affairs (BIA).....	X		Federal
Workforce Investment Act (WIA) (Check with Job Service North Dakota)	X		Federal



Loans:

(Must be repaid with interest or sometimes service)

Federal Perkins Loan	X		Federal/Institutional/State
Federal FELP or Direct Stafford Subsidized Loan.....	X		Federal/State/Private Sector
Federal FELP or Direct Stafford Unsubsidized Loan.....		X	Federal/State/Private Sector
Federal FELP or Direct PLUS.....		X	Federal/Private Sector
Nursing Education Loan.....	X		State Nursing Fees
DEAL Loan-Alternative Loan through Bank of North Dakota.....		X	State



Scholarships:

(Generally based on achievement)

Robert C. Byrd Honors Scholarship (a)		X	Federal
North Dakota Scholars Scholarship (a)		X	State
Institutional Scholarships (a).....	X	X	Institutional
North Dakota Indian Scholarship.....	X	X	State



Work:

Federal Work Study.....	X		Federal/State
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- save for college -

It's never too early or too late to start

Paying for education after high school requires planning. While college may seem far away, you will be better able to meet the challenge of rising college costs if your family starts planning today.

It is cheaper to save than it is to borrow! Think about savings as a down payment on your education. Even if you won't be able to save enough to cover all your school costs, having some money saved can drastically increase your school options while decreasing your need to depend on student loans and other financial aid.

The earlier you start saving the easier it will be to accumulate your goal amount. The chart below shows the monthly amount required to save \$25,000.

Student Age	Birth	1st Grade	6th Grade	8th Grade	10th Grade	12th Grade
Monthly Savings	\$58	\$119	\$239	\$357	\$633	\$2017

Monthly amount needed to save \$25,000 for college at 6% interest rate.

If instead of saving, you decide to borrow \$25,000 to pay for college, you will have to pay \$288 a month for 10 years to pay back the loan. Total payments with interest will add up to \$34,524. The choice of whether to save in advance or pay afterward is up to you and your family. This example clearly demonstrates that paying afterward will cost more in the long run.

Once you've determined how much to put away, you need to decide where it should go. Below are some savings options to consider:

- **College SAVE** – North Dakota's 529 College Savings plan helps families invest for future college expenses. You, as well as parents, grandparents, aunts, uncles, etc., can deposit money into an account. Funds can be used to cover qualified higher education expenses incurred while attending an eligible institution. The program offers a state tax deduction on contributions for North Dakota residents, federal and state tax-free growth on earnings for qualified expenses, a matching grant program, and many investment options. For more information, call 1-866-728-3529 or visit the College SAVE Web site at www.collegesave4u.com.
- **Certificates of Deposit (CD's)** – Issued by insured financial institutions who pay fixed rates of interest for specific periods of time. These are considered safe investments.
- **Regular Savings Account** – Monthly contributions into these accounts are one of the most fundamental methods for building financial reserves.
- **Coverdell Education Savings Account** – This type of investment should be discussed with an investment broker.

Estimated Cost of Attending College in 2010

	<u>PRIVATE</u>	<u>2-YEAR COLLEGE</u>	<u>4-YEAR UNIVERSITY</u>
One Year of College	\$22,993	\$13,126	\$15,557
Completion of Degree	\$99,103	\$26,909	\$67,053

For a complete listing of approximate college costs for children ages 1 through 18, visit: mystudentloanonline.nd.gov.



Take Classes at Home



Are education opportunities limited by where you live? Not at all! Today's learners can access education from home or a nearby location and can schedule classes around their work or other activities. Both youth and adults can benefit from distance education courses offered through the North Dakota Center for Distance Education and the North Dakota University System.

The North Dakota Center for Distance Education (NDCDE) is accredited by the North Dakota Department of Public Instruction. It provides opportunities for middle school students, high school students, and adults who do not have high school diplomas to:

- take courses that aren't offered locally;
- continue their education while homebound, disabled, or even living in another country; and
- earn a high school diploma through alternative methods.

For more information, contact your school counselor or the:



North Dakota Center for Distance Education
PO Box 5036 • 1510 12th Avenue North
Fargo ND 58105-5036
Phone: 701-231-6000 • Fax: 701-231-6052
www.NDCDE.org

North Dakota University System (NDUS) colleges and universities offer both undergraduate and graduate courses by distance education. For more information, refer to "Distance Education in North Dakota" below, and to the clearinghouse of distance education at www.nduso.org.

NORTH DAKOTA
UNIVERSITY SYSTEM

The Vital Link to a Brighter Future

When you are considering distance education, make sure the college is accredited.

DISTANCE EDUCATION IN NORTH DAKOTA

Access to education has never been easier because of the distance learning opportunities available through the North Dakota University System (NDUS).

For nearly two decades, the NDUS has provided undergraduate and graduate distance learning opportunities through the Interactive Video Network (IVN). With the anytime, anywhere expectations of today's students, the North Dakota University System Online (NDUSO) also offers online courses and programs.

The NDUS delivers certificate, two-year, bachelor and graduate programs through the collaboration of the 11 system colleges and universities of the NDUS with over 120 totally online programs. These virtual learning opportunities

provide students the freedom to choose courses from several campuses while completing just one application.

Internet delivery brings college courses and programs to individuals who are unable to attend classes in the traditional setting because of work, family or other commitments. Online courses also appeal to high school students who wish to take college classes as part of a dual-credit or advanced placement program. Overall, online instruction provides increased schedule flexibility for all students-residential or at-a-distance.

The NDUS also utilizes other distance education formats including two-way video, audio conferencing, satellite downlink, off campus face-to-face and

correspondence.

More information about NDUS distance learning opportunities is available by contacting the individual campuses. Detailed information concerning online learning opportunities can be found at: www.nduso.org

To evaluate whether or not you're a good candidate for online distance education, visit: www.bismarckstate.com/online/profile.asp. This self-test will help you get a clearer picture of your own online distance learning abilities.

If you are considering taking a distance education course from a provider other than the NDUS, do your homework first. Make sure the provider is a legitimate institution and not a degree mill.

What are the North Dakota University System Admission Requirements?

If you plan to attend a North Dakota University System (NDUS) four-year university, you'll need to take the following core high school courses:

- English: Four courses
- Mathematics: Three courses (algebra 1 and above)
- Laboratory science: Three courses (including at least two in biology, chemistry, physics or physical science)
- Social studies: Three courses (not including consumer education, cooperative marketing, orientation to social science or marriage/family)



Although not required, the NDUS recommends you also take advanced algebra and at least two foreign language courses. Additional courses may be required before you can be admitted to some college programs. Your school counselor can tell you more about specific requirements for the programs that interest you.

These requirements are not in effect at the two-year NDUS colleges. If you don't take the core courses required to attend a four-year university, you can attend a two-year college. After successfully completing 24 credits, you may be eligible to transfer to a four-year university. The ACT assessment test is required for all students; the ACT writing essay may be required. Check with the campus admission office to find out if the writing essay is part of its admissions requirements.

CHECKLIST

for Admission to a College or University

- Select more than one campus for consideration.
- Request college catalogs and/or visit each campus website.
- Make appointments to tour the selected campuses (contact admissions office).
- Take the ACT - colleges can provide testing deadlines.
- Submit admission applications to the selected colleges (including fees and related paperwork).
- Request your high school transcript be forwarded to the selected campuses.
- Verify with each college registrar's office that you have met "core course" and other admission requirements.
- Contact each institution's financial aid office to apply for financial aid and scholarships.
- Prepare parent and student (if applicable) income tax forms as soon as possible after January 1, 2011, for use in completing the Free Application for Federal Student Aid (FAFSA) form.
- Complete the 2011-12 FAFSA form to apply for federal and state grants and loans. The NDUS priority FAFSA deadline is March 15.
- Consider applying for institutional and private scholarships at each selected institution.
- Weigh your options, including financial aid packages, and select a college or university.
- Attend the college or university's orientation session.
- Get ready for the experience of a lifetime.

PLANNING TO TRANSFER?

Planning to transfer? The North Dakota University System (NDUS) has a program that will help you. It's called the General Education Requirement Transfer Agreement or GERTA for short.

GERTA allows students to attend any public or tribal college or university in North Dakota, complete that college or university's general education requirements, and then transfer to another institution having met both institutions' requirements. In many cases, students can complete an entire associate's degree close to home before transferring to another campus to complete a bachelor's degree. This will save students time and money.

Many of our college and university programs also have what are called articulation agreements. These agreements are pacts, signed between campuses, that allow students to know exactly which courses to complete for particular majors prior to transfer. This means no wasted time or money, and it means graduating more quickly.

For more information, visit your counselor or advisor, or go to www.transfernd.com. You can also call the North Dakota Director of Articulation and Transfer at 701-328-2960.



Why Choose a North Dakota Campus?

North Dakota's public and private colleges and universities offer you outstanding opportunities:

- ✓ Educational challenges ranging from career and technical education programs to professional degrees in law, medicine and pharmacy
- ✓ Individualized attention from professors and instructors
- ✓ Nationally recognized programs of study
- ✓ Learning environments consistently ranked among the top in the nation
- ✓ Instructional programs that prepare students for the skills required in today's workplace
- ✓ Opportunities to participate in student organizations, intramural sports and inter-collegiate sports
- ✓ The peace-of-mind that comes from living and learning in a safe, secure environment
- ✓ Excellent return on your investment
- ✓ Incentive programs



NORTH DAKOTA: 2010-2011 ESTIMATED ON-CAMPUS BUDGETS FOR RESIDENT DEPENDENT STUDENTS

CODE	SCHOOL	MAILING ADDRESS	FINANCIAL AID PHONE NUMBER	ADMISSIONS PHONE NUMBER	TUITION & FEES	BOOKS & SUPPLIES	ROOM & BOARD	TOTAL
002988	Bismarck State College www.bismarckstate.edu	PO Box 5587 Bismarck ND 58506	701-224-5494 800-445-5073	701-224-5429 800-445-5073	\$4,007 ¹	\$1,000	\$5,400	\$10,407
015793	Cankdeska Cikana Community College www.littlehoop.edu	PO Box 269 Fort Totten ND 58335	701-766-1374	701-766-1342	\$2,480	\$700	\$5,750	\$8,930
002995	Dakota College at Bottineau www.dakotacollege.edu	105 Simrall Blvd Bottineau ND 58318	701-228-5437 800-542-6866	701-228-5426 800-542-6866	\$3,857	\$1,000	\$4,456	\$9,313
002989	Dickinson State University www.dickinsonstate.edu	291 Campus Drive Dickinson ND 58601	701-483-2371 800-279-4295	701-483-2175 800-279-4295	\$5,394 ²	\$1,000	\$4,718	\$11,112
015536	Fort Berthold Community College www.fbcc.bia.edu	PO Box 490 New Town ND 58763	701-627-4738 Ext. 245	701-627-4738	\$4,200	\$1,000	\$3,800	\$9,000
041394	The Hair Academy www.thehairacademynd.com	2101 E Broadway Ave Bismarck ND 58501	701-255-3547 800-793-9594	701-255-3547 800-793-9594	\$7,920	\$1,299	\$6,240 ³	\$15,459
016232	Headquarters Academy of Hair Design	108 S Main Street Minot ND 58701	701-852-8329 800-891-5135	701-852-8329 800-891-5135	\$10,800	\$330	\$4,560 ³	\$15,690
012295	JZ Trend Academy www.rhairstylingcollege.com	1320 Tacoma Ave Bismarck ND 58504	701-223-8804	701-223-8804 800-767-5079	\$14,295	\$1,600	\$12,000 ³	\$27,895
002990	Jamestown College www.jc.edu	6085 College Lane Jamestown ND 58405	701-252-3467 Ext. 5556	701-252-3467 Ext. 5562 800-336-2554	\$16,780 ²	\$1,000	\$5,536	\$23,316
007756	Josef's School of Hair Design, Inc. www.jsohd.com	627 N P Avenue Fargo ND 58102	701-235-0011 800-201-0012	701-235-0011 800-201-0012	\$13,100	\$650	\$7,700	\$19,450
010406	Josef's School of Hair Design, Inc. www.jsohd.com	2011 S Washington Grand Forks ND 58201	701-772-2728 800-201-0012	701-772-2728 800-201-0012	\$13,100	\$650	\$7,700	\$19,450
002991	Lake Region State College www.lrscc.edu	1801 College Dr N Devils Lake ND 58301	701-662-1517 800-443-1313	701-662-1514 800-443-1313	\$3,908	\$1,000	\$4,600	\$9,508
002993	Mayville State University www.mayvillestate.edu	330 3rd Street NE Mayville ND 58257	701-788-4767 800-437-4104	701-788-4842 800-437-4104	\$5,937 ⁴	\$900	\$5,428	\$12,265
009354	Medcenter One College of Nursing www.medcenterone.com/collegeofnursing	512 N 7th Street Bismarck ND 58501	701-323-6270	701-323-6271	\$10,851	\$1,169	\$5,949	\$17,969
002994	Minot State University www.minotstateu.edu	500 University Ave W Minot ND 58707	701-858-3375 800-777-0750	701-858-3350 800-777-0750	\$5,637	\$1,000	\$4,768 ⁵	\$11,405
016929	Moler Barber College of Hairstyling	16 S 8th Street Fargo ND 58103	701-232-6773	701-232-6773	\$5,480	\$855	\$5,335	\$11,670
002996	North Dakota State College of Science www.ndscs.edu	800 N 6th Street Wahpeton ND 58076	701-671-2207 800-342-4325 Ext. 32207	701-671-2202 800-342-4325 Ext. 32202	\$4,173 ⁶	\$900	\$5,728	\$10,801
002997	North Dakota State University www.ndsu.edu	PO Box 6050 Dept 5240 Fargo ND 58108-6050	701-231-6200 866-924-8969	701-231-8643 800-488-6378	\$6,660	\$1,000	\$6,714	\$14,374
E01407	Rasmussen College www.rasmussen.edu	1701 E Century Ave Bismarck ND 58503	701-530-9600 877-530-9600	701-530-9600 877-530-9600	\$13,500 ⁷	\$0	\$4,716 ³	\$18,216
E01382	Rasmussen College www.rasmussen.edu	4012 19th Ave SW Fargo ND 58103	701-277-3889 800-817-0009	701-277-3889 800-817-0009	\$13,500 ⁷	\$0	\$4,716 ³	\$18,216
040313	Salon Professional Academy www.thesalonprofessionalacademy.com	4377 15th Ave S Fargo, ND 58103	701-478-1772 Ext. 111 877-478-1772	701-478-1772 Ext. 104 877-478-1772	\$13,290	\$1,200	\$5,299 ³	\$19,789
014993	Sitting Bull College www.sittingbull.edu	9299 Highway 24 Fort Yates ND 58538	701-854-8000 701-854-8013	701-854-8020	\$3,910	\$1,200	\$5,200	\$10,310
012059	Trinity Bible College www.trinitybiblecollege.edu	50 S 6th Avenue Ellendale ND 58436	888-822-2329	888-822-2329	\$13,190	\$880	\$5,150	\$19,120
009450	Turtle Mountain Community College www.tm.edu	PO Box 340 Belcourt ND 58316	701-477-7862	701-477-7862	\$2,000	\$400	\$3,664 ³	\$6,064
002992	University of Mary www.umary.edu	7500 University Dr Bismarck ND 58504	701-255-7500 800-288-6279	701-255-7500	\$12,800	\$1,100	\$5,180 ⁸	\$21,594
003005	University of North Dakota www.und.edu	264 Centennial Dr Stop 8371 Grand Forks ND 58202	701-777-3121 800-CALLUND	701-777-3821 800-CALLUND	\$6,934	\$800	\$6,000	\$13,734
014470	United Tribes Technical College www.uttcc.edu	3315 University Dr Bismarck ND 58504	701-255-3285 Ext. 1354	701-255-3285 Ext. 1334	\$3,080	\$1,200	\$2,400	\$6,680
003008	Valley City State University www.vcsu.edu	101 College St SW Valley City ND 58072	701-845-7412 800-532-8641	701-845-7101 800-532-8641	\$6,075 ^{1,4}	\$1,000	\$5,017	\$12,092
003007	Williston State College www.wsc.edu	PO Box 1326 Williston ND 58802-1326	701-774-4248 888-863-9455	701-774-4210 888-863-9455	\$3,202 ⁷	\$1000	\$6,100 ⁸	\$10,302

Note: Totals do not include Personal, Recreation or Miscellaneous costs which average approximately \$3,000. Costs may be different for specialized programs. Contact the college for more information.

Chart Footnotes:

- 1 Based on 15 credits per term.
- 2 Up to \$150/month may be added for child care.
- 3 Estimate for off campus housing. School does not have dorm facilities.
- 4 Includes notebook computer.
- 5 Based on double room occupancy and 19 meals, 7 day plan.
- 6 Based on 16 credits per term.
- 7 Based on 12 credits per term.
- 8 Contact campus housing for actual costs.

It's Time to Think About

SEARCHING FOR A JOB!

Here are some quick time-saving tips that will make your hunt go more smoothly.

Make the Switch. It is time now to make the switch from student to adult. What does that mean? Check your voice mail message, edit your social networking sites and make sure they give the impression of the professional you would like to project.

Be Prepared. Have an up-to-date resume ready to send. You will want to make changes so it is appropriate for each job, but you should have a basic resume ready at all times. Don't forget to check with your references in advance so they know to expect phone calls and requests for recommendations.

Get Help. Utilize the people and agencies that are there to help you in this search. Check with high school and college counselors, career offices, Job Service North Dakota and the public library.

Be Thorough. Exhaust all possibilities when searching for the next job. In addition to Job Service, try using search engines and don't forget to network. Many job openings are not advertised, so tell everyone you know you are looking for work.

Save Time. Can't find the time to get it all done? Consider hiring someone to help post your availability or to help with your resume and/or applications. It can save you hours of time and assure a professional product. Be sure to check this work to ensure it is a true reflection of you.

Never Quit. At times it might seem like you have been searching forever and there is little hope to finding something suitable. The job for you is out there, so keep looking as you continue to develop your skills and gain experiences.

➔ Steve Beutler, Minot High School, has created a job search tool kit that will help you with all the details for your job search. Go to www.nd.gov/cte/crn and click on "Nail That Job" in the Students column to find all of the resources you need to get started.

Helpful links to job hunting tools:

www.jobsnd.com

<http://www.workforce.nd.gov>

BEWARE

Social Network Considerations. Your personal photo and information posts can and will be used against you by potential employers who routinely search new hire candidates. Employers screen for explicit photos and unprofessional comments on social networking websites. Remember, you cannot control content that your friends might post about you.

Did you know life skills that help people in their everyday lives also help them to be successful in the workplace? *They do!*



life skills for the workplace

Employers look for employees who possess:

- communication and interpersonal skills, including written and verbal communication
- enthusiasm and flexibility
- leadership skills
- an eagerness to work and the desire to succeed
- confidence, honesty and respect
- the ability to stay properly groomed

In addition, there are foundation skills necessary for workplace success.

- Basic skills that include the ability to read, write, listen and understand math and science.
- Thinking skills such as the ability to learn, reason, think creatively, make decisions and solve problems.
- Personal qualities that include responsibility and integrity as well as being a team player.

Do you have the life skills necessary to make yourself successful in the workforce?

IS SELF-EMPLOYMENT FOR U?

If you're a person with a strong entrepreneurial spirit, and you have what it will take to launch and operate a successful business, perhaps self-employment is for you!

Today there's a growing demand for "free agents" – contractors, consultants, project workers (particularly in technology fields), service providers, and others – as companies attempt to trim labor and benefit costs. More and more companies are increasingly using specialists from the "outside" for specific projects.

Or perhaps you desire to operate a home or "cottage" business to produce something or provide a service. Self-employment opportunities are boundless if you possess the necessary skills and abilities (or can acquire them), are willing to work hard and take risks, and have the time and financial resources needed.

To help determine if this route is best for you, you'll need to do an honest self-assessment to decide what business skills you have, what skills you need, and if you have the desire to learn what you need to know.

SELF-EMPLOYMENT ASSESSMENT

Answer "Yes" or "No" to each of the following questions.

- ___ Do you have a skill or service that is marketable in today's economy? (Or can you acquire training needed?)
- ___ Do you have potential clients or customers? How many?
- ___ Are you able to take personal and financial risks?
- ___ Are you a hard and diligent worker?
- ___ Do you have good planning and organizational skills?
- ___ Are you a good decision-maker?
- ___ Can you handle periods of high stress?
- ___ Are you willing to put in long hours?
- ___ Can you handle challenges and persevere during difficult times?
- ___ Are you highly self-motivated and self-directed?
- ___ Can you sell yourself and your product to clients and customers?
- ___ Do you have good business communication and marketing skills?
- ___ Do you have money or resources needed to start a business?
- ___ Do you have the technical skills you need?
- ___ Do you have needed space to operate and run a business?

HELPFUL RESOURCES



ARE YOU AN ENTREPRENEUR?

Visit www.nd.gov/cte/crn/docs/EmployYourself.pdf to complete a checklist to help you learn more about entrepreneurs and yourself!

You can also contact:

Marketplace for Ideas/Marketplace for Kids

210 N 4th St, Bismarck ND 58501

701-663-0150 or 888-384-8410

www.marketplaceforideas.org

www.marketplaceforkids.org

Mini Society Curriculum for Grades 3-7 "Train-the-Trainer" Program

2718 Gateway Ave Ste 104, Bismarck, ND 58503

701-328-9718

Kathleen.tweeten@ndsu.edu

Postsecondary Institutions



ND University System

www.ndus.edu



AREA CAREER AND TECHNICAL CENTERS

www.nd.gov/cte/links/centers.html

Information Technology



Information Technology career videos, salary information, skill sets, and much more.

WWW.DISCOVERNDIT.COM

Adult Learning Centers



Belcourt Adult Learning Center
Turtle Mountain Community College
701-477-7913 www.tm.edu

Bismarck Adult Learning Center
Bismarck Public Schools
701-323-4530
www.bismarckschools.org/adultlearning

Devils Lake Adult Learning Center
Lake Region State College
701-662-1536

Dickinson Adult Learning Center
Dickinson Public Schools
701-456-0008
www.dickinson.k12.nd.us/adult_learning

Fargo Adult Learning Center
Fargo Public Schools
701-446-2806
www.fargo.k12.nd.us

Fort Totten Adult Education Program
Cankdeska Cikana Community College
701-766-1377

Grafton Adult Learning Center
North Valley Career Tech Center
701-352-3705
www.northvalley.k12.nd.us

Grand Forks Adult Learning Center
Grand Forks Public Schools-Stanford
Centre
701-795-2785
www.grand-forks.k12.nd.us

Jamestown Adult Learning Center
James Valley Career Technology Center
701-252-8841

Mayville Adult Education Program
Mayville State University
701-788-4770

Minot Adult Learning Center
Minot Public Schools
701-857-4488
www.minot.k12.nd.us/alc

New Town Adult Education Program
Fort Berthold Community College
701-627-4738 Ext. 258

Valley City Adult Learning Center
Sheyenne Valley Area Career Tech Center
701-845-0256

Wahpeton Adult Education Program
Wahpeton Public School District
701-642-2604

West Fargo Adult Education Program
West Fargo Public Schools
701-499-1650

Williston Adult Learning Center
Williston State College
701-572-5886
www.adultlearningcenter.com

Human Service/Voc Rehab Centers



WWW. ND. GOV/DHS/LOCATIONS/REGIONALHSC

Badlands Human Service Center

300 13th Ave W, Suite 1, Dickinson, ND 58601
701-227-7500 (Voice)
701-227-7574 TTY
1-888-227-7525

Northwest Human Service Center

316 2nd Ave W, Williston, ND 58802
701-774-4600 (Voice)
701-774-4692 (TTY)
1-800-231-7724

Lake Region Human Service Center

200 Hwy 2 SW, Devils Lake, ND 58301
701-665-2200 (Voice)
701-665-2211 (TTY)
1-888-607-8610

South Central Human Service Center

520 3rd St NW, Jamestown, ND 58401
701-253-6300 (Voice)
701-253-6414 (TTY)
1-800-260-1310 (Toll Free)

North Central Human Service Center

1015 S Broadway, Suite 18, Minot, ND 58701
701-857-8500 (Voice)
701-857-8666 (TTY)
1-888-470-6968

Southeast Human Service Center

2624 9th Ave SW, Fargo, ND 58103
701-298-4500 (Voice)
701-298-4450 (TTY)
1-888-342-4900

Northeast Human Service Center

151 South 4th St, Suite 401,
Grand Forks, ND 58201
701-795-3000 (Voice)
701-795-3060 (TTY)
1-888-256-6742

West Central Human Service Center

1237 W Divide Ave, Suite 5,
Bismarck, ND 58401
701-328-8888 (Voice)
1-800-366-6888 (TTY)
1-888-328-2662

Job Service North Dakota



***STATEWIDE TTY 800-366-6888**

WWW. JOBSND.COM

Beulah

119 E Main
701-873-5607 or 877-268-5437

Minot

3416 N Broadway
701-857-7500 or 800-482-0017

Bismarck-Mandan

1601 E Century Ave
701-328-5000 or 800-247-0981

New Town

204 Main St
701-627-4390

Devils Lake

301 College Dr S
701-662-9300 or 800-247-0982

Oakes

924 S 7th St.
701-742-2546

Dickinson

66 Osborn Dr
701-227-3100 or 800-247-0983

Rolla

103 E Main Ave
701-477-5631 or 877-516-0600

Fargo

1350 32nd St S
701-239-7300 or 800-247-0985

Valley City

325 2nd Street NW
701-845-8860 or 800-831-6374

Grafton

927 12th St W
701-352-4450 or 800-321-7416

Wahpeton

524 2nd Ave N
701-671-1550 or 888-671-9229

Grand Forks

1501 28th Ave S
701-795-3700 or 800-247-0986

Williston

422 1st Ave W
701-774-7900 or 800-247-0989

Jamestown

1307 12th Ave NE Ste 3
701-253-6200 or 800-247-0988

Financial Aid

FINANCIAL AID

College Information Service
Student Loans of North Dakota
701-328-5835 or 800-554-2717
mystudentloanonline.nd.gov

Student Financial Assistance Program
State Grant Program North Dakota Scholars Program
701-328-4114
peggy.wipf@ndus.nodak.edu
www.ndus.edu

Bank of North Dakota
Student Loan Services
701-328-5763 or
701-328-5739 TDD
800-472-2166 or
800-643-3916 TDD
mystudentloanonline.nd.gov

No matter what your dream...

...you can pursue it through Career and Technical Education (CTE), a program for middle and high school students in North Dakota's public schools.



Through **CAREER AND TECHNICAL EDUCATION**, you can explore career opportunities and learn how core school subjects like math, science and writing are used in real-life by:

- Engineers
- Architects
- Green technology experts
- Doctors, nurses and other health providers
- Construction workers
- Transportation experts
- And many other professionals

CTE students graduate from high school with career goals, job skills and leadership skills knowing exactly where they will go next to further their academic and hands-on education and training. Become one of those students!

Career and Technical Education.

North Dakota CTE is comprised of nine program areas developed to prepare you to meet the demands of college and the expectations of employers. Each program area includes a variety of course offerings leading to several possible career options, valuable skills and real-world experience. Through involvement in these programs and the Career and Technical Student Organizations (CTSOs), you will have the opportunity to focus on leadership development, personal growth through self-awareness, community service and career awareness.

North Dakota CTE program areas and related CTOS include:

- Agriculture Education - FFA/PAS
- Business & Office Technology - FBIA/PBL
- Career Development
- Family & Consumer Sciences - FCCLA
- Health Careers - Skills USA
- Information Technology - Skills USA
- Marketing Education - DECA/Collegiate DECA
- Technology Education - TSA
- Trades, Industry & Technical Education - Skills USA

Put your talents to work.

Participating in extended learning experiences will help you gain insight to possible career options and discover if your initial choices are a good match for you. You might be interested in:

- Job shadowing/Mentoring
- Cooperative education
- Part time jobs/Summer employment
- Service learning/Volunteer service
- Work simulations/School-based businesses
- Career camps & academies
- Internships
- On-the-job training
- Apprenticeship programs

Learn more.

- Go to www.RUReadyND.com to explore career possibilities and learn more about your interests, skills and work values and to create an individual career and academic plan.
- Learn more about the North Dakota career clusters and their plans of study by visiting <http://www.nd.gov/cte/services/career-clusters>.
- Visit www.nd.gov/cte to get more information about the CTE program areas in North Dakota.
- For additional career planning resources go to www.nd.gov/cte/crn.

CAREER RESOURCE NETWORK

600 E Blvd Ave – Dept 270

Bismarck, ND 58505

Ph – 701.328.9733

Fax – 701.328.1255 • cte@nd.gov

